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Corporate philanthropy and corporate misconduct: Evidence from China



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ABSTRACT

This paper examines the association between corporate philanthropy and corporate misconduct. Using panel data from China, we find a negative relationship between philanthropic engagement and the likelihood of subsequent corporate misconduct. In addition, we find that the favorable effect of philanthropy on corporate misconduct is stronger when a company's philanthropic giving is more sustained, when a company is located in a region with a stronger external institutional environment, and when a company is not a state-owned enterprise. Our results suggest that companies engaging in philanthropy have incentives to enhance their reputations and build their relationships with stakeholders. Our research extends the extant literature on corporate misconduct by identifying a new antecedent relating to corporate philanthropy and provides valuable insights for practitioners in terms of how to assess and predict the link between corporate philanthropy and the likelihood of its subsequent misconduct.

1. Introduction

In past decades, we have witnessed some of the largest corporate misconduct in history, such as those of Enron, Tyco, and WorldCom. These scandals have driven legislators, regulators, practitioners, and academics to investigate the causes of these events and search for mechanisms to prevent future corporate misconduct. For example, prior studies documented that tax aggressiveness (Lennox, Lisowsky, & Pittman, 2013), auditing (Lennox & Pittman, 2010), executive compensation (Andergassen, 2016; Erickson, Hanlon, & Maydew, 2006), and the press (Lu, Wei, & Chang, 2015; Miller, 2006) are associated with corporate misconduct. In this paper, we investigate the association between another important corporate behavior, corporate philanthropy, with corporate misconduct.

Corporate philanthropy, which is at the top of 'the pyramid of corporate social responsibility' (Carroll, 1979), has recently garnered remarkable research attention. Apart from the focus on the drivers and motives for corporate giving (Gautier & Pache, 2013), that is, whether corporate philanthropy is a charitable or self-serving action, the economic consequences of corporate philanthropy, such as firm performance, has also been widely examined (Wang, Choi, & Li, 2008; Wang & Qian, 2011; Chen, Dong, Tong, & Zhang, 2018a, 2018b, 2019). However, the channels through which corporate philanthropy affects firm performance remain unclear. In this paper, we propose that one of the channels could be corporate misconduct. In other words, corporate philanthropy could be associated with corporate misconduct, eventually leading to impacts on firm performance.

Corporate philanthropy is considered as firms' strategic decision to enhance corporate reputation and build better relationships with stakeholders. Engaging in corporate philanthropy would motivate managers to be less involved in corporate misconduct to reduce the risks of reputation damage and losing critical resources from stakeholders. Moreover, by doing more corporate philanthropy, firms can lower the amount of free cash flow controlled by the managers, which to some extent prevent managerial misconduct (Jensen, 1986). In this case, firms with more corporate philanthropy have less managerial misconduct. In addition, even if corporate philanthropy is made

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by self-serving managers to enhance their personal reputation and advance their own careers, managers would be reluctant to be involved in corporate misconduct because doing so will hurt their public image and career prospects. Therefore, in either way, a negative relationship between corporate philanthropy and corporate misconduct is predicted.

Furthermore, corporate philanthropy leads to more exposure to the public and thus attracts more monitoring from the public and the media, which prevents firms from corporate misconduct. However, prior studies also documented that philanthropy helps reduce litigation cost of misconduct and could be used to disguise corporate misconduct and distract public attention (Chen, Patten, & Roberts, 2008; Du, 2014; Hong & Liskovich, 2016; Petrovits, 2006; Tan & Tang, 2014), which would lead to a positive association between corporate philanthropy and corporate misconduct. In addition, firms might engage in corporate philanthropy to build guanxi or political connections so that they can obtain favorable treatment from the government, leading to more resources under control of the manager and higher probability of misconduct. Similarly, previous studies on the economic consequences of corporate philanthropy provide mixed results (Chen, Dong, Tong, & Zhang, 2018b, 2019, 2018a; Brammer & Millington, 2008; Chen, Liu, Li, & Wang, 2016; Wang et al., 2008; Wang & Qian, 2011). Therefore, whether corporate philanthropy is positively or negatively associated with corporate misconduct is an empirical question worth further investigation.

Chinese firms rely upon the existence of strong political connections to get access to external capital and profitable projects (Khwaja & Mian, 2005). This is different from mature markets in developed countries, such as the United Kingdom, where external capital resources are allocated mainly by competition. The incentive of doing corporate philanthropy by Chinese firms could be strengthening their political connection and then obtaining better opportunity from the government. Therefore, using China as our research setting could help us better understand how corporate philanthropy shapes firm behavior in countries where politics interact with economics.

Using a sample of Chinese listed companies from 2007 to 2012, we document that firms involved in corporate philanthropy are associated with less future corporate misconduct. This result suggests that firms engaging in corporate philanthropy are motivated to improve their public image and build good relationships with the community and the stakeholders. The results remain robust to various sensitivity checks.

We then further explore the variations of the negative association between philanthropy and corporate misconduct. In particular, when corporate philanthropy is sustained over time, the probability of opportunistic philanthropy is lower. Consequently, we predict that the negative association between corporate philanthropy and corporate misconduct is more pronounced if corporate philanthropy is more sustained. In addition, when marketization of the region where a company locates is lower, the monitoring role of the public, stakeholders, and media will be weakened, leading to a less pronounced association between corporate philanthropy and corporate misconduct. Our empirical results are consistent with these two predictions, further supporting our theoretical arguments.

Our research contributes to the extant literature in the following ways. First, our study advances the knowledge of corporate misconduct, a pervasive phenomenon around the world which severely hampers the development of firms and that of the entire economy. Although prior studies have investigated different drivers of corporate misconduct (Erickson et al., 2006; Lennox et al., 2013), very few studies have explored whether firms can address corporate misconduct by engaging in corporate philanthropy. This study focuses on the unique role of corporate philanthropy in affecting corporate misconduct. Our study contributes to the literature by explicitly investigating the association between corporate philanthropy and corporate misconduct as well as the variations of this relationship. Our results serve to inform both researchers and practitioners by identifying philanthropy as a factor that influences corporate misconduct. The findings suggest that investors who have concerns about corporate misconduct should pay more attention to firms engaging in philanthropy.

Second, this study contributes to philanthropy literature by investigating another consequence of corporate philanthropy. Prior studies provide mixed evidence on the relationship between corporate philanthropy and firm performance (Brammer & Millington, 2008; Orlitzky, Schmidt, & Rynes, 2003; Seifert, Morris, & Bartkus, 2004; Wang et al., 2008; Wang & Qian, 2011; Wokutch & Spencer, 1987). One possible reason is that corporate philanthropy decisions are usually at the discretion of management (Buchholtz, Amason, & Rutherford, 1999; Carroll, 1979; Hou, Meng, Zhang, & Chan, 2019), indicating that philanthropy could have captured managerial incentives. An investigation of the aggregate firm performance, such as Tobin's Q, is likely to suffer from confounding effects. Corporate philanthropy probably contributes to effective managerial decision to cultivate a culture of benevolence, commitment to developing a positive public image, avoidance of misbehavior, and achieving superior performance in the future. Therefore, it is important to examine the specific mechanisms through which corporate philanthropy may impact on firm value (Lev, Petrovits, & Radhakrishnan, 2010). By illustrating that philanthropy benefits by alleviating corporate misconduct, this study reveals a different approach to a better understanding of the economic consequence of corporate philanthropy.

Third, another stream of literature on corporate philanthropy focuses on the firms' motivation to donate and serve public purposes (Gautier & Pache, 2013). Among all motivations, the most debatable one is wealth maximization. Friedman (1962) argues that corporate philanthropy leads to additional costs to a firm and will ultimately do harm to a firm's productivity. However, we witnessed an increase in both firm profits and corporate philanthropy since the 1970s. One possibility is that managers and owners must have believed that the benefits from corporate philanthropy outweigh the costs of it (Abzug & Webb, 1996). We provide further evidence on the benefits of corporate philanthropy.

Finally, by further exploring whether the relationship between corporate philanthropy and corporate misconduct is contingent on internal and external factors, this research uncovers the underlying mechanisms that can assist stakeholders in assessing whether a firm conducts philanthropic activities on the moral basis of benevolence as a good corporate citizen (Liket & Simaens, 2013; Shaw & Post, 1993), rather than using such activities as 'insurance-like' protection for potential illegal behavior or corporate misconduct (Godfrey, 2005; Wyland, Bollmus, Freimark, & Hedrich, 2012). In this sense, this study provides valuable insights for regulators, managers, investors, and other key stakeholders.

The rest of this paper proceeds as follows. The following section reviews relevant literature and provides the theoretical background

for our hypotheses development. We explain the data source, sample, empirical models, and measures of variables in the next section and then present and analyze the results of our quantitative modeling. Finally, we discuss our main findings and related implications.

2. Literature review and hypothesis development

This study relates to the literature on corporate philanthropy and corporate misconduct. Below we briefly review the related literature and build our hypotheses.

2.1. Literature review of corporate philanthropy

The extant literature documents various motivations for corporate philanthropy. Many firms involve themselves in philanthropy to create a socially responsible public image so that positive moral capital among communities is built (Godfrey, 2005). Such firms could maintain better relationships with their primary stakeholders so as to secure important resources under control of those stakeholders such as suppliers, government, and customers (Chen et al., 2018a; 2018b, 2019). Zhang, Ma, Su, and Zhang (2014) indicate that firms with better corporate social performance have better trade credit terms from suppliers, strengthening the argument that companies engage in philanthropy to build positive public image and eventually maximize economic benefits. Firms may also engage in charitable work because their top managers actively participate in the social and civic networks of the philanthropic elite or associations of firms that are active in corporate philanthropy (Chen et al., 2018a; 2018b, 2019). Managers of these firms are keen on enhancing their personal reputations because they could use philanthropy as a tool to promote their political or career agenda (Chen et al., 2018a; 2018b, 2019). Moreover, managers and directors might make donations because of an altruistic belief, which essentially indulges agents' utility for "doing good" at the cost of shareholders (Chen et al., 2018a; 2018b, 2019). Recent studies further indicate that corporate philanthropy could be utilized to deviate public attention (e.g. Hou et al., 2018), 2006), environmental pollution (Chen, Pattern, & Roberts 2008; Du, 2014), and product safety issues (Chen et al., 2008).

The above review shows a rich body of knowledge in the literature on the incentive of corporate philanthropy. Previous studies have also examined the consequences of philanthropic activities, but the results are mixed. For example, Wokutch and Spencer (1987) and Orlitzky et al. (2003) find a positive association between philanthropic donations and corporate financial performance. On the contrary, Griffin and Mahon (1997) document that several dimensions of corporate social performance are significantly associated with firm financial performance, but they did not find a significant association for philanthropy. Berman, Wicks, Kotha, and Jones (1999) show that community relation that involves philanthropic activities by corporations exerts limited influence on firm performance. Similarly, using structural equation modeling on a sample of fortune 1000 firms, Seifert et al. (2004) fail to find a significant association between philanthropy and financial performance. Wang et al. (2008) posit that the relationship between corporate philanthropy and financial performance is best captured by an inverse U-shape and that the inverse U-shaped relationship varies with the level of dynamism in firms' operational environment. Wang and Qian (2011) show that the positive philanthropy-performance relationship is stronger for firms with greater public visibility, better past performance, and without political connections, suggesting that philanthropic activities help firms elicit positive stakeholder responses and gain political resources.

Other studies examine stakeholders' reaction to explore firms' benefits from engaging in philanthropic activities. Philanthropy promotes a firm's reputation because it creates positive perceptions of the firm among a variety of stakeholders. For example, institutional investors are more likely to invest in firms engaging in philanthropy (Graves & Waddock, 1994). Employees show greater commitment to firms doing philanthropy, and such firms can attract quality employees (Backhaus, Stone, & Heiner, 2002; Turban & Greening, 1997). Customers also have a higher demand for the products or services provided by philanthropic firms (Bhattacharya & Sen, 2003).

2.2. Literature review of corporate misconduct

Corporate misconduct has been regarded as an integral component of the modern business practices and becomes an increasingly important topic for academics and practitioners such as managers, investors, and government regulators (Williams & Barrett, 2000). Corporate misconduct will result in direct economic consequences in terms of legal penalties and the great loss in firm value (Cumming, Dannhauser, & Johan, 2015; Dyck, Morse, & Zingales, 2010; Murphy, Shrieves, & Tibbs, 2009). Moreover, firms with allegations of misconduct also suffer from reputational penalties (Desai, Hogan, & Wilkins, 2006). The direct consequence of reputational penalties leads customers, suppliers, providers of financial capital, or other related stakeholders to revise their terms of trade (Greve, Palmer, & Pozner, 2010). This is mainly because misconduct in one area of activities (e.g., earnings management) may reduce stakeholders' evaluations in other areas (e.g., product quality), which will, in turn, have a significant impact on the alleged firm's profitability and cost of capital (Murphy et al., 2009). In addition, there are also managerial consequences due to executive turnover and restructuring costs (Murphy et al., 2009), as most culpable managers and employees lose their jobs and face criminal charges and penalties (Cumming et al., 2015; Karpoff, Scott Lee, & Martin, 2008).

More importantly, individual firms' corporate misconduct might also have an influence on the entire industry, because illegal or socially irresponsible behavior can spread between organizations (Greve et al., 2010). In addition, some researchers suggest, when one firm commits misconduct, peers in the industry suffer lower valuations because investors might perceive the generalized culpability within the industry and take peers as similar to the focal firm (Jonsson, Greve, & Fujiwara-Greve, 2009; Paruchuri & Misangyi, 2015).

Besides the research on the consequences of corporate misconduct, there are also many studies on the motivation of corporate

misconduct. According to agency theory, the agents may conduct self-serving behavior that is not in the best interests of the principal (Jensen & Meckling, 1976). Moreover, the information asymmetry between CEOs (agents) and shareholders (principals) makes it difficult for shareholders to detect the relationships between CEOs' behavior and the resulting effects. There is much variation in a stakeholder's likelihood of noticing an act of misconduct, and in how the stakeholder will assess misconduct and decide whether to punish managers, so misconduct will not always result in punishment, increasing the probability of managerial misbehavior (Barnett, 2014). Therefore, corporate governance could be important for preventing misconducts.

Farber (2005) found that fraudulent firms demonstrate poorer corporate governance in terms of fewer numbers and percentages of outside board members, fewer audit committee meetings, fewer financial experts on the audit committee, and a higher percentage of CEOs who are also chairmen of the board of directors. In addition, empirical research shows stock-based managerial incentives might lead to corporate misconducts, such as earnings manipulation (Bergstresser & Philippon, 2006; Cheng & Warfield, 2005; Laux & Laux, 2009). Several studies on Enron's organizational culture also shows organizational culture which emphasizes personal and corporate economic gain through a "rank and yank" evaluation system and permits acts of insignificant rule bending has led to Enron's business catastrophe (Kulik, 2005; Sims & Brinkmann, 2003). The Enron case implies that actors of corporate misconduct are not always top managers. In some organizations, corporate misconduct has become a collective behavior and been reinforced by organizational culture, routines, and systems.

Despite the extensive research which has examined a wide range of drivers of corporate misconduct, empirical evidence on the association between philanthropy and misconduct are scarce. Therefore, by investigating the association between corporate philanthropy and corporate misconduct, this study could fill in the gap in the extant literature.

2.3. Corporate philanthropy and corporate misconduct

The literature reviewed above reveals various antecedents, namely organizational motives for corporate philanthropy. A firm's potential or subsequent behavior as the outcome of philanthropic engagement is closely linked to its initial motive for such engagement. Therefore our hypothesis development is built upon the reviewed literature to explore explanations of the underlying mechanisms that drive or hinder any potential corporate misconduct following the philanthropic engagement.

On one hand, firms might conduct philanthropy to gain legitimacy, enhance firm image, strengthen the relationship with important stakeholders and thus increase firm valuation (Godfrey, 2005; Wang & Qian, 2011; Zhang et al., 2014). Therefore, commitment to corporate philanthropy is essentially a signal of a firm's concern for its surrounding community and its responsibilities to a wide range of stakeholders. Firms labeled as socially responsible are forced to behave well and ethically in their business activities. Thus, managers of these firms are less likely to be involved in corporate misconduct because doing so would betray their willingness to create a positive image in society. These firms have a strong desire to protect their reputation and avoid undertaking corporate misconduct. Padgett and Galan (2010) document that firms with a socially responsible reputation are less likely to provide low-quality products to consumers. Following the same logic, we argue that firms engaging in corporate philanthropy are more likely to avoid misconduct to circumvent potential reputation damages.

Corporate misconduct is normally achieved through intentional actions by top managers. Hence, if corporate philanthropy is a tool that managers use to indulge their altruism or quench their thirst for prestige, the motivation to protect personal reputation would strengthen managerial incentives and reduce their willingness to be involved in corporate misconduct, leading to a negative association between philanthropy and corporate misconduct.

Moreover, corporate philanthropy exposes firms to a wide range of audiences. Therefore, firms engaging in philanthropy are more intensively monitored by the public. The extant literature indicates that corporate giving enhances firms' political visibility, which makes them subject to more public pressure and monitoring. Moreover, by doing more corporate philanthropy, firms can lower the amount of free cash flow controlled by the managers, which to some extent prevent managerial misconduct (Jensen, 1986). In this case, firms with more corporate philanthropy have less managerial misconduct. Similarly, Qian, Gao, and Tsang (2014) document that so-cially responsible firms show increased transparency in corporate dealing and financial reporting and suffer less from agency problems. As a result, we argue that corporate philanthropy reduces information asymmetry and strengthen monitoring by outsiders, thereby lead to less corporate misconduct.

The above discussion indicates a negative relationship between corporate philanthropy and corporate misconduct. However, on the other hand, corporate philanthropy might be used as a tool for shielding insiders from the monitoring of outsiders. Prior studies indicate that through philanthropic activities, companies can signal a positive image to their key stakeholders and the general public, and consequently attain a higher level of legitimacy. Firms that are trusted and highly reputable may enjoy relaxed external supervision and a lower level of government monitoring and surveillance (Wyland et al., 2012). Moreover, firms might engage in corporate philanthropy to build guanxi or political connections so that they can obtain favorable treatment from the government, leading to more resources under control of the manager and higher probability of misconduct. In this view, the increased legitimacy gained by corporate philanthropy might create a favorable condition that ill-willed or irresponsible managers can take advantage of to engage in illegal behavior and allow companies get away with non-compliance of legal and ethical obligations (Wyland et al., 2012). Corporate philanthropy may also be used as a tool for dressing up corporate wrongdoing, such as environmental and product safety issues (Du, 2014), which means participating in philanthropic activities can become an 'insurance-like' protection for a firm's reputation and its relations with its key stakeholders (Godfrey, 2005). In addition, the strong image created by philanthropy might mean that, if prosecuted for misconduct, firms will be fined less (Hong & Liskovich, 2016). In other words, philanthropic activities can help mitigate public criticism, reduce litigation costs, or assuage adverse stakeholder responses in case of potential corporate philanthropy helps mitigate the negative

impact of potential corporate misconduct, we would expect a positive association between philanthropy and corporate misconduct.

Taken together, if corporate philanthropy is used as a credible mechanism to maintain a good public reputation or as a means to enhance managers' individual image, we expect a negative association between philanthropy and misconduct. If philanthropy helps alleviate the consequences of wrongdoings, we expect a positive association between philanthropy and misconduct. In addition, once firms are involved in philanthropy, they are automatically exposed to public pressure and would be constrained from any corporate misconduct. Given the dominance of evidence supporting a negative relation, we state our first hypothesis as follows.

H1. Corporate philanthropy is negatively associated with corporate misconduct.

We then examine the cross-sectional variations among firms for the relationship between corporate philanthropy and corporate misconduct. By examining moderating factors of the association between philanthropy and misconduct, we can obtain a better understanding of mechanisms that determine both internally and externally how corporate philanthropic practices affect the likelihood of subsequent or potential corporate misconduct.

As we discussed, corporate philanthropy can be used to gain legitimacy, enhance firm reputation, strengthen the relationship with key stakeholders, and promote managers' personal reputation. However, to achieve the above objectives, firms need to sustain corporate philanthropy engagement so that they will be identified as good corporate citizens rather than one-off opportunistic players. On the contrary, if corporate philanthropy is used to dress up corporate wrongdoings and shield monitoring from outsiders (Chen et al., 2008; Du, 2014; Petrovits, 2006; Tan & Tang, 2014), firms will only do philanthropy when they need to do so rather than being continuously involved in corporate philanthropy. Based on this argument, if there is sustained corporate philanthropy rather than a one-off, or short-run one, it is more likely the ultimate driver of the firm's corporate philanthropy is to enhance firm image, strengthen the relationship with stakeholders, or promote managers' personal reputation. As above mentioned, such firm is less likely to be involved in corporate misconduct. Therefore, we state our second hypothesis as follows:

H2. The negative relationship between corporate philanthropy and corporate misconduct is more pronounced for firms with sustained corporate philanthropy.

Despite the recent overall improvement in the institutional environment in China, institutional systems in different regions have not been developed equally. The development of institutional systems is closely related to local marketization level, which measures the degree of market maturity and the associated role of government versus market, in regional economic development, such as the extent of government resource control and the government's intervention on business (Peng & Zhou, 2005). The marketization level is also reflected by the degree of the certainty of regulatory policy, as well as the comprehensiveness and effectiveness of legal frameworks (Peng & Zhou, 2005). During China's transitional phase, regions with low marketization and weak institutional frameworks were usually characterized by a lack of transparency in legal frameworks, poor enforcement of laws and regulations, and inconsistent and corrupt behavior of government agencies (Huang & Rice, 2012). These institutional deficiencies are likely to be exploited by irresponsible businesses to their advantage, either as a way to seek exemption from compliance with laws or as a cover for their potential misconduct. Therefore, firms located in regions with lower marketization will be more likely to have misconduct once they gain legitimacy and enjoy relaxed external supervision by doing corporate philanthropy. In addition, firms in regions with lower marketization are more likely to use philanthropy to dress up their wrongdoings and shield monitoring from outsiders. Following this logic, the regional institutional environment could moderate the relationship between corporate philanthropy and corporate misconduct. The negative relationship proposed in H1 could be more pronounced in regions with higher marketization levels and a stronger external institutional environment. Our third hypothesis is as follows:

H3. The negative relationship between corporate philanthropy and corporate misconduct is more pronounced for firms in regions with higher marketization levels.

China is well known for the dominance of state-owned enterprises (SOEs) with growing listed non-SOEs. SOEs are controlled by the government and have to serve the objectives of self-interested politicians who do not necessarily focus on value maximization (Shleifer & Vishny, 1994). Therefore, the probability of abusing money on corporate philanthropy is high for SOEs compared with non-SOEs. In addition, SOEs could get helping hands from Chinese government when encounter difficulties and so care less about the insurance provided by corporate philanthropy against financial crises, leading to a weaker incentive to build a reputation and the relationship with stakeholders through corporate philanthropy. In sum, SOEs have a weak incentive to enhance firm image and strengthen the relationship with stakeholders through philanthropy. Thus, we predict that the negative association between philanthropy and misconduct is less pronounced for SOEs. Our fourth hypothesis is as follows:

H4. The negative relationship between corporate philanthropy and corporate misconduct is less pronounced for SOEs.

3. Methods

3.1. Sample

Our original sample consists of all publicly traded Chinese companies listed on the Shanghai and Shenzhen stock exchanges from 2007 to 2012. We obtain all the financial and stock market data from the China Stock Market and Accounting Research (CSMAR) database. CSMAR is one of the largest databases of Chinese listed companies and serves as an important source of information on Chinese stock markets and financial statements of listed companies in China. CSMAR is designed and developed by GTA Information

Technology, which is the primary provider of data relevant to Chinese companies. Data on corporate philanthropy are obtained from annual reports of sample firms drawn from the China Securities Regulatory Commission (CSRC) and their official websites. Data on corporate misconduct are obtained from the CSRC and CSMAR. After merging the data and excluding observations with missing values, 11,343 observations remained in the final sample. The final sample is unbalanced panel data covering the period from 2007 to 2012.

3.2. Measures and Statistical Models

Measures of the Dependent Variable. Our dependent variable, the likelihood of corporate misconduct, is measured by whether a focal firm has been penalized by the CSRC in any fiscal year from 2008 to 2012. Similar to the Securities and Exchange Commission in the U.S., the CSRC is the main regulatory body enforcing securities law and regulations and conducting investigations to identify and penalize corporate misconduct of publicly traded firms in China. The likelihood of corporate misconduct is measured using a dummy variable, *MISCONDUCT*, which is equal to one if a firm has been penalized by CSRC for corporate misconduct in a specific fiscal year, and zero otherwise.

Measures of Independent Variables. For hypothesis H1 in examining the effort of corporate philanthropy on the likelihood of corporate misconduct, we use two alternative measures for the independent variable corporate philanthropy. The first measure *PHIL_D* is a dummy variable equal to one if the total amount of a firm's charitable contribution in any fiscal year from 2007 to 2011 is greater than zero, and equal to zero if otherwise. This variable is used to measure whether a focal firm has conducted any philanthropic activities in any fiscal year from 2007 to 2011 (to test the subsequent likelihood of corporate misconduct as a result of corporate philanthropy, for every value of the dependent variable in a specific fiscal year t during 2008–2012 in our panel data, we use data from the previous year (t-1) as the value of corresponding independent variables). We also use another measure, *PHIL_M*, which is a continuous variable equal to the natural logarithm of one plus the total amount of a firm's charitable contribution in a specific fiscal year from 2007 to 2011. This measure is used to evaluate the amount of a firm's charitable contribution. We use the logarithm of one plus the total amount to mitigate concerns on skewed distribution.

For H2 which investigates whether a more consistent and sustained corporate philanthropic behavior has a stronger negative effect on corporate misconduct, using *PHIL_D* only cannot fully capture the pattern of corporate philanthropy. For example, when we observe that both companies A and B donate the same amount of money in this year, we still would not know whether they have donated in a consistent and sustained pattern over the years. If company A donated last year and company B donates for the first time this year, then the incentives for the charitable donations of companies A and B might be different. Thus, to capture the pattern of corporate philanthropy, we separate *PHIL_D* further into two dummy variables. The first variable *PHIL_1* is a dummy variable equal to one if a firm's charitable contribution in year t is greater than zero and if that in year t-1 is zero; and the variable is equal to zero if otherwise. The second variable *PHIL_2* is a dummy variable equal to one if a firm has made a charitable contribution greater than zero for both year t and t-1; and the variable is equal to zero if otherwise. *PHIL_ORDER* is an ordinal variable equal to zero if a firm has made no charitable donation in year t; equal to one if a firm has made a charitable donation in year t-1; and equal to two if a firm has made charitable donations in both year t and year t-1.

H3 investigates whether the degree of marketization affects the association between corporate philanthropy and corporate misconduct. The degree of marketization is measured by a dummy variable *MARKET*, which is equal to one if the firm is located in a province with a marketization index lower than the median (which suggests a lower marketization level) and is equal to zero if otherwise.¹ The marketization index of China's provinces is published by the National Economic Research Institute (NERI), China Reform Foundation. This index has been widely used in the previous studies (Jia, 2014; Li & Liang, 2014; Li & Qian, 2013; Markóczy, Li Sun, Peng, & Ren, 2013). The marketization index includes five major items that capture the progress of marketization along different dimensions of China's 31 provinces in each year. The five items include the following: (1) the relation between the government and the market, (2) the development of the non-state sector, (3) the development of product market, (4) the development of factor market, and (5) the development of market intermediaries and legal environment. Each item contains several sub-indices that add up to a total of 23 sub-indices. The sub-indices are built based on data from the National Bureau of Statistics of China and surveys conducted by NERI. The NERI marketization index forms panel data that measure marketization levels across different provinces in China over time.

Measures of Control Variables. We control for several firm characteristics that affect the likelihood of corporate misconduct. These control variables are consistent with those used in previous studies (Kim & Skinner, 2012; Wang & Yung, 2011). *SIZE* is the natural logarithm of total assets at the beginning of a fiscal year. *MB* is the market value of equity divided by the book value of equity. *ROA* is the industry-mean-adjusted return on assets, which is calculated as the income before extraordinary items divided by total assets. *LEV* refers to the long-term liabilities divided by total assets at the beginning of a fiscal year. *BIGN* is a dummy variable equal to one if the firm is audited by a *BIG4* auditor and zero if otherwise. *IND* is the number of independent directors divided by the number of directors in a firm. *BLOCK* is the percentage of shares held by the largest shareholder of a firm. *DA* is the absolute value of discretionary accruals, which is estimated from the Modified Jones Model (Dechow, Sloan, & Sweeney, 1995). *SOE* is a dummy variable equal to one if the firm is state-owned and zero if otherwise. Finally, we include both time period (year) and industry affiliation (two-digit SIC codes) to control for possible year-to-year and industry-to-industry variations in corporate misconduct.

Statistical Models. H1 focuses on the effects of corporate philanthropy on corporate misconduct. Using the measures described above, we estimate the following statistical model to test hypothesis H1. We aim to test whether β_1 is significantly negative.

¹ We also use continuous marketization index to measure the degree of marketization in robustness tests, and the results remain the same.

J. Chen et al. International Review of Economics and Finance 65 (2020) 17–31 MISCONDUCT $_{t+1} = \beta_0 + \beta_1 PROXY_PHILANTHROPY_t + \beta_2 SIZE_t + \beta_3 MB_t + \beta_4 ROA_t + \beta_4 LEV_t + \beta_6 BIGN_t + \beta_7 IND_t + \beta_8 BLOCK_t + \beta_9 DA_t + \beta_{10}SOE_t + \beta_{11}MARKET_t + Industry and year fixed effects + <math>\xi$ (1)

H2 investigates the effects of the pattern of corporate philanthropic behavior on corporate misconduct. We use the following models to evaluate whether the pattern of philanthropic giving, which is more constituent and sustained, could lead to a stronger negative effect on the likelihood of corporate misconduct. For model (2), we expect γ_1 to be insignificant and γ_2 to be significantly negative. For model (3), we expect λ_1 to be significantly negative.

 $\begin{aligned} \text{MISCONDUCT}_{t+1} = \gamma_0 + \gamma_1 \text{PHIL}_{1t} + \gamma_2 \text{PHIL}_{2t} + \gamma_3 \text{SIZE}_{t} + \gamma_4 \text{MB}_{t} + \gamma_5 \text{ROA}_{t} + \gamma_6 \text{LEV}_{t} + \gamma_7 \text{BIGN}_{t} + \gamma_8 \text{IND}_{t} + \gamma_9 \text{BLOCK}_{t} + \gamma_{10} \text{DA}_{t} + \gamma_{11} \text{SOE}_{t} + \gamma_{12} \text{MARKET}_{t} + \text{Industry and year fixed effects} + \\ \\ \end{aligned}$

$$\begin{split} \text{MISCONDUCT}_{t+1} = \lambda_0 + \lambda_1 \text{PHIL}_ORDER_t + \lambda_2 \text{PHIL}_2t + \lambda_3 \text{SIZE}_t + \lambda_4 \text{MB}_t + \lambda_5 \text{ROA}_t + \lambda_6 \text{LEV}_t + \lambda_7 \text{BIGN}_t + \lambda_8 \text{IND}_t + \lambda_9 \text{BLOCK}_t + \lambda_{10} \text{DA}_t + \lambda_{11} \text{SOE}_t + \lambda_{12} \text{MARKET}_t + \text{Industry and year fixed effects} + \xi \end{split}$$

H3 examines whether a region's marketization level affects the association between philanthropic engagement of firms located in that region and their corporate misconduct. This hypothesis is essentially formed to test the moderating effect of the degree of marketization (measured by the interaction variable *PHIL* MARKET*) on the relationship between corporate philanthropy and subsequent corporate misconduct. According to H3, we expect ρ 2 to be significantly positive.

 $MISCONDUCT_{t+1} = \rho_0 + \rho_1 PHIL_t + \rho_2 PHIL^* MARKET_t + \rho_3 SIZE_t + \rho_4 MB_t + \rho_5 ROA_t + \rho_6 LEV_t + \rho_7 BIGN_t + \rho_8 IND_t + \rho_9 BLOCK_t + \rho_1 DA_t + \rho_{11} SOE_t + \rho_{12} MARKET_t + Industry and year fixed effects + \xi$ (4)

H4 investigates whether the association between corporate philanthropy and corporate misconduct is less pronounced in SOEs. This hypothesis is essentially formed to test the moderating effect of government ownership (measured by the interaction variable *PHIL** *SOE*) on the relationship between corporate philanthropy and subsequent corporate misconduct. According to H4, we expect μ_2 to be significantly positive.

 $MISCONDUCT_{t+1} = \mu_0 + \mu_1 PHIL_t + \mu_2 PHIL^* SOE_t + \mu_3 SIZE_t + \mu_4 MB_t + \mu_5 ROA_t + \mu_6 LEV_t + \mu_7 BIGN_t + \mu_8 IND_t + \mu_9 BLOCK_t + \mu_{10} DA_t + \mu_{11} SOE_t + \mu_{12} MARKET_t + Industry and year fixed effects + \xi$ (5)

4. Results

Table 1a

4.1. Descriptive statistics

Table 1a provides a summary of descriptive statistics for the variables used to test our main hypotheses. The mean values of corporate philanthropy variables *PHIL_D* and *PHIL_M* are 0.647 and 7.884, respectively. The mean of the dependent variable *MISCONDUCT* is 0.121, which indicates that around 12% of our sample firms were penalized by the CSRC due to corporate misconduct during our sampling period. The mean (median) value for *SIZE* is 7.475 (7.359), indicating that the distribution is not skewed. The mean (median) value for *MB* is 3.483 (2.581). The average firm in our sample has an industry-adjusted *ROA* of -0.759, leverage of 0.081, percentage of hiring Big 4 auditor of 0.067, the percentage of independent directors of 0.354 and the percentage of *SOE* of 0.641.

Table 1b shows Pearson correlation matrix for all variables. Our measures of corporate philanthropy, namely, *PHIL_D* and *PHIL_M*, are both significantly and positively correlated with each other. The correlation coefficient between *MISCONDUCT* and the measures of corporate philanthropy (i.e., *PHIL_D* and *PHIL_M*) are both significantly negative. This finding supports H1 stating that corporate misconduct decreases with the increasing level of corporate philanthropic engagement.

Variable	Ν	Mean	Median	Std. Dev	P25	P75
PHIL_M	11343	7.88	10.76	6.07	0.00	12.90
PHIL_D	11343	0.65	1.00	0.48	0.00	1.00
MISCONDUCT	11343	0.12	0.00	0.33	0.00	0.00
MISCONDUCT _FIN	11343	0.06	0.00	0.23	0.00	0.00
MISCONDUCT _NOFIN	11343	0.12	0.00	0.32	0.00	0.00
SIZE	11343	7.48	7.36	1.13	6.72	8.11
MB	11343	3.48	2.58	3.46	1.59	4.34
ROA	11343	-0.76	0.01	10.25	-0.03	0.05
LEV	11343	0.08	0.04	0.11	0.01	0.12
BigN	11343	0.07	0.00	0.25	0.00	0.00
IND	11343	0.35	0.33	0.05	0.33	0.38
BLOCK	11343	0.38	0.36	0.16	0.26	0.50
DA	11343	0.08	0.05	0.08	0.02	0.10
SOE	11343	0.64	1.00	0.48	0.00	1.00
MARKET	11343	0.24	0.00	0.43	0.00	0.00

Notes: See Appendix A for the details of variable definitions.

Table 1b Correlation matrix.

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		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
PHIL_M	(1)	1.00	0.96	-0.04	-0.02	-0.03	0.26	0.00	0.02	0.03	-0.02	0.07	-0.02	-0.04	-0.01	0.01
PHIL_D	(2)		1.00	-0.03	-0.01	-0.02	0.17	0.00	0.02	0.01	-0.06	0.05	-0.04	-0.04	-0.01	-0.0
MISCONDUCT	(3)			1.00	0.65	0.98	-0.11	0.05	0.00	-0.01	-0.06	0.00	-0.12	0.05	-0.11	-0.0
MISCONDUCT _FIN	(4)				1.00	0.59	-0.07	0.03	-0.02	-0.01	-0.04	-0.01	-0.08	0.03	-0.08	-0.0
MISCONDUCT _NONFIN	(5)					1.00	-0.11	0.05	0.00	-0.01	-0.06	0.00	-0.11	0.04	-0.10	-0.0
SIZE	(6)						1.00	-0.19	0.03	0.26	0.36	0.05	0.22	-0.14	0.30	0.03
MB	(7)							1.00	-0.03	-0.11	-0.07	0.05	-0.05	0.10	-0.11	-0.0
ROA	(8)								1.00	0.03	0.01	-0.03	0.02	-0.02	0.03	-0.0
LEV	(9)									1.00	0.10	0.01	0.01	-0.01	0.08	-0.0
BigN	(10)										1.00	0.03	0.13	-0.04	0.10	0.09
IND	(11)											1.00	-0.01	0.04	-0.10	0.03
BLOCK	(12)												1.00	-0.04	0.27	-0.0
DA	(13)													1.00	-0.12	-0.0
SOE	(14)														1.00	-0.1
MARKET	(15)															1.00

Notes: Bold text indicates the significance at the 0.05 level or better (two-tailed). See Appendix A for the details of variable definitions.

Table 2

The effects of corporate philanthropy on corporate misconduct (H1).

$PHIL{=}PHIL_M_t$	(continuous vari	able of Corporate P	hilanthropy)	PHIL=PHIL	_D _t (dummy variab	le of Corporate Philanthropy)
Variable	Coeff.	Wald Chi ²	p-value	Coeff.	Wald Chi ²	p-value
Intercept	-0.28	0.52	0.47	-0.35	0.81	0.37
PHILt	-0.17	7.04	0.01	-0.02	12.97	0.00
SIZE	-0.17	26.23	<.00	-0.16	20.99	<.00
MB	0.02	6.38	0.01	0.02	6.53	0.01
ROA	0.01	3.79	0.05	0.01	3.84	0.05
LEV	0.50	2.89	0.09	0.49	2.84	0.09
BIGN	-0.52	8.50	0.00	-0.54	8.85	0.00
IND	-0.53	0.78	0.38	-0.52	0.75	0.39
BLOCK	-1.87	77.14	<.00	-1.87	77.42	<.00
DA	0.91	7.30	0.01	0.91	7.38	0.01
SOE	-0.38	33.49	<.00	-0.39	34.78	<.00
MARKET	-0.23	11.10	0.00	-0.23	10.91	0.00
INDUSTRY	Included			Included		
YEAR	Included			Included		
-2 Log L	7920.12			7914.23		
N	11343			11343		

Notes: See Appendix A for the details of variable definitions. The standard errors are adjusted for clustering by firm and year.

4.2. Hypotheses testing

Our central research question explores the effects of corporate philanthropy on corporate misconduct. Table 2 presents the results of the first hypothesis testing. The coefficients of our two different measures of corporate philanthropy, *PHIL_D* and *PHIL_M*, are uniformly negative and significant in each of the models, which strongly support H1 stating that corporate philanthropy is negatively associated with corporate misconduct in China. These negative *PHIL* coefficients suggest that the subsequent likelihood of corporate misconduct is generally lower when a firm is more engaged in corporate philanthropy in China, which means that Chinese organizations are less likely to be involved in corporate misconduct when they are more active in corporate philanthropy.

The results for control variables are consistent with expectations and are also generally consistent with the results of prior research (Chen, Cumming, Hou, & Lee, 2014; Du, 2014; Qian et al., 2014), such as the negative coefficients of firm size (*SIZE*), audit quality (*BIGN*), block holdings (*BLOCK*), and state ownership (*SOE*) and the positive coefficients of return on assets (*ROA*) and leverage (*LEV*).

For H2, we further examine the effects of the pattern of corporate philanthropy on corporate misconduct. Table 3 presents the results of the tests. The coefficient of *PHIL_1* is insignificant; the coefficient of *PHIL_2* is significantly negative; and the coefficient of *PHIL_ORDER* is negative and significant. Overall, these results indicate that the negative association between corporate philanthropy and corporate misconduct is more pronounced when corporate philanthropy is more consistent and sustained, and thus, H2 is fully supported.

For H3, we further examine the effect of external marketization degree on the association between corporate philanthropy and corporate misconduct. Table 4 presents the results of the tests. The coefficients of interaction variable *PHIL* MARKET* are both significantly negative, indicating that the negative association between corporate philanthropy and corporate misconduct is stronger in

Table 3 The effects of patterns of corporate philanthropy on corporate misconduct (H2).

Variable	Coeff.	Wald Chi ²	p-value	Coeff.	Wald Chi ²	p-value
Intercept	-0.31	0.64	0.42	-0.31	0.64	0.42
PHIL_1	-0.09	0.95	0.33			
PHIL 2	-0.20	8.28	0.00			
PHIL_ORDER				-0.10	8.32	0.00
SIZE	-0.17	24.37	<.00	-0.17	24.45	<.00
MB	0.02	6.37	0.01	0.02	6.37	0.01
ROA	0.01	3.76	0.05	0.01	3.76	0.05
LEV	0.50	2.88	0.09	0.50	2.88	0.09
BIGN	-0.53	8.73	0.00	-0.53	8.73	0.00
IND	-0.53	0.78	0.38	-0.53	0.78	0.38
BLOCK	-1.87	77.53	<.00	-1.87	77.53	<.00
DA	0.90	7.16	0.01	0.90	7.17	0.01
SOE	-0.38	33.51	<.00	-0.38	33.52	<.00
MARKET	-0.23	11.08	0.00	-0.23	11.08	0.00
INDUSTRY	Included			Included		
YEAR	Included			Included		
-2 Log L	7918.81			7918.82		
N	11343			11343		

Notes: See Appendix A for the definitions of other variables. The standard errors are adjusted for clustering by firm and year.

Table 4

The effects of marketization on	the relationship betwee	en corporate philant	hropy and	corporate miscor	iduct (H3).

	PHIL=PH	IL_M _t (continuou	is variable of Corporate Philanthropy)	PHIL=PHIL_D _t (dummy variable of Corporate Philanthropy)			
Variable	Coeff.	Wald Chi ²	p-value	Coeff.	Wald Chi ²	p-value	
Intercept	-0.24	0.38	0.54	-0.20	0.26	0.61	
PHILt	-0.03	26.62	<.00	-0.30	16.38	<.00	
PHIL*MARKET	-0.05	16.45	<.00	-0.48	11.63	0.00	
SIZE	-0.16	20.02	<.00	-0.17	24.89	<.00	
MB	0.02	5.98	0.01	0.02	5.92	0.02	
ADJ_ROA	0.01	4.00	0.05	0.01	3.92	0.05	
LEV	0.44	2.27	0.13	0.46	2.43	0.12	
BigN	-0.54	8.91	0.00	-0.53	8.69	0.00	
OUTDIR	-0.55	0.84	0.36	-0.55	0.84	0.36	
BLOCK	-1.88	77.92	<.00	-1.87	77.75	<.00	
DA	0.89	7.05	0.01	0.90	7.08	0.01	
SOE	-0.40	35.80	<.00	-0.39	34.10	<.00	
MARKET	-0.12	1.13	0.29	-0.08	0.47	0.49	
INDUSTRY	Included			Included			
YEAR	Included			Included			
-2 Log L	7897.56			7908.28			
N	11343			11343			

Notes: See Appendix A for the definitions of other variables. The standard errors are adjusted for clustering by firm and year.

regions with higher marketization level. Therefore, H3 is supported.

For H4, we further examine the effect of ownership on the association between corporate philanthropy and corporate misconduct. Table 5 presents the results of the tests. The coefficients of interaction variable *PHIL* * *CEO* are both significantly positive, indicating that the negative association between corporate philanthropy and corporate misconduct is weaker in SOEs. Therefore, H4 is supported.

5. Additional tests

5.1. Types of corporate misconduct

There are two types of corporate misconduct: corporate misconduct related to financial statements, such as profit manipulation, overstating assets, misleading disclosure, inappropriate accounting treatment; and corporate misconduct unrelated to financial statements, such as stock price manipulation, insider trading, illegal occupation of assets and other misconduct. Considering the two different types of corporate misconduct, we performed additional tests to further explore whether corporate philanthropy is associated with one or both types of corporate misconduct. We use two dummy variables to proxy for the two types of corporate misconduct. The first one is *MISCONDUCT_FIN*, which equals to one if a firm is penalized by CSRC because of misconduct related to financial statements in any fiscal year from 2008 to 2012, and zero if otherwise. The other variable is *MISCONDUCT_NONFIN*, which is equal to one if a firm is penalized by CSRC because of misconduct unrelated to financial statements in any fiscal year from 2008 to 2012, and zero if otherwise. Table 6 presents the results of these additional tests, essentially replicating Table 2 while separating corporate misconduct into two types. The coefficients of *PHIL* are uniformly negative and significant, which strongly indicates that corporate philanthropy is negatively associated with both financial and nonfinancial related misconduct. Therefore, our results are robust to different measures of corporate philanthropy as well as to different types of corporate misconduct.

5.2. CP-sensitive industries

One concern with our findings is that other factors such as government policy, which might be correlated with changes in corporate philanthropy, influence the fluctuation in corporate misconduct. To address this concern, we split the full sample into two groups based on whether a company is in a CP-sensitive industry because corporate philanthropy is an important way to commit corporate social responsibility. If corporate philanthropy affects corporate misconduct, we expect that the effect of philanthropy on misconduct will be stronger for companies in a more CP-sensitive industry. On the other hand, if factors other than philanthropy lead to the observed variation in corporate misconduct, we should not expect philanthropy-misconduct association to differ between these two groups.

Our partition of the sample according to whether a company is from a CP-sensitive industry. Following prior studies, we define the following industries as CP-sensitive: Mining (B), Textile, clothes, and fur (C1), Paper and printing (C3), Oil and gas, chemical, and rubber and plastic (C4), Electronic (C5), Pharmaceutical and biological (C8), Chemicals (C43), Electricity, gas and water supply and distribution (D), and Real estate (J).² The partitioning variable, $CPS_{i,t}$, is equal to one if a company is from a CP-sensitive industry, and zero otherwise.

 $^{^2}$ Industry classification is based on the 'Industry Classification Guideline of Listed Companies' issued by the China Securities Regulation Commission.

Table 5

The effects of government ownershi	a an tha ualationship hatusaan	again angka mhilamthugan and	componente misson durat (IIA)
The effects of government ownershi	o on the relationship between	corporate philanthropy and	corporate misconduct (H4).

	PHIL=PHI	IL_M _t (continuous	s variable of Corporate Philanthropy)	PHIL=PHI	L_D _t (dummy va	riable of Corporate Philanthropy)
Variable	Coeff.	Wald Chi ²	p-value	Coeff.	Wald Chi ²	p-value
Intercept	-0.24	0.38	0.54	-0.20	0.25	0.62
PHILt	-0.03	20.89	<.00	-0.31	11.94	0.00
PHIL*SOE	0.03	8.04	0.00	0.27	4.91	0.03
SIZE	-0.16	20.71	<.00	-0.17	25.79	<.00
MB	0.02	6.68	0.01	0.02	6.54	0.01
ADJ_ROA	0.01	3.94	0.05	0.01	3.86	0.05
LEV	0.45	2.42	0.12	0.47	2.59	0.11
BigN	-0.53	8.77	0.00	-0.52	8.31	0.00
OUTDIR	-0.56	0.88	0.35	-0.55	0.85	0.36
BLOCK	-1.84	74.86	<.00	-1.85	75.19	<.00
DA	0.92	7.40	0.01	0.91	7.32	0.01
SOE	-0.60	36.64	<.00	-0.55	29.55	<.00
MARKET	0.22	10.79	0.00	0.23	11.09	0.00
INDUSTRY	Included			Included		
YEAR	Included			Included		
-2 Log L	7897.56			7908.28		
N	11343			11343		

Notes: See Appendix A for the definitions of other variables. The standard errors are adjusted for clustering by firm and year.

Table 6

The effects of corpor	ate philanthropy c	on different types of	corporate misconduct.

Panel A: Deper	ndent variable	: MISCONDUCT_	FIN					
Variable	Coeff.	Wald Chi ²	p-value	Coeff.	Wald Chi ²	p-value		
	PHIL=PH	L_M _t (continuou	variable of Corporate Philanthropy)	PHIL=PHIL_Dt (dummy variable of Corporate Philanthropy)				
Intercept	-0.24	0.38	0.54	-0.20	0.25	0.62		
PHILt	-0.03	20.89	<.00	-0.31	11.94	0.00		
SIZE	0.03	8.04	0.00	0.27	4.91	0.03		
MB	-0.16	20.71	<.00	-0.17	25.79	<.00		
ROA	0.02	6.68	0.01	0.02	6.54	0.01		
LEV	0.01	3.94	0.05	0.01	3.86	0.05		
BIGN	0.45	2.42	0.12	0.47	2.59	0.11		
IND	-0.53	8.77	0.00	-0.52	8.31	0.00		
BLOCK	-0.56	0.88	0.35	-0.55	0.85	0.36		
DA	-1.84	74.86	<.00	-1.85	75.19	<.00		
SOE	0.92	7.40	0.01	0.91	7.32	0.01		
MARKET	-0.60	36.64	<.00	-0.55	29.55	<.00		
INDUSTRY	Included			Included				
YEAR	Included			Included				
-2 Log L	4527.64			4530.96				
N	11343			11343				

Panel B: Dependent Variable: MISCONDUCT _NONFIN

*	PHIL=PHI	L_M _t	_	PHIL=P	HIL_D _t		
Variable	Coeff.	Wald Chi ²	p-value	Coeff	Wald Chi ²	p-value	
Intercept	-0.45	1.31	0.25	-0.39	0.97	0.32	
PHILt	-0.02	10.19	0.00	-0.15	4.87	0.03	
SIZE	-0.16	20.57	<.00	-0.18	25.51	<.00	
MB	0.02	4.55	0.03	0.02	4.43	0.04	
ROA	0.01	4.77	0.03	0.01	4.73	0.03	
LEV	0.43	2.08	0.15	0.44	2.13	0.14	
BIGN	-0.55	8.94	0.00	-0.54	8.56	0.00	
IND	-0.44	0.52	0.47	-0.44	0.54	0.46	
BLOCK	-1.75	66.12	<.00	-1.75	65.84	<.00	
DA	0.83	5.78	0.02	0.82	5.73	0.02	
SOE	-0.39	32.89	<.00	-0.38	31.73	<.00	
MARKET	-0.27	15.80	<.00	-0.28	16.01	<.00	
INDUSTRY	Included			Included	1		
YEAR	Included			Included	1		
-2 Log L	7708.09			7713.37			
N	11,343			11,343			

Notes: See Appendix A for the definitions of other variables. The standard errors are adjusted for clustering by firm and year.

We present the results for the subsamples in Table 7 and the results are supportive of the association between corporate philanthropy and corporate misconduct. As Table 7 shows, the coefficients on *PHIL***CPS* are significantly negative in both regressions. Moreover, the coefficients on PHIL are negative but insignificant. This suggests that the negative association between philanthropy and misconduct only exists in industries sensitive to corporate social responsibility. This finding suggests that the effect of corporate philanthropy on corporate misconduct is stronger for companies in CP-sensitive industries. Therefore, the results in Table 7 further strengthen our arguments and increase the robustness of our main findings.

6. Conclusion

Our study indicates that firms engaging more in corporate philanthropy are less likely to become involved in corporate misconduct. This finding provides significant implications for policymakers, regulators, investors, boards of directors, managers and other related stakeholder groups in terms of pushing for corporate philanthropy engagement among Chinese firms. This finding is also consistent with Shaw and Post's (1993) argument that moral bases for corporate philanthropy such as altruism and corporate citizenship orientation will largely reduce an organization's tendency toward future illegal or irresponsible activities.

Studies on the far-reaching benefits of corporate philanthropy in the long run, both for the organization and for community and society in general (e.g., Wang & Qian, 2011; Zhang, Zhu, Yue, & Zhu, 2010), also supports our assertion that corporate philanthropy should be advocated and motivated. The intangible values of 'moral reputational capital' (Godfrey, 2005) could generate employee morale, customer loyalty, government support, and investor confidence, which altogether form a valuable source of competitive advantage for organizations. However, this kind of strategic value can be lost easily because of any negative information about the organization's bad deeds (Muller & Kräussl, 2011). Therefore, to sustain such a competitive advantage derived from corporate philanthropy engagement over time, organizations will have less and less incentive for corporate misconduct in the long run. Porter and Kramer (2002) further proposed a win-win outcome of philanthropic engagement, which can improve the competitiveness not only of individual companies but also the broader business environment, and in turn, enhance the performance of all its constituent organizations. This proposition indicates that by serving needs of the community and society, an organization can also benefit from capable local clusters of industries, productive and transparent environment for competition, educated workforce, attractive market and efficient physical and administrative infrastructure contributed by the collective philanthropic investments of members of community and society (Porter & Kramer, 2002).

While a generally negative relationship between corporate philanthropy and corporate misconduct has been observed in our sample, the more significant contribution of our research is to suggest that stakeholders should not praise organizations uncritically for their philanthropic giving. Stakeholders should be prudent in interpreting motives or drivers behind a company's philanthropic practices, based on which they should predict carefully the likelihood of corporate misconduct as an outcome of philanthropy engagement. As revealed by our study, internal and external factors can be used to help stakeholders in China further determine whether a company's philanthropic giving is guided by Confucian virtues rather than being driven by the purpose of seeking relaxed external supervision and protection that facilitates potential violations of government laws and regulations.

An important factor that can be observed easily is the pattern of a company's philanthropic giving behavior. Stakeholders should closely monitor whether this pattern is steady, consistent and sustained, which reflects the Confucian businessmen's moral commitment and thus is more strongly associated with a lower degree of the likelihood of corporate misconduct. If these acts are only random or one-off charitable donations, stakeholders should keep a close eye on the organization's subsequent behavior to better interpret and analyze

Table 7 The effects of CP-Sensitivity on the relationship between corporate philanthropy and corporate misconduct. PHIL=PHIL M. (continuous variable of Corporate Philanthropy) PHIL=PHIL D. (dummy variable of Corporate Philanthropy)

	PHIL=PHIL_M _t (continuous variable of Corporate Philanthropy)			PHIL=PHIL_D _t (dummy variable of Corporate Philanthropy)			
Variable	Coeff.	Wald Chi ²	p-value	Coeff.	Wald Chi ²	p-value	
Intercept	0.29	0.72	0.40	0.35	1.06	0.30	
PHILt	0.00	0.15	0.70	0.00	0.00	0.99	
PHIL*CPS	-0.03	11.90	0.00	-0.35	8.35	0.00	
CPS	0.24	6.55	0.01	0.21	4.64	0.03	
SIZE	-0.19	32.00	<.00	-0.20	37.74	<.00	
MB	0.02	3.79	0.05	0.02	3.72	0.05	
ADJ_ROA	0.00	1.61	0.20	0.00	1.64	0.20	
LEV	0.40	2.05	0.15	0.41	2.12	0.15	
BigN	-0.49	7.61	0.01	-0.48	7.30	0.01	
OUTDIR	-0.66	1.23	0.27	-0.67	1.25	0.26	
BLOCK	-1.75	70.71	<.0001	-1.74	70.42	<.00	
DA	0.67	4.16	0.04	0.67	4.16	0.04	
SOE	-0.38	35.27	<.00	-0.38	33.97	<.00	
MARKET	0.26	14.90	0.00	0.26	14.98	0.00	
INDUSTRY	Included			Included			
YEAR	Included			Included			
-2 Log L	7897.56			7908.28			
N	11343			11343			

Notes: See Appendix A for the definitions of other variables. The standard errors are adjusted for clustering by firm and year.

the motives behind these philanthropic practices.

Another important factor from the external perspective that can provide valuable insights for stakeholders is the level of marketization of the region where an organization operates. Although the economic reforms have been widely implemented in China, a regional imbalance in the market economy development exists. The institutional framework in less marketized regions with the less effective role of market places more emphasis on informal rules and personal relationships, particularly socio-political networks (Peng, 2003). In such an institutional environment where a relationship-based, personalized and network-centered regime dominates (Peng, 2003), institutional deficiencies such as the lack of transparency in laws and regulations, and the 'rule of man' governing competition and resources allocation, are more likely to be taken advantage of by organizations who intend to use philanthropy to mask their real intention of subsequent misconduct. On the contrary, in the regions with higher marketization levels, where there is a relatively rule-based, impersonal, and market-centered institutional environment, the 'rule of law' would more effectively shape companies' social behavior and in turn, reduce the likelihood that philanthropic engagement is associated with illegal or unethical intentions. Therefore, stakeholders should be careful when interpreting the link between corporate philanthropy and corporate misconduct in regions with different marketization levels and institutional conditions.

To conclude, we investigate whether corporate philanthropy is associated with corporate misconduct. Generally, we find that firms active in corporate philanthropy are less likely to be involved in corporate misconduct in China. Our results are robust to the use of different measures of corporate philanthropy and the different types of corporate misconduct. Our findings also suggest that stake-holders should not praise firms uncritically for their philanthropic contributions; they can use two important factors to further examine whether a firm's philanthropic engagement might lead to corporate misconduct, namely, a company's philanthropic giving pattern and the level of marketization of the region where a firm operates. Our research extends the extant literature by adding a novel dimension of philanthropy to the understanding of antecedents of corporate misconduct, and provides valuable insights for practitioners in terms of assessing and predicting the link between corporate philanthropy and the likelihood of subsequent corporate misconduct.

However, we should be cautious when generalizing our findings because of the unique institution backgrounds of China. For example, Chinese firms rely heavily on political connection to get access to external capital resources. As such, the incentive of doing corporate philanthropy by Chinese companies could be different from that of firms from developed countries.

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Appendix B. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.iref.2019.09.002.

APPENDIX A. Variable definitions

Variable	Definition of variables
Corporate Philanthropy variables	
PHIL_M _t	a continuous variable equal to the natural logarithm of one plus the total amount of a firm's charitable contribution in year t.
PHIL_D _t	a dummy variable equal to one if the total amount of a firm's charitable contribution in year, is greater than zero, zero if otherwise
PHIL_1t	a dummy variable equal to one if a firm's charitable contribution in year t is greater than zero and if that in year t-1 is zero, zero if otherwise
PHIL_2 _t	a dummy variable equal to one if a firm has made charitable contribution for both year t and t-1, zero if otherwise
PHIL_ORDER _t	an ordinal variable equal to zero if a firm has made no charitable donation in year t, one if a firm has made a charitable donation in year t
	but has made no charitable donation in year t-1, and two if a firm has made charitable donations in both year t and year t-1
Corporate Misconduct variables	
MISCONDUCTt	a dummy variable indicating whether a firm was penalized by CSRC in year t
MISCONDUCT_FINt	a dummy variable indicating whether a firm was penalized by CSRC because of financial issues in year t
$MISCONDUCT_NONFIN_t$	a dummy variable indicating whether a firm was penalized by CSRC because of nonfinancial issues in year t
Firm-level control variables	
SIZEt	the logarithm of the total assets (in thousands) at the beginning of year t
MBt	the ratio of the market value of equity divided by the book value of equity
ROAt	industry-mean-adjusted return on assets, which is calculated as income before the extraordinary items divided by total assets
LEVt	long-term liabilities divided by total assets at the beginning of year t
BigNt	equal to one if a firm hired a BIG4 auditor, zero if otherwise
INDt	the number of independent directors divided by board size
BLOCK _t	the percentage of shares held by the largest shareholder
DAt	the absolute value of discretionary accruals as estimated from Modified Jones Model (Dechow et al., 1995)
	(continued on next page)

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(continued)

Variable	Definition of variables
SOE _t	a dummy variable equal to one if the firm is state-owned, zero if otherwise
MARKET _t	a dummy variable equal to one if a firm is located in a province with marketization index higher than sample median, zero if otherwise

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