ORIGINAL PAPER



How Foreign Institutional Shareholders' Religious Beliefs Affect Corporate Social Performance?

Xuezhou Zhao¹ · Libing Fang¹ · Ke Zhang¹

Received: 16 July 2019 / Accepted: 12 December 2020 / Published online: 1 January 2021 © The Author(s), under exclusive licence to Springer Nature B.V. part of Springer Nature 2021

Abstract

In this paper, we employ the unique qualified foreign institutional investors (QFII) scheme in China to investigate whether and how the different religious beliefs in the areas where foreign institutional shareholders from are associated with the corporate social responsibility (CSR) performance of domestic firms. After controlling for other determinants, we find robust evidence that firms with QFII investors from areas with stronger religious beliefs have better CSR performance than those that do not have these beliefs'. This association is more pronounced when a QFII has a shorter holding period, has a relatively large ownership in the firm, or is a more committed investor in China. The above moderating results show that the stock preference may be a channel through which religious QFIIs affect firms' CSR performance. Our paper contributes to the growing body of literature on CSR and on the effects of investors' religious beliefs. It also offers useful guidance to listed companies, institutional investors, regulators, and other stakeholders.

Keywords QFII · Religious beliefs · Corporate social responsibility

Introduction

The corporate social responsibility (CSR) of firms is of importance to stakeholders around the world. Scholars are interested in both the economic and the social factors that influence this issue. Recently, the latter have been extensively highlighted by the academic community (Dyck et al. 2019; Su 2019; Zolotoy et al. 2019). Specifically, some social factors, including (domestic) religious norms, are thought to benefit CSR, as argued by Zolotoy et al. (2019) and Su (2019). However, little is known about whether and how the different religious beliefs of foreign institutional shareholders drive domestic firms' CSR performance. Related evidence on the social norms of institutional shareholders is documented by Dyck et al. (2019), who argue that

Ke Zhang kezhang@nju.edu.cn

> Xuezhou Zhao xzhao@nju.edu.cn Libing Fang lbfang@nju.edu.cn

¹ School of Management and Engineering, Nanjing University, No. 5 Pingcangxiang, Gulou District, Nanjing 210093, Jiangsu, China institutional investors across 41 countries drive the environmental and social (E&S) performance of firms by transferring their social norms regarding laws on labor protection, environmental health and ecosystem vitality. Religious beliefs could influence social norms as well. For example, Ramasamy et al. (2010) claim that religiosity influences values and values determined attitudes and behavior. Kumar et al. (2011) state that "the predominant local religion could influence local cultural values and norms". In contrast to the ways in which laws shape social norms, religious beliefs also shape people's behavior through informal rules, thus influencing the decision making within firms (Barro and McCleary 2003; Hilary and Hui 2009; Gundolf and Filser 2013).

Therefore, we aim to fill the gap in the literature presented by the concept that domestic religious norms shape firms' CSR (Su 2019; Zolotoy et al. 2019) and that institutional investors' formal social norms (laws) drive the improvement of firms' CSR performance (Dyck et al. 2019). Employing the unique scheme of qualified foreign institutional investors (QFII)¹ and the overall low level of religious norms in China,² we investigate the impact of the different religious beliefs of foreign institutional shareholders on domestic firms' CSR performance. Chinese corporate law has required listed firms to adopt CSR practices since 2006. Both the Shenzhen and Shanghai stock exchange markets also took action to promote CSR with the publication of the "Guide about Listed Firms' Social Responsibility" in 2006 and that of the "Notice about Strengthening Listed Firms' Social Responsibility" in 2008. Additionally, the media has begun to frequently focus on firms' CSR in China (Lin 2010). We argue that the introduction of foreign institutional investors imposes pressures on domestic listed firms to improve their CSR.

Additionally, we view China to be a good experimental context for testing this issue because China is one of the largest developing economies in the world and invites global investors to participate in its accelerating progress. The budget for the QFII scheme has been approximately 150 billion U.S. dollars since it began in 2013. We also observed that an increasing number of foreign institutional investors with various religious beliefs have joined the top 10 shareholders of Chinese listed firms during the last 10 years. By the end of 2018, 34 QFIIs were listed among the top 10 investors in the Chinese stock market. Vanguard and UBS AG hold the leading positions among these shareholders.

The final reason for our use of China as a setting comes from Dyck et al. (2019) statement that China's environmental performance index is at the bottom of the World Value E&S Index; according to this index, China only ranks higher than India in this aspect. Domestic firms in China have become additionally motivated to improve their CSR due to the recent tragedies involving the Tanggu explosion in Tianjin, the series of DiDi crimes, the chemical explosion in Xiangshui, etc. Therefore, we expect significant results in cases involving foreign institutional shareholders with strong religious norms if these norms actually exert positive pressure on the CSR decisions of domestic firms.

In this study, we empirically show that firms with QFII investors from areas with stronger religious beliefs have better CSR performance than those that do not have these beliefs. Their level of religious belief can further increase this effect. Prior research suggest that firms' location in religious areas influences organizational behaviors (Hilary and Hui 2009; Kumar et al. 2011; Dyreng et al. 2012; Shu et al. 2012; Cai et al. 2020). And there is a general tendency to hold certain religious beliefs in the particular geographical locations where the foreign invest companies are based. We also differentiate between the origins of religious beliefs, classifying them as Christian and other religions. We find that the Christian belief has a significant impact on CSR but that the other religions do not. We then explore the possible mechanism underlying this positive association between CSR and the religious beliefs of QFIIs. Is it due to the monitoring effect of QFIIs or their investment preference? We find that the positive association between CSR and the religious beliefs of QFIIs is more pronounced when a QFII is a more active, a larger, or a more committed investor, which is consistent with preference theory. Furthermore, when we divide CSR performance into five categories, namely, involving shareholders, customers, employers, environmental issues, and social issues, we find that the religious beliefs of QFIIs have the most significant impacts on firms' CSR performance pertaining to the responsibilities of their shareholders. Our results are robust to a series of sensitivity tests, including a special test that further distinguishes between Protestant and Catholic beliefs. Consistent with the findings of Weber (1930), we find evidence that there is a significant difference between many Christian denominations regarding their attitudes toward capitalism and work. Only firms that have QFIIs with Protestant beliefs have better CSR performance.

Our research has the following contributions. First, we extend the literature on the determinants of firms' CSR. On one hand, the existing literature show that firm's domestic religious beliefs are positively related to CSR (Su 2019; Zolotoy et al. 2019). As a supplementary evidence, we find that the religious beliefs of foreign institutional shareholders also improve domestic firms' CSR performance. In the context of the current active cross market investment activities, our findings provide further support for the promotion of CSR by corroborating religious beliefs. On the other hand, our findings are also an extension of the results of Dyck et al. (2019), who show the driving effect of the formal social norms (e.g., laws) of institutional investors on CSR. We show the effect of one informal social norm, namely the religious beliefs, of foreign institutional shareholders are related to CSR and the possible underlying mechanism. Our work emphasizes that various social norms, not only formal ones, are related to CSR performance.

We also contribute to the literature of how religious beliefs affect business behaviors. Religious beliefs, as informal rules, demonstrate the importance of a society's culture for firms' decision making and economic outcomes. As an extension to Guiso et al. (2009), which suggests the importance of a society's culture for a range of economic outcomes, our study not only categorize foreign religious norms

¹ The QFII scheme was established in 2002. It allows foreign access to China's equity markets with restrictions on investment ratios, quotas, targets, and capital remittance controls.

² The ARDA (Association of Religion Data Archives) shows that, in 2015, 38.8% of Chinese people identified as atheists and that China was ranked 8th in atheistic belief among 243 countries around the world. Source: http://www.thearda.com/internationalData/countries/Country_52_1.asp.

into religious and atheistic norms, but also into Christian and other norms, and further into Protestant, Catholic, and other norms. This decomposition is helpful to the understanding of how religious beliefs affect business behaviors and outcomes. Moreover, our classification method is inspired by Weber (1930), and empirically we also find that cross-border investment behaviors are also consistent with the classic Weber's argument as well.

Furthermore, we contribute to the literature of underlying mechanism of how foreign institutional investor affect firm decisions. The existing literature shows that independent institutional investors and foreign investors in particular are more active in the improvement of firms' governance (Gillan and Starks 2003; Ferreira and Matos 2008; Aggarwal et al. 2011). More recently, Dyck et al. (2019) show that the formal social norms (e.g., laws) of foreign institutional investors affect CSR by monitoring by voice. They find no supporting evidence for the exit & selection being an important channel through which foreign institutional ownership have effects on the domestic firms. However, we show that with a small investment scale and scope, QFII investors in China are more likely to be passive investors and choose to invest in more responsible firms instead of being proactive investors who actually monitor firms' CSR activities. Our results reveal that when the monitoring effect of foreign institutional investor does not apply due to limited scale, voting by feet could be an important channel to affect the domestic firms as well.

Our findings have policy implication to the evaluation of the current progress of China's capital market opening. Currently, Chinese QFII regulations cap any individual QFII investor's ownership of a listed firm at 10%, and the total shareholding ratio of all foreign investors in a single listed company shall not exceed 30% of the total shares of the listed company. It is not surprising that QFIIs' CSR enhancement effect is a result of their investment preference. If the monitoring effect is expected, our findings may provide justification to accelerate the opening of the Chinese market.

The remainder of our paper is organized as follows. Section 'Literature and Hypothesis' reviews the related literature and develops our hypotheses. We discuss the research methodology in section 'Research Design'. Our empirical results are presented in section 'Empirical Results'. Section 'Conclusion' concludes the paper.

Literature and Hypothesis

Religion and Corporate Social Responsibility

Religion has been shown to have a strong influence on people's behavior and on firms' decision making (Barro and McCleary 2003; Hilary and Hui 2009; Gundolf and Filser 2013). It is also considered an important contextual factor that influences a firm's CSR and thus its value in both developed economies such as the U.S. (Zolotoy et al. 2019) and developing economies such as China (Ramasamy et al. 2010; Su 2019).

Weber (1930) discusses the ways in which Protestantism created a specific form of self (emphasizing frugality and hard work as virtues) that was necessary for the creation of the conditions that led to the flourishing of capitalism. The act of striving to increase one's own capital represents a form of due diligence. Moreover, this striving provided a way of avoiding eternal damnation and of achieving salvation. Ideally, capitalism does not encourage the accumulation of capital through robbery, plunder or other violent means, of course. Weber's ideas show that certain types of ethics provide psychological driving forces and establish moral standards for enterprises. However, due to the existence of the negative externalities of immoral and irresponsible behaviors, we still have reason to believe that when firms pursue individual economic efficiency, society's wellbeing could be harmed. It is believed that firms may ignore questions of morality and social responsibility if they can achieve individual economic efficiency. This is why regulators must establish standards for corporate social responsibility (CSR) and why researchers are attempting to demonstrate the positive association between CSR and better firm performance (Carr 2003); namely, these individuals and organizations aim to provide incentives for enterprises to engage in better CSR. Are ethics and the pursuit of profit maximization mutually exclusive?

In this paper, we answer the above question by adhering to Weber's ideas and extending the more recent literature that focuses on the relationship between domestic religious beliefs and firms' CSR. For example, McGuire et al. (2011) show that the strength of local religious beliefs is negatively associated with the likelihood of locally headquartered firms engaging in ethically questionable practices, including that of financial misreporting. Griffin and Sun (2018) find that firms in locations with a high level of religious adherence (i.e., with a high proportion of evangelical Christian churchgoers) disclose their CSR activities less frequently and that firms in high-affiliation locations (i.e., with a high proportion of nonevangelical Christian churchgoers) disclose their CSR activities more frequently. They also find that managers make firm-value-increasing CSR disclosure decisions that cater to the religious of the local community. Su (2019)demonstrates that the religious atmosphere (Buddhism and Taoism as a whole) of a region can induce managers to act less selfishly and to care more about other stakeholders, which could be beneficial for a firm's CSR. Su (2019)also demonstrates that the above conclusions apply only in the case of Buddhism, indicating that the impact of religion on CSR varies based on the type of religion. In contrast to the literature, we investigate whether and how the religious norms of foreign institutional shareholders, rather than those of local institutional shareholders, impact firms' CSR performance. The heterogeneity among the impacts of different religious beliefs is also documented.

Religious QFII and Corporate Social Responsibility

Regarding the association between institutional investors and CSR, the argument of long-term investment, insurance and signaling implies that sophisticated institutional investors may find firms with better CSR to be more attractive. For example, Graves and Waddock (1994) find anecdotal evidence that the number of institutional investors who hold shares in an S&P 500 company is positively associated with the company's KLD ratings. Cox et al. (2004) find that longterm institutional investment is positively related to CSR. Dhaliwal et al. (2011) find that US firms with a high level of CSR experience a significant increase in institutional ownership when they initially disclose their CSR reports. There are also other related studies about the influence of firms' ownership on CSR disclosure in developing countries (Rizk et al. 2008). Saleh et al. (2010) find that institutional ownership is positively related to CSR disclosure. In addition, other studies find that foreign ownership is positively related to CSR disclosure (Teoh and Thong 1984; Khan et al. 2013). However, several studies document that managerial ownership and high ownership concentration lead to a low level of CSR disclosure (Ahmed-Haji 2013; Khan et al. 2013). We complement these studies by providing evidence on the impact of the religious beliefs of foreign shareholders on domestic CSR performance.

Weber (1930) concludes that a person with Protestanttype ethics is responsible in regard to his duties. The act of striving to increase one's own capital represents a form of due diligence, and it provides a way of avoiding eternal damnation and of achieving salvation. The ways in which Protestantism created a specific form of self (emphasizing frugality and hard work as virtues) were necessary for the creation of the conditions that led to the flourishing of capitalism. As more recently stated in the work of Su (2019), most religions encourage people to uphold their responsibilities, even though there are, to some extent, differences among the beliefs of different religions. For example, religions advocate interdependence and interconnectedness among all of life: we are all part of one another, thus, doing good for others is equivalent to doing good for oneself. Each individual should see it as his or her own responsibility to create a positive impact on social or environmental aims (Margues 2012). The introduction of institutional shareholders with strong religious beliefs to a firm is likely to affect the ethical atmosphere of firms' decisions. Under this circumstances, firm owners are less likely to exploit others for private benefits,

and managers are compelled to behave less selfishly. Thus, the improvement of the ethical atmosphere of a firm along with that of the religious beliefs of its owners decreases its level of selfishness and instills in it a greater care for others (Vasconcelos 2010). For example, 'tunneling' is a typical selfish behavior undertaken by controlling shareholders in cases where firms' ownership is concentrated. This refers to the way in which controlling shareholders view a listed firm 'as their own little ATM machine,' as described by the Asian Corporate Governance Association in 2003.³ Kimber and Lipton (2005) show that intercorporate loans are used to expropriate a considerable amount of cash from listed firms. However, Du (2014) provides strong evidence that the intensity of a domestic religion (for example, Buddhism) is significantly negatively associated with tunneling. This finding implies that religion reduces controlling shareholders' selfish behavior. Religion also encourages people to minimize their environmental exploitation and promotes ecological balance (Tomalin 2009; Vasconcelos 2010; Du et al. 2014), for example, through the reduction of energy consumption (Zsolnai 2008). All these concepts are consistent with firms' socially responsible behaviors with respect to the natural world and environmental sustainability. Therefore, the connection between ecological issues and religious issues is relevant to improving firms' CSR.

Furthermore, shareholders are the ultimate decision makers in firms, and their attitudes toward responsible behaviors should have significant effects on corporate social performance (Motta and Uchida 2018). Institutional shareholders can effectively improve corporate governance structures (Hartzell and Starks 2003; Aggarwal et al. 2011; Demiralp et al. 2011; Helwege et al. 2012; Shinozaki et al. 2016). Mitchell et al. (1997) indicate that shareholders possess the power to make urgent and legitimate claims; therefore, they have the strongest influence on the actions and decisionmaking processes of firms. More importantly, a certain stream of literature has revealed that the decisions of firms are affected by their religious backgrounds. Hilary and Hui (2009) find that the strength of domestic religious beliefs is negatively associated with the risk level of the operations conducted by locally headquartered firms. The strength of domestic religious beliefs is negatively associated with the likelihood that locally headquartered firms will engage in ethically questionable practices, including those involving financial misreporting (McGuire et al. 2011), corporate tax avoidance (Boone et al. 2012), and bad news hoarding (Callen and Fang 2015). Su (2019) demonstrates that the local religious atmosphere can induce managers to be less selfish

³ See "CG watch: Corporate governance in Asia 2003" for more details, available at www.acga-asia.org.

and to care more about other stakeholders, which is potentially beneficial to a firm's CSR.

Based on the above arguments, we expect that a firm's CSR performance is more likely to improve when foreign shareholders with strong religious beliefs become managers. Therefore, hypothesis 1 is:

Hypothesis 1: Firms' CSR performance improves when they have foreign institutional shareholders with strong religious beliefs.

The Moderate Effect

We also hold the opinion that the stock preference channel is underlying in the above association, and we examine three moderate effects based on this opinion. Generally, institutional investors may affect firm performance and decision making in two ways: monitoring by voice and voting by feet (preference). In the Chinese market, because the scale and scope of foreign investment is very small (due to the regulations imposed on this investment), QFIIs are less likely to be engaged in active monitoring of firms. If a single foreign investor holds shares of a listed company through a qualified foreign institutional investor, the shareholding ratio shall not exceed 10% of the total shares of the company; the total shareholding ratio of all foreign investors in a single listed company shall not exceed 30% of the total shares of the listed company. Empirical evidence shows that QFII investment in Chinese stock markets only accounts for 0.81% of Chinese firms' total outstanding shares, while domestic institutional shareholders own 13.7% of these shares (Korkeamäki et al. 2019). Furthermore, under the current Chinese regulations, QFII investors cannot directly invest in listed firms, thus their transactions have to be processed by a domestic custodian security firm. As a result, QFII investors could only choose to invest in more responsible firms instead of actually monitoring firms' CSR activities. Therefore, we find that it is more beneficial to examine the passive effects of QFIIs on firm's decision making to determine whether heterogeneous QFIIs show different preferences in their choices of stocks.

The first moderate variable we are interested is QFIIs' holding periods. We use the religious QFII's holding periods to measure their investor activism. Short-term religious QFIIs are classified as active investors while long-term religious QFIIs are classified as passive investors. Gallagher et al. (2010) argue that active funds outperform by the privately collected information, and the interpretation of publicly released information that short-term QFIIs are good at use to make their investment decisions. Gallagher et al. (2010) also find that the active investors' superior ability of using information make them to become 'short-term profiteers'. Bottazzi et al. (2008) show that investor activism is

positively related to the success of portfolio companies as well. So we argue that the active investors (who trade frequently) care more about firm's CSR strategies and activities and are more likely to use voting by feet to affect firm decisions, while passive investors care less. Since short-term orientated investors may generate more trading on CSR, which levy higher pressures on firms to keep these investors, firms will take more social responsible actions in response. Therefore, we have reason to believe that due to investment preferences and abilities to use CSR information, short-term investors may have a stronger preference for better CSR than do long-term investors. We express the following hypothesis:

Hypothesis 2: The association between the religious beliefs of QFII shareholders and CSR is more pronounced when foreign institutional shareholders are short-term investors.

Second, we are interested in the scale of QFIIs' investments in a firm. Institutional investors who are larger shareholders are expected to have greater commitment than do institutional investors who are smaller shareholder (Holderness 2003). Managers align their actions with the interests of their shareholders who are large enough to have significant voting rights. If larger shareholders threaten to sell their stock, managers will take them more seriously because it is more likely that this action will lead to a decline in stock price. Therefore, with larger investments scale, QFIIs show greater preference in firms CSR, this is in support of the preference mechanism. We express the following hypothesis:

Hypothesis 3: The association between the religious beliefs of QFII stakeholders and CSR is more pronounced when foreign institutional owners are relatively larger shareholders.

Finally, we are interested in the number of years since the religious QFII entered Chinese stock market as the proxy of investment commitment in China market. We consider these religious QFIIs to be more committed investors if they have entered Chinese stock market earlier than the others. Field et al. (2013) find that directors who also serve in other boards are able to serve as excellent advisors, drawing on their rich experience and significant number of contacts. Morey (2002) find that overall Morningstar ratings of seasoned funds are consistently and significantly higher than the average overall star ratings of younger funds, which may indicate that experience lead to superior abilities. Experience provides fund managers with information advantage at stock picking and timing. More committed QFIIs are doing deeper cultivation in China market as well. So the more committed religious QFIIs may see through the CSR information and make better use of it when making investment decisions. Thus we expect to find that the association between CSR and the religious beliefs of QFII stakeholders is more pronounced in cases of more committed QFIIs in support of the preference mechanism. We express the following hypothesis:

Hypothesis 4: The association between the religious beliefs of QFII shareholders and CSR is more pronounced when foreign institutional owners are more committed investors in China.

Research Design

Sample

We draw financial and governance data from the Wind and CSMAR databases. To determine the religions of QFIIs, we use both QFII religion data from the China Securities Regulatory Committee (CSRC) and annual data on worldwide regional religious populations from the Religious Characteristics of States (RCS) dataset.⁴ The RCS dataset provides annual statelevel data for the religious demographics of 97 denominations for the time period spanning from 1800 to 2015 (Brown and James 2017). For each state-year observation, the population of each denomination is obtained primarily from official government sources and from 25 secondary sources, including the World Christian Encyclopedia, the World Religion Database, the United Nations Population Statistics, and the Statesman's Yearbook. The CSR performance of Chinese listed companies is manually collected from a professional website, namely Hexun.com. The CSR evaluation procedure used by this website has been adopted by the recent literature (Shahab et al. 2019; Su 2019). Hexun has released evaluation scores regarding the CSR of Chinese listed companies since 2010. Our raw data cover the period from 2010 to 2018. According to previous studies, financial firms may have different capital structures; thus, we exclude these firms due to their unique operational characteristics (Su 2019). These firms also have different supply chain relationships, which may imply that their CSR performance components have different structures. We obtain a final sample of 23,046 firm-year observations. To eliminate the adverse effect of extreme values, the continuous variables are winsorized at the 1% level in both tails.

Variables

Dependent Variables

Following Shahab et al. (2019) and Su (2019), we use the professional CSR evaluation scores (*CSR_Score*) from

Hexun.com to proxy the CSR performance of the Chinese listed firms in our sample. Hexun.com computes firms' CSR score based on their CSR report and annual report. This CSR score includes five elements: shareholder responsibility (*SHAREHOLDER*), customer and supplier rights (*CUSTOMER*), employee responsibility (*EMPLOYEE*), environmental responsibility (*ENVIRONMENT*) and social responsibility (*SOCIAL*). The weights of the above elements are 30%, 15%, 15%, 20% and 20%, respectively. According to the explanation from Hexun.com, the five elements of CSR includes the following aspects⁵:

- (1) The shareholder responsibility score contains information on a firm's profitability, solvency, dividends, financial disclosures, and innovation.
- (2) The customer and supplier rights score includes product quality, after-sale service, credit and reciprocity.
- (3) The employee responsibility score includes working performance, safety, and compensation.
- (4) The environmental responsibility score addresses issues of environmental protection.
- (5) The social responsibility score involves tax and donation information.

We also use the CSR grade (*CSR_Grade*) as a robust dependent variable. We divide the numbers from 0 to 100 into ten equal-width intervals, and the CSR grade of a firm (*CSR_Grade*) indicates which of these intervals its CSR evaluation score (*CSR_Score*) is assigned to.

Independent Variables

The key independent variable in our paper is the religious beliefs of QFIIs. Religion may play a role in place attachment (Mazumdar and Mazumdar 2004). If an investor is located in a highly religious region, she is more likely to engage in religious activities and to be affected by religious opinions (Su 2019). Following previous studies (Callen and Fang 2015), we classify each QFII as a religious QFII or an atheistic QFII based on the religious population of the region in which each QFII is located. We further categorize the religious QFIIs as Christian QFIIs or other religious QFIIs. Specifically, the detailed procedure that we use for categorizing the above variables is as follows.

First, using the RCS (Religious Characteristics of States) data from the ARDA, we compare the total number of people who practice Christianity or other religions with the number

⁴ http://www.thearda.com/Archive/Files/Descriptions/RCSDE M2.asp.

⁵ Hexun.com uses different weights to evaluate firms in the consumption, manufacturing, and service industry. For detailed evaluation process please refer to http://stock.hexun.com/2013-09-10/157898839. html.

of people who are atheistic within each region and year. If the number of people who are religious is larger than that of people who are atheistic within a specific year, we consider the region to be religious for that year. Otherwise, we consider the region to be atheistic for the year. Furthermore, we categorize a religious region as Christian if the largest religious population in the region practices Christianity, and we place a religious region into the category of other religions if the largest religious population practices other religions.

Second, we manually collect information on QFIIs and the countries or regions that they are from using the data from the CSRC. We categorize a QFII as religious (*REL*) or atheistic (*ATHEIST*) based on the region in which that investor is located. For each year, the holdings of a QFII are considered religious (*REL*) if the QFII is from a region considered to be religious for that year. Otherwise, its holdings are considered atheistic (*ATHEIST*). In addition, we determine whether the holdings of a religious QFII are Christian (*CHRIST*) or associated with other religions (*OTHER*) based on whether that QFII is from a region that is considered to generally practice Christianity or other religions for that year.

Further Partitions

We further categorize the religious QFIIs as long- or shortterm investors, large or small shareholder, and more or less sophisticated investors. We determine whether an investor is a long- or short-term investor based on the volatility of the investors' holdings. The volatility of institutional investors' holdings demonstrates their investment horizons (Gaspar et al. 2005). Long-term institutional investors are expected to keep their shares stable over considerable lengths of time. However, short-term institutional investors are expected to modify their portfolios frequently. Following the studies on long-term and short-term institutional investors (Gaspar et al. 2005; Kim et al. 2019a, b), we divide the QFIIs into long- or short-term categories based on the volatility of their investment horizons. We consider QFIIs to be longterm investors if they hold stable portfolios. Otherwise, we consider them to be short-term investors. Specifically, first, we compute the standard deviation of each investor's holding proportion within one firm for each year based on their previous 12 quarters' holding proportions. Second, we compute the average of these standard deviations for each QFII across all the firms. Third, we consider a QFII to be a long-term investor for a specific year if the average standard deviation of its holdings for that year is below the average standard deviation of all the OFIIs. Otherwise, we consider OFIIs to be short-term for that year. Therefore, we are able to classify the holdings of religious QFIIs into long-term holdings of religious QFIIs (LONG_REL) and short-term holdings of religious QFIIs (SHORT_REL).

We also try to show a relatively larger shareholder of a firm (larger than the median of all QFIIs' holding within the industry in the same year) has more pronounced effect on CSR. We categorize the holdings of religious QFIIs into the holdings of religious QFIIs as relatively larger shareholder (*LARGE_REL*) and the holdings of religious QFIIs as relatively smaller shareholder (*SMALL_REL*).

We finally use the number of years since the religious QFII entered Chinese stock market as the proxy of the committed investor. We consider these religious QFIIs to be more committed investors if, during a specific year, the number of years they have entered Chinese stock market more than the average number of years of entering across all the QFIIs. Otherwise, we consider the religious QFIIs to be less committed investors. Thus, we are able to classify the holdings of religious QFIIs into the holdings of more committed religious QFIIs (*MCOM_REL*) and those of less committed religious QFIIs (*LCOM_REL*).

Control Variables

To ensure that the results are not driven by heterogeneity among the listed firms, we add control variables that cover the characteristics of listed firms that have been examined in prior studies (Li and Zhang 2010; Di Giuli and Kostovetsky 2014; Pucheta Martínez and López Zamora 2018; Ting and Yin 2018; Kim et al. 2019a, b; Su 2019). These control variables include ROA, namely, the ratio of earnings before interest and tax to total assets. Tobin's Q (TOBINQ) is computed as the ratio of market capitalization to total assets. Domestic institutional holding (INST) is calculated as the ratio of the shares held by domestic institutions to total shares. We add a dummy variable to control for property rights (SOE), which equals 1 if a given firm is a state-owned enterprise; otherwise, this variable equals 0. The inclusion of SOEs is important, potentially due to the following reason given by Du (2014): the CEOs and/or chairmen in SOEs are quasi-government officials and are Chinese Communist Party members; thus, they are inclined toward atheism. Managerial ownership (MGM) is measured as the ratio of the number of shares held by managers to the total number of shares. The first shareholder's ownership (FIRST) is calculated as the ratio of the number of shares held by the first shareholder to the total number of shares. We add a dummy variable to control for the duality of managers (DUAL), which equals 1 if the chairman and CEO of a given firm are the same person; otherwise, this variable equals 0. We also include the cash flow of firms (CASHFLOW), which is measured as the firm's net cash flow divided by its total assets. We control for board independence (INDE) as the ratio of the number of independent board directors to the total number of board directors. Following previous studies (Almeida and Campello 2007), we add asset tangibility

(*TANG*) to control for the impact of intangible resources on firms' CSR performance (Surroca et al. 2010). We also control for firm size (*SIZE*), the listed age of firms (*AGE*), the capital expenditure ratio (*CAPX*), advertising costs (*AD*), and board size (*BDSIZE*).

Furthermore, the characteristics of the countries or regions from which these QFIIs come from may affect their investment preferences. We add a series of variables to control for the effect of the QFIIs' country of origin. Following Dyck et al. (2019), we use the Environmental Performance Index from the Yale Center for Environmental Law (Yale University) to measure firms' awareness of CSR. To measure worker rights and other social issues, we add the Employment Laws Index and Collective Relations Law Index proposed by Botero et al. (2004). We also add countries' GDP per capita and ratio of market capitalization to GDP using data from the World Bank to measure these countries' economic development and the complexity of their capital markets, respectively. However, these variables are highly correlated with each other. The Pearson correlations between the pairs of these variables are all above 0.85. Thus, we perform PCA to extract one principal component (namely, QFII Country) that indicates the characteristics of the countries or regions from which the QFIIs originate. Of the total variance among the above five variables, 89% is explained by *QFII Country*. Detailed definitions and sources for these variables are found in the Appendix.

Methodology

For each listed firm in the sample, there are multiple associated QFII investors, meaning that each firm's CSR performance is affected by its own characteristics and those of the associated QFIIs; thus, we attempt to use two-level nested data—namely, including firm and QFII data—and the hierarchical linear model to carry out our empirical research. The hierarchical linear model can not only effectively address the estimation of model parameters, but it can also analyze the intragroup and intergroup effects of microscopic and macroscopic variables (Hofmann 1997). Compared with OLS model, the primary advantage of hierarchical linear models in our research settings is that they allow us to simultaneously investigate relationships within firms level, as well as relationships between or across firms level.

In this study, we determine that the firms are nested within the related QFIIs and thus establish a two-level hierarchical linear model. In addition, multiple QFIIs can hold shares of the same firm. In other words, a firm's CSR performance could be affected by multiple QFIIs. In this study, following Leckie (2013), we establish a two-level hierarchical linear model with multiple membership.

The data structures of the multiple membership model require us to modify standard hierarchical notation. Thus,

following Browne et al. (2001), we use classification notation to represent our model. First, we establish an unconditional model as shown in Eq. (1) to test whether there is a significant level of intragroup correlation.

$$CSR_{i} = \beta_{0} + \sum_{j} w_{j,i}^{(2)} u_{j}^{(2)} + e_{i}$$
$$u_{j}^{(2)} \sim N\left(0, \delta_{u(2)}^{2}\right)$$
(1)

 $e_i \sim N(0, \delta_e^2)$

where CSR_i denotes the CSR performance (CSR score or grade) of firm *i*, and β_0 represents the mean of CSR performance across all the firms. The superscript '(2)' denotes the random effects of the second-level QFIIs and their associated covariance parameters. $\sum_j w_{j,i}^{(2)} u_j^{(2)}$ is the weighted sum of QFII effects where the multiple membership weight $w_{j,i}^{(2)}$ measures the extent to which firm *i* belongs to QFII *j*, and its associated effect is denoted as $u_j^{(2)}$. We normalized the proportion of the shares of firm *i* held by each QFII using the multiple membership weights. Thus, the sum of the multiple membership weights of each firm is equal to 1: $\sum_i w_{i,i}^{(2)} = 1$.

The QFII effects $u_j^{(2)}$ and the residual errors e_i are assumed to be independent of one another and normally distributed with zero means and constant variances. Consequently, the intraclass correlation coefficients (ICC) of two firms held by the same QFII could be calculated using Eq. (2) (Leckie 2013):

$$\rho = \frac{\delta_{u(2)}^2}{\delta_{u(2)}^2 + \delta_e^2}$$
(2)

The value of an ICC reflects the ratio of between-group variance to total variance. If CSR performance is independent of QFII type, the value of the ICC will be zero, indicating that there is no between-group difference. In this case, it would not be necessary to use a hierarchical linear model (Hofmann 1997).

Using Eq. (1), we add the explanatory variables at the QFII level and the control variables at the firm level. When adding variables at the QFII level, we should account for the type of each QFII that holds shares of each firm. To do this, we sum the religious QFII holdings and the atheistic QFII holdings within the model.⁶ In this way, we develop a

⁶ It is notable that in the multiple membership hierarchical linear model, the variables at higher levels are usually added into the model in the form of weight averages. However, the holdings of these QFIIs are already scaled by the total number of shares of each firm. Thus, we include the sum of religious QFII holdings and atheistic QFII holdings into the model.

two-level random intercept model with multiple membership as shown in Eq. (3):

$$CSR_{i} = \beta_{0} + \beta_{1} \sum_{j} REL_{j,i} + \beta_{2} \sum_{j} ATHEIST_{j,i}$$
$$+ \sum_{j} w_{j,i}^{(2)} u_{j}^{(2)} + \gamma * Control_{i} + e_{i}$$
$$u_{j}^{(2)} \sim N\left(0, \delta_{u(2)}^{2}\right)$$
(3)

 $e_i \sim N(0, \delta_e^2)$

where $\sum_{j} REL_{j,i}$ and $\sum_{j} ATHEIST_{j,i}$ represent the sum of the holdings of religious QFIIs (*REL*) and that of the holdings of atheistic QFIIs (*ATHEIST*), respectively.

To further distinguish between the effects of different religions, we employ the following models to test the effect of the religious beliefs of Christian QFIIs (*CHRIST*) and that of the religious beliefs of QFIIs who practice other religions (*OTHER*) on firms' CSR performance.

$$\begin{split} CSR_i &= \beta_0 + \beta_1 \sum_{j} CHRIST_{j,i} + \beta_2 \sum_{j} OTHER_{j,i} \\ &+ \sum_{j} w_{j,i}^{(2)} u_j^{(2)} + \gamma * Control_i + e_i \\ u_j^{(2)} &\sim N\Big(0, \delta_{u(2)}^2\Big) \end{split} \tag{4}$$

$$e_i \sim N(0, \delta_s^2).$$

Empirical Results

Sample

We have a final sample containing 23,046 observations after merging the data collected from Hexun.com and the Wind and CSMAR databases. We select our sample firms using the following criteria (Jiang and Wang 2008; Du 2014): (1) We delete financial firms because of their unique financial characteristics; and (2) we exclude firm-years with particular treatment (PT) and special treatment (ST). The sample period used spans from 2010 to 2018.

Table 1 presents the year, industry and QFII distributions. As presented in Panel A, the number of observations increased slowly and steadily over our sample period. As presented in Panel B, our sample has higher number of manufacturing industries (C1-C4) than it does any other industry, which is consistent with the industrial development in China. As shown in Panel C, the number of QFIIs that invest in the A-share market remains steady over our sample period. Additionally, the results show that approximately 10% of the listed firms in the A-share market are partially held by QFIIs each year.

Table 2 presents the distribution of religions for the countries or regions from which the QFIIs originate. From Table 2, we can see that the QFIIs in our sample exhibit a variety of religious beliefs.

Table 3 presents the descriptive statistics of the main variables that we use in the following analyses. From Table 3, we can see that in our sample, the average CSR score is 25.2779 out of 100, and the average CSR grade is 3.0492 out of 10; both of these scores demonstrate the low level of CSR performance in China and are consistent with the findings of Su (2019).

Univariate Test

Table 4 presents the Pearson correlations between the main variables in this study. We find that the two measures of CSR used are highly correlated (the correlation is 0.983 and significant at the 1% level).

The results in Table 4 reveal significantly positive relations between the measures of CSR and those of REL, which is consistent with the argument that firms with QFIIs who hold religious beliefs have better CSR performance than do others. Additionally, consistent with prior literature (Du 2014; Su 2019), we find that high CSR scores are positively associated with state-owned firms and with firms that are large, have a high level of institutional ownership, have a low level of managerial ownership, exhibit a low level of financial distress and a high cash flow, have a large board and show a high degree of board independence.

Regression Results

We apply the maximum likelihood method to estimate the parameters for the unconditional model Eq. (1) and the sub-sequent models.

Following Leckie (2013), the values of the intraclass correlation coefficients (ICC) of two firms held by the same QFII are $\rho = 14.22\%$ and $\rho = 14.61\%$ for columns (1) and (2), respectively. Additionally, the random variance $\delta_{u(2)}^2$ and e_i both pass a chi-squared test, indicating that the values of the ICCs are statistically significant. In other words, the firms' CSR performance exhibits a between-group difference at the QFII level. Thus, it is necessary to use the hierarchical linear model to estimate the impact of the religious beliefs of QFIIs on firms' CSR performance. The results are shown in Table 5.

In Table 6, we present the regression results regarding the effect of the religious beliefs of QFIIs on CSR performance

Table 1 Sample distributions

Year	Ν	РСТ	CUML PCT
Panel A: yearly distribution			
2010	1799	7.81%	7.81%
2011	2069	8.98%	16.78%
2012	2236	9.7%	26.49%
2013	2277	9.88%	36.37%
2014	2449	10.63%	46.99%
2015	2668	11.58%	58.57%
2016	2876	12.48%	71.05%
2017	3300	14.32%	85.37%
2018	3372	14.63%	100%
Panel B: industry distribution			
A	302	1.31%	1.31%
В	568	2.46%	3.78%
C1	1483	6.43%	10.21%
C2	4076	17.69%	27.9%
C3	8369	36.31%	64.21%
C4	366	1.59%	65.8%
D	832	3.61%	69.41%
E	605	2.63%	72.03%
F	1286	5.58%	77.61%
G	726	3.15%	80.76%
Н	74	0.32%	81.09%
ſ	1681	7.29%	88.38%
К	1017	4.41%	92.79%
L	347	1.51%	94.3%
М	237	1.03%	95.33%
N	301	1.31%	96.63%
Р	43	0.19%	96.82%
Q	79	0.34%	97.17%
R	349	1.51%	98.68%
S	305	1.32%	100%
Year		Number of unique Firms held by QFIIs	Number of unique QFIIs holding shares
Panel C: QFIIs distribution			
~ 2010		392	54
2011		281	59
2012		294	65
2013		453	97
2014		475	113
2015		520	125
2016		536	96
2017		503	100
2018		452	86

Panel A of this table presents the yearly distribution of our CSR sample. Panel B of this table presents the industry distribution of the sample. The numbers of observations, percentages, and cumulative percentages are presented. In Panel B, the industry labels follow China's industrial classification for national economic activities, with notations of A for agriculture, forestry, animal husbandry and fishery; B for mining; C1–C4 for manufacturing; D for electricity, thermal, gas and water production and supply; E for construction; F for wholesale and retail; G for transportation, warehousing and postal services; H for accommodation and catering; I for information and software; K for real estate; L for leasing and business services; M for scientific research and technology services; N for water conservancy, environment and public facilities management; P for education; Q for health and social work; R for culture, sports and entertainment; and S for public administration, social security and social organization. Financial industries are excluded from our sample. Panel C of this table presents the QFIIs distribution of the sample. The number of unique firms that held by QFIIs and the number of unique QFIIs that hold shares are presented

Table 2 Religion distributions

Countries/Regions	Most popular religion	Number of unique QFIIs holding shares
Hong Kong	Chinese Folk	54
United States of America	Christian (Protestant)	29
United Kingdom	Christian (Protestant)	16
Singapore	Buddhist	15
Taiwan	Chinese Folk	14
South Korea	Atheist	9
Japan	Buddhist	8
France	Christian (Catholic)	7
Canada	Christian (Catholic)	6
Switzerland	Christian (Protestant)	6
Australia	Christian (Protestant)	4
Malaysia	Muslim	2
Germany	Christian (Protestant)	2
Netherlands	Atheist	2
Norway	Christian (Protestant)	1
Qatar	Muslim	1
Macau	Chinese Folk	1
Kuwait	Muslim	1
Sweden	Christian (Protestant)	1
Italy	Christian (Catholic)	1
Ireland	Christian (Catholic)	1
United Arab Emirates	Muslim	1

Tis table presents the religion distributions of the countries or regions where the QFIIs from. The most popular religion in the country or region and the number of unique QFIIs that hold shares are presented. The Christian includes all denominations

after controlling for the other determinants. Additionally, the CSR score and the CSR grade are used as dependent variables. Columns (1) and (3) of Table 6 show the parameters and *t*-values of each independent variable; the focus of this table is on the information regarding REL, namely, on the holdings of religious QFIIs. The coefficients of the measures of REL are 0.5292 (with a t-value of 2.63) and 0.0539 (with a *t*-value of 2.67). They are both statistically significant at the 1% level and have economic significance. These results are consistent with our argument and support the notion that firms with a high level of religious QFII ownership have better CSR performance than do those without this ownership. Columns (2) and (4) present the results of further categorizing REL into groups composed of the holdings of Christian QFIIs (CHRIST) and those of QFIIs who practice other religions (OTHER). The association between CSR and CHRIST is significant at the 1% level. However, the association between CSR and OTHER is insignificant.

Regarding the control variables, we find that some of the results for the key factors are similar to those in the existing literature. For example, the coefficients for the relation between *SIZE* (firm size) and CSR score are significant at the 1% level, consistent with findings of Su (2019). As prior literature has shown, firm size can predict institutional ownership and determine to what extent foreign institutional investors can affect board decisions. Corporate governance variables such as board independence (*INDE*) and firm characteristics such as age (*AGE*), roa (*ROA*), and cashflows (*CASHFLOW*) are consistent with the prior literature across all columns (Li and Zhang 2010; Su 2019).

The Moderate Effects

To test Hypotheses 2, we focus on whether the association between the religious beliefs of QFII shareholders and CSR is more pronounced when foreign institutional shareholders are short-term investors. Table 7 presents the relevant regression results.

As shown in Columns (1) and (3) of Table 7, we find that the coefficients of *LONG_REL* are insignificant. However, *SHORT_REL* has significant coefficients of 0.7336 and 0.0730, and both are significant at the 1% level. As shown in Columns (2) and (4), *LONG_CHRIST* has coefficients of 0.2396 and 0.0214 that are significant at the 10% level and insignificant, respectively. The coefficients of *LONG_OTHER* are insignificant. *SHORT_CHRIST* has coefficients of 0.6794 and 0.0660, and both are significant at the 1% level. *SHORT_OTHER* has coefficients of 0.4050 and 0.0406, and both are significant at the 5% level.

In conclusion, the results are consistent with Hypothesis 2, namely, that the religious beliefs of short-term QFIIs have significant effects on CSR. When these religious beliefs are categorized into those that are Christian and those that pertain to other religions, we can see that the aforementioned positive effect on CSR is more pronounced when the religious beliefs of the QFIIs are Christian. This additional finding is consistent with the findings of Weber (1930).

We are also interested in the differences between relatively larger and relatively smaller shareholders QFIIs. The results of the regression used to test Hypotheses 3 are presented in Table 8. We find that in Table 8, *LARGE_REL* has coefficients of 0.4083 and 0.0423, and both are significant at the 5% level. *SMALL_CHRIST* has coefficients of 0.6087 and 0.0579, and both are significant at the 1% level. The coefficients of *SMALL_REL*, *SMALL_CHRIST*, and *SMALL_OTHER* are all insignificant.

The results are consistent with Hypothesis 3, namely, that the religious beliefs of relatively larger shareholders QFIIs have more pronounced effects on CSR. When these religious beliefs are categorized into those that are Christian and those that pertain to other religions, we can see that the

 Table 3
 Descriptive statistics

Variable	N	Mean	Std.	Min	Median	Max
CSR_Score	23,046	25.2779	16.3391	0.0000	22.2900	90.8700
CSR_Grade	23,046	3.0492	1.6213	1.0000	3.0000	10.0000
REL	23,046	0.0000	1.0000	-0.2074	- 0.2074	28.6662
ATHEIST	23,046	0.0000	1.0000	- 0.0495	- 0.0495	84.9491
CHRIST	23,046	0.0000	1.0000	- 0.1834	- 0.1834	27.2125
OTHER	23,046	0.0000	1.0000	- 0.1363	- 0.1363	36.1544
SOE	23,046	0.3575	0.4793	0.0000	0.0000	1.0000
INST	23,046	36.2387	22.5140	0.1350	35.7775	85.5650
MGM	23,046	13.5654	20.4829	0.0000	0.2881	89.7250
FIRST	23,046	35.2408	15.1627	0.0000	33.3400	91.1600
SIZE	23,046	9.5310	0.8789	0.0000	9.4982	12.3861
AGE	23,046	10.3465	7.1368	1.0000	9.0000	29.0000
TOBINQ	23,046	2.1789	2.0144	0.0000	1.6059	11.2414
TANG	23,046	0.4748	0.1391	0.0000	0.4764	0.9903
ROA	23,046	0.0554	0.0734	- 0.1896	0.0449	0.3342
AD	23,046	3.4292	12.3380	- 22.5706	0.7626	85.5439
CASHFLOW	23,046	0.0498	0.0681	0.0000	0.0269	0.3877
CAPX	23,046	0.0219	0.0295	0.0000	0.0156	0.8107
BDSIZE	23,046	2.1338	0.2160	0.0000	2.1972	2.8904
INDE	23,046	0.3739	0.0577	0.0000	0.3333	0.8000
DUAL	23,046	0.2698	0.4438	0.0000	0.0000	1.0000
QFII_Country	23,046	0.0000	2.1140	-0.8820	- 0.8820	6.8277

This table presents summary statistics for the major variables used in this study. The sample period is from 2010 to 2018 and has 23,046 firm-year observations. The religious QFIIs' holdings (*REL*), atheist QFIIs' holdings (*ATHEIST*), Christian QFIIs' holdings (*CHRIST*) and other religious QFIIs' holdings (*OTHER*) are all normalized. All the variables are defined in the Appendix

aforementioned positive effect on CSR exists only when the QFIIs are relatively larger shareholders and are from Christian countries.

The last analysis used to test Hypotheses 4. The results are presented in Table 9. We find that, *MCOM_REL* has coefficients of 0.4651 and 0.0462, and both are significant at the 5% level. The coefficients of *LCOM_REL* are insignificant. *MCOM_CHRIST* has coefficients of 0.6716 and 0.0636, and both are significant at the 1% level. The coefficients of *MCOM_OTHER* and *LCOM_OTHER* are insignificant.

In conclusion, the final analysis is consistent with the stock preference channel as well. More committed religious QFII holdings are significantly related to CSR. These results are consistent with Hypothesis 4, namely, that the religious beliefs of more sophisticated QFIIs have significant effects on CSR. In conclusion, results shown in Tables 7, 8, 9 are consistent with the stock preference mechanism, which explains the positive association between CSR and religious QFII holdings.

Robustness

We employ five robustness tests in this study. First, we divide the CSR scores into five categories: shareholder, customer, employer, environment, and social. For each category, we run our main model. The results of this analysis are summarized in Table 10. We can see that *QFII_REL* is most significantly positive in the case of the shareholder dimension. The same phenomenon occurs in the case of the measure pertaining to Christian beliefs. We noticed that in four out of the five dimensions, the measure of Christian beliefs is more significantly positive than are the raw religious measures. Again, these findings are consistent with the stock preference hypothesis because the shareholder dimension is closely related to financial performance. Christian beliefs seem to be more closely related to better CSR than are other beliefs.

In the second sensitivity test, we change the measurement used for the holdings of religious QFIIs (*QFII_REL*). We consider a region to be atheistic if the proportion of atheists in that region is among the top 15%, 20% or 25% of the proportions of atheists in regions where QFIIs are located. Then, we re-estimate the coefficients. The results of this analysis are shown in Table 11. Under all the different cutoff

Table 4 Pearson (below) and Spearman (above) correlation analy	ow) and Spearn	ian (above) corn	elation analysis								
Variables	(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)	(10)	(11)
(1) CSR_Score	1	0.950^{***}	0.125***	0.023^{***}	0.107^{***}	0.105^{***}	0.070^{***}	0.150^{***}	0.017^{**}	0.170^{***}	0.219^{***}
(2) CSR_Grade	0.983^{***}	1	0.118^{***}	0.020^{**}	0.101^{***}	0.099***	0.080^{***}	0.150^{***}	0.006	0.164^{***}	0.219^{***}
(3) REL	0.078^{***}	0.076^{***}	1	0.057^{***}	0.809^{***}	0.644^{***}	0.087***	0.111^{***}	-0.057^{***}	0.079^{***}	0.155^{***}
(4) ATHEIST	0.009	0.007	0.039***	1	0.043^{***}	0.032^{***}	0.012	0.011	-0.010	0.020^{**}	0.017^{**}
(5) CHRIST	0.082^{***}	0.080^{***}	0.808^{***}	0.048^{***}	1	0.169^{***}	0.083^{***}	0.078^{***}	- 0.063***	0.074^{***}	0.116^{***}
(6) OTHER	0.036^{***}	0.037***	0.744^{***}	0.010	0.207^{***}	1	0.057***	0.119^{***}	-0.034^{***}	0.060^{***}	0.154^{***}
(7) SOE	0.138^{***}	0.141^{***}	0.017**	- 0.005	0.024^{***}	0.000	1	0.395***	-0.555^{***}	0.193^{***}	0.332^{***}
(8) INST	0.187^{***}	0.187^{***}	0.065***	-0.011	0.061^{***}	0.039^{***}	0.393^{***}	1	-0.464^{***}	0.287^{***}	0.448^{***}
(6) MGM	-0.060^{***}	-0.065^{***}	-0.019^{**}	0.009	-0.026^{***}	-0.003	-0.472^{***}	-0.500^{***}	1	-0.199^{***}	-0.291^{***}
(10) FIRST	0.151^{***}	0.147^{***}	0.031^{***}	0.009	0.019^{**}	0.030^{***}	0.197^{***}	0.305***	-0.102^{***}	1	0.150^{***}
(11) SIZE	0.158^{***}	0.155^{***}	0.072^{***}	- 0.003	0.064^{***}	0.047^{***}	0.186^{***}	0.376^{***}	-0.185^{***}	0.121^{***}	1
(12) AGE	0.007	0.014^{*}	0.018^{**}	-0.013*	0.021^{**}	0.005	0.452***	0.382^{***}	-0.553^{***}	-0.082^{***}	0.205^{***}
(13) TOBINQ	- 0.025***	-0.024^{***}	0.003	0.001	0.000	0.004	-0.064^{***}	-0.051^{***}	0.046^{***}	-0.026^{***}	-0.104^{***}
(14) TANG	0.030^{***}	0.025***	0.012	0.011	0.009	0.010	-0.100^{**}	-0.106^{**}	0.215^{***}	0.048^{***}	0.033^{***}
(15) ROA	0.011	0.010	0.001	0.000	0.001	0.001	0.001	-0.011	0.002	0.026^{***}	0.000
(16) AD	0.061^{***}	0.060^{***}	0.027***	- 0.002	0.023^{***}	0.019^{**}	0.075***	0.122^{***}	-0.047^{***}	0.107^{***}	0.158^{***}
(17) CASHFLOW	0.002	0.001	0.000	0.001	0.001	-0.000	- 0.004	-0.015*	0.009	0.022^{***}	0.001
(18) CAPX	0.001	0.001	0.006	0.001	0.006	0.003	0.000	- 0.007	0.003	0.018^{**}	- 0.002
(19) BDSIZE	0.127^{***}	0.125^{***}	0.012	0.002	0.022^{***}	-0.005	0.238^{***}	0.172^{***}	-0.175^{***}	0.012	0.141^{***}
(20) INDE	- 0.009	- 0.008	0.021^{**}	-0.005	0.006	0.028^{***}	-0.061^{***}	-0.041^{***}	0.066^{***}	0.042^{***}	0.007
(21) DUAL	-0.063^{***}	-0.065^{***}	0.011	0.010	0.006	0.011	-0.292^{***}	-0.206^{**}	0.266^{***}	-0.038^{***}	-0.097^{***}
(22) QFII_Country	0.102^{***}	0.100^{***}	0.453***	0.127^{***}	0.426^{***}	0.269^{***}	0.083^{***}	0.091***	-0.054^{***}	0.091^{***}	0.112^{***}
Variables	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
(1) CSR_Score	- 0.065***	0.015^{*}	0.066^{***}	0.524^{***}	0.234^{***}	0.092^{***}	0.109^{***}	0.100^{***}	-0.015*	-0.026^{***}	0.117^{***}
(2) CSR_Grade	-0.056^{***}	0.002	0.061^{***}	0.489^{***}	0.217^{***}	0.090^{***}	0.094^{***}	0.106^{***}	-0.019^{**}	-0.035^{***}	0.110^{***}
(3) REL	0.038^{***}	- 0.004	0.003	0.102^{***}	0.124^{***}	0.046^{***}	0.051^{***}	0.044^{***}	0.002	-0.024^{***}	0.971^{***}
(4) ATHEIST	0.008	- 0.006	0.009	0.016^{*}	0.023^{***}	0.002	0.015^{*}	0.009	-0.010	0.004	0.202^{***}
(5) CHRIST	0.034^{***}	- 0.011	0.019^{**}	0.081^{***}	0.119^{***}	0.039^{***}	0.052^{***}	0.041^{***}	- 0.002	-0.021^{**}	0.809^{***}
(6) OTHER	0.038^{***}	- 0.003	-0.017*	0.080^{***}	0.093^{***}	0.022^{***}	0.020^{**}	0.027^{***}	0.019^{**}	-0.018^{**}	0.589^{***}
(7) SOE	0.453^{***}	-0.314^{***}	- 0.088***	-0.191^{***}	0.133^{***}	-0.130^{***}	-0.188^{***}	0.257^{***}	- 0.070***	- 0.292***	0.089^{***}
(8) INST	0.424^{***}	-0.242^{***}	-0.103^{***}	-0.053^{***}	0.220^{***}	-0.072^{***}	-0.088^{***}	0.181^{***}	-0.050^{***}	-0.207^{***}	0.102^{***}
(6) MGM	- 0.545***	0.304^{***}	0.154^{***}	0.275^{***}	-0.106^{***}	0.182^{***}	0.254^{***}	-0.174^{***}	0.045^{***}	0.270^{***}	-0.061^{***}
(10) FIRST	- 0.099***	-0.063^{***}	0.061^{***}	0.103^{***}	0.106^{***}	0.043^{***}	-0.048^{***}	0.001	0.028^{***}	- 0.029***	0.087^{***}
(11) SIZE	0.424^{***}	-0.604^{***}	-0.241^{***}	-0.103^{***}	0.351^{***}	-0.056^{***}	-0.205^{***}	0.237^{***}	-0.020^{**}	-0.193^{***}	0.148^{***}
(12) AGE	1	-0.380^{***}	-0.296^{***}	-0.355^{***}	0.110^{***}	-0.341^{***}	-0.220^{***}	0.125^{***}	-0.023^{***}	-0.250^{***}	0.035^{***}
(13) TOBINQ	-0.041^{***}	1	0.176^{***}	0.415***	-0.128^{***}	0.130^{***}	0.282^{***}	-0.176^{***}	0.030***	0.177^{***}	- 0.010

Table 4 (continued)											
Variables	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
(14) TANG	- 0.295***	0.295*** 0.054***	1	0.186^{**}	-0.081^{***}	0.019^{**}	0.181^{***}	-0.014^{*}	- 0.021**	0.079***	0.004
(15) ROA	-0.003	0.001	0.013	1	0.171^{***}	0.302^{***}	0.330^{***}	-0.019^{**}	-0.030^{***}	0.108^{***}	0.091^{***}
(16) AD	0.027^{***}	- 0.012	-0.045^{***}	- 0.000	1	0.122^{***}	0.004	0.125^{***}	-0.021^{**}	-0.073^{***}	0.119^{***}
(17) CASHFLOW	-0.018^{**}	0.001	0.005	0.974^{***}	0.002	1	0.169^{***}	0.047^{***}	-0.037^{***}	0.092***	0.043***
(18) CAPX	- 0.002	0.003	0.013^{*}	0.957^{***}	-0.001	0.980^{***}	1	-0.055^{***}	-0.010	0.127^{***}	0.043^{***}
(19) BDSIZE	0.117^{***}	-0.060^{***}	-0.029^{***}	-0.001	0.073^{***}	-0.001	- 0.003	1	-0.554^{***}	-0.182^{***}	0.045***
(20) INDE	-0.024^{***}	0.019^{**}	-0.019^{**}	-0.002	0.013	-0.003	0.000	-0.372^{***}	1	0.100^{***}	- 0.002

This table presents the Pearson (below) and Spearman (above) correlations between each pair of major variables used in this study. The sample period is from 2010 to 2018 and has 23,046 firmyear observations. All the variables are defined in the Appendix

- 0.023***

0.101 *** - 0.002

 -0.153^{***}

0.002 0.001

- 0.025***

-0.0010.001

0.094***

0.028*** -0.007

-0.241 * * * 0.026^{***}

(22) QFII_Country

(21) DUAL

0.009

0.002 0.004

0.043***

0.041***

-0.020**

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively

X. Zhao et al.

Table 5	Regression	results of	unconditional	model
---------	------------	------------	---------------	-------

	CSR Score (1)	CSR Grade (2)
INTERCEPT	24.9528***	3.0186***
	(229.52)	(279.30)
Variance compone	nt	
$\delta^2_{u(2)}$	42.9698***	0.4378***
n (2)	(3.62)	(3.61)
e _i	259.0047***	2.5590***
	(107.02)	(107.07)
No. of obs.	23,046	23,046

This table presents the regression results of the effect of QFIIs' religion on CSR performance. The sample consists of 23,046 firm-year observations from 2010 to 2018. All the variables are defined in the Appendix. Industry and year effects are controlled

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively

points of religious vs. atheistic countries, we consistently observe a significant positive association between CSR and the holdings of religious QFIIs, but the association between CSR and the holdings of atheistic QFIIs is weaker in each of these cases and is even sometimes insignificant. This evidence reveals that firms with any kind of QFII holdings may have better CSR than those that do not, but strong, stable and positive effects on CSR are associated with religious QFIIs.

In the third robustness test, we add lagged CSR measures to further control the fixed firm CSR policy effect. We perform this set of sensitivity tests because there are no significant changes in the CSR of the observed firms; thus, we are not able to run the change model, which may be more suitable to test QFIIs' behaviors regarding stock choice. The best alternative that is available to us involves the inclusion of CSR scores and grades from the previous year as additional control variables. The results in Table 12 are consistent with those in Table 6. However, all the coefficients are economically and statistically weaker. Nevertheless, the holdings of religious and Christian QFIIs are still significantly positive at the 1% or 5% level.

Due to the significant differences among many of the Christian denominations and their attitudes toward capitalism and work, we further divide the holdings of Christian QFIIs into those that are held by Catholic QFIIs and those that are held by Protestant QFIIs. The results of this analysis are presented in Table 13. The coefficient of the holdings of Protestant QFIIs (PROTESTANT) is significant at the 1% level, while the coefficient of the holdings of Catholic QFIIs (CATHOLIC) is insignificant. These results are consistent with the results of Weber (1930).

In the fifth robustness test, we run the main regression again but with a matching sample. First, we separate our sample into QFII and non-QFII (control group) observations.

Table 6Regression resultson the association betweenQFIIs' religion and firm's CSRperformance

	CSR score		CSR grade		
	(1)	(2)	(3)	(4)	
REL	0.5292***		0.0539***		
	(2.63)		(2.67)		
ATHEIST	- 0.0035	- 0.0112	- 0.0038	- 0.0045	
	(-0.03)	(-0.10)	(-0.33)	(-0.39)	
CHRIST	. ,	0.7241***		0.0694***	
		(3.44)		(3.28)	
OTHER		0.0610		0.0093	
		(0.37)		(0.56)	
SOE	2.0229***	2.0219***	0.2059***	0.2058***	
	(7.72)	(7.72)	(7.89)	(7.89)	
INST	0.0854***	0.0855***	0.0083***	0.0083***	
	(15.09)	(15.10)	(14.76)	(14.77)	
MGM	0.0543***	0.0544***	0.0050***	0.0051***	
	(8.42)	(8.43)	(7.85)	(7.86)	
FIRST	0.0573***	0.0573***	0.0055***	0.0055***	
	(7.93)	(7.94)	(7.60)	(7.61)	
SIZE	2.8839***	2.8862***	0.2810***	0.2813***	
	(19.78)	(19.80)	(19.36)	(19.37)	
AGE	- 0.2082***	- 0.2085***	- 0.0194***	- 0.0195***	
	(- 10.79)	(- 10.81)	(- 10.12)	(- 10.14)	
TOBINQ	0.0191*	0.0192*	0.0020*	0.0020*	
	(1.82)	(1.83)	(1.88)	(1.89)	
TANG	- 2.5977***	- 2.5879***	- 0.2995***	- 0.2986***	
	(- 3.29)	(- 3.27)	(- 3.80)	(- 3.79)	
ROA	1.5329***	1.5332***	0.1439***	0.1439***	
	(7.32)	(7.32)	(6.90)	(6.90)	
CASHFLOW	0.0030*	0.0030**	0.0003*	0.0003*	
	(1.96)	(1.97)	(1.82)	(1.83)	
CAPX	- 5.2068***	- 5.2028***	- 0.5329***	- 0.5325***	
	(- 6.65)	(- 6.65)	(- 6.84)	(- 6.83)	
AD	1.0565**	1.0528**	0.1326***	0.1323***	
	(2.26)	(2.25)	(2.85)	(2.84)	
BDSIZE	4.9389***	4.9393***	0.4770***	0.4771***	
	(9.65)	(9.66)	(9.36)	(9.36)	
INDE	7.3583***	7.3860***	0.7416***	0.7441***	
	(3.99)	(4.01)	(4.04)	(4.05)	
DUAL	- 0.3953*	- 0.3944*	- 0.0433*	- 0.0432*	
	(- 1.68)	(- 1.67)	(- 1.84)	(- 1.84)	
QFII_Country	0.3505***	0.3414***	0.0344***	0.0336***	
	(6.36)	(6.19)	(6.26)	(6.11)	
Yr and IND	Controlled	Controlled	Controlled	Controlled	
Variance component					
$\delta^2_{u(2)}$	7.5172**	7.0639**	0.0771**		0.0728**
u(2)	(2.47)	(2.38)	(2.41)		(2.34)
e _i	218.8190***	218.7914***	2.1701***		2.1699***
-	(106.86)	(106.86)	(108.50)		(107.43)
No. of obs.	23,046	23,046	23,046		23,046

This table presents the regression results of the effect of religious QFIIs' holdings on CSR performance. The sample consists of 23,046 firm-year observations from 2010 to 2018. All the variables are defined in the Appendix. Industry and year effects are controlled

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively

	CSR score		CSR grade	
	(1)	(2)	(3)	(4)
LONG_REL	- 0.0056		0.0009	
	(-0.04)		(0.06)	
SHORT_REL	0.7336***		0.0730***	
	(4.08)		(4.03)	
LONG_ CHRIST		0.2396*		0.0214
		(1.77)		(1.57)
LONG_ OTHER		- 0.1942		- 0.0157
		(-1.46)		(- 1.18)
SHORT_ CHRIST		0.6794***		0.0660***
		(3.62)		(3.48)
SHORT_ OTHER		0.4050**		0.0406**
		(2.46)		(2.45)
Control vari- ables	Yes	Yes	Yes	Yes
Yr and IND	Controlled	Controlled	Controlled	Controlled
Variance com- ponent				
$\boldsymbol{\delta}_{\boldsymbol{u}(2)}^2$	7.2743**	7.6283**	0.0770**	0.0808**
m(2)	(2.46)	(2.44)	(2.42)	(2.41)
e _i	218.7244***	218.6612***	2.1691***	2.1686***
•	(107.21)	(107.19)	(106.40)	(107.36)
No. of obs.	23,046	23,046	23,046	23,046

 Table 7
 Regression results on the association between long / short-term QFIIs' religion and firms' CSR performance

 Table 8
 Regression results on the association between the religions of QFIIs as large/small shareholders and firms' CSR performance

	CSR score		CSR grade	
	(1)	(2)	(3)	(4)
LARGE_REL	0.4083**		0.0423**	
	(2.08)		(2.15)	
SMALL_REL	0.0908		0.0071	
	(0.86)		(0.68)	
LARGE_ CHRIST		0.6087***		0.0579***
		(2.99)		(2.82)
LARGE_ OTHER		0.0111		0.0050
		(0.07)		(0.30)
SMALL_ CHRIST		0.0522		0.0040
		(0.50)		(0.38)
SMALL_ OTHER		0.0852		0.0071
		(0.85)		(0.71)
Control vari- ables	Yes	Yes	Yes	Yes
Yr and IND	Controlled	Controlled	Controlled	Controlled
Variance com- ponent				
$\delta_{u(2)}^2$	7.7126**	7.0810**	0.0796**	0.0737**
•(-)	(2.47)	(2.39)	(2.42)	(2.36)
e _i	218.8296***	218.8141***	2.1702***	2.1701***
	(107.27)	(107.26)	(107.43)	(106.90)
No. of obs.	23,046	23,046	23,046	23,046

This table presents the regression results of the association between long/short-term QFIIs' religions on CSR performance. The sample consists of 23,046 firm-year observations from 2010 to 2018. *LONG_CHRIST* and *SHORT_CHRIST* denote the long/short-term Christian QFIIs' holdings. *LONG_OTHER* and *SHORT_OTHER* denote the long/short-term other religious QFIIs holdings. All the variables are defined in the Appendix. Industry and year effects are controlled ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively

Then, we match each QFII observation with an observation from the control group while requiring each pair of observations to be in the same industry and to have similar firm sizes. These matched observations are not repetitive. The results of this analysis are presented in Table 14. However, all the coefficients are economically and statistically weaker. Nevertheless, the holdings of religious and Christian QFIIs are still significantly positive at the 1% or 5% level.

Finally, we test the mediation effect of firm characteristics on the association between the religions of QFIIs and CSR performance. Six variables are used as mediating variables, This table presents the regression results of the association between the holdings of religions QFIIs as large/small shareholders on CSR performance. The sample consists of 23,046 firm-year observations from 2010 to 2018. *LARGE_CHRIST* and *SMALL_CHRIST* denote the holdings of Christian QFIIs as large/small shareholders. *LARGE_ OTHER* and *SMALL_OTHER* denote the holdings of the other religious QFIIs as the large/small shareholders. All the other variables are defined in the Appendix. Industry and year effects are controlled ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively

namely, *ROA*, which measures firm performance; *SIZE*, which measures firm scale; *BDSIZE*, *INDE*, and *DUAL*, which measure the quality of corporate governance; and *AH*, which measures cross listing. We test the mediating effects of each variable individually. The results of this analysis, shown in Table 15, demonstrate that the mediating effects of these six variables are very low; the highest effect pertains to the variable *SIZE* (10.41%). These results indicate that most of the influence of the religious beliefs of QFIIs on CSR has not passed through these variables.

	CSR score		CSR grade	
	(1)	(2)	(3)	(4)
MCOM_REL	0.4651**		0.0462**	
	(2.44)		(2.41)	
LCOM_REL	0.1911		0.0212	
	(1.31)		(1.45)	
MCOM_ CHRIST		0.6716***		0.0636***
		(3.22)		(3.03)
MCOM_ OTHER		0.0374		0.0060
		(0.25)		(0.40)
LCOM_ CHRIST		0.1957		0.0199*
		(1.63)		(1.65)
LCOM_ OTHER		0.0517		0.0076
		(0.35)		(0.50)
Control vari- ables	Yes	Yes	Yes	Yes
Yr and IND	Controlled	Controlled	Controlled	Controlled
Variance com- ponent				
$\delta^2_{u(2)}$	7.4745***	7.2010**	0.0781***	0.0749**
w(2)	(2.40)	(2.37)	(2.38)	(2.36)
e _i	218.8208***	218.7846***	2.1701***	2.1698***
	(107.25)	(107.25)	(107.43)	(106.89)
No. of obs.	23,046	23,046	23,046	23,046

 Table 9 Regression results on the association between more/less committed QFIIs' religion and firms' CSR performance

This table presents the regression results of the association between more/less committed QFIIs' religions on CSR performance. The sample consists of 23,046 firm-year observations from 2010 to 2018. *MCOM_CHRIST* and *LCOM_CHRIST* denote the more/less committed Christian QFIIs' holdings. *MCOM_OTHER* and *LCOM_OTHER* denote the more/less committed other religious QFIIs holdings. All the other variables are defined in the Appendix. Industry and year effects are controlled

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively

Conclusion

Social factors, such as religious beliefs, are thought to improve firms' CSR, which is becoming a central concern of stakeholders. In this study, we employ the unique qualified foreign institutional investors (QFII) scheme in China to show that stronger religious beliefs among QFIIs are associated with better CSR performance among Chinese listed firms after controlling for other determinants. We further show that this association is driven by QFII's stock preferences when investing. Three sets of opposing hypotheses enable us to examine the stock preference mechanism. The empirical results of this analysis show that the abovementioned association is more pronounced when QFIIs' holding period is shorter, when they are more committed, and when they are more sophisticated investors, which is consistent with the preference story.

We add to the existing literature by studying the effect of foreign institutional investors with varying religious beliefs on the CSR performance of domestic firms. To this end, we examine whether and how the intensity of the religious beliefs of QFIIs affects the CSR performance of Chinese listed firms. The QFII scheme enacted in 2002 is one of the most important programs for the extension of China's progress to global investors. Furthermore, China has a relatively low level of religious adherence. Therefore, this country presents a good experimental context in which to test this issue.

Our study also has some limitations. The most considerable problem stems from the small sample size. The scale and scope of the overall QFII investment in the Chinese stock market is very small. Moreover, Chinese QFII regulations cap any individual QFII investor's ownership in a listed firm to less than 10%. We expect that in the future, with an increased number of QFIIs in China or with the allowance for larger shares of ownership, we will be better able to explore this topic. Alternatively, we expect to find another developing stock market with similar features to those of China but with more general guidelines in terms of foreign institutional holdings to test in the future.

	Shareholder		Customer		Employer		Environment		Social	
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)	(10)
REL	0.4385^{***}		0.0323		0.0179		0.0416		0.0605*	
	(5.44)		(0.56)		(0.43)		(0.87)		(1.66)	
ATHEIST	0.0446		-0.0076		- 0.0269		-0.0132		0.0002	
	(1.00)		(-0.23)		(- 1.17)		(-0.41)		(0.01)	
CHRIST		0.4014^{***}		0.1197^{**}		0.0517		0.1077^{**}		0.0662^{*}
		(4.68)		(2.04)		(1.16)		(2.28)		(1.79)
OTHER		0.1930^{***}		- 0.0496		-0.0183		-0.0416		0.0131
		(2.88)		(-1.05)		(-0.52)		(-1.03)		(0.40)
	(2.98)	(2.99)	(0.63)	(0.64)	(-0.78)	(-0.77)	(- 0.72)	(-0.71)	(3.97)	(3.97)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
YR and IND	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Variance component										
$\delta^2_{u(2)}$	1.3498^{**}	1.3481^{**}	0.5370^{**}	0.4706^{**}	0.3422^{**}	0.3670^{**}	0.1772	0.1493	0.0446	0.0504
	(2.57)	(2.53)	(2.35)	(2.23)	(2.34)	(2.35)	(1.64)	(1.46)	(0.86)	(0.96)
e_i	32.3815^{***}	32.3796***	19.4393^{***}	19.4389^{***}	8.7405***	8.7395	21.5765^{***}	21.5745***	17.7056^{***}	17.7042***
	(107.22)	(107.23)	(107.78)	(107.73)	(107.90)	(106.59)	(106.97)	(106.97)	(107.27)	(107.27)
No. of obs.	23,046	23,046	23,046	23,046	23,046	23,046	23,046	23,046	23,046	23,046

Table 10 The association between QFII's religion and firm's CSR component performance

🖄 Springer

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively

Table 11	Robustness: change
definition	n of Atheist QFIIs'
holdings	

	CSR score			CSR grade		
	15%	20%	25%	15%	20%	25%
REL85%	0.4198**			0.0430**		
	(2.20)			(2.24)		
ATHEIST15%	0.2111			0.0194		
	(1.40)			(1.29)		
REL80%		0.3277*			0.0357*	
		(1.67)			(1.82)	
ATHEIST20%		0.3371**			0.0297*	
		(2.19)			(1.93)	
REL75%			0.3958**			0.0423**
			(2.12)			(2.26)
ATHEIST25%			0.2443*			0.0213
			(1.61)			(1.40)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Yr and IND	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Variance compone	nt					
$\boldsymbol{\delta}_{\boldsymbol{u}(2)}^2$	7.5546***	7.7902**	7.5735**	0.0785**	0.0797**	0.0792**
u (2)	(2.47)	(2.46)	(2.47)	(2.43)	(2.42)	(2.42)
e _i	218.8173***	218.7958***	218.8178***	2.1701***	2.1700***	2.1701***
-	(106.86)	(107.25)	(107.25)	(107.43)	(107.43)	(107.43)
No. of obs.	23,046	23,046	23,046	23,046	23,046	23,046

This table presents the regression results of the effect of QFIIs' religion on CSR performance based on a robust measure of REL. We consider a region to be atheist if the proportion of atheists is among the top 15%, 20% or 25% regions where QFIIs are located. The sample consists of 23,046 firm-year observations from 2010 to 2018. All the variables are defined in the Appendix. Industry and year effects are controlled ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively

Another weakness of our study stems from the division method used to categorize religious countries and nonreligious countries. In this study, we assign the religious beliefs of QFIIs based on the country from which they originated using a somewhat arbitrary population-based method. In this secular age, it is not appropriate to assume that people have fixed religious identities and that these identities are readily shared among the majority of the people in a shared national setting. To compensate for this, we could only employ a series of robustness tests, such as changing the divisions between religious countries and nonreligious countries; after these tests, our results still hold. Unfortunately, due to data limitations, we do not have a better method by which to identify the religious beliefs of all the foreign investors. In

 Table 12
 Robustness: add the lagged term of dependent variable

	CSR score		CSR grade		
	(1)	(2)	(3)	(4)	
REL	0.2545**		0.0292**		
	(2.20)		(2.42)		
ATHEIST	0.0227	0.0215	- 0.0029	- 0.0030	
	(0.26)	(0.25)	(- 0.32)	(-0.34)	
CHRIST		0.3014***		0.0324***	
		(2.62)		(2.69)	
OTHER		0.0440		0.0070	
		(0.44)		(0.67)	
L_CSR_Score	0.4820***	0.4819***			
	(90.85)	(90.83)			
L_CSR_Grade			0.4410***	0.4410***	
			(84.83)	(84.81)	
Control vari- ables	Yes	Yes	Yes	Yes	
Yr and IND	Controlled	Controlled	Controlled	Controlled	
Variance com- ponent					
$\delta_{u(2)}^2$	0.5867	0.4964	0.0074	0.0064	
u (2)	(1.20)	(1.08)	(1.29)	(1.18)	
e _i	155.2559***	155.2509***	1.5937***	1.5937***	
-	(102.64)	(102.64)	(102.58)	(101.42)	
No. of obs.	19,363	19,363	19,363	19,363	

This table presents the regression results of the effect of religious QFIIs' holdings on CSR performance with the lagged term of dependent variable. The sample consists of 19,363 firm-year observations from 2011 to 2018. All the variables are defined in the Appendix. Industry and year effects are controlled

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively Table 13 Robustness: difference between Catholic and Protestant

	(1) CSR score	(2) CSR grade
CATHOLIC	0.0706	0.0073
	(0.48)	(0.49)
PROTESTANT	0.7285***	0.0696***
	(3.49)	(3.31)
OTHER	0.0621	0.0094
	(0.37)	(0.56)
ATHEIST	- 0.0137	-0.0047
	(-0.12)	(-0.41)
Control Variables	Yes	Yes
Yr and IND	Controlled	Controlled
Variance component		
$\delta^2_{u(2)}$	6.9300**	0.0723**
n (2)	(2.40)	(2.37)
e _i	218.7905***	2.1699***
	(107.14)	(107.42)
No. of obs.	23,046	23,046

This table presents the regression results of the effect of Catholic, Protestant, other religious and atheist QFIIs' holdings on CSR performance. The sample consists of 23,046 firm-year observations from 2010 to 2018. All the variables are defined in the Appendix. Industry and year effects are controlled

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively

Table 14 Robustness: m	natching samples
--------------------------------	------------------

	CSR score		CSR grade	
	(1)	(2)	(3)	(4)
REL	0.3233**		0.0329**	
	(2.09)		(2.13)	
ATHEIST	0.0286	0.0235	- 0.0006	- 0.0011
	(0.28)	(0.23)	(-0.06)	(-0.11)
CHRIST		0.4908***		0.0467***
		(3.11)		(2.94)
OTHER		- 0.0266		0.0001
		(-0.20)		(0.00)
Control vari- ables	Yes	Yes	Yes	Yes
Yr and IND	Controlled	Controlled	Controlled	Controlled
Variance com- ponent				
$\delta^2_{u(2)}$	1.9000	1.9502*	0.0193	0.0202*
#(2)	(1.63)	(1.67)	(1.62)	(1.67)
e _i	213.0009***	212.8324***	2.1269***	2.1255***
	(60.17)	(60.28)	(60.34)	(60.34)
No. of obs.	7318	7318	7318	7318

This table presents the regression results of the effect of QFIIs' religion on CSR performance based on a matching sample. Firm-year observations with QFIIs are matched with another observation without QFIIs in the same industry and with a similar firm size. The sample consists of 7318 firm-year observations from 2010 to 2018. All the variables are defined in the Appendix. Industry and year effects are controlled

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively

Table 15 Robustness:
the mediation effect of
firm characteristics on the
association between QFIIs'
religions on CSR performance

the future, a possible solution may be to manually collect the specific religious information of the management of each QFII or to determine the religious tendency of the specific area in which the QFIIs' headquarters are located. This type of alternative analysis may present new results.

Our results highlight the positive effects of the religious beliefs of foreign institutional investors on the CSR performance of domestic firms, thus contributing to the growing body of literature on the relationship between religious beliefs and firms' CSR. We also explain how and why the religious beliefs of institutional investors affect a firm's CSR. We also extend the understanding of the heterogeneity of institutional investors from the perspective of religious beliefs and their impact on a firm's CSR. By revealing the lack of monitoring effects, we offer evidence that the openness of China's financial market should be increased. Furthermore, due to the significant differences between many Christian denominations and their attitudes toward capitalism and work, our results indicate that the holdings of Protestant and Catholic QFIIs have different effects on CSR, which is consistent with the results of Weber (1930). All in all, by showing the association between religious beliefs of QFIIs and CSR of domestic firms in China, and its underlying "stock preference" channel, our paper not only contributes to the literature, but also offer useful guidance to the practitioners."

	(1) ROA	(2) SIZE	(3) BDSIZE	(4) INDE	(5) DUAL	(6) AH
a Coefficient	0.0021	0.0371***	0.0016	0.0011***	0.0080***	0.0024**
	(0.69)	(8.32)	(1.23)	(3.10)	(2.92)	(2.41)
b Coefficient	1.5374***	3.0115***	5.0310***	7.3946***	- 0.4081*	9.5612***
	(7.32)	(20.66)	(9.80)	(4.00)	(- 1.73)	(14.86)
Indirect effect	0.0033	0.1118***	0.0079	0.0081**	- 0.0033	0.0232**
	(0.69)	(7.72)	(1.22)	(2.45)	(- 1.49)	(2.38)
Direct effect	0.9628***	0.9628***	0.9628***	0.9628***	0.9628***	0.9396***
	(9.75)	(9.75)	(9.75)	(9.75)	(9.75)	(9.56)
Total effect	0.9661***	1.0746***	0.9707***	0.9786***	0.9595***	0.9628***
	(9.77)	(10.80)	(9.81)	(9.83)	(9.72)	(9.75)
Proportion of total effect that is medi- ated	0.34%	10.41%	0.81%	0.83%	- 0.34%	2.41%

a coefficient is the impact of religious QFIIs' holding on mediator variable. *b* coefficient is the impact of mediator variable on the dependent variable. The mediator variables include firm performance (ROA), corporate governance quality (*SIZE*, *BDSIZE* and *INDE*), and Cross-listing (AH). AH indicates whether the firm both listed in A-share market and Hong Kong stock market. Indirect effect is the product of *a* and *b* coefficient. Direct effect is the impact of religious QFIIs' holding on firms CSR score which is not channeled by the mediator variables

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively

Acknowledgements We thank the financial support of the National Natural Science Foundation of China under Grants Nos. 71720107001, 71673133, 72071102 and 71771117.

Funding This study was funded by the National Natural Science Foundation of China.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflicts of interest. This article does not contain any studies involving human participants performed by any of the authors.

Appendix

Variable Definitions

Variable	Definitions		QFIIs from these regions to be the holdings of QFIIs who practice other religions
Dependent variables		Further partition variables	
CSR_Score	The CSR scores are taken from the professional CSR evalua- tion platform Hexun.com. A higher CSR score indicates that a listed company has better CSR performance	LONG_REL/SHORT_REL	Long/short-term holdings of religious QFIIs. We divide the holdings of religious QFIIs into long-term and short-term holdings based on the volatility of their investment horizons. We classify the QFIIs as long-term
CSR_Grade	The CSR grade from Hexun. com. A higher grade indicates that a company has better CSR performance		investors if they hold a stable portfolio. Otherwise, they are classified as short-term investors
CUSTOMER	The component of a firm's CSR that involves customer responsi- bility, taken from Hexun.com	LARGE_REL/SMALL_REL	Holdings of religious QFIIs as large/small shareholders. We define the holdings of a religious QFII as a large shareholders'
EMPLOYER	The component of a firm's CSR that involves employer responsi- bility, taken from Hexun.com		if the QFII holds more shares proportion than the median of all QFIIs' holding within the indus-
ENVIRONMENT	The component of a firm's CSR that involves environmental responsibility, taken from Hexun.com		try in the same year. Otherwise, we consider these holdings to be shares hold by religious QFIIs as small shareholders
SOCIAL	The component of a firm's CSR involving social responsibility, taken from Hexun.com	MCOM_REL/LCOM_REL	The holdings of more/less com- mitted religious QFIIs. We divide the holdings of religious
SHAREHOLDER	The component of a firm's CSR involving shareholder responsi- bility, taken from Hexun.com		QFIIs into more or less commit- ted holdings based on the num- ber of years they have entered Chinese stock market. We define
Testing variables			the QFIIs as more committed
REL	The holdings of religious QFIIs. First, based on the number of religious and atheistic individu- als in a region, we determine whether the regions in which the examined QFIIs are located are religious or atheistic. Then, we classify each QFII's holdings as		investors if the number of years they have entered Chinese stock market more than the average number of years of entering across all the QFIIs. Otherwise, they are defined as less commit- ted investors
	religious if that investor is from		

a religious region

Variable

ATHEIST

CHRIST

OTHER

Definitions

The holdings of atheistic QFIIs. We consider a QFIIs' holdings

from an atheistic region

to be atheistic if that investor is

The holdings of Christian QFIIs. If the Christian population of a

region is larger than any other religious population, we con-

sider the holdings of the QFIIs

from that region to be Christian

regions where QFIIs are from is not Christian, we consider these regions to be other religious

regions and the holdings of the

The holdings of QFIIs who practice other religions. If the largest religious population in the

Variable	Definitions	
Control variables		
SOE	Property rights. If the firm is a state-owned enterprise, this variable equals 1; otherwise, this variable equals 0	
INST	Domestic institutional hold- ings. The ratio of the number of shares held by domestic institutions to the total number of shares	
MGM	Managerial ownership. The ratio of the number of shares held by management to the total number of shares	
FIRST	First shareholder's ownership. The ratio of the number of shares held by the first shareholder to the total number of shares	
SIZE	Firm size. This variable is measured by the natural log of a firm's total assets	
AGE	Listed age. The natural log of the number of years that a firm has been listed plus 1	
TOBINQ	Tobin's Q. The ratio of market capitalization to total assets	
TANG	Asset tangibility	
ROA	Profitability. The ratio of earning before interest and tax to total assets	
AD	Advertising cost. The ratio of advertising expenses to total assets	
САРХ	Capital expenditure ratio. The ratio of capital expenditures to total assets	
BDSIZE	Board size. The natural log of the total number of board directors plus 1	
INDE	Board independence. The ratio of the number of independent board directors to the total number of board directors	
DUAL	Managers' duality. If the chairman and CEO are the same person, this variable equals 1; otherwise, this variable equals 0	
QFII_Country	We use PCA to extract the princi- pal components of the Environ- mental Performance Index, the Employment Laws Index, the Collective Relations Law Index, GDP per capita, and the ratio of market capitalization to GDP	

References

- Aggarwal, R., Erel, I., Ferreira, M., & Matos, P. (2011). Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics*, 100, 154–181.
- Ahmed-Haji, A. (2013). Corporate social responsibility disclosures over time: Evidence from Malaysia. *Managerial Auditing Journal*, 28, 647–676.
- Almeida, H., & Campello, M. (2007). Financial constraints, asset tangibility, and corporate investment. *The Review of Financial Studies*, 20, 1429–1460.
- Barro, R. J., & McCleary, R. M. (2003). Religion and economic growth across countries. *American Sociological Review*, 68, 760–781.
- Boone, J. P., Khurana, I. K., & Raman, K. K. (2012). Religiosity and tax avoidance. *The Journal of the American Taxation Association*, 35, 53–84.
- Botero, J. C., Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2004). The regulation of labor. *The Quarterly Journal of Economics*, 119, 1339–1382.
- Bottazzi, L., Rin, M. D., & Hellmann, T. (2008). Who are the active investors? Evidence from venture capital. *Journal of Financial Economics*, 89, 488–512.
- Brown, D., & James, P. (2017). The religious characteristics of states: Classic themes and new evidence for international relations and comparative politics. *Journal of Conflict Resolution*, 62, 1340–1376.
- Browne, W. J., Goldstein, H., & Rasbash, J. (2001). Multiple membership multiple classification (MMMC) models. *Statistical Modelling*, 1, 103–124.
- Cai, G., Li, W., & Tang, Z. (2020). Religion and the method of earnings management: Evidence from China. *Journal of Business Ethics*, 161, 71–90.
- Callen, J. L., & Fang, X. (2015). Religion and stock price crash risk. Journal of Financial and Quantitative Analysis, 50, 169–195.
- Carr, P. (2003). Revisiting the Protestant Ethic and the Spirit of Capitalism: Understanding the relationship between ethics and enterprise. *Journal of Business Ethics*, 47, 7–16.
- Cox, P., Brammer, S., & Millington, A. (2004). An empirical examination of institutional investor preferences for corporate social performance. *Journal of Business Ethics*, 52, 27–43.
- Demiralp, I., D'Mello, R., Schlingemann, F. P., & Subramaniam, V. (2011). Are there monitoring benefits to institutional ownership? Evidence from seasoned equity offerings. *Journal of Corporate Finance*, 17, 1340–1359.
- Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The Accounting Review*, 86, 59–100.
- Di Giuli, A., & Kostovetsky, L. (2014). Are red or blue companies more likely to go green? Politics and corporate social responsibility. *Journal of Financial Economics*, 111, 158–180.
- Du, X. (2014). Does religion mitigate tunneling? Evidence from Chinese Buddhism. *Journal of Business Ethics*, 125, 299–327.
- Du, X., Jian, W., Zeng, Q., & Du, Y. (2014). Corporate environmental responsibility in polluting industries: does religion matter? *Journal of Business Ethics*, 124, 485–507.
- 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*, 693–714.

- Dyreng, S. D., Mayew, W. J., & Williams, C. D. (2012). Religious social norms and corporate financial reporting. *Journal of Busi*ness Finance & Accounting, 39, 845–875.
- Ferreira, M. A., & Matos, P. (2008). The colors of investors' money: The role of institutional investors around the world. *Journal of Financial Economics*, 88, 499–533.
- Field, L., Lowry, M., & Mkrtchyan, A. (2013). Are busy boards detrimental? *Journal of Financial Economics*, 109, 63–82.
- Gallagher, D. R., Looi, A., & Pinnuck, M. (2010). Are active fund managers collectors of private information or fast interpreters of public information. *Accounting and Finance*, 50, 635–662.
- Gaspar, J., Massa, M., & Matos, P. (2005). Shareholder investment horizons and the market for corporate control. *Journal of Financial Economics*, 76, 135–165.
- Gillan, S., & Starks, L. T. (2003). Corporate governance, corporate ownership, and the role of institutional investors: A global perspective. *Journal of Applied Finance*, 13, 4–22.
- Graves, S. B., & Waddock, S. A. (1994). Institutional owners and corporate social performance. Academy of Management Journal, 37, 1034–1046.
- Griffin, P. A., & Sun, E. Y. (2018). Voluntary corporate social responsibility disclosure and religion. *Sustainability Accounting, Management and Policy Journal*, 9, 63–94.
- Guiso, L., Sapienza, P., & Zingales, L. (2009). Cultural biases in economic exchange? *The Quarterly Journal of Economics*, 124, 1095–1131.
- Gundolf, K., & Filser, M. (2013). Management research and religion: A citation analysis. *Journal of Business Ethics*, 112, 177–185.
- Hartzell, J. C., & Starks, L. T. (2003). Institutional investors and executive compensation. *Journal of Finance*, 58, 2351–2374.
- Helwege, J., Intintoli, V. J., & Zhang, A. (2012). Voting with their feet or activism? Institutional investors' impact on CEO turnover. *Journal of Corporate Finance*, 18, 22–37.
- Hilary, G., & Hui, K. W. (2009). Does religion matter in corporate decision making in America? *Journal of Financial Economics*, 93, 455–473.
- Hofmann, D. A. (1997). An overview of the logic and rationale of hierarchical linear models. *Journal of Management*, 23, 723–744.
- Holderness, C. G. (2003). A survey of blockholders and corporate control. *Economic Policy Review*, *9*, 51–64.
- Jiang, G., & Wang, H. (2008). Should earnings thresholds be used as delisting criteria in stock market? *Journal of Accounting and Public Policy*, 27, 409–419.
- Khan, A., Muttakin, M. B., & Siddiqui, J. (2013). Corporate governance and corporate social responsibility disclosures: Evidence from an emerging economy. *Journal of Business Ethics*, 114, 207–223.
- Kim, H., Kim, T., Kim, Y., & Park, K. (2019a). Do long-term institutional investors promote corporate social responsibility activities? *Journal of Banking & Finance*, 101, 256–269.
- Kim, H., Kim, Y., Mantecon, T., & Song, K. R. (2019b). Short-term institutional investors and agency costs of debt. *Journal of Busi*ness Research, 95, 195–210.
- Kimber, D., & Lipton, P. (2005). Corporate governance and business ethics in the Asia-Pacific region. *Business & Society*, 44, 178–210.
- Korkeamäki, T., Virk, N., Wang, H., & Wang, P. (2019). Learning Chinese? The changing investment behavior of foreign institutions in the Chinese stock market. *International Review of Financial Analysis*, 64, 190–203.
- Kumar, A., Page, J. K., & Spalt, O. G. (2011). Religious beliefs, gambling attitudes, and financial market outcomes. *Journal of Financial Economics*, 102, 671–708.

- Leckie, G. (2013). Multiple membership multilevel models—Concepts. In LEMMA VLE Module 13, pp. 1–57. http://www.bristol.ac.uk/ cmm/learning/course.html.
- Li, W., & Zhang, R. (2010). Corporate social responsibility, ownership structure, and political interference: Evidence from China. *Journal of Business Ethics*, 96, 631–645.
- Lin, L. (2010). Corporate social responsibility in China: Window dressing or structural change. *Berkeley Journal of International Law*, 28, 64.
- Marques, J. (2012). Consciousness at work: A review of some important values, discussed from a Buddhist perspective. *Journal of Business Ethics*, 105, 27–40.
- Mazumdar, S., & Mazumdar, S. (2004). Religion and place attachment: A study of sacred places. *Journal of Environmental Psychology*, 24, 385–397.
- McGuire, S. T., Omer, T. C., & Sharp, N. Y. (2011). The impact of religion on financial reporting irregularities. *The Accounting Review*, 87, 645–673.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22, 853–886.
- Morey, M. R. (2002). Mutual fund age and morningstar ratings. *Financial Analysts Journal*, 58, 56–63.
- Motta, E. M., & Uchida, K. (2018). Institutional investors, corporate social responsibility, and stock price performance. *Journal of the Japanese and International Economies*, 47, 91–102.
- Pucheta Martínez, M. C., & López Zamora, B. (2018). Engagement of directors representing institutional investors on environmental disclosure. *Corporate Social Responsibility and Environmental Management*, 25, 1108–1120.
- Ramasamy, B., Matthew, C. H. Y., & Alan, K. M. A. (2010). Consumer support for corporate social responsibility (CSR): The role of religion and values. *Journal of Business Ethics*, 91, 61–72.
- Rizk, R., Dixon, R., & Woodhead, A. (2008). Corporate social and environmental reporting: A survey of disclosure practices in Egypt. Social Responsibility Journal, 4, 306–323.
- Saleh, M., Zulkifli, N., & Muhamad, R. (2010). Corporate social responsibility disclosure and its relation on institutional ownership: Evidence from public listed companies in Malaysia. *Mana*gerial Auditing Journal, 25, 591–613.
- Shahab, Y., Ntim, C. G., & Ullah, F. (2019). The brighter side of being socially responsible: CSR ratings and financial distress among Chinese state and non-state owned firms. *Applied Economics Letters*, 26, 180–186.
- Shinozaki, S., Moriyasu, H., & Uchida, K. (2016). Shareholder composition and managerial compensation. *Journal of Financial and Quantitative Analysis*, 51, 1719–1738.
- Shu, T., Sulaeman, J., & Yeung, P. E. (2012). Local religious beliefs and mutual fund risk-taking behaviors. *Management Science*, 58, 16–23.
- Su, K. (2019). Does religion benefit corporate social responsibility (CSR)? Evidence from China. *Corporate Social Responsibility* and Environmental Management, 26(6), 1206–1221.
- Surroca, J., Tribó, J. A., & Waddock, S. (2010). Corporate responsibility and financial performance: The role of intangible resources. *Strategic Management Journal*, 31, 463–490.
- Teoh, H., & Thong, G. (1984). Another look at corporate social responsibility and reporting: An empirical study in a developing country. *Accounting, Organizations and Society, 9*, 189–206.
- Ting, P., & Yin, H. (2018). How do corporate social responsibility activities affect performance? The role of excess control right. *Corporate Social Responsibility and Environmental Management*, 25, 1320–1331.

- Tomalin, E. (2009). *Biodivinity and biodiversity: The limits to religious environmentalism*. London: Routledge.
- Vasconcelos, A. F. (2010). Spiritual development in organizations: A religious-based approach. *Journal of Business Ethics*, 93, 607–622.
- Weber, M. (1930). *The Protestant Ethic and the Spirit of Capitalism*. London: Routledge.
- Zolotoy, L., O'Sullivan, D., & Chen, Y. (2019). Local religious norms, corporate social responsibility, and firm value. *Journal of Banking* & *Finance*, 100, 218–233.
- Zsolnai, L. (2008). Sustainability and sufficiency: Economic development in a Buddhist perspective. Akademiai Kia-do, Budapest: Society and Economy.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.