

Ji, Li; Tao, Cunjie; Deng, Bofu

Article

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Where to donate: The geographical distribution of corporate philanthropy in China

Li Ji, Cunjie Tao^{*}, Bofu Deng

School of Accounting, Southwestern University of Finance and Economics, Chengdu, China

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ABSTRACT

An emerging body of literature has demonstrated that corporate philanthropy can be an important part of a company's business strategy. However, we know relatively little about how companies allocate philanthropic resources to achieve their strategic targets. Using geographical distribution data on corporate philanthropy in China from 2009 to 2016, we provide robust evidence of companies' revenue-driven regional favoritism. Specifically, companies donate more to regions where they obtain revenue than to other regions. Further evidence suggests that this revenue-driven regional favoritism may have both reputational and political motivations. Further analysis suggests that China's targeted poverty alleviation policy has compromised revenue-driven regional favoritism while increasing the amount of money donated to poor regions. Overall, we enrich understanding of decision-making on corporate philanthropy. We also demonstrate that companies can use the geographical distribution of corporate philanthropy strategically to obtain consumer and government favor in regions where they operate. The results also provide evidence at the micro company level of the effect of China's implementation of a targeted poverty alleviation policy.

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1. Introduction

Corporate philanthropy in China has developed significantly since the 2008 Wenchuan earthquake. Companies account for more than 60% of total donations in China, according to the China Charity Donation report issued by the China Charity Federation from 2009 to 2016. Although corporate philanthropy has been viewed as an altruistic behavior unrelated to a company's ability to make a profit, an increasing number of

^{*} Corresponding author.

E-mail address: cunjietao@mail.swufe.edu.cn (C. Tao).

studies have suggested that corporate philanthropy is not purely motivated by altruism. Extensive research has demonstrated the wide range of business benefits that a company can reap from engaging in philanthropy (Brammer and Millington, 2005; Faccio et al., 2006; Zhang et al., 2013; Flammer, 2015; Li et al., 2016; Xia et al., 2019). These benefits can be explained through the enlightened self-interest conceptualization of corporate social responsibility (CSR) in which CSR is believed to benefit shareholders as well as to operate to the benefit of stakeholders and society as a whole (Keim, 1978). Despite the valuable insights obtained from such studies, research highlighting how companies allocate philanthropic resources across regions to achieve strategic targets are still scarce. Given this limitation, the process that companies use to allocate philanthropic resources requires further investigation.

Corporate philanthropy has been found to help companies overcome the liabilities of foreignness, gain consumer recognition, obtain the social license to operate, and secure government support (Zaheer, 1995; Su and He, 2010; Long and Yang, 2016; Hornstein and Zhao, 2018). Based on the above benefits, corporate philanthropy can be used as part of a company's business strategy to enhance its competitiveness, attract and retain customers, and increase revenue in regions to which it donates. If so, we expect companies to donate more to regions where they obtain revenue (vs. regions where they do not obtain revenue), in line with companies' profit-maximizing objective.

To investigate the geographical distribution of decision-making on corporate philanthropy and the motivations underlying it, we manually collect geographical distribution data on corporate philanthropy in China from 2009 to 2016. The empirical results reveal that companies allocate philanthropic resources very unevenly and exhibit strong revenue-driven regional favoritism. These results are in line with the enlightened self-interest perspective.

We also find that the revenue-driven regional favoritism of Chinese companies is driven by reputational and political motivations. Motivated by reputational concerns, companies with high media coverage and companies that sell products directly to consumers demonstrate more pronounced revenue-driven regional favoritism. Motivated by political concerns, the greater the government fiscal pressure in regions where companies obtain revenue, the more philanthropic resources the companies allocate to these regions. Additionally, enterprises that are not state-owned donate more to regions where they obtain (vs. those where they do not obtain) revenue.

We further investigate whether and, if so, how the geographical distribution of corporate philanthropy changes within a particular institutional setting, focusing on China's 2014 implementation of a targeted poverty alleviation policy. Our empirical results show that since the implementation of the targeted poverty alleviation policy, the amount of money donated to regions where companies obtain revenue has decreased, whereas the amount of money donated to poor regions has increased. Therefore, our results suggest that targeted poverty alleviation objectively enhances the altruism effect of corporate philanthropy.

We expand and enrich the literature in several ways. First, our study offers a novel perspective on the geographical distribution of corporate philanthropy. The literature on corporate philanthropy has documented that altruism cannot fully explain corporate philanthropy behavior (Brammer and Millington, 2005; Wang and Qian, 2011; Flammer, 2015; Long and Yang, 2016; Xia et al., 2019). We extend this line of research by examining the important, yet previously ignored, topic of the geographical distribution of corporate philanthropy, providing evidence that companies donate more to regions where they obtain revenue.

Second, we contribute to the emerging literature on the relationship between geography and business strategy. Studies have acknowledged that geographical factors explain much of the cross-sectional variation in companies' financial characteristics, such as corporate payout policy (John et al., 2011), financing (Gao et al., 2011), compensation (Kedia and Rajgopal, 2009), and mergers and acquisitions (Chakrabarti and Mitchell 2013). However, research highlighting the relationship between geography and corporate philanthropy remains scarce. We uncover the importance of geographical factors to decision-making on corporate philanthropy and enrich relevant theoretical and empirical research.

Finally, this study has practical significance. Our findings offer timely insights for the Chinese government and other parties concerned about corporate philanthropy. We provide company-level evidence of the effect of implementing China's targeted poverty alleviation policy.

The remainder of this paper is organized as follows. Section 2 provides an overview of the corporate philanthropy motivation literature. Section 3 develops the hypothesis. Section 4 describes the sample, variable

definitions, and empirical model specifications. Section 5 reviews the summary statistics and reports the main empirical results. Section 6 presents the motivation test. Finally, Section 7 offers a brief conclusion.

2. Literature review

Discerning the motivation of corporate philanthropy is the primary task in evaluating companies' donation behaviors (Long and Yang, 2016). Overall, research has documented two types of corporate philanthropy, namely altruism motivated corporate philanthropy and self-interest motivated corporate philanthropy.

According to altruistic motivation theory, corporate philanthropy is an act inspired by social conscience and altruism (Edmondson and Carroll, 1999; Sánchez, 2000; Xu and Li, 2016). This theory suggests that companies engage in philanthropy to enhance the welfare of society, even if it has little or no effect on company profits (Cowton, 1987; Campbell et al., 1999; Sánchez, 2000). However, an emerging body of literature has demonstrated that corporate philanthropy is not motivated purely by altruism. Companies can hope to reap several benefits from engaging in philanthropy. The first benefit is reputation. Corporate philanthropy can serve as advertising through which companies can enhance their reputation and establish brand recognition (Zhang et al., 2010; Pan et al., 2017). Shan et al. (2008) studied corporate philanthropy after the Wenchuan earthquake on May 12, 2008 in China. They found that companies used corporate philanthropy for self-advertising. Zhang et al. (2010) suggested that corporate philanthropy can be used as an alternative to traditional advertising. The second benefit is political connections. Companies can use corporate philanthropy to cultivate a relationship with the government, in turn promoting their acquisition of government favors. Local governments exert strong control over the allocation of key economic resources, such as land, credit, subsidies, and tax breaks, in China (Buchholtz et al., 1999; Su and He, 2010). This motivates companies to establish political connections with the government. Dai et al. (2014) documented that corporate philanthropy can serve as a special political contribution made by a company to establish political connections. The third benefit is insurance-like protection. Corporate philanthropy can be considered an ex-ante risk management behavior used to cope with future adverse situations. Godfrey (2005) documented that moral capital promoted by corporate philanthropy provides insurance against difficult times. Fu and Ji (2017) found that the amount of money donated by a company increases with litigation risk, indicating that the company may practice philanthropy to prevent further loss of reputation. The fourth benefit is agency costs. Corporate philanthropy may be a form of agency cost for CEOs to enhance their social standing and improve their prestige at their companies' expense (Brown et al., 2006; Long and Yang, 2016).

With the increase in global market competition, corporate philanthropy has become more strategic (Zhang et al., 2010). The benefits that a company can reap from its engagement in philanthropy have led companies to perceive corporate philanthropy as a business strategy. Despite valuable insights from studies demonstrating the positive implications of corporate philanthropy activities for companies, it is unclear how companies allocate corporate philanthropic resources across regions to achieve their strategic targets. We investigate companies' decision-making process surrounding corporate philanthropy and its underlying motivation from the perspective of geographical distribution.

3. Theory and hypothesis development

Studies have documented that corporate philanthropy helps companies overcome liabilities of foreignness (Zaheer, 1995), establish brand recognition and consumer loyalty (Zhang et al., 2010), and cultivate connections with the government (Su and He, 2010; Long and Yang, 2016). These benefits drive companies to view corporate philanthropy as a business strategy for obtaining the favor of consumers and the government. However, the strategic effect of corporate philanthropy may decrease with distance. Compared with other stakeholders, stakeholders that directly benefit from a company's philanthropy have a higher evaluation of the company. Therefore, it is thus reasonable to expect that if corporate philanthropy is used as a form of strategic investment to obtain consumer and government favor, more philanthropic resources are allocated to regions where companies obtain revenue.

Reputational concerns motivate companies to allocate more philanthropic resources to regions where they obtain revenue. Consumers take corporate philanthropy into account when evaluating products and making

purchasing decisions (Sen and Bhattacharya, 2001; Wongpich et al., 2016). In various respects, corporate philanthropy has been found to improve consumers' evaluations of companies and their products (Sen and Bhattacharya, 2001), to project a more positive image and enhance reputation (Hess et al., 2002), to enhance consumers' trust and brand loyalty (Pivato et al., 2008), and to increase consumers' willingness to purchase (Wongpich et al., 2016). Therefore, corporate philanthropy can serve as advertising through which companies can enhance their reputation, establish brand recognition and consumer loyalty, and ultimately increase their revenue. Maintaining and further increasing revenue in the region where a company operates are crucial to its development. To obtain the favor of consumers, companies tend to donate more to regions where they obtain revenue.

Political concerns also motivate companies to donate more to regions where they obtain revenue. China has established an institutional separation between businesses and the government, but local governments continue to exert strong control over the allocation of key economic resources. Governments not only shape perceptions of legitimacy but can also exert strong control over a company through rewards or punishments and through the allocation of critical resources that companies need, such as land, credit, subsidies, and tax breaks (Dai et al., 2014; S. Li et al., 2015). Studies have documented that companies that establish political connections with the government enjoy the resources controlled by the government (Faccio et al., 2006; Zhang et al., 2013). Corporate philanthropy is a means through which companies build political connections with the government (Su and He, 2010; W. Li et al., 2015; Long and Yang, 2016). Companies thus have a strong incentive to build political connections with the government via corporate philanthropy. Meanwhile, the Chinese government shoulders the responsibility of closing the poor–rich gap and reducing poverty. Corporate philanthropy is an important form of charity through which companies assist their local governments in implementing certain policy objectives related to social relief and welfare programs (Wang and Qian, 2011). Hence, the shortage of public funds motivates local governments to solicit donations from local companies. Corporate philanthropy is a feasible way to relieve fiscal pressure on the government and to nurture political connections (Su and He, 2010). Therefore, by allocating more philanthropic resources to the regions in which they operate, companies can secure favorable treatment from their local governments (Li and Zhang, 2010; W. Li et al., 2015).

Based on the previous discussion, we propose the following hypothesis:

- Hypothesis: Companies donate more to regions where they obtain revenue (vs. regions where they do not obtain revenue).

4. Research design

4.1. Sample selection and data source

Chinese A-share companies listed on the Shanghai and Shenzhen stock exchanges from 2009 to 2016 are selected as the study sample. We manually collect geographic information on corporate philanthropy from annual reports and CSR reports. Geographical distribution data on revenue are derived from the China Stock Market and Accounting Research (CSMAR) database. Other financial data are derived from the CSMAR database or the China Research Data Service database. We then select our sample as follows: (1) we exclude financial, insurance, and securities listed companies that have special operational characteristics and accounting systems; (2) we exclude special treatment companies, coded as ST (the company has suffered losses for 2 consecutive years) and *ST (the company has suffered losses for 3 consecutive years); (3) we exclude observations that do not disclose geographic information on donations and revenues; and (4) we exclude samples with missing data. Our final sample consists of 45,536 company-year-province observations, including 28,224 company-year-province observations on donations to regions where the company obtains revenue and 17,312 observations on donations to other regions. To reduce the influence of outliers, all of the continuous variables are winsorized at the 1% and 99% levels.

Table 1
Variable definitions.

Dependent variables	
<i>Donation</i>	The amount of money donated by company <i>i</i> to province <i>j</i> in year <i>t</i>
<i>Donation_as</i>	The amount of money donated by company <i>i</i> to province <i>j</i> in year <i>t</i> divided by the total assets of company <i>i</i> in year <i>t</i>
Independent variable	
<i>Divincom</i>	The amount of revenue obtained by company <i>i</i> from province <i>j</i> in year <i>t</i>
Control variables	
<i>Size</i>	The natural logarithm of total assets at the end of the year
<i>Lev</i>	The ratio of total liabilities to total assets at the end of the year
<i>Sellsexp</i>	The natural logarithm of 1 plus the amount of sales expenses at the end of the year
<i>Cash</i>	Cash holdings, which equal the cash and cash equivalents divided by current liabilities
<i>Growth</i>	The annual percentage revenue growth of a company
<i>Roa</i>	The ratio of annual net profit to total assets at the end of the year
<i>Age</i>	The number of years since a company's establishment
<i>Dual</i>	A dummy variable that equals 1 if the chairman and the CEO are the same person and 0 otherwise
<i>Z</i>	The sum of the shares held by the second to fifth largest shareholders divided by the shares held by the largest shareholder of the company
<i>Politic</i>	A dummy variable that equals 1 if the CEO or chairperson of the board previously worked or currently works in any government bureau and 0 otherwise
<i>GDP</i>	The gross regional product of province <i>j</i> in year <i>t</i>

4.2. Measures

The dependent variable is province-level corporate philanthropy (*Donat*). *Donat* is measured in two ways: *Donation* and *Donation_as*. *Donation* represents the amount of money donated by company *i* to province *j* in year *t*. *Donation_as* represents the amount of money donated by company *i* to province *j* in year *t* divided by the total assets of company *i* in year *t*.¹

The independent variable is the province-level revenue of company *i* (*Divincom*), namely the amount of revenue obtained by company *i* from province *j* in year *t*.

Following Shan et al. (2008), Du et al. (2014), and Pan et al. (2017), we also control for a series of variables that affect corporate philanthropy. These variables include corporate characteristics, corporate governance, political connections, and the macroeconomic environment. In addition, we control for company, year, and province fixed effects. Table 1 presents definitions of all of the variables.

4.3. Empirical model specification

We construct the following ordinary least squares regression model to test our hypothesis:

$$Donat_{i,t,j} = \beta_0 + \beta_1 Divincom_{i,t,j} + \sum Controls + \sum Industry + \sum Year + \sum Province + \varepsilon \quad (1)$$

where *Donat* (proxied by *Donation*_{*i,t,j*} and *Donation_as*_{*i,t,j*}) is our dependent variable, and *Divincom* is the independent variable. If our hypothesis is true, β_1 should be significantly positive.

5. Results

5.1. Descriptive statistics

Table 2 reports the geographical distribution of corporate philanthropy in China. It shows that philanthropic resources are distributed very unevenly. Companies seem to donate mainly to developed provinces

¹ The value of a company's corporate philanthropy is small relative to its total assets. Therefore, the unit of corporate philanthropy is 10,000 yuan, whereas the unit of total assets is 100 million yuan.

Table 2
Geographical distribution of corporate philanthropy.

Province	2009	2010	2011	2012	2013	2014	2015	2016	Total	%
Guangdong	6	11	15	10	11	8	9	13	83	9.62
Sichuan	4	7	7	3	39	8	4	5	77	8.92
Qinghai	1	32	2	2	2	7	8	8	62	7.18
Beijing	0	6	7	12	8	10	10	7	60	6.95
Fujian	4	6	7	9	7	8	10	9	60	6.95
Shanghai	2	5	9	10	9	4	4	4	47	5.45
Yunnan	1	5	7	4	3	12	4	7	43	4.98
Jiangsu	1	4	7	7	7	1	5	11	43	4.98
Zhejiang	2	4	5	7	12	6	4	3	43	4.98
Anhui	4	3	2	5	4	3	6	11	38	4.40
Shandong	2	3	7	2	5	2	3	3	27	3.13
Hunan	1	3	3	4	3	3	4	6	27	3.13
Xinjiang	1	1	4	3	4	3	5	5	26	3.01
Gansu	1	8	1	2	3	3	3	3	24	2.78
Guizhou	1	5	5	3	1	1	1	5	22	2.55
Shanxi	1	2	1	1	3	3	3	7	21	2.43
Henan	1	1	4	2	1	1	1	7	18	2.09
Hebei	0	1	2	2	3	2	2	3	15	1.74
Tianjin	1	2	1	1	2	0	4	2	13	1.51
Jiangxi	1	1	0	2	4	2	1	2	13	1.51
Shaanxi	0	2	1	4	1	2	1	2	13	1.51
Liaoning	0	0	2	2	2	1	2	2	11	1.27
Inner Mongolia	0	0	0	2	3	2	2	1	10	1.16
Guangxi	0	4	0	0	1	3	1	1	10	1.16
Tibet	0	0	1	2	0	0	2	5	10	1.16
Hubei	1	2	2	2	0	0	0	2	9	1.04
Hainan	0	2	1	0	0	3	1	1	8	0.93
Hong Kong, Macao, and Taiwan	6	0	0	0	0	0	1	1	8	0.93
Chongqing	1	3	1	1	0	0	1	1	8	0.93
Jilin	1	3	0	1	1	1	0	0	7	0.81
Ningxia	0	0	1	0	2	1	1	1	6	0.70
Heilongjiang	0	0	1	0	0	0	0	0	1	0.12
Total	44	154	105	105	138	91	98	128	863	
%	5.10	14.60	12.28	12.17	16.34	11.59	11.94	15.99		100

Note: This table presents data on the number of listed companies that donate money to province j in year t .

in China. The top five regions to which companies donate are Guangdong, Sichuan, Qinghai, Beijing, and Fujian. All of these provinces (autonomous regions and municipalities) are developed, with the exception of Qinghai. Qinghai has received many company donations in response to natural disasters. After the 2010 Yushu earthquake ($M = 7.1$) in Qinghai, many companies donated to the province in the name of earthquake relief (Hurtado and Agudelo, 2013). Therefore, we exclude observations of company donations in response to natural disasters, such as earthquakes and typhoons, in one of the robustness tests.

Table 3 reports the descriptive statistics of the main variables. Panel A shows that the mean value of province-level corporate philanthropy is 2,700 yuan, with a standard deviation of 2.58, and the mean value of province-level revenue is 48.8 million yuan, with a standard deviation of 3.195. These values highlight the tremendous geographical differences between corporate philanthropy and revenue. Panel B groups the variables into subsamples of companies that donate to regions where they obtain revenue (28,224 company-year-province observations) and to other regions (17,312 company-year-province observations). The means are calculated for each subsample. The results show that the means of province-level donations and province-level revenue are significantly higher for companies that donate to regions where they obtain revenue. This indicates that companies donate more generously to regions where they obtain revenue.

Table 3
Descriptive statistics.

Panel A. Descriptive statistics of the variables						
Variables	Obs.	Mean	SD	Minimum	Median	Maximum
<i>Donation</i>	45,536	0.270	2.580	0.000	0.000	46.000
<i>Donation_as</i>	45,536	0.046	0.486	0.000	0.000	9.925
<i>Divincom</i>	45,536	0.488	3.195	0.000	0.000	36.030
<i>Size</i>	45,536	22.920	1.342	17.630	22.880	27.350
<i>Lev</i>	45,536	0.535	0.191	0.041	0.544	0.983
<i>Sellsexp</i>	45,536	17.040	5.075	0.000	18.290	22.800
<i>Cash</i>	45,536	0.089	0.241	0.000	0.000	2.608
<i>Growth</i>	45,536	16.400	33.720	−79.690	11.380	304.300
<i>Roa</i>	45,536	7.031	5.706	−14.910	5.932	42.920
<i>Age</i>	45,536	12.290	6.090	0.000	0.000	24.000
<i>Dual</i>	45,536	0.155	0.362	0.000	0.000	1.000
<i>Z</i>	45,536	0.643	0.625	0.008	0.415	3.455
<i>politic</i>	45,536	0.439	0.496	0.000	0.000	1.000
<i>GDP</i>	45,536	9.491	0.988	6.092	9.660	11.300
Panel B. Mean difference tests of the variables						
Variables	Donated to regions where they obtain revenue (N=28,224)		Donated to other regions (N=17,312)		Mean difference test	
	Mean	SD	Mean	SD		
<i>Donation</i>	0.303	2.702	0.216	2.366		0.087***
<i>Donation_as</i>	0.0530	0.520	0.0355	0.426		0.017***
<i>Divincom</i>	0.614	3.547	0.283	2.504		0.330***

Note: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 4 presents the correlation coefficients of the main variables. It shows that province-level donation is significantly and positively correlated with province-level revenue. These results provide preliminary support for our hypothesis, indicating that companies donate more to regions where they obtain revenue.

Table 5 reports the main regression results. Our hypothesis predicts that regions where companies obtain revenue receive larger donations. Columns 1 and 3 of Table 5 include no other control variables than year, industry, and province fixed effects, whereas columns 2 and 4 include all of the control variables. The coefficient of *Divincom* is significantly positive. This result suggests that the more revenue a company obtains from a region, the more philanthropic resources are allocated to this region, which is consistent with our hypothesis.

5.2. Robustness checks

5.2.1. Alternate measurement and Tobit regression method

Following Xu and Li (2016) and Pan et al. (2017), we examine whether our main findings are robust to the use of alternative corporate philanthropy measures: *Donation_rev* and *Logdonation*. *Donation_rev* is the amount of money donated by company *i* to province *j* in year *t* divided by the revenue of company *i* in year *t*. *Logdonation* is calculated as the natural logarithm of 1 plus the amount of money donated by company *i* to province *j* in year *t*. Columns 1 and 2 of Table 6 show the regression results. *Divincom* remains significantly positive, thus supporting the main findings. Considering the characteristics of the data with left truncation (0 at truncation) for the dependent variable, the Tobit regression method is used for the robustness test. Columns 3 and 4 of Table 6 show the results, which are consistent with the previous findings.

5.2.2. Self-selection problem: The Heckman two-stage method

As province-level revenue is disclosed voluntarily, companies that disclose their province-level revenue may be more likely to donate to regions where they obtain revenue (vs. regions where they do not obtain revenue). This may result in biased samples, in turn affecting the accuracy and validity of the results. Following Deng

Table 4
Correlation matrix of main variables.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) <i>Donation</i>	1.00	0.98***	0.18***	0.04***	0.01**	0.03***	0.00	0.02***	0.00	−0.01***	0.00	0.02***	0.01**	0.05***
(2) <i>Donation_as</i>	0.83***	1.00	0.18***	0.03***	0.00	0.04***	0.01	0.02***	0.01**	−0.01**	0.00	0.01***	0.02***	0.05***
(3) <i>Divincom</i>	0.14***	0.11***	1.00	0.06***	0.05***	0.00	−0.01**	0.00	−0.03***	−0.02***	0.00	−0.01**	0.02***	0.11***
(4) <i>Size</i>	0.05***	0.00	0.12***	1.00	0.51***	0.32***	0.15***	0.02***	−0.18***	0.20***	−0.21***	−0.06***	0.08***	0.08***
(5) <i>Lev</i>	0.01*	−0.01**	0.07***	0.53***	1.00	0.08***	0.04***	0.06***	−0.38***	0.13***	−0.17***	−0.06***	0.00	0.00
(6) <i>Sellsexp</i>	0.01***	0.01**	0.03***	0.08***	−0.01***	1.00	0.18***	0.12***	0.03***	0.07***	−0.01**	−0.01	−0.02***	0.05***
(7) <i>Cash</i>	0.01**	0.01*	−0.01	0.05***	−0.07***	0.11***	1.00	−0.02***	−0.05***	0.07***	0.03***	0.05***	−0.04***	0.00
(8) <i>Growth</i>	0.02***	0.02***	0.00	0.03***	0.06***	0.02***	−0.01*	1.00	0.24***	−0.16***	0.02***	0.10***	0.04***	−0.05***
(9) <i>Roa</i>	0.00	0.01**	−0.01***	−0.17***	−0.33***	0.05***	0.03***	0.23***	1.00	−0.17***	0.08***	0.07***	0.09***	−0.05***
(10) <i>Age</i>	−0.02***	−0.02***	0.00	0.19***	0.17***	0.06***	0.02***	−0.10***	−0.16***	1.00	−0.13***	−0.20***	−0.17***	0.09***
(11) <i>Dual</i>	0.00	0.01*	−0.04***	−0.20***	−0.17***	0.05***	0.04***	0.02***	0.08***	−0.15***	1.00	0.11***	−0.03***	0.02***
(12) <i>Z</i>	0.01*	0.01*	−0.03***	−0.09***	−0.10***	−0.10***	0.08***	0.08***	0.07***	−0.20***	0.12***	1.00	0.00	0.01***
(13) <i>Politic</i>	0.02***	0.02***	0.03***	0.07***	0.01*	−0.02***	−0.04***	0.03***	0.09***	−0.16***	−0.03***	−0.03***	1.00	−0.03***
(14) <i>GDP</i>	0.01**	−0.01	0.09***	0.07***	0.00	0.02***	−0.01	−0.02***	−0.05***	0.07***	0.02***	0.01	−0.03***	1.00

Note: The lower-triangular cells report the Pearson correlation coefficients and the upper-triangular cells report the Spearman rank correlations. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 5
Companies' preference for regions where they obtain revenue.

Variables	Donation		Donation_as	
	(1)	(2)	(3)	(4)
<i>Divincom</i>	0.115*** (5.89)	0.113*** (5.72)	0.019*** (6.00)	0.019*** (6.13)
<i>Size</i>		0.078** (3.01)		−0.001 (−0.31)
<i>Lev</i>		−0.190 (−1.61)		−0.038* (−2.01)
<i>Sellsexp</i>		−0.000 (−0.02)		0.001 (1.15)
<i>Cash</i>		0.097 (1.36)		0.013 (1.02)
<i>Growth</i>		0.000 (1.26)		0.000 (1.39)
<i>Roa</i>		−0.000 (−0.14)		−0.000 (−0.79)
<i>Age</i>		−0.007 (−1.81)		−0.000 (−0.69)
<i>Dual</i>		0.055 (1.24)		0.012 (1.47)
<i>Z</i>		0.020 (0.74)		0.004 (0.97)
<i>Politic</i>		0.023 (0.67)		0.008 (1.21)
<i>GDP</i>		0.000 (1.09)		0.000 (0.67)
<i>Constant</i>	0.206 (1.24)	−1.521** (−2.96)	0.008 (0.38)	0.030 (0.48)
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Observations	45,536	45,536	45,536	45,536
Adjusted R ²	0.037	0.039	0.036	0.037

Note: The *t*-statistics reported in parentheses are calculated based on robust standard errors clustered by company. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

Table 6
Robustness tests: Alternate measurement and Tobit regression method.

Variables	Alternate measurement		Tobit regression method	
	Donation_rev (1)	Logdonation (2)	Donation (3)	Donation_as (4)
<i>Divincom</i>	0.011*** (5.128)	0.019*** (6.001)	1.918*** (12.051)	0.37*** (10.47)
<i>Control</i>	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Observations	45,536	45,536	45,536	45,536
Adjusted R ²	0.014	0.047	/	/
Pseudo R ²	/	/	0.049	0.058

Note: The *t*-statistics reported in parentheses are calculated based on robust standard errors clustered by company. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

et al. (2020), we adopt the Heckman two-step method to address this potential issue. We design a model to examine the possibility of a company disclosing its province-level revenue. The first step of the model is expressed as follows:

$$\begin{aligned} Income_{i,t} = & \beta_0 + \beta_1 Size_{i,t} + \beta_2 Lev_{i,t} + \beta_3 Roa_{i,t} + \beta_4 State_{i,t} + \beta_5 Payrate_{i,t} + \beta_6 Seo_{i,t} + \beta_7 Share_{i,t} \\ & + \beta_8 Outdirector_{i,t} + \beta_9 Dual_{i,t} + \beta_{10} Big4_{i,t} + \beta_{11} HHI_{i,t} + \beta_{12} Loss_{i,t} + \sum Industry \\ & + \sum Year + \varepsilon \end{aligned} \quad (2)$$

where the dependent variable *Income* is a dummy variable that equals 1 if the company discloses its province-level revenue information and 0 otherwise. We estimate a logit model for *Income* on a bunch of variables that are likely to influence a company's decision to disclose the geographic information on its revenue. Following Luo and Zhu (2010) and Zhang and Liao (2010), we include the following variables: *Size*, the natural logarithm of total assets at the end of the year; *Lev*, the ratio of total liabilities to the total assets at end of the year; *Roa*, the ratio of annual net profit to the total assets at the end of the year; *State*, a dummy variable that equals 1 if the company is a state-owned enterprise (SOE) and 0 otherwise; *Payrate*, other cash paid related to operating activities divided by revenue; *SEO*, a dummy variable that equals 1 if the company conducts a seasoned equity offering in year $t + 1$ and 0 otherwise; *Share*, the quadratic sum of the top 10 stockholders' share ratio; *Outdirector*, the percentage of independent directors, which equals the number of independent directors divided by the total number of board members; *Dual*, a dummy variable that equals 1 if the chairman and the CEO are the same person and 0 otherwise; *Big4*, a dummy variable that equals 1 if a company's external auditor is a Big 4 auditor and 0 otherwise; *HHI*, the industry's Herfindahl–Hirschman Index; and *Loss*, a dummy variable that equals 1 when a company has a negative net income and 0 otherwise. We calculate the inverse Mills ratio (*IMR*) from the model. Next, the *IMR* is added to regression model (1) as a control in the second stage.

Table 7 reports the final results. After controlling for *IMR*, *Divincom* remains significantly positive at the 1% level. Thus, our findings are robust.

5.2.3. Missing variables: Placebo test

To verify that the results are not caused by missing variables, we conduct a placebo test. Following Pan et al. (2017), we randomize province-level revenue for each company and define *Divincom_placebo* as the amount of revenue obtained from a randomly designated province. After replacing *Divincom* in the baseline model with *Divincom_placebo*, we re-run the regression. We repeat this process 500 and 800 times. If companies donate more to regions where they obtain revenue, then province-level donation should not demonstrate any significant positive associations with randomly chosen province-level revenues.

Table 7
Robustness tests: The Heckman two-stage method.

Variables	<i>Donation</i>	<i>Donation_as</i>
<i>Divincom</i>	0.115*** (5.78)	0.019*** (6.18)
<i>IMR</i>	−0.059*** (−3.94)	−0.008** (−3.11)
<i>Control</i>	Yes	Yes
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Province fixed effects	Yes	Yes
Observations	45,536	45,536
Adjusted R ²	0.039	0.037

Note: The *t*-statistics reported in parentheses are calculated based on robust standard errors clustered by company. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

Fig. 1 displays the results of the random placebo test. The ratio of the significant positive coefficient is small, suggesting that the random distribution of the province-level revenue of a company does not have a significant impact on its province-level donations. Therefore, our results are not caused by unobservable factors.

5.2.4. Reverse causality: Donations measured at year $t + 1$

Our baseline estimates may also suffer from reverse causality, namely the more philanthropic resources that are allocated to a region, the more revenue a company obtains from this region. To eliminate this concern, we use *Donation* and *Donation_as* at year $t + 1$ as the dependent variable, regress it on *Divincom* at year t , and re-run the regression. The time interval between the variables avoids reverse causality. Table 8 shows the results, which are consistent with the previous findings.

5.2.5. Other robustness checks

To enhance the reliability of our conclusions, we conduct further robustness tests, as described below.

- (1) Exclude observations involving companies' donations to natural disasters. Many natural disasters, such as the Yushu earthquake ($M = 7.1$), the Lushan earthquake ($M = 7.0$), and the super typhoon Ramma-sun, occurred in China during the sample period. Many companies donate to regions where natural dis-

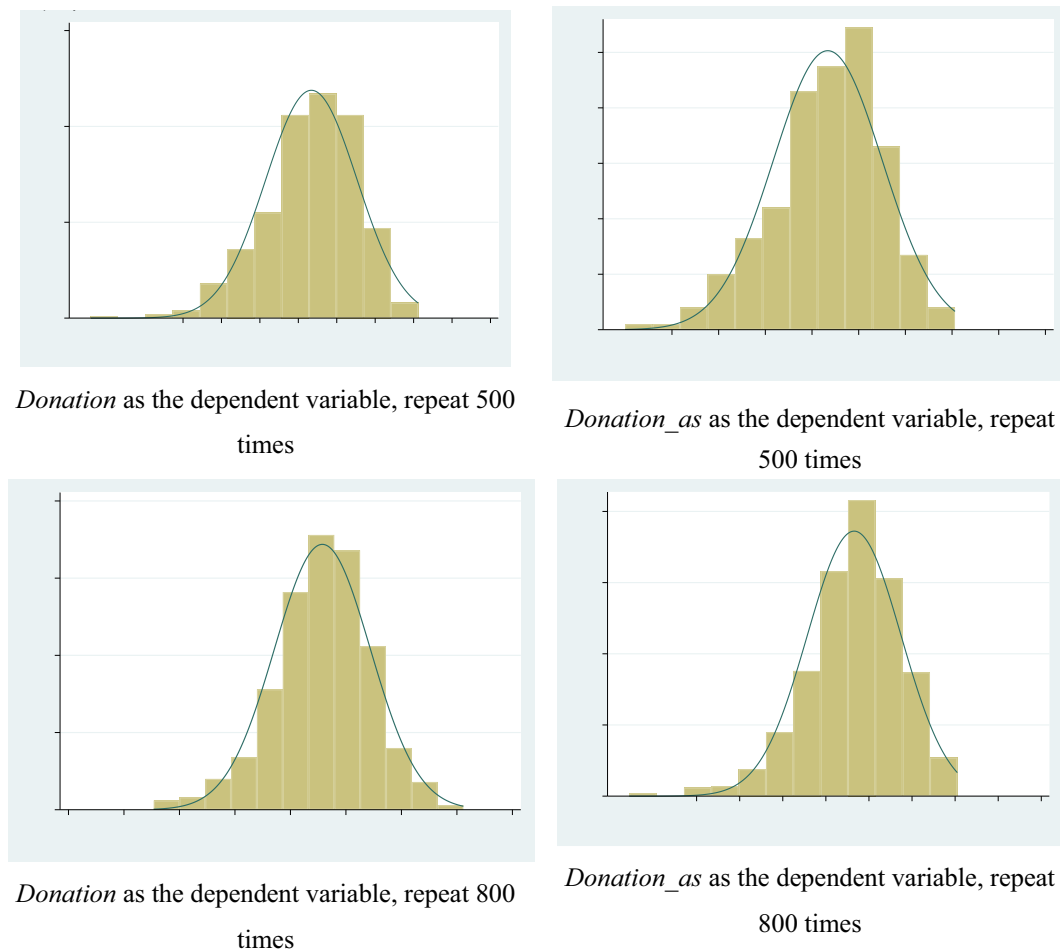


Fig. 1. Placebo test: t -value distribution of the regression coefficient of *Divincom*.

Table 8
Robustness tests: Donations measured at year $t + 1$.

Variables	<i>Donation_{t+1}</i>	<i>Donation_{as,t+1}</i>
<i>Divincom_t</i>	0.107*** (5.78)	0.016*** (6.00)
<i>Control</i>	Yes	Yes
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Province fixed effects	Yes	Yes
Observations	40,352	40,352
Adjusted R ²	0.032	0.030

Note: As the variable is used in year $t + 1$, we lose 1 year of observations. The t -statistics reported in parentheses are calculated based on robust standard errors clustered by company. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

Table 9
Regression results excluding donations to natural disasters.

Variables	<i>Donation</i>	<i>Donation_{as}</i>
<i>Divincom</i>	0.111*** (5.68)	0.018*** (6.02)
<i>Control</i>	Yes	Yes
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Province fixed effects	Yes	Yes
Observations	45,194	45,194
Adjusted R ²	0.042	0.039

Note: The t -statistics reported in parentheses are calculated based on robust standard errors clustered by company. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

asters occur, leading to the geographic aggregation of corporate philanthropy. To rule out the impact of natural disasters, we exclude the observations of corporate philanthropy related to disaster relief. Table 9 shows the results, which are consistent with the previous tests.

- (2) Exclude observations involving companies' donations to poor regions where they obtain revenue. We find that companies donate more to regions where they obtain revenue rather than to other regions in need of support. From this perspective, we hold that corporate philanthropy is not purely motivated by altruism. However, it is difficult to clarify the motivation of corporate philanthropy if the regions where companies obtain revenue are also poor regions.² To rule out this effect, we exclude the observations involving poor regions where companies obtain revenue. Table 10 shows the regression results, which are consistent with the previous findings.
- (3) Exclude observations involving companies' donations to their headquarters. To rule out the influence of the headquarters-based pattern of CSR, we exclude observations involving corporate philanthropic spending being invested in the headquarters province. Table 11 shows the regression results, which are consistent with the previous findings.

6. Motivation tests

In the previous section, we provide empirical evidence that companies donate more to regions where they obtain revenue. In this section, we further examine the motivations for revenue-driven regional favoritism. As

² Poor regions are defined in the next section.

Table 10
Regression results excluding donations to poor regions.

Variables	<i>Donation</i>	<i>Donation_as</i>
<i>Divincom</i>	0.109*** (5.54)	0.018*** (5.87)
<i>Control</i>	Yes	Yes
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Province fixed effects	Yes	Yes
Observations	36,998	36,998
Adjusted R ²	0.044	0.041

Note: The *t*-statistics reported in parentheses are calculated based on robust standard errors clustered by company. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

Table 11
Regression results excluding donations to companies' headquarters.

Variables	<i>Donation</i>	<i>Donation_as</i>
<i>Divincom</i>	0.043* (1.70)	0.006** (2.02)
<i>Control</i>	Yes	Yes
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Province fixed effects	Yes	Yes
Observations	44,270	44,270
Adjusted R ²	0.018	0.018

Note: The *t*-statistics reported in parentheses are calculated based on robust standard errors clustered by company. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

mentioned earlier, reputational motivations and political motivations are two potential motivations for revenue-driven regional favoritism. If those motivations are indeed valid, any cross-sectional differences in reputation and political status should be related to the allocation of philanthropic resources across regions.

6.1. Reputational motivations

6.1.1. Media coverage

Companies donate more to regions where they obtain revenue to enhance their profile, project a more positive image, and improve their reputation. However, for companies to realize their reputational purpose, their stakeholders must be informed of their corporate philanthropy. The more widely information regarding a company's corporate philanthropy spreads, the more the company's reputation is promoted. As an information intermediary, the media play a key role in information transmission. Media reports are an important way for stakeholders to stay informed about companies (Fang and Peress, 2009). Media coverage broadens the scope of philanthropic information delivery, enhances the speed of philanthropic information transmission, and enhances the reputation promotion effect of corporate philanthropy (Pan et al., 2017). It is reasonable to expect revenue-driven regional favoritism to be stronger for companies with higher local media coverage. To test the reputational motivation of corporate philanthropy, we construct model (3), which is based on model (1) and introduces the interaction term between province-level revenue (*Divincom*) and media coverage (*Media*). Of greatest concern are the sign and statistical significance of β_2 . We expect the coefficient of the interaction term β_2 to be positive.

$$\begin{aligned} \text{Donat}_{i,t,j} = & \beta_0 + \beta_1 \text{Divincom}_{i,t,j} + \beta_2 \text{Divincom}_{i,t,j} \times \text{Media}_{i,t,j} + \beta_3 \text{Media}_{i,t,j} + \sum \text{Controls} \\ & + \sum \text{Industry} + \sum \text{Year} + \sum \text{Province} + \varepsilon \end{aligned} \quad (3)$$

Following Dai et al. (2011), we use the number of newspaper reports on a company to measure media coverage. Giving province-level donation data, *Media* is defined as the amount of news covering the firm in each province's newspapers. Province-level newspaper reports are manually collected from the China Academic Literature Online Publication Database Full-Text Database of Important Newspapers in China.

Columns 1 and 2 of Table 12 present the results. The coefficient of *Divincom* remains significantly positive. The coefficient of the interaction between *Divincom* and *Media* is positive and significant at 5% or better. These results indicate that companies characterized by higher local media coverage donate more to regions where they obtain revenue.

Table 12

Media coverage, product properties, and revenue-driven regional favoritism.

Variables	Media exposure		Product properties	
	(1) <i>Donation</i>	(2) <i>Donation_as</i>	(3) <i>Donation</i>	(4) <i>Donation_as</i>
<i>Divincom</i>	0.112*** (5.64)	0.019*** (6.03)	0.093*** (4.661)	0.015*** (4.903)
<i>Divincom</i> × <i>Media</i>	0.009** (2.52)	0.003*** (3.58)		
<i>Media</i>	0.004 (1.26)	0.001** (2.38)		
<i>Divincom</i> × <i>Consumer</i>			0.073** (2.002)	0.013** (2.312)
<i>Consumer</i>			0.176** (2.371)	0.016* (1.77)
<i>Size</i>	0.079*** (3.01)	−0.001 (−0.31)	0.112*** (4.106)	0.003 (1.07)
<i>Lev</i>	−0.195 (−1.61)	−0.038** (−1.98)	−0.281** (−2.187)	−0.047** (−2.205)
<i>Sellsexp</i>	0.000 (0.01)	0.001 (1.16)	0.001 (0.137)	0.000 (0.653)
<i>Cash</i>	0.104 (1.41)	0.014 (1.06)	0.066 (0.873)	0.013 (0.711)
<i>Growth</i>	0.000 (1.26)	0.000 (1.38)	0.000 (0.726)	0.000 (1.091)
<i>Roa</i>	−0.000 (−0.11)	−0.000 (−0.70)	−0.002 (−0.554)	−0.001 (−0.944)
<i>Age</i>	−0.007* (−1.79)	−0.001 (−0.76)	−0.006 (−1.399)	−0.001 (−0.648)
<i>Dual</i>	0.058 (1.28)	0.013 (1.54)	0.069 (1.411)	0.015 (1.51)
<i>Z</i>	0.022 (0.77)	0.005 (1.00)	0.031 (1.065)	0.005 (0.982)
<i>Politic</i>	0.022 (0.62)	0.007 (1.12)	0.023 (0.597)	0.007 (0.908)
<i>GDP</i>	0.000 (0.98)	0.000 (0.79)	−0.433** (−2.12)	−0.126*** (−3.388)
<i>Constant</i>	−1.547*** (−2.94)	0.028 (0.43)	1.818 (0.949)	1.131*** (3.271)
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Observations	44,112	44,112	45,536	45,536
Adjusted R ²	0.040	0.039	0.037	0.034

Note: The China Academic Literature Online Publication Database Full Text Database of Important Newspapers in China does not include newspapers from Hong Kong, Macao, or Taiwan. Therefore, the sample size is reduced in columns 1 and 2. The *t*-statistics reported in parentheses are calculated based on robust standard errors clustered by company. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

6.1.2. Product properties

Corporate philanthropy can be used as a means of non-price competition similar to advertising, which promotes corporate image. However, the value of corporate philanthropy probably varies across the industry. Individual consumers are more responsive to corporate philanthropy than industry buyers are. Thus, the advertising effect of corporate philanthropy is more valuable for companies that sell products directly to consumers (Brammer and Millington, 2005; Shan et al., 2008; Flammer, 2015). Consequently, it is reasonable to expect revenue-driven regional favoritism to be stronger for companies that sell products directly to consumers. To test the reputational motivation of corporate philanthropy, we construct model (4), which is based on model (1) and introduces the interaction term between province-level revenue (*Divincom*) and a dummy variable indicating whether a company sells products directly to consumers (*Consumer*). We expect the coefficient of the interaction term β_2 to be positive.

$$\begin{aligned} \text{Donat}_{i,t,j} = & \beta_0 + \beta_1 \text{Divincom}_{i,t,j} + \beta_2 \text{Divincom}_{i,t,j} \times \text{Consumer}_{i,t,j} + \beta_3 \text{Consumer}_{i,t,j} + \sum \text{Controls} \\ & + \sum \text{Industry} + \sum \text{Year} + \sum \text{Province} + \varepsilon \end{aligned} \quad (4)$$

where the classification of whether a company sells products directly to consumers (*Consumer*) is obtained from Shan et al. (2008). Columns 3 and 4 of Table 12 present the results. As shown, the coefficient of *Divincom* remains significantly positive. The coefficient of the interaction between *Divincom* and *Consumer* is positive and significant at 5%. These results indicate that companies that sell products directly to consumers donate more to regions where they obtain revenue.

6.2. Political motivations

6.2.1. Fiscal pressure of the local government

Political motivations also incentivize companies to donate more to regions where they obtain revenue. Corporate philanthropy is an important means through which companies assist their local governments in implementing certain policy factors in social relief and welfare programs (Wang and Qian, 2011). When a government fails to fund adequate public services, it reaches out to companies for additional funding. Hence, corporate philanthropy is a feasible way to relieve the pressure faced by the government and nurture political connections (Su and He, 2010). Consequently, if corporate philanthropy is used as a means of local political networking, we should observe that companies donate more to regions where the local government is in greater need. To measure the need for support, we use the fiscal pressure of local governments (*Press*). Following Pan et al. (2017), we measure the fiscal pressure of local governments (*Press*) by the per capita financial income of each province (excluding Hong Kong, Macao, and Taiwan). We construct model (5), which is based on model (1) and introduces the interaction term between province-level revenue (*Divincom*) and the fiscal pressure on the government (*Press*). The lower the value of *Press* is, the greater the fiscal pressure on the local government is. We expect the coefficient of the interaction term β_2 to be negative.

$$\begin{aligned} \text{Donat}_{i,t,j} = & \beta_0 + \beta_1 \text{Divincom}_{i,t,j} + \beta_2 \text{Divincom}_{i,t,j} \times \text{Press}_{i,t,j} + \beta_3 \text{Press}_{i,t,j} + \sum \text{Controls} \\ & + \sum \text{Industry} + \sum \text{Year} + \sum \text{Province} + \varepsilon \end{aligned} \quad (5)$$

Columns 1 and 2 of Table 13 present the results. The coefficient of *Divincom* remains significantly positive. The coefficient of the interaction between *Divincom* and *Press* is negative and significant at 5% or better. These results indicate that companies can use corporate philanthropy to meet political ends to cultivate their relationship with their local governments.

6.2.2. Ownership type

There are obvious differences in the resource endowments of SOEs and non-SOEs in China, leading to differences in their donation behaviors. Non-SOEs in China have been discriminated against in the financial market, whereas SOEs are more likely to benefit from preferential policies, such as better property rights protection, lighter tax burdens, and more government subsidies (Li and Zhang, 2010; Li and Xie, 2014). Thus, the motivation to cultivate a relationship with the local government is stronger for non-SOEs. Consequently, it

Table 13

Fiscal pressure of the local government, ownership type, and revenue-driven regional favoritism.

Variables	Fiscal pressure of the local government		Ownership type	
	<i>Donation</i> (1)	<i>Donation_as</i> (2)	<i>Donation</i> (3)	<i>Donation_as</i> (4)
<i>Divincom</i>	0.155*** (4.88)	0.027*** (5.18)	0.163*** (5.514)	0.028*** (5.614)
<i>Divincom</i> × <i>Press</i>	−0.458** (−2.50)	−0.084*** (−2.88)		
<i>Press</i>	−1.831 (−1.42)	−0.062 (−0.32)		
<i>Divincom</i> × <i>SOE</i>			−0.075** (−2.068)	−0.015** (−2.485)
<i>SOE</i>			−0.012 (−0.319)	0.006 (1.011)
<i>Size</i>	0.079*** (3.00)	−0.001 (−0.34)	0.116*** (3.885)	0.003 (1.105)
<i>Lev</i>	−0.208* (−1.71)	−0.041** (−2.10)	−0.303** (−2.295)	−0.05** (−2.302)
<i>Sellsexp</i>	0.000 (0.02)	0.001 (1.16)	0.001 (0.1)	0.000 (0.699)
<i>Cash</i>	0.104 (1.42)	0.013 (1.06)	0.052 (0.676)	0.012 (0.666)
<i>Growth</i>	0.000 (1.28)	0.000 (1.38)	0.000 (0.774)	0.000 (1.212)
<i>Roa</i>	−0.001 (−0.22)	−0.000 (−0.86)	−0.002 (−0.654)	−0.001 (−1.01)
<i>Age</i>	−0.007* (−1.75)	−0.000 (−0.62)	−0.005 (−1.174)	0.000 (−0.547)
<i>Dual</i>	0.060 (1.34)	0.013 (1.56)	0.074 (1.568)	0.017* (1.793)
<i>Z</i>	0.021 (0.75)	0.005 (1.00)	0.023 (0.782)	0.005 (0.938)
<i>Politic</i>	0.022 (0.62)	0.008 (1.15)	0.007 (0.181)	0.006 (0.704)
<i>GDP</i>	0.000 (1.31)	0.000 (0.94)	−0.426** (−2.077)	−0.125*** (−3.326)
<i>Constant</i>	−1.221** (−2.21)	0.049 (0.64)	1.79 (0.922)	1.124*** (3.204)
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Observations	44,113	44,113	45,536	45,536
Adjusted R ²	0.042	0.040	0.036	0.034

Note: The *t*-statistics reported in parentheses are calculated based on robust standard errors clustered by company. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

is reasonable to expect revenue-driven regional favoritism to be stronger for non-SOEs. We construct model (6), which is based on model (1) and introduces the interaction term between province-level revenue (*Divincom*) and a dummy variable indicating a company's ownership type (*SOE*). *SOE* equals 1 if the company is ultimately controlled by the government and 0 otherwise. Given that the motivation to cultivate a relationship with the local government is stronger for non-SOEs, we expect the coefficient of the interaction term β_2 to be negative.

$$\begin{aligned}
 Donat_{i,t,j} = & \beta_0 + \beta_1 Divincom_{i,t,j} + \beta_2 Divincom_{i,t,j} \times SOE_{i,t,j} + \beta_3 SOE_{i,t,j} + \sum Controls + \sum Industry \\
 & + \sum Year + \sum Province + \varepsilon
 \end{aligned} \quad (6)$$

Columns 3 and 4 of Table 13 present the results. The coefficient of *Divincom* remains significantly positive. The coefficient of the interaction between *Divincom* and *SOE* is negative and significant at 5%. These results indicate that non-SOEs donate more to regions where they obtain revenue.

6.3. Impact of targeted poverty alleviation

Since 2014, Chinese companies have been expected to engage in targeted poverty alleviation.³ Studies have indicated that companies adjust their donation behavior to meet changing social expectations (Campbell, 2007; Huang et al., 2008). Indeed, urged by the government and other stakeholders, companies have become increasingly involved in targeted poverty alleviation (Deng et al., 2020a, 2020b). Therefore, it is necessary to examine whether and, if so, how targeted poverty alleviation affects the allocation of philanthropic resources.

Since the implementation of targeted poverty alleviation, stakeholders have increasingly expected companies to engage in poverty alleviation. In such a situation, donating to poor regions is in line with social expectations, which helps companies gain and maintain legitimacy. The central government has formulated a series of policies to promote targeted poverty alleviation, including the incorporation of poverty alleviation performance into the system used to appraise and promote officials. This incentivizes local government officials to get involved in targeted poverty alleviation. Corporate philanthropy is an important way for companies to assist the government in accelerating the progress of poverty alleviation and in easing the fiscal pressure on the government. Therefore, the government has preferred companies to donate to poor regions since 2014. Local governments may provide secure access to scarce resources in return for companies' assistance in targeted poverty alleviation.

Based on the above analysis, the implementation of the targeted poverty alleviation policy has made donating to poor regions an important means through which companies can meet the expectations of society and government. However, it is difficult for companies to rapidly increase their philanthropic resources in the short term. As a result, donating more to poor regions decreases the amount of money that can be donated to other regions. Consequently, it is reasonable to expect the amount of money donated to the regions where companies obtain revenue to have decreased but the amount of money donated to poor regions to have increased since the implementation of the targeted poverty alleviation policy.

First, we test the impact of targeted poverty alleviation on the amount of money donated to the regions where companies obtain revenue. Based on model (1), we construct model (7). *Post* is a dummy variable that equals 1 for years after 2013 and 0 otherwise. *Post* captures the effect of the implementation of the targeted poverty alleviation policy on the allocation of philanthropic resources across regions. We introduce the interaction term between *Divincom* and *Post* and expect the coefficient of the interaction term β_2 to be significantly negative.

$$\begin{aligned} \text{Donat}_{i,t,j} = & \beta_0 + \beta_1 \text{Divincom}_{i,t,j} + \beta_2 \text{Divincom}_{i,t,j} \times \text{Post}_{i,t,j} + \beta_3 \text{Post}_{i,t,j} + \sum \text{Controls} + \sum \text{Industry} \\ & + \sum \text{Year} + \sum \text{Province} + \varepsilon \end{aligned} \quad (7)$$

Table 14 presents the results. The coefficient of *Divincom* remains significantly positive. The coefficient of the interaction between *Divincom* and *Post* is negative and significant at 5% or better. These results indicate that the implementation of targeted poverty alleviation is associated with the reduction in philanthropic resource allocation to the regions where companies obtain revenue.

We also test the impact of targeted poverty alleviation on the amount of money donated to poor regions. We construct model (8) for regression analysis.

$$\text{Donapoor}_{i,t} = \beta_0 + \beta_1 \text{Post}_{i,t} + \sum \text{Controls} + \sum \text{Industry} + \sum \text{Year} + \varepsilon \quad (8)$$

where the dependent variable is the amount of money donated to poor regions (*Donapoor*). *Donapoor* is measured in two ways: *Donapoor_20* and *Poorprop*. Following the classification method of the National Bureau of Statistics, the provinces with the bottom 20% of the annual per capita disposable income are defined as poor

³ The targeted poverty alleviation policy was first proposed in November 2013. Since then, it has gradually developed. We treat 2014 as the first year of the implementation of targeted poverty alleviation in China.

Table 14
The targeted poverty alleviation policy and revenue-driven regional favoritism.

Variables	Donation	Donation_as
<i>Divincom</i>	0.131*** (5.655)	0.022*** (5.796)
<i>Divincom</i> × <i>Post</i>	−0.062** (−2.313)	−0.013*** (−3.422)
<i>Post</i>	0.325** (2.407)	0.097*** (3.892)
<i>Size</i>	0.113*** (3.781)	0.003 (1.051)
<i>Lev</i>	−0.308** (−2.316)	−0.05** (−2.312)
<i>Sellsexp</i>	0.001 (0.161)	0.000 (0.689)
<i>Cash</i>	0.062 (0.806)	0.013 (0.677)
<i>Growth</i>	0.000 (0.887)	0.000 (1.145)
<i>Roa</i>	−0.002 (−0.603)	−0.001 (−0.965)
<i>Age</i>	−0.005 (−1.186)	0.000 (−0.562)
<i>Dual</i>	0.082* (1.813)	0.017* (1.733)
<i>Z</i>	0.031 (1.101)	0.006 (1.115)
<i>Politic</i>	0.016 (0.404)	0.007 (0.844)
<i>GDP</i>	−0.419** (−2.054)	−0.123*** (−3.306)
<i>Constant</i>	1.779 (0.925)	1.114*** (3.218)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Province fixed effects	Yes	Yes
Observations	45,536	45,536
Adjusted R ²	0.036	0.034

Note: The *t*-statistics reported in parentheses are calculated based on robust standard errors clustered by company. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

regions. $Donapoor_{i,t}$ is calculated as the amount of money donated by a company to poor regions. $Poor-prop_{i,t}$ is the amount of money donated by a company to poor regions divided by the total amount of money donated by the company in the same year.

Table 15 presents the results. The coefficient of the targeted poverty alleviation period (*Post*) is positive and significant at 5%. This indicates that companies have donated more to poor regions since the implementation of the targeted poverty alleviation policy.

In general, our results suggest that companies donate more to poor regions after the implementation of targeted poverty alleviation. This enhances the altruism effect of corporate philanthropy, even if companies are driven by reputational and political motivations.

7. Conclusions

In response to increasing awareness of the positive implications of corporate philanthropy for firm revenue, many companies voluntarily engage in corporate philanthropy. The increasing importance of corporate philanthropy is reflected in the proliferation of research in this area. Many studies have suggested that corporate

Table 15
The targeted poverty alleviation policy and donations to poor regions.

Variables	<i>Donapoor_20</i>	<i>Poorprop</i>
<i>Post</i>	0.34** (2.139)	0.024** (2.356)
<i>Size</i>	0.13 (1.554)	0.000 (0.089)
<i>Lev</i>	−0.597 (−1.372)	−0.005 (−0.301)
<i>Sellsexp</i>	0.03** (2.533)	0.001** (2.283)
<i>Cash</i>	0.13 (0.28)	−0.001 (−0.11)
<i>Growth</i>	0.004 (1.473)	0.000 (0.729)
<i>Roa</i>	−0.006 (−0.397)	0.000 (−0.234)
<i>Age</i>	0.016 (0.821)	0.000 (−0.01)
<i>Dual</i>	−0.094 (−0.476)	0.000 (0.055)
<i>Z</i>	0.482 (1.61)	0.004 (0.588)
<i>Polititc</i>	0.307* (1.716)	0.011** (1.976)
<i>GDP</i>	−0.555*** (−3.443)	−0.019*** (−3.687)
<i>Constant</i>	0.956 (0.51)	0.133** (2.055)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	1,423	1,423
Adjusted R ²	0.047	0.034

Note: The *t*-statistics reported in parentheses are calculated based on robust standard errors clustered by company. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

philanthropy is not motivated purely by altruism and have demonstrated the wide range of benefits that a company can reap from engaging in philanthropy. Despite the valuable insights provided by these studies, insufficient attention has been paid to the process of philanthropic resource allocation across regions. We enrich the literature by examining how companies in China allocate philanthropic resources across regions to achieve their strategic targets.

Using data on Chinese listed companies from 2009 to 2016, we find that philanthropic resources are distributed very unevenly and that companies exhibit strong revenue-driven regional favoritism. We also find the revenue-driven regional favoritism of Chinese companies to be driven by reputational and political motivations. Motivated by reputational concerns, companies with high media coverage and companies that sell products directly to consumers demonstrate more pronounced revenue-driven regional favoritism. Motivated by political concerns, the greater the government fiscal pressure in regions where companies obtain revenue, the more philanthropic resources companies allocate to these regions. Additionally, non-SOEs donate more to regions where they obtain revenue than to regions where they do not obtain revenue. Finally, the implementation of China's targeted poverty alleviation policy has enhanced the altruism effect of corporate philanthropy.

This study has several important implications. First, corporate philanthropy does not necessarily come at the expense of efficiency. The allocation of philanthropic resources across regions can be used as part of a company's business strategy to obtain consumer and government favor in regions where it operates. Strategic corporate philanthropy may concurrently promote social welfare and company revenue. Second, as social

expectations change, corporate philanthropy should be adjusted dynamically. Third, the government should adopt policies to encourage instead of compel companies to engage in philanthropy. Firms in China are often urged by the government to contribute to social programs, such as disaster relief and poverty reduction, when the government fails to adequately fund public services. However, charity is not companies' main goal. Compelling companies to participate in social programs not only distorts the rules of the market but may also impede the sustainable development of corporate philanthropy.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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