Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Philanthropic disaster relief giving as a response to institutional pressure: Evidence from China

Yongqiang Gao *

Huazhong University of Science & Technology, People's Republic of China

A R T I C L E   I N F O

Article history:
Received 1 January 2010
Received in revised form 1 September 2010
Accepted 1 December 2010
Available online 30 December 2010

Keywords:
China
Corporate philanthropy
Disaster relief
Institutional pressure
Wenchuan earthquake

A B S T R A C T

This paper investigates if firms under high institutional pressure donate more to disaster relief than firms under lower institutional pressure. By taking Chinese listed companies’ donations to May 12, 2008 Wenchuan earthquake as the sample, this research finds that large firms and firms who have political ties donate a significant more to disaster relief than smaller firms and firms who do not have political ties. But the findings indicate that state-owned enterprises (SOEs) donate no more than non SOEs, and service companies donate significantly less than non-service companies. The results of this research partly support the institutional point of view of corporate philanthropy. Firms under high institutional pressure are more likely to donate more than firms facing lower institutional pressure.

© 2010 Elsevier Inc. All rights reserved.

1. Introduction

Corporate philanthropy, common in the U.S. for about fifty years, may be the oldest form of corporate social performance (Bartkus et al., 2002; Mescon and Tilson, 1987). Businesses take philanthropy as a way to demonstrate their social consciousness (Idowu and Papasolomou, 2007) on the one hand, and to support their financial performance (Marom, 2006) on the other hand.

Some scholars hold that philanthropic giving is motivated by rational economic considerations of market generation and consumer cooption, akin to advertising (e.g., Burt, 1983). They argue that philanthropic giving has potential strategic value for the companies who conduct it (e.g., Gardberg and Fombrun, 2006; Godfrey, 2005; Porter and Kramer, 1999, 2002; Saia et al., 2003), as those donations help to establish brand recognition and loyalty (Sánchez, 2000), to enhance firm image (Brammer et al., 2006; Saia, 2002), to increase reputational capital (Gardberg and Fombrun, 2006; Godfrey, 2005), and to build an environment that favors firms’ strategic position (Porter and Kramer, 2002). However, despite the positive argument, empirical research on the relationship between philanthropic giving and financial performance remains mixed or inconsistent (Hillman and Keim, 2001; Margolis and Walsh, 2003; Windsor, 2001).

Others hold that philanthropic giving is more socially determined, irrespective of the immediate benefits or costs to the firm (Husted and Allen, 2006; Marquis et al., 2007; Oliver, 1991). Those scholars, mainly from an institutional viewpoint, argue that firms conduct philanthropic giving as a response to institutional pressure. More
Specifically, this research tests if the firms who face high institutional pressure donate more than those who face lower institutional pressure. The study offers a unique viewpoint of disaster relief in the largest developing country, namely China. In the absence of prior efforts to empirically test the institutional point of view of corporate social behaviors, this article contributes to our understanding of the socially responsible behaviors of firms in institutional context.

The remainder of this paper has the following organization. The following section (Section 2) reviews the corporate giving in China. Section 3 discusses the theoretical background and puts forward relevant hypotheses. Section 4 and 5 test the hypotheses and report the results respectively. Finally, the paper ends with conclusion and discussion.

2. Corporate philanthropic giving in China

Although in some developed countries people widely use the term corporate social responsibility (CSR) as early as the 1970s, it is a relatively new concept in China (Yang, 2008). Since the implementation of a reform and openness policy in China in 1978, economy oriented policy leads to the ignorance of CSR. CSR came into China only in the mid-1990s on a tidal wave of social responsibility audits which were launched by numerous multinational organizations involved in mainly consumer goods and the retail sector (Zhou, 2006). Its expansion and development have to a great extent been in reaction to export requirements, and initially a wait-and-see strategy was adopted by the Chinese government (Tian, 2006).

Almost after China’s joining in World Trade Organization (WTO) in 2001 was CSR taken seriously in China due to the severe results caused by the social irresponsible behavior (e.g., labor scandals, product safety, and air pollution) of business in China and the criticism from overseas. China is now under great pressure to catch up with developed countries where CSR has been developing for much longer. This pressure (to move from a passive approach to a much more proactive one) comes from the Chinese government who is altering its attitude and the degree of attention paid to CSR (Tian, 2006).

However, though the all-round CSR is relatively underdeveloped, corporate philanthropy has never been suspended in China. Thoughts and practices of philanthropy were widespread early in the feudal society of China (Meng, 2005). Confucianism, a dominant moral-political philosophy in China, embodies rich philanthropic thoughts (Warner and Zhu, 2002). Confucians believe that the nature of human beings is to achieve happiness and to do good. As a result, Confucianism advocates people to be benevolent, philanthropic and humane. Corporate philanthropy is observable everywhere in modern China. The 1998 flood disaster, the 2003 Severe Acute Respiratory Syndrome (SARS) accident, the 2004 Tsunami of India Ocean, the 2008 frost disaster and the May 12, 2008 Great Wenchuan Earthquake, witness disaster relief donations from individuals and companies. Besides, more and more companies contribute their donations to helping the poor and the disable, supporting education, sanitation, sports and arts, and the like. But unfortunately, no precise data is reported by the government to show how much the corporate donation is.

In recent years, the Chinese government, some Chinese corporations and civil society have promoted and advocated various CSR practices (Yang, 2008). In September 2006, the Shenzhen Stock Exchange released the “Social Responsibility Guidelines for Listed Companies”. Listed companies are encouraged to follow its CSR mechanisms and develop CSR reports according to this guideline (Yin et al., 2007). In year-end 2006, President Hu Jintao pointed out that companies should assume their social responsibilities on the China’s Central Conference on Economic Work. In April 2007, Shanghai Banking Regulatory Bureau released “Corporate Social Responsibility Guidelines for Shanghai Banking Financial Institutions” that encourages banking financial institutions to publish their CSR reports. In 2008, State-owned Assets Supervision and Administration Commission (SASAC) of the State Council, the regulatory body of state-owned enterprises (SOEs) in China, released “the Guiding Advice on Fulfilling Social Responsibility by Central Enterprises”. This guideline stressed the exemplary role that central corporations should play in carrying out social responsibility, and included principles and implementation measures of CSR development (SASAC, 2008).

The advocating and pressure from the government motivates more and more companies to pay attention to their social responsibility. In today’s China, more and more companies engage in charitable donation and report their social responsibility publicly.

3. Theoretical background and hypotheses

Institutional theory, with its focus on public opinion and institutionalized pressure groups and their impact on firm structures (Meyer and Rowan, 1977; Oliver, 1991), offers a compelling explanation for corporate philanthropic giving. Institutional theory emphasizes that organizational environments are not only technical but increasingly institutional (Greening and Gray, 1994; Scott and Meyer, 1983). Institutions specify rules, procedures, and structures for organizations as a condition of giving legitimacy and support (Meyer and Rowan 1977).

The cause of institutional pressures refers to the rationale, set of expectations, or intended objectives that underlie external pressures for conformity (Oliver, 1991). Institutional constituents that exert pressures and expectations include not only the state and professions, as institutions, but also interest groups and public opinion (Oliver, 1991; Scott, 1987). Although all firms are inevitably undergoing institutional pressure, different firms or firms in different industries may face and different level of institutional pressure. Some pressures or expectations forcing firms to conduct philanthropy may be specific to a firm or affect all firms in the industry (Hess and Warren, 2008) or affect certain kind of firms across different industries.

For example, larger firms are regarded to be particularly sensitive to institutional pressures (Hess and Warren, 2008). These firms face greater attention from government bodies and the media and are more vulnerable to institutional pressures than smaller firms (Goodstein, 1994; Powell, 1991). The underlying reason that larger firms are more likely to undergo institutional pressures is their higher “visibility” in the front of the government and the media or the public. Higher visibility of a firm can attract attention from institutional constituents more easily and thus its managers perceive higher institutional pressures. In China, the most powerful institutional constituents are the state (or the government) and the media or the public (Gao, 2007). Therefore, firms who have higher visibility in the front of the government, the media and the public may face higher institutional pressures than firms who have lower visibility.

Since large firms, firms who have political ties, state-owned enterprises (SOEs) and firms in service sector tend to have higher visibility in the front of the state or the media and the public, this article hypothesizes these firms have higher propensity to donate more than smaller firms, firms who do not have political ties, non-SOEs and firms in non-service sectors.

3.1. Firm size

Firm size is one of antecedents of charitable donations (Burlingame and Frishkoff, 1996). Large firms are more visible to the public, receive more pressures from the institutional constituents such as the government, the media and the public and have more incentives to donate to increase their reputation (Brammer and Millington, 2006).

Several studies including Atkinson and Galaskiewicz (1988), Boatsman and Gupta (1996), Adams and Hardwick (1998), Buchholtz et al. (1999), Brammer and Millington (2006), and Zhang et al. (2009)
conclude that large firms give more to charity. Useem (1988) find that firm size is the single most important determinant of corporate giving and that large firms appear to contribute relatively more money to charity regardless of profits. Thompson et al. (1993) observe that giving by small businesses is positively related to the number of employees.

**Hypothesis 1.** Large firms commit more philanthropic giving than small firms.

### 3.2. Political ties

Literature on government-business networks shows that political ties are a valuable asset for firms (Bertrand et al., 2004; Faccio, 2007). It is even more popular and important in developing countries in which the government exerts extreme influence on the operations of business. A good relationship with the government or public officials can bring a company preferential treatment in the forms of easy access to limited resources, increased accessibility to controlled information, increased possibility of avoiding fines or taxes, preferential terms including the granting of credit and protection from external competitors, and the like (Luo and Chen, 1997; Pearce and Robinson, 2000; Xin and Pearce, 1996).

However, despite its value, political ties also involve unspecified obligations for exchange partners (Blau, 1964). In some cases the obligations become more coercive than voluntary (Warren et al., 2004). Firms who have political ties are vulnerable to support philanthropy because of their visibility in the eyes of the government and thus feel greater government pressures to conduct CSR (Cowen et al., 1987).

**Hypothesis 2.** Firms who have political ties commit more philanthropic giving than those who do not have political ties.

### 3.3. Ownership type

Ownership type is important in philanthropic giving in countries where state-owned enterprises (SOEs) play an important role in society (Zhang et al., 2009). State-owned enterprises (SOEs) are special companies having state ownership and control. In addition to assuming economic responsibility (to preserve and increase the value of state-owned assets), SOEs also need to share social responsibilities. “The Guiding Advice on Fulfilling Social Responsibility by Central Enterprises” released by SASAC in China expects the SOEs to become “leading examples” for all Chinese companies. This legal document embodies the Chinese central government’s attitude toward CSR of SOEs (Lin, 2010). When the state faces disasters or difficulties, SOEs are required and expected to take their responsibilities proactively. Besides, SOEs are also in a vulnerable position to support philanthropic causes because of their high visibility in the front of the state, the media and the public. If SOEs do not act as “leading examples” in sharing social responsibilities, they are going to be questioned by the state and the public for not to complying with the advocating of SASAC.

**Hypothesis 3.** SOEs donate more to charities than non SOEs.

### 3.4. Industrial type

Firms in different industries face different incentives in supporting charity. Useem (1988) argues that firms from industries with high levels of public contact such as retailing, insurance or banking typically give more than firms from low contact industries such as mining or primary metals, suggesting that there are differences across industries in the perceived need for firms to pursue socially responsible outcomes. Supporting Useem’s (1988) argument, researchers find that firms in industries that depend more on consumer sales (Burt, 1983) or public perceptions (Clotfelter, 1985), and have more public contact (Fry et al., 1982) tend to give more.

Companies in the service sector depend more on consumer sales and have high levels of public contact. The high visibility in the front of consumers and the public force them to satisfy the expectations of the public. During the past several decades, the expectation or pressure from the public on firms to be “socially responsible” continuously increases (Sethi, 2003). In the context of natural disaster, the public awareness about disaster relief fund-raising appeal exerts huge pressure on firms to make philanthropic giving. But because of different visibility in the front of the public, firms in the service sector may face more pressures and thus donate more than firms in the industrial sector.

**Hypothesis 4.** Firms in the service sector commit more philanthropic giving than firms in the industrial sector.

### 4. Method

#### 4.1. Data collection

To test the above hypotheses, the study uses the donating behavior of Chinese listed companies in Wenchuan earthquake as the sample. The May 12, 2008 Wenchuan earthquake caused 69,227 deaths, and 374,643 people injured and 17,923 disappeared. The direct property loss reaches more than RMB 840 billion (Legal Evening News, 2008-9-4). After the earthquake, many Chinese companies initiated disaster relief donation immediately and voluntarily, while others also responded to it but somewhat lately. The giving made by companies includes cash and materials. Most of companies committed their giving through the hands of non-government organizations (NGOs) such as the Red Cross Society of China (RCSC), China Foundation for Poverty Alleviation (CFPA), and China Charity Federation (CCF).

To date, no verified and complete data exists about the philanthropic giving of listed companies available. In addition, some listed companies did not report their earthquake donation in their annual reports. Contrary to that, the online media in China intensively report the contributions of companies especially those who made contribution within May 2008. Therefore, in this study we select the listed companies collected by the two leading websites in China — the Baidu.com (http://finance.baidu.com/hongguan/guonei/2008-05-19/100237.html) and the Sina.com (http://finance.sina.com.cn/stock/blank/wcjiazi.shtml) — as the sample. These two websites collect the contributions of thousands of companies. However, among the companies, there are only 295 listed in Chinese domestic stock markets. Besides, since the earthquake took place in May 2008, companies who got listed after May 2008 are not suitable for this study. Finally, some companies made their donation in mixture of the company, the employees and their control shareholder. Therefore, if we cannot distinguish the companies’ donation from their employees or control shareholders, we deleted those companies from our sample. By doing so, we finally got a sample consisting of 254 listed companies.

The donation used in this study includes both cash and materials. In order to ensure the validity of the data, we checked the data by comparing them with those reported in each firm’s annual report, official website, its announcement and CSR report if there is one. By doing that, we found that several companies donated more than once. Few companies conducted donation even after the report made by the two websites (Baidu.com and Sina.com). As a result, we adjusted the data of those companies. The value of materials is transferred to cash according to the declaration of the companies. Since the subject we want to examine is the firm, the philanthropic giving from individuals is subtracted from the total contribution.
Other data come mainly from the annual report of each company directly. Besides, since not all companies report the political ties of their Chairman of the board or chief executive officer (CEO) in the annual report, we supplement the data of political ties by searching them through search engines such as google.com and baidu.com.

4.2. Measurement of variables

This research measures variables in the following ways. Philanthropic giving (GIV) is measured by the sum of organization-level donation in RMB of companies to May 12, 2008 earthquake relief. The natural logarithm transformation was used to achieve a univariate normal distribution.

Firm size (SIZE), as in Lenway and Rehbein (1991), is measured as the total value of assets in RMB at the end of 2007. The natural logarithm transformation was used to achieve a univariate normal distribution.

Political ties (P_TIE) is defined as either the Chairman of the board or the CEO of a firm is at the same time a public official, or a member of congress (Faccio et al., 2006; Fan et al., 2007), or a member of People’s Political Consultative Conference in early 2008. Firms having political ties are coded as 1, otherwise 0.

Ownership type (O_TYP) is a dummy variable with service companies being coded as 1 and otherwise 0. The distinction among different ownership companies is based on the identity of the leading or largest shareholder. A company is coded as SOE when its leading shareholder is the agent of the state (e.g., the state or local state-owned assets supervision and administration commission) or another SOE. Other companies are coded as non SOEs.

Industry type (I_TYP) is a dummy variable with service companies being coded as 1 and otherwise 0. The distinction among different industrial companies is based on the “Classification of Industries for National Economy” (GB/T4754-2002) of China. This classification divides national economy into three industries, including primary, secondary and tertiary industry. Companies in primary industry are relating to agricultural production. Companies in secondary industry refer mainly to manufacturers. Companies in tertiary industry are service providers. Therefore, companies in tertiary industry are regarded as service companies and coded as 1 while companies in primary and secondary industry are regarded as non service companies and coded as 0.

This research controls for organizational profitability and leverage. Literature has found that profitability (Adams and Hardwick, 1998; Crampton and Patten, 2008; Seifert et al., 2003) and leverage (Roberts, 1992; Adams and Hardwick, 1998) are associated with corporate philanthropic giving. Profitability (ROA), as in Bandeira-de-Mello et al. (2008), is measured as the “Return on Assets” in 2007. Leverage (LEV) is measured as the ratio of total debt to the total value of assets in 2007.

5. Analysis and results

5.1. Descriptive statistics

Tables 1 and 2 summarize the characteristics of firms. Table 1 shows firms’ donations in absolute value range from RMB 100 thousand to RMB 67 million, with a median donation of 1.45 million.

Table 1

| Characteristics | Minimum | Median | Maximum |
|-----------------|---------|--------|---------|
| Donations (10,000 RMB) | 0.00 | 10.00 | 145.00 |
| Firm size | 868,000,000.00 | 15,000.00 | 302,690.00 |
| Profitability (%) | 231.74 | -35.91 | 4.90 |
| Leverage (%) | 156.72 | 4.44 | 53.29 |

Firm size is measured by the total value of assets. The biggest company has up to RMB 8680 billion assets, while the smallest one has only RMB 150 million. The medium assets are about RMB 3.0 billion.

The mean profitability is 4.90%, with the maximum 231.74% and the minimum —35.91%. The maximum of leverage reaches 156.72%, while the minimum is only 4.44%. The median of leverage is 53.29%.

Table 2 shows that 104 firms are state-owned enterprises (SOEs), which accounts for 40.9% of the total sample. The remainder includes private, collective, and foreign companies. Firms locate in different industries, with minority (71 or 28%) of them being in service sector. 120 companies have political ties, which accounts for 47.2% of the total sample.

5.2. Analysis and results

Table 3 summarizes the means, standard deviations, and Pearson correlations among the variables. From the Pearson correlations we can see that leverage (LEVE), firm size (ln SIZE), political ties (P_TIE), and ownership type (O_TYP) are significantly associated with corporate philanthropic giving (ln GIV), while firm’s profitability (PROF) and industrial type (I_TYP) are not significantly associated with corporate philanthropic giving.

Besides, among the independent variables, political ties (P_TIE), ownership type (O_TYP) and industrial type (I_TYP) are significantly associated with firm size (ln SIZE), and ownership type (O_TYP) are significantly related to industrial type (I_TYP). The coefficients may suggest that there may be slight collinearity problem. Therefore, in the following regression analysis we put the independent variables into the model one by one. Meanwhile, the values of Tolerance and VIF (variance inflation factor) are also calculated.

In order to further test the hypotheses proposed formerly, multiple regression analyses are conducted by using Ordinary least square (OLS) as method and SPSS (16.0 edition) as tool. We first test the effects of controlled variables on dependent variable (corporate philanthropic giving). Following that we add the four independent variables into the model step by step. Finally, we put all the variables into the model. Table 4 reports the results of regression analysis.

### Table 2

| Characteristics of firms (N = 254). |
|------------------------------------|
| Ownership | Number of firms | % of total N |
|----------|----------------|-------------|
| SOEs | 104 | 40.9 |
| Non-SOEs | 150 | 59.1 |
| Industry type | | |
| Service firms | 71 | 28 |
| Other firms | 183 | 72 |
| Political ties | | |
| Have | 120 | 47.2 |
| Do not have | 134 | 52.8 |

Note: *, ** represent correlation is significant at the 0.05 and 0.01 level respectively (2-tailed).

### Table 3

| Variables | Mean | S.D. | 1 | 2 | 3 | 4 | 5 | 6 |
|-----------|------|-----|---|---|---|---|---|---|
| Ln GIV | 14.5 | 1.35 | 1.00 | | | | | |
| PROF | 7.1 | 15.86 | .10 | | | | | |
| LEVE | 53.3 | 20.34 | .17** | -27** | | | | |
| Ln SIZE | 22.3 | 1.92 | .62** | -13** | .50** | | | |
| P_TIE | 0.5 | 0.50 | .50** | .13** | .02 | .36** | | |
| O_TYP | 0.6 | 0.49 | .17** | -.09 | .19** | .40** | .03 | |
| I_TYP | 0.3 | .45 | .11 | -.05 | .25** | .41** | .06 | .22** |

Note: *, ** represent correlation is significant at the 0.05 and 0.01 level respectively (2-tailed).
From Model (1) we can find that the two control variables have a significant effect on corporate philanthropic giving. Both the effects of profitability and leverage are positive.

From Model (2) to Model (5) we can see when the independent variables are put into the model one by one, all variables have a significantly positive effect on corporate philanthropic giving at the level of 0.05 except industrial type (L_TYP).

From Model (6) putting all the variables into the model, the direction and significance of some variables changed. This may indicate that some significant interactions exist among the variables. According to the rule of thumb in the econometric literature (a VIF >10 or a tolerance level <0.1 are signs of severe multicollinearity problems), there is no significant collinear relationships among these independent variables.

According to Model (6), the F value (=41.558) is significant (p<0.01) and adjusted R\(^2\) is 0.490, which indicates that the combination of these variables can explain about 49% of the variance of the level of corporate philanthropic giving.

Firm size (Ln SIZE) (β = 0.651, p<0.01) is found to have a significant and positive effect on corporate philanthropic disaster relief giving. This result keeps in line with the findings of many previous research (e.g., Adams and Hardwick, 1998; Buchholtz et al., 1999; Brammer and Millington, 2006; Zhang et al., 2009) and suggests that large firms do donate more than smaller firms. This finding conforms to our expectation, and thus Hypothesis 1 is supported.

Political ties (P_TIE) (β = 0.258, p<0.01) is found to be significantly and positively associated with corporate philanthropic disaster relief giving. This finding is in line with our expectation and suggests that companies who have political ties donate more than those companies who do not have political ties. Therefore, Hypothesis 2 is supported.

Ownership type (O_TYP) (β = −0.037, p>0.05) is found to have a negative but insignificant effect on corporate philanthropic giving. This finding suggests that SOEs donate no more than non SOEs. This result is out of our expectation and thus Hypothesis 2 is not supported.

Industry type (I_TYP) (β = −0.136, p<0.01) has a negative and significant effect on corporate philanthropy. It suggests that service companies donate significantly less than non service companies. The result is contrary to our expectation and thus Hypothesis 3 is refused.

Among the control variables, the effect of profitability keeps significant and positive while the effect of leverage changes from significantly positive to insignificantly negative. The results suggest that firms who have high profitability donate more than firms who have lower profitability. Firms who have high leverage donate slightly less than firms who have lower leverage but the extent is not significant.

6. Conclusion and discussion

This study investigates if companies in China tend to use philanthropic disaster relief giving to alleviate their institutional pressure and thus to build their good images in the front of the government, the media and the public alike.

The results show that large firms and firms who have political ties donate more than smaller firms and firms who do not have political ties. Since large firms receive high pressure from the government, the media and the public, while the firms who have political ties receive high pressure from the government, the results of this research partly support the argument that high institutional pressure leads firms to donate more to disaster relief.

However, the study finds state-owned enterprises (SOEs) donate no more to disaster relief than non SOEs. This finding is interesting and out of our expectation. The possible reason may be that many SOEs are large firms and have a large number of employees. The donation of individual workers in SOEs is so big that even the organizational donation is less; the amount of donation is still very significant. Therefore, SOEs are not forced to donate more than non SOEs.

Besides, we find that service companies donate significantly less than non service companies. This result is also out of our expectation and different from the findings of Burt (1983), Fry et al. (1982) and Clofelter (1985). The possible reasons may be that most non-service companies in our sample produce consumer goods rather than industrial goods. As a result, they may perceive higher pressure from consumers than service companies who sell the products. After all, consumers care more about the manufacturers rather than the sellers. Therefore, it suggests that further research should divide non service companies into two categories: those who produce consumer goods and those who produce industrial goods.

In sum, this research supports the institutional pressure viewpoint of corporate philanthropy. We demonstrate the usefulness of institutional theory in explaining the corporate philanthropic behavior. This is different from the mainstream point of view about corporate philanthropy which argues that firms conduct philanthropy based merely on rational economic considerations. Besides, although Oliver (1991) argues that firms may engage in “window dressing” and other symbolic behaviors to avoid sharing social responsibility genuinely, our research finds that they are less likely to avoid their social responsibility under high institutional pressure. Finally, though many scholars identified the potential value of political ties (or even guanxi with other stakeholders) in China, our research demonstrates that the effect of guanxi is dual. Good guanxi with the government also increases a firm’s vulnerability to support the government’s needs and expectations.

The limitations of the study lie in the following aspects. First, the data of charitable donation of firms used in this study only include the donations to earthquake relief. Since firms might contribute to other socially responsible programs too, the results we get from this study cannot explain companies’ social responsible behavior thoroughly. Second, some organizational characteristics, such as the financial performance and capital structure, rise and fall frequently, and thus influence their capability of supporting philanthropy. Therefore, a time series analysis should be better than cross-sectional analysis in explaining the corporate philanthropy.

| Table 4 Linear regression analysis results (N = 254). |
|-----------------------------------------------|
| Model | Model (1) | Model (2) | Model (3) | Model (4) | Model (5) | Model (6) | Tolerance | VIF |
|-------|------------|------------|------------|------------|------------|------------|------------|------|
| PROF  | .155** (2.965) | .148** (2.965) | .085 (1.510) | .161* (2.549) | .154* (2.406) | .113* (2.387) | .903 | 1.107 |
| LEVE  | .213** (3.335) | −.141* (−2.469) | .184** (3.284) | .180** (2.900) | .196** (2.970) | −.089* (−1.634) | .684 | 1.461 |
| Ln SIZE | .704** (12.689) | .480** (8.845) | .153* (2.461) | −.037* (−741) | .067 (1.063) | −.136* (−2.752) | .821 | 1.210 |
| P_TIE | .416** | .269 | .063 | .044 | .490 | 4.019** | 41.553** |
| O_TYP | .153** (2.461) | .258** (5.148) | .285** (5.148) | .285** (5.148) | .800 | 1.250 |
| I_TYP | .416** | .269 | .063 | .044 | .490 | 4.019** | 41.553** |
| Adjusted R² | .044 | .416 | .269 | .063 | .044 | .490 | 4.019** | 41.553** |

Note: *; ** represent correlation is significant at the 0.05 and 0.01 level respectively (2-tailed).
Acknowledgements

The author is grateful to the anonymous reviewers for their constructive comments and to master students Li Gen, Xiong Wei and Yang Bin for their help in collecting data. This research is financially supported by the “Humanities and Social Science Planned Fund of Education Ministry of China” (No. 10YJA630039) and the “Specific Fund of Operation Expenses for Basic Research in Chinese Central Universities” (No. 2010MS084).

References

Adams M, Hardwick P. An analysis of corporate donations: United Kingdom evidence. J Manage Stud 1998;35(5):641–54.

Atkinson L, Galaskiewicz J. Stock ownership and company contributions. Adm Sci Q 1988;33:82-100.

Burrill DF, Frishkoff PA. How does charitable giving in large UK companies. Bus Ethics Eur Rev 2006;15(1):234–45.

Burlingame DF, Young DR, editors. Corporate Philanthropy at the Crossroads. Bloomington/Indianapolis, IN: Indiana University Press; 1996. p. 86-104.

Burt RS. Corporate Proﬁts and Co-option: Networks of Market Constraints and Directorate Ties in the American Economy. New York: Academic Press; 1983.

Clotfelter CT. Federal Tax Policy and Charitable Giving. Chicago: University of Chicago Press; 1985.

Conway SS, Ferrari LB, Parker LD. The impact of corporate characteristics on social responsibility disclosure: a typology and frequency-based analysis. Acc Organ Soc 1987;12(2):111–22.

Crompton W, Patten D. Social responsiveness, proﬁtability and catastrophic events: evidence on the corporate philanthropic response to 9/11. J Bus Ethics 2008;81(4):863–73.

D’Maggio PJ, Powell WW. The iron cage revisited: institutional isomorphism and collective rationality in organizational ﬁelds. Am Sociol Rev 1983;48:147–60.

D’Maggio P. Politically connected ﬁrms. Am Econ Rev 2007;96(1):369–86.

D’Maggio P, Masulis R, McConnell J. Political connections and corporate bailouts. J Finance 2006;61(6):2597–635.

Fan JPH, Wong TJ, Zhang T. Politically-connected CEOs, corporate governance and post-IP0 performance of China’s newly privately privatized ﬁrms. J Finance Econ 2007;84(2):330–57.

Fry LW, Keim G, Meiners R. Corporate contributions: altruistic or for-proﬁt? Acad Manage J 1982;25(1):94-106.

Gao YQ. Dealing with non-market stakeholders in international market: case studies of US-based MNEs in China. Singapore Manage Rev 2007;25(2):49–61.

Gardberg NA, Fombrun CJ. Corporate citizenship: creating intangible assets across Universities Education Ministry of China “.

Gao YQ, Rehbein K. Leaders, followers, and free riders: an empirical test of the variation in corporate political involvement. Acad Manage J 1991;34(4):893–905.

Lenway SA, Zajac ME, Zhou W. Will CSR work in China? BSR leading perspectives. Available athttp://www.academyofmanagement.org/publications/strategicmanagement/strategicmanage.pdf

Marquis GL, Coughlin MA, Davis CF. Corporate social responsibility: a typology and frequency-based analysis. J Bus Ethics 2003;45(3):195–211.

Meng C. The history of Chinese philanthropic culture and its today’s challenges. JSW West Univ Nationality 2005;1:5–8 (in Chinese).

Mescon TS, Tilson DJ. Corporate philanthropy: a strategic approach to the bottom-line. Calif Manage Rev 1987;29(2):49–61.

Meyer JW, Rowan B. Institutional organizations: formal structure as myth and ceremony. Am J Sociol 1977;83:340–63.

Oliver C. Strategic responses to institutional processes. Acad Manage Rev 1991;16: 45–79.

Pearce JA, Robinson Jr RB. Cultivating guanxi as a foreign investor strategy. Bus Horiz 2000;31:8 January–February.

Porter ME, Kramer MR. Philanthropy’s new agenda: creating value. Harv Bus Rev 1999:121–30 November–December.

Porter ME, Kramer MR. The competitive advantage of corporate philanthropy. Harv Bus Rev 2002;80(12):56–68.

Powell WW. Expanding the scope of institutional analysis. In: Powell WW, D’Maggio PJ, editors. The New Institutionalism in Organizational Analysis. Chicago IL: University of Chicago Press; 1991. p. 183–203.

Roberts R. Antecedents of corporate social responsibility disclosure: an application of stakeholder theory. Acad Org Soc 1992;17(5):395–412.

Saiha DH, Philanthropy and corporate citizenship: strategic philanthropy is good corporate citizenship. J Corp Citizenship 2002;1(2):57–74.

Saiha DH, Carroll AB, Buchholtz AK. Philanthropy as strategy. Bus Soc 2003;42:169–201.

Sánchez CM. Motives for corporate philanthropy in El Salvador: altruism and political legitimacy. J Bus Ethics 2000;27(4):363–75.

SASAC. Guiding advice on fulﬁlling social responsibility by central enterprises. Available at:http://www.china.com.cn ﬁnance/txt/2008-01/05/content _9482863.htm

Scott WR. The adolescence of institutional theory. Acad Sci Q 1987;32:493–511.

Scott WR. Organizations: Rational, Natural, and Open System. Englewood Cliﬀs NJ: Prentice Hall; 1992.

Scott WR. The organization of societal sectors. In: Meyer JW, Scott WR, editors. Organizational Environments: Ritual and Rationality. Beverly Hills, CA: Sage; 1983. p. 129–53.

Seifert B, Morris SA, Barkus BR. Comparing big givers and small givers: ﬁnancial correlates of corporate philanthropy. J Bus Ethics 2003;45(3):195–211.

Sethi SP. Globalization and the good corporation: a need for proactive co-existence. J Bus Ethics 2003;43(1/2):21–31.

Acad Manage 1993;31:35–51.

Tian H. Corporate Social Responsibility and Advancing Mechanism. Beijing: Economy & Humanities and Social Science Planned Fund of...