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Corporate donations and shareholder value

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ABSTRACT. Do corporate donations enhance shareholder wealth or reflect agency problems? We address this question for a global sample of firms whereby we distinguish between charitable and political donations, as well as between donations in cash and in kind. We find that charitable donations are positively related to financial performance and firm value, which is consistent with the value-enhancement hypothesis. This positive effect on firm value is stronger for cash than in-kind donations. In contrast, political donations do not appear to enhance shareholder value, but rather tend to reflect agency problems, as they are higher for firms with poor internal corporate governance and strong managerial entrenchment. We address endogeneity concerns by using peer firms' donations as an instrument in a two-stage least squares (2SLS) setting and by conducting a difference-in-difference analysis around a general election.

Keywords: corporate social responsibility, corporate philanthropy, charitable donations, political donations, corporate foundation, corporate governance, firm value

JEL codes: G3, I3

Corporate donations and shareholder value

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I. Introduction

More and more companies strive for a reputation of "giving back to society" by means of donations. A 2014 survey among 261 leading firms worldwide (CECP, 2014a) concludes that the amount of corporate philanthropy totals $25 billion, with a median of $18 million per company which is equivalent to 1.01% of pre-tax profits, 0.13% of revenues, or $644 of per employee. When zooming in on the industry level, industrial and energy companies are at the bottom with donations of only 0.76% of pre-tax income, which stands in marked contrast with the healthcare and consumer discretionary[1] sectors as top contributors with 1.58% and 1.25% of pre-tax income, respectively. The main beneficiaries are educational organizations capturing 28% of the total donations, followed by health & social services with 27% (CECP, 2014b). The amount of donations keeps growing; it has augmented by about 40% over the past decade. [2]

Corporate philanthropy can be defined in many ways; the most widely accepted definition is the one from the Financial Accounting Standards Board (1993), which defines it as "an unconditional transfer of cash or other assets to an entity or a settlement, or cancellation of its liabilities in a voluntary nonreciprocal transfer by another entity acting other than as an owner." Thus, as summarized by Gautier and Pache (2015), corporate philanthropy concerns voluntary donations of corporate resources to charitable causes. As corporate philanthropy consists of pro-social behavior, it is considered as part of corporate social responsibility (CSR) that involves explicit pro-social spending (Shapira, 2012; Liang

[1] The consumer discretionary sector offer goods or services to consumers that are non-necessities, such as automobiles, high-end apparel, restaurants, and luxury goods.
[2] Based on average corporate donations of our sample firms increasing from 0.14% of sales in 2004 up to 0.20% of sales in 2013.

and Renneboog, 2016). We can partition donations on the basis of the type of beneficiary: charitable and political donations, but can also dissect total charitable donations on the basis of the type of payment: cash and in-kind donations. An important mechanism for distributing donations is the corporate foundation/trust; a good third of corporate donations are made via a corporate foundation (CECP, 2015). In the remainder of this study, we will interchangeably use the terms corporate philanthropy, contributions, giving, and donations.

For society as a whole, corporate philanthropy may yield important benefits (to non-shareholders) that can increase social welfare. However, altruism comes at a cost because corporate giving lowers tax revenues and some donations, for instance those aimed at fulfilling politicians' agendas may not be pro-social. The scope of this study, however, is limited to the implications for shareholder wealth. At first sight, corporate philanthropy may seem inconsistent with maximizing shareholder wealth, because giving money or other assets away contradicts the commercial, profit-making purpose of a company (Friedman, 1970). According to such rationales, grouped under the agency theory, the primary reason why managers would still decide to donate is because it satisfies their personal altruistic needs or yields other private benefits. In other words, managers serve their own interests at the expense of the shareholders. In contrast, the value-enhancement view argues that corporate philanthropy increases the value of the firm. Donations could function as a kind of marketing tool, indirect cost saving mechanism, community-oriented investment, or mechanisms to bond employees to the company, and as such improve corporate financial performance. In addition, corporate donations can also solve a collective action problem as it is difficult to aggregate individual investors' donations such that they have a strong enough impact on society. If corporate philanthropy can serve the purpose of passing through individuals' donations and make a bigger impact to society, investors may perceive it favorably, consistent with the value-enhancement view. Although there has been a noteworthy body of research in the area of corporate philanthropy, the causal effect on firm value is still ambiguous. Consequently, the two contradictory theories both find support in the literature (e.g. Seifert, Morris, & Bartkus, 2004; Wang & Qian, 2011; Masulis & Reza, 2015). Of course, these views are not necessarily mutually exclusive, as corporate philanthropy can on the one hand fulfil managers' self-interest, and can on the other hand enhance financial performance due to tax savings or reputation building. Which effects are more dominant is mostly an empirical question.

We first examine the agency hypothesis by linking corporate donations and the use of corporate foundations to measures of internal and external corporate governance that can capture the relative power of managers and shareholders, and of shareholders' protection as regulated by law. Second, the value-

enhancement view is examined by relating corporate donations to measures of current and future firm value and financial performance. Given that this relation between donations and firm value may be endogenous since doing well may enable a firm to do good (e.g. Seifert, Morris & Bartkus, 2004), we employ an instrumental variable approach by using peer firms' donations as an IV and also conduct a difference-in-differences analysis.

The results suggest that charitable donations are associated with higher shareholder value for the largest listed corporations around the world. First, charitable donations are not strongly correlated with internal and external corporate governance. Charitable donations do not occur more in firms where management is entrenched, nor do we see less corporate philanthropy in firms with stronger shareholder power. This casts doubt on the view that considers charitable donations as an agency problem. Second, charitable giving is positively correlated with current and future measures of firm value and profitability (Tobin's Q, ROA, and sales growth). This positive relation is stronger for charitable donations in cash than for in-kind donations. We use an instrumental variable approach (using peers' donations as instruments for the focal firm's donations) to address the endogeneity problem between donations and firm value/profitability and show that the causation goes from donations to value and not vice versa. Third, distributing funds by means of a corporate foundation is correlated with poor internal governance and strong managerial power (as measured by the presence of golden parachutes, M&A limitations, larger board size, anti-takeover devices, CEO-chairman duality, and the corporate governance E-index), and poor external governance which is here equivalent to the absence of large shareholder monitoring. While one may interpret the use of a corporate foundation an agency problem, the fact that a foundation is positively related with current and future firm value casts doubt on this interpretation. Our findings are more in line with a foundation helping to ensure that donations are spent in the best interest of the firm and that they are actually a solution to the agency problems in the firm related to donations. Fourth, political donations do appear to be related to agency problems: they are associated with various indicators of poor internal corporate governance and managerial entrenchment and are unrelated to firm value and financial performance. A difference-in-differences analysis around the 2010 UK elections does not reveal any positive effect on the firm value of companies with political donations.

This study contributes to the literature in the following ways. First, it adds to the literature on corporate philanthropy. In contrast to previous studies suggesting that corporate philanthropy reflects an agency problem (Fich, Garcia, Robinson & Yore, 2009; Masulis & Reza, 2015), this paper finds that donations by a global sample of large public firms can positively affect corporate value and financial profitability, thereby offering a different perspective that is more in line with the value-enhancement

view of corporate philanthropy. Moreover, this paper adds to the literature on political giving and agency costs by means of a difference-in-difference approach and sheds light on the agency aspect of political donations. Second, to the best of our knowledge, this study is the first to dissect corporate donations by studying giving in cash or in-kind assets. Our findings suggest that this differentiation by the form of giving is important as the positive effect of donations on firm value is prevalent for cash giving but less so for in-kind donations. Third, by examining donations in their corporate governance context, we can show the impact of internal and external corporate governance mechanisms as well as the effect of the regulatory framework on the relation between donations and firm value, an important aspect that is missing in the current literature which usually employs a single-country setting. Our focus on an international context helps to show how the relation between donations and shareholder value is related to legal investor protection at the country level.

In the next section, we review the existing theories on the relation between corporate donations and value creation, whereupon the hypotheses will be formulated in the third section. The fourth section describes the data and explains the methodology. Section five contains the results of the empirical analysis and section six concludes.

II. Literature Review

The literature on corporate philanthropy stems from a broad field of disciplines, such as management, economics, finance, sociology, law, and ethics (for an eclectic summary, see Gautier and Pache (2013)). Given that we take a shareholder value perspective, we will focus in this subsection on the various forms of donations predominantly addressed in the financial literature (2.1), and on the prevailing theories regarding the drivers and outcomes of corporate philanthropy embedded in value-enhancement (2.2) theory and agency theory (2.3).

2.1 Corporate philanthropy: different means of giving

The various forms of corporate philanthropy can be differentiated according to (i) type of assets transferred (cash or in-kind assets[3]), (ii) method of transfer, and (iii) recipient of those assets. Yermack (2009) studies in-kind giving by US firms, but focuses only on stock donations. Other papers only account for cash donations (e.g. Brown et al., 2006) or do not make the distinction (e.g. Masulis & Reza,

[3] A third potential type of transfers is forgiveness of liabilities, which is usually not included in the definition of donations in the existing literature and neither will be in this study, because it is negligible for firms outside the financial sector.

2015). With regard to the transfer method, firms make charitable donations either via a direct giving program or a corporate foundation. A company-sponsored private foundation is a separate legal entity; it is exempt from taxes, receives funding from the parent, and some of the parent company's employees or directors usually exert some degree of control the foundation. Giving by means of a foundation has several advantages: corporate managers can be excluded from decision making, which may facilitate a fair and objective decision process, and firms maintain more stable levels of donation payouts to charity while avoiding corporate timing of contributions to the foundation with respect to business cycle and tax purposes. The alternative to a foundation is a direct giving program that has the potential advantage that firms may not be required by international accounting standards to disclose all donations, the reason being that the donations to a variety of projects may—each individually—be small relative to the company's assets (Petrovits, 2006; Shapira, 2012).[4] There may still be specific disclosure thresholds imposed by stock exchanges or countries.[5] In practice, foundations are common across all geographic regions, and most firms make use of both methods of transfer (direct or via foundations) at the same time (CECP, 2014).[6] Brown et al. (2006) and Masulis & Reza (2015) argue that family foundations are more likely to be used for cash donations that benefit the insiders personally, and foundations have been shown to be associated with worse corporate governance.

2.2 Value-enhancement view: corporate philanthropy as value-maximizing behavior

According to the value-enhancement view, corporate donations may increase firm value. Although firms usually pretend to donate out of altruistic convictions, corporate philanthropy is often presented and justified by managers as shareholder value-enhancing. For example, companies may benefit from the goodwill generated by corporate giving, resulting in a higher employee morale and customer loyalty, and more lenient treatment by regulators or government officials (Brown et al., 2006). Although there is considerable support for such a value-enhancement theory in the literature, the empirical evidence is largely indirect. Navarro (1988) argues that donations enhance revenues through improving the firm's reputation and increasing demand for the firm's products, because there is a positive relation between

[4] Although donations are included in total corporate expenditures, they are not captured by the materiality requirements and consequently not itemized in financial reports.

[5] For example, the NYSE requires companies to disclose donations in excess of USD one million to a charity institution affiliated with an independent director (Shapira, 2012), whereas the U.K. demands disclosure of donations larger than GBP 200 (Brammer & Millington, 2005).

[6] In more detail, 79% of companies in the U.S. operate a foundation, where cash donations by foundations account for 34% of total US giving. In Europe, foundations are also very common, where 74% of the companies maintains a foundation and 42% of donations are made through foundations. Also in Asia, 60% of the firms has established a foundation and 33% of corporate donations are attributable to foundations (CECP, 2014).

advertising and the donations-to-sales ratio. This argument is in line with Schwartz (1968), who finds that charitable giving is a device to shift the demand curve for a firm's products outwards. Although these studies suffer from serious endogeneity problems, more recent evidence points out that customers are willing to pay on average 6% more for identical products on Ebay when they are part of a charity auction (Elfenbein & McManus, 2010). More direct evidence is offered by Lev et al. (2010), who employ Granger causality tests to show that corporate philanthropy is associated with higher future revenues, particularly among firms that sell products directly to the general public. They also find a positive relation between contributions and customer satisfaction, which suggests that charitable giving is able to increase customer loyalty.

Besides revenue-enhancement, corporate philanthropy can also contribute to firm value by means of cost reductions. "Profit-maximizing managers may use corporate contributions to reduce labor, capital, operating, or regulatory and governmental costs. In the labor market, for instance, workers may be willing to work for lower wages in communities that provide better recreational, educational, cultural, and health-related facilities. If the costs to the firms of financing such facilities are more than offset by the wage reductions, profits are increased." (Navarro, 1988: 68) Moreover, corporate donations can bring about managerial perks for executives, such as meeting with celebrities at charity events. This could inspire employees to strive for promotion and form a far more cost-effectively method to motivate lower-level personnel than equivalent amounts of salary (Rajan & Wulf, 2006). The more closely a company's philanthropy is linked to the firm's competitive context, the greater the company's contribution to society will be, according to Porter and Kramer (2012).

Furthermore, corporate donations may have a social impact that individual investors' personal donations cannot easily achieve due to the small scale of individual donations. To the extent that companies are able to solve a collective action problem, they can be welfare enhancing by enabling society to move closer to its optimal level of charitable giving. Consequently, individuals and investors can respond favorably to corporate donations on their behalf.

Although there appears to be, at best, some indirect empirical evidence of the value-enhancement view, the literature still lacks convincing evidence on the relation between donations and corporate financial performance. Due to the endogenous nature of the relation, it is hard to draw any conclusions on the causality. In a study on Chinese firms, Wang and Qian (2011) show that corporate donations enable firms to elicit positive stakeholder responses and gain political access, thereby improving corporate financial performance. This relation is particularly pronounced for companies with greater public visibility and a better past performance. The study also provides evidence that companies who

are not government-owned or politically well-connected enjoy greater benefits from corporate giving, as gaining access to political resources is critical in a Chinese context (Liang, Renneboog, and Sun, 2015). In an US event study, Patten (2008) present some evidence that companies experience positive 5-day cumulative abnormal returns (CARs) after announcing donations to the relief effort following the 2004 tsunami in Southeast Asia, with CARs increasing with donation amounts.

Conceptually, corporate donations could be part of an optimal contract with management, serving as some kind of indirect, low-profile or tax-advantageous compensation form. The reason that this cash-outflow could still enhance shareholder value is because firms may adjust the wage of the managers downwards for the part of the corporate donations that benefits the managers personally. In addition, corporations receiving corporate philanthropy are mostly tax-exempt organizations (Shapira, 2012) and corporations making donations to qualified charitable organizations (which may include their own foundations) can deduct these amounts from their pre-tax income as gifts (Petrovits, 2006).[7] This implies that the costs of donations are reduced by the marginal tax rate of the company (but the generated revenue will also be reduced by the marginal tax rate). If revenues induced by donations exceed the costs, donations could be profit maximizing. Whereas Navarro (1988) does not discover a significant relation between the federal tax rate and corporate giving, Boatsman and Gupta (1996) do report a negative relation between donations and the marginal tax rate, which they interpret as evidence that managers want to maintain some level of minimum net profit. In addition, tax incentives may affect both the timing of gifts and the long-run level of donations (Petrovits, 2006; Webb, 1994).[8] The above tax considerations are consistent with the value-enhancement view of corporate philanthropy.

2.3 Agency theory: corporate philanthropy as a managerial perk

Companies are agents of their owners and as such they provide services on behalf of their owners as well as other parties in society. The agency hypothesis states that corporate philanthropy is the result of, or reflects, an agency problem between the manager and owners since managers (and directors) are likely to act in their own interests (Jensen, 2001). Managers engaging in private utility maximizing behavior could reduce total firm value. The literature presents various channels by which insiders can harvest private benefits from corporate philanthropy. A straightforward motivation behind corporate

[7] The extent to which donations are tax deductible may be limited in some countries. For instance, in the U.S., donations qualify for tax deductibility as long as they do not exceed 10% of pre-tax income in total (Shapira, 2012).

[8] Companies can receive a large up-front tax deduction after transferring money to foundations and pledging to use it for future donations. In some rare cases, firms even run their advertising campaigns out of their foundation. By already transferring these amounts up-front to their foundation, this allows them in fact to expense several years of advertising costs up front (Petrovits, 2006).

philanthropy is to do good. In accordance, the most common rationale provided by managers is that their firms have a moral obligation to the communities in which they operate. If corporate donations are genuinely made out of an altruistic motivation, it will lack the expectation of a direct quid-pro-quo (Shapira, 2012). Obviously, this may clash with the commercial, profit-making aim of a company and, therefore, corporate giving for altruistic reasons may satisfy the personal need of managers or directors to do good but may come at the expense of shareholders, which makes this motivation also an agency issue. Corporate giving can enable managers and directors to support their own pet charities, which means that they pursue private objectives at the expense of the firm (Brown et al., 2006). In addition, corporate giving creates some kind of 'warm-glow' effect for insiders, since they enhance their reputations as individuals who care about people and communities (Andreoni, 1990). Furthermore, it may provide insiders with benefits, such as tickets to events and access to celebrities. Executives may be keen to expand their networks and improve their own image at e.g. a charity gala or a celebrity golf tournament (Balotti & Hanks, 1999). Thus, corporate giving may enable managers to further their own objectives, boost their personal reputation, attract media attention, and advance their careers.

The literature does provide some empirical evidence that donations are not related to corporate value: e.g. Fich, Garcia, Robinson and Yore et al. (2009) point out that corporate philanthropy is related to lower market-to-book ratios, sales margins, and market-adjusted returns. Consistently, investors place less value on the amount of corporate cash holdings for firms that maintain high levels of corporate giving (Masulis & Reza, 2015). Companies may adopt donations as a method of earnings management, since some firms use corporate foundations as off-balance sheet reserves (Petrovits, 2006). Similarly, firms may use corporate philanthropy to divert public attention away from financial results, and to buy goodwill after they have been required to restate suspected earnings (Koehn & Ueng, 2010). Furthermore, Yermack (2009) conclude that some CEOs fraudulently backdate stock gifts to increase personal income tax benefits, because those donations patterns are correlated with reporting delays after a drop in stock price.

If donations reduce shareholder wealth and are to be regarded as an agency problem, one would expect a negative relation between donations and corporate governance mechanisms that increase monitoring of management. This is not the case in Adams and Hardwick (1998) who document that highly leveraged UK firms, which are expected to be effectively monitored by creditors, give more to charity. In contrast, after controlling for industry, state and fiduciary laws and regulation, Brown et al. (2006) also show that the leverage ratio is negatively related to both cash giving and the establishment

of a corporate foundation. Furthermore, Seifert et al. (2004) show that corporate philanthropy is positively related with organizational slack, measured by free cash-flow.

Along these lines, management is said to be entrenched when "managers gain so much power that they are able to use the firm to further their own interests rather than the interests of shareholders" (Weisbach, 1988). The (widely-used) corporate governance G-index (Gompers, Ishii & Metrick, 2003), which is higher when the firm is less shareholder-oriented, is positively related to corporate philanthropy according to Fich et al. (2009), suggesting that firms who donate more also exhibit more agency problems. They also document that corporate donations are related to a larger board size, firm size, busy outside directors, and a low debt ratio. Masulis & Reza (2015) find a positive relation between the corporate governance E-index[9], which also measures managerial entrenchment, and corporate giving (through foundations), and conclude that their findings is in line with their agency hypothesis. Likewise, ownership by blockholders and institutional owners is negatively associated with corporate donations (Seifert, Morris & Bartkus, 2002). While some of the above papers suffer from endogeneity issues and do not convincingly exclude reverse causality, Ferrell, Liang, and Renneboog (2016) apply an instrumental variable approach and conclude that corporate social responsibility (CSR), in general and in all its dimensions (including the social one which contains corporate philanthropy), is not an agency problem but is adopted by well-governed firms that suffer less from agency concerns.

Some supporters of the agency view of argue that corporate donations are sometimes related to corporate political activities, which can be defined as "corporate attempts to shape government policy in ways favorable to the firm" (Baysinger, 1984). In the US, firms are not allowed to fund political campaigns directly, but can instead establish political action committees (PACs) to which firm directors, employees, and their families can donate.[10] Outside the US, the vast majority of political donation data come from the UK where few restrictions for corporate donations to political parties and candidates

[9] According to Bebchuk, Cohen & Ferrell (2009), there are only six provisions (out of the 24 in the G-index) that really matter in corporate governance (staggered/classified boards; poison pills; golden parachutes; the degree to which shareholders have power to decide on significant company transitions (such as M&As) by means of e.g. supermajority requirements; whether or not supermajority requirements for amendments of corporate charters or bylaws apply) which are combined into the E-index. The higher the index, the more powerful management is.

[10] The PAC is allowed to support candidates up to a maximum of $5,000 per candidate per election, but since 2010, companies can also establish a super PAC (technically known as independent expenditure-only committees), which may raise unlimited sums of money from individuals as well as other companies and then spend unlimited amounts to overtly advocate for or against political candidates. Unlike traditional PACs, super PACs are prohibited from donating money directly to political candidates (Center for Responsive Politics, 2015).

exist, although donations of more than £5,000 to the main political party offices, or of more than £1,000 to constituency or local party offices have to be disclosed (Library of Congress, 2015).[11]

From an economic perspective, there are two prevailing views on political donations. First, although companies may not have a political preference, they have an economic interest in various legislative actions, regulatory decisions, or other political outcomes. Therefore, political donations represent an investment in political capital that can generate positive returns for the firm. Second, political giving may reflect managers' personal political preferences that could come at the cost for shareholders (Aggarwal et al., 2012). A number of studies provide evidence consistent with the value-enhancement theory, showing a negative effect on firm value when politicians tied to the firm lose power and a positive effect when the connected politicians get elected (Faccio & Parsley, 2009; Jayachandran, 2006; Cooper, Gulen & Ovtchinnikov, 2010; Goldman, Rocholl, & So, 2009). Other evidence is more in line with the agency theory: political donations are negatively associated with returns (Faccio, 2010; Aggarwal et al., 2012) and political donations in the US are associated with a free cash flow problem, worse corporate governance, and a higher number of poor acquisitions (Duchin & Sosyura, 2012).

III. Hypothesis Development

We try to disentangle the two theories in relation to corporate philanthropy, namely the value-enhancement and agency theories. According to the former, corporate philanthropy improves corporate value and financial performance, whereas the latter implies that corporate philanthropy merely enhances managerial self-interest at the expense of shareholders. There is an optimal level of corporate donations that can be determined via cost-benefit analysis (McWilliams and Siegel, 2001), although, as long as this level is not reached, these theories are not necessarily mutually exclusive, because donations could potentially contribute to firm value and at the same time serve managers' personal aspirations. In order to determine which theory dominates, we relate corporate philanthropy to internal and external corporate governance, legal investor protection, and firm value when developing our hypotheses in this section.

It is important to consider that donations are not homogenous: political and charitable donations have different types of recipients, and charitable donations can be made in cash or in-kind (pro-bono services, products, volunteer work, shares, and the support of research). Nevertheless, the latter could be more beneficial for shareholder wealth because many of these in-kind contributions are related to the core

[11] The other channel via which firms can engage in politics is corporate lobbying. Companies are allowed to make direct expenditures for lobbying up to an unlimited amount (Hillman, Keim, and Schuler (2004); Hill, Kelly, Lockhart & Van Ness, 2013), which is beyond the scope of this paper.

business activities of a firm and the costs of in-kind giving might be lower. For instance, a pharmaceutical company's development of a more cost effective treatment for emerging economies may lead to the establishment of a distribution network that the firm could use to expand its markets (Porter and Kramer, 2012). On the other hand, cash donations also have advantages: primarily, the recipient can use the proceeds in the way that best suits his or her needs and the donation can therefore be perceived by consumers and other stakeholders as a more genuine corporate gesture. Moreover, cash donations are very transparent by nature, since it is always clear what and how much is given away, and could also emit a signal to the market about strong future cash flows. Finally, cash donations can be transferred via a corporate foundation; and such a foundation or trust can facilitate a fair and objective decision making process, create timing advantages, guarantee more transparency, and mitigate to a greater extent the probability that donations are used for private benefits.

When the value-enhancement theory is correct, shareholders would have no reason to curb corporate donations. However, managers reaping private benefits from corporate philanthropy have an incentive to donate beyond the optimal level (from the firm's perspective). In this case, shareholders will attempt to limit corporate giving. The extent to which shareholders are able to limit spending on corporate philanthropy depends on the corporate governance structure. We distinguish between internal governance that mainly concerns organizational-based provisions, and external governance that is related to the voting power. This enables us to formulate the first hypothesis: ***Total charitable donations (made in cash or in-kind assets), donations by means of a corporate foundation, and political donations are positively related to greater agency problems (Hypothesis 1).*** Empirically, we measure agency problems by means of the following measures that capture high managerial power: the presence of a staggered board, shareholder limitations to M&A decision making, supermajority requirements to change corporate charters and bylaws, golden parachutes, poison pills, the E-index (which aggregates the previous aspects of corporate governance), anti-takeover devices, board size, and CEO-chairman duality.

A negative relation between external corporate governance and donations is also consistent with donations reflecting an agency problem (whereas an insignificant or positive relation would be in line with the value-enhancement view), as formulated in the second hypothesis: ***Total charitable donations (made in cash or in-kind assets), donations by means of a corporate foundation, and political donations are expected to be negatively related to external corporate governance, which suggest that donations reflect agency problems and do not contribute to firm value (Hypothesis 2)***. External corporate governance quality is empirically measured by ownership concentration, ownership by the

largest shareholder, the control wedge (cash-flow rights minus voting rights of the largest shareholder), and the type of the largest shareholder (that can be a financial institution, another company, an individual or family, the government).

Besides the firm specific internal and external corporate governance mechanisms discussed above, country-level regulations can mitigate agency problems and investor expropriation (La Porta, Lopez-de-Silanes, Shleifer & Vishny, 2000) and may also affect corporate philanthropy. One of the most important factors in shareholders' legal rights are those addressing corporate voting procedures and decision-making. The extent to which managers are subject to such shareholder influence is reflected in Spamann's (2010) corrected Anti-Directors Rights Index (ADRI) of which a high value reflects that the law grants shareholders a high level of protection against management and a low value indicates that management is largely shielded from shareholder interference. Thus, if corporate donations reduce shareholder wealth, one would expect companies in countries with stronger shareholder protection by law (and hence more shareholder power) to make fewer donations, as similarly argued by Ferrell, Liang, and Renneboog (2016) in the broader context of CSR. This results in a third hypothesis: ***Total charitable donations (made in cash or in-kind assets), donations by means of a corporate foundation, and political donations are expected to be negatively related to stronger investor protection, because corporate donations reflect agency problems (Hypothesis 3)***.

As mentioned above, the value-enhancement view implies that donations positively affect firm value. For example, donations can contribute to shareholder wealth via corporate reputation, revenue-enhancement, cost reductions, and political goodwill (Lev et al, 2010; Navarro, 1988; Patten, 2008; Wang & Qian, 2011). In contrast, the agency view suggests that managers donate primarily to enhance their own interests, which suggests a negative effect on firm value. Potential channels for such a transfer of wealth from the firm to the manager are altruistic beliefs, the manager's reputation, and connections established via corporate charity, earnings management, and personal tax effects (Fich et al., 2009; Masulis & Reza, 2015; Petrovits, 2006). Three measures of value and corporate financial performance are used, namely Tobin's Q, ROA, and sales growth. A negative or insignificant relation between donations and firm value would be consistent with agency theory, whereas the alternative hypothesis predicts a positive relation and is consistent with the value-enhancement theory: ***Total charitable donations (in cash or in-kind assets), donations by means of a corporate foundation, and political donations are expected to be negatively related to firm value, in line with agency theory (Hypothesis 4)***.

In contrast to charitable donations, donations to political organizations may reflect managerial agency problems. The effects of political contributions are particularly acute during political elections, as in that context the costs and benefits of donating to political organizations are amplified. For example, the loss of control of the incumbent political powers may negatively affect the value of firms with strong political ties to the forces that held power (Faccio & Parsley, 2009; Jayachandran, 2006; Fisman, 2001). The strength of the political ties can be proxied by the extent of political donations, since e.g. evidence from Brazil and the US shows that firms with high political contributions experience higher stock returns after elections that bring the supported politicians to power (Claessens et al., 2008; Cooper et al., 2010). These studies support the value-enhancement theory of political donations since they may shape political decisions that favor the company. However, political giving may also reflect the personal political preferences of managers and benefit their personal career. Consistent with this idea, the literature shows that firms giving more to politics are associated with fraudulent behavior, free cash flow problems, bad corporate governance, and lower returns (Aggarwal et al., 2012; Duchin & Sosyura, 2012; Faccio, 2010; Yu & Yu, 2011). We empirically test the competing theories by means of a difference-in-differences approach applied to the 2010 general elections in the UK where virtually all political contributions have to be disclosed. If donations have a positive effect on firm value, these efforts should then pay-off, as the market is assumed to immediately incorporate all future benefits associated with political influence. So, if firm value increases more in 2010 for British companies that made larger political donations, the value-enhancement theory is not rejected, whereas an insignificant relation would fail to reject the agency theory. ***The effect of corporate political donations on firm value is expected to become (more) positive at elections (Hypothesis 5)***.

IV. Data and methodology

4.1. Sample selection

Our sample comprises publicly listed firms for which donation data are available in the Thomson Reuters ASSET4 database over the period 2004-2013, 2004 being the first year with substantial data coverage on this issue. ASSET4 collects this information from sustainability/CSR reports, company websites, annual reports, proxy filings, non-governmental organizations, and news from all the major providers. We then only retain the firms for which information is available in the following databases: Orbis (firm level ownership and control data), Worldscope (firm level accounting and financial data), and World Bank (country indices on legal issues, corruption, shareholder protection etc.). Our final

sample has a global coverage and contains 2,026 firms with firm-year observations amounting to 1,985, 1,395, 3,226, and 8,976 for respectively cash, in-kind, political, and total donations. [12]

4.2 Variable definitions

Corporate philanthropy

We distinguish among different types of corporate giving: *political donations* comprise expenditures for political lobbying, support of political candidates, and contributions to parties. Monetary charitable giving falls under *cash donations* and other corporate charitable philanthropic expenses are categorized as *in-kind donations*, such as in-kind assets, shares, volunteer work, and research funded through the company's foundations. *Total charitable donations*, the sum of cash and in-kind giving, comprise charitable contributions in general. We scale the donation amounts, which are provided on an aggregated annual basis, by the firm's total sales. Data on whether or not a firm has set up a corporate foundation to distribute its donations is also gathered from ASSET4. Detailed variable definitions are provided in Appendix A.

Corporate financial performance

Our main proxy for firm value in this paper is Tobin's Q, the market value of total assets over the book value of total assets, which also has been used in prior research (e.g. Bebchuk et al., 2009; Fich et al., 2009). This market-based measure is forward-looking and is assumed to reflect future profitability; it is not subject to accounting manipulations and does not fluctuate with scale. In addition, we also use accounting measures of corporate financial performance such as return on assets (ROA), return on equity (ROE), yearly sales growth, and five-yearly sales growth.

Corporate governance variables

The main external governance variable measures the voting power held by the shareholder. Note that the voting power reflects the degree to which total ownership, thus both direct and indirect ownership, is concentrated in the hands of an ultimate owner. Furthermore, we collect data on the control wedge between cash-flow and voting rights, defined as cash flow rights minus voting rights of this largest (ultimate) shareholder. We also identify the type of largest shareholder: other corporations, financial institutions (mutual funds, pensions funds, insurance companies,…), individuals or families, and state owners (government or government institutions).

[12] Data on community lending, financing and investments is not included in this study, since it is negligible and not relevant for firms outside of the financial sector and cannot be considered as donations according to the ASSET4 ESG Data Glossary (2015)

We also collect the corporate governance measures that matter most according to Bebchuk et al. (2009): staggered boards, majority requirements for charter and bylaw amendments, limitations on the shareholder decision rights regarding takeovers, golden parachutes, and poison pills (the definitions are given in Appendix A). These five dummy variables on corporate governance provisions are compiled into an index that measures managerial entrenchment (the E-index) and gives equal weights to the above variables. More than half of our firms have two or more of these corporate governance provisions. In addition, we collect data on board size, CEO-chairman duality, the number of anti-takeover devices, and the dual class equity structure.[13]

Country level variables

The country-level scores on the Anti-Directors Rights Index (ADRI) are based on Spamann's (2010) corrected version of the ADRI initially proposed by La Porta et al. (1998). The index is the sum of three dummy variables on shareholder voting (voting by mail, voting without blocking of shares, and calling an extraordinary meeting) and three dummy variables on minority protection (proportional board representation, pre-emptive rights, and judicial remedies). A higher value indicates stronger legal investor protection against managerial discretion on decision-making. Finally, GDP per capita captures country level effects related to the general level of welfare, which may affect some dimensions of CSR performance (Liang & Renneboog, 2016).

Firm level control variables

In prior research with Tobin's Q as the dependent variable (e.g. Bebchuk et al., 2009), the following control variables were also included: (lagged) Return on assets (ROA), firm size (total assets), Capex (capital expenditures-to-assets, leverage, research & development (R&D) expenditures, firm age (Fich et al., 2009), industry fixed effects (NACE rev. 2 code). We follow the convention and use this standard set of controls.

4.3 Descriptive statistics

Table 1 presents the descriptive statistics of our key variables. The average charitable donations amount $28.4 million per year, which is equivalent to 1.3% of earnings (before depreciation and amortization), or 0.18% of sales. This is in line with donations numbers from the CECP (2014c), which reports a median total charitable donations of $18 million or 0.13% of sales for the firms participating

[13] Consistent with prior research, firms with a dual class equity structure are excluded from our regressions, since the holding of superior voting rights could form a prevailing entrenchment mechanism that makes the other provisions listed above relatively irrelevant (Bebchuk et al., 2009).

in its global survey. Charitable contributions made in cash comprise 0.11% of sales in the sample, compared to 0.24% of sales that are donated as in-kind assets. It should be noted that data on the specific form of donations are available for only a subset of the firms reporting total charitable donations. Political donations are smaller at $294,000 per year or 0.003% of sales, but almost one third of firms that make donations do so (also) to political parties. These numbers are largely consistent with those presented in previous studies, for example, Hill et al. (2013) show that 15% of firms are engaged in lobbying or political donations, and donated $152,000 in 2004, augmenting to $334,000 in 2011. About 42% of firms in our global sample operate a corporate foundation for their donations.

The average sample firm has a Tobin's Q of 1.6, ROA of 7%, sales growth of almost 9.4%, a leverage ratio of 18.6%, total assets of almost $63 billion, capital expenditures of 5.8% of total assets, and is 52 years old. Moreover, the average firm has a largest shareholder owning 25.2% of the equity, is most frequently held by another company (as ultimate shareholder). The control wedge is negative (-0.6), implying that the cash flow rights are significantly less than the voting rights. A staggered board is present in virtually all companies and the poison pill the least common anti-takeover mechanism (only present in 18.8% of the companies). The average board consists of 11 executive and non-executive directors and in 36% of firms the role of CEO and chairman is fulfilled by one person. Almost 11% of firms have dual class shares.

Table 2 presents the country distribution of the total donations and its constituents. Of the western economies, Denmark, Canada, Switzerland, and US firms appear to be much more engaged in total corporate giving, their donations (as a % of sales) are more than twice the average the U.K., France, and Germany. Political donations are particularly concentrated in the U.S. and Brazil. In terms of the industry distribution of total corporate donations, we find that the most generous industries in are the human health and social work industry, which includes the pharmaceutical sector, and the arts, entertainment, and recreation sector.[14] The construction, transportation and storage, and professional, scientific and technical services industries are the lowest donators. As could be expected, industries that are most dependent on political decisions and government contracts make most political donations: the electricity/gas, construction, financial, mining, and transportation sectors.

[Insert Tables 1 and 2 about here]

[14] Table available upon request.

4.4 Methodology

Our two basic models, where *i* refers to the firm and *t* to years, are:

$$Donation\ variables_{it} = \beta_0 + \beta_1(Governance\ and\ legal\ provisions_{it}) + \beta_2(Firm\ charac._{it}) + Industry\ FE + Year\ FE + \varepsilon_{it} \quad (1)$$

$$Firm\ performance_{it} = \beta_0 + \beta_1(Donation\ variables_{it}) + \beta_2(Firm\ charac._{it}) + Industry\ FE + Year\ FE + \varepsilon_{it} \quad (2)$$

Donations variables stand for (i) total charitable donations, (ii) cash giving, (iii) in-kind contributions, or (iv) political contributions, all scaled by sales, and (v) a dummy variable capturing whether or not the firm donates via its corporate foundation. We represent corporate financial value/performance by: (i) Tobin's Q, (ii) ROA, and (iii) yearly sales growth. The findings with dependent variables scaled by assets (rather than sales), and with alternative value and performance variables will be discussed in the robustness section. Firm characteristics comprise leverage, firm age, size, capital expenditures, and R&D expenses. GDP (per capita) stands for the country's general level of welfare. Given that donation patterns vary by industry and over time, we also include these fixed effects.

The various dependent variables require different econometric approaches. When financial performance is the dependent variable, we use panel data regressions with cluster-robust standard errors (and the above-mentioned fixed effects). When donations (the ratio of total, cash, in-kind, or political donations over sales), which are truncated at zero, are used as dependent variable, we use tobit panel regression that address the lower limit censoring at zero and cluster standard errors at the firm level. The analysis of whether or not the firm operates a foundation is performed by means of logit models of which we report the marginal effects.

To test the first three hypotheses on donations, firm value and corporate governance, we include sets of corporate governance variables and legal investor protection variables. The former set comprises internal corporate governance variables such as the presence of a staggered board, majority requirements, shareholders' limitations in M&A decision-making, golden parachutes, poison pills, chairman-CEO duality, as well as a managerial entrenchment index (E-index, constructed following the composition of the original E-index developed by Bebchuk et al. (2009)), board size, and the number of anti-takeover measures.[15] The governance variable set also comprises external corporate governance as

[15] Note that the first five individual anti-takeover dummies constitute the entrenchment index such that they cannot be simultaneously included in model. Similarly, we avoid multicollinearity by not including the entrenchment index and the number of anti-takeover measures in the same model.

captured by the percentage of equity held by the largest shareholder, total ownership concentration, the control wedge of the largest shareholder, and dummy variables capturing the main types of ultimate owners (manufacturing companies, financial institutional, individuals and families, and the state). Our regulation variable is the anti-director rights variable (ADRI) that reflects the managerial discretion/entrenchment relative to the shareholders or, in other words, reflects the degree of shareholder protection.

To estimate the fourth hypothesis (on donations and firm value), we regress the donation variables on measures of firm profitability. As this relation between donations and firm value could suffer from endogeneity, we resort to an instrumental variable approach using 2SLS estimation. A valid instrument should not be related to firm performance value through channels other than donations, which implies that most company-specific characteristics do not qualify. As instruments, we therefore use peer firms' donations: the average ratios of total, cash, in-kind, and political donations of the peer companies by country and by year. The rationale is that a firm's donations may be affected by the level of donations by the direct industry peers, usually due to peer pressure and public perception, but that these donations of industry peers do not significantly affect the focal firm's financial performance. Prior research does indeed confirm that firms in the same industry tend to adopt similar giving practices (Brown et al., 2006), and corporate behavior in general is strongly influenced by peers (e.g., Servaes & Tamayo, 2013; Leary & Roberts, 2014; Hoberg, Phillips, & Prabhala, 2014; Foucault & Fresard, 2014). Using peer firms' policies as IVs for focal firms' policies has been widely used in the literature (e.g., Ferrell, Liang, & Renneboog, 2016; Lin, Ma, Malatesta, & Xuan, 2011, 2012).

First stage:

$$Donation\ variables_{it} = \beta_0 + \beta_1(Peer\ donation\ vars._{it}) + \beta_2(Governance\ and\ legal\ provisions_{it}) + \beta_3(Firm\ charact._{it}) + YearFE + \varepsilon_{it} \quad (3)$$

Second stage:

$$Firm\ perform._{it} = \beta_0 + \beta_1(Estimated\ Donation\ vars._{it}) + \beta_2(Governance\ and\ legal\ provisions_{it}) + \beta_3(Firm\ char._{it}) + Year\ FE + \varepsilon_{it} \quad (4)$$

To test Hypothesis 5 (measuring the effect of political donations on firm value in election years), we apply a difference-in-differences (DiD) methodology to political donations in United Kingdom. This approach assumes that in absence of a so-called treatment, the trends in firm value would be similar for all firms, but an exogenous shock induces a deviation from this common trend for the 'treated' firms (Angrist & Pischke, 2009). Our shock is the general elections in the UK of 2010. This natural experiment

is largely exogenous, because these elections were simply held as the fixed term of five years for parliamentary sessions had ended. In order to identify a trend, firms with missing observations in any of the years 2008, 2009, and 2010 are excluded, since at least three consecutive periods (and preferably more) are required according to Angrist & Pischke (2009). Although the election result may affect the value of all firms, it is most likely to affect the value of companies that have made more political donations. Companies' donations usually peak before the elections and this effort may be visible in firm value as a one-off effect or a lasting one (for several years), which is why we test the hypothesis with a dummy variable for 2010 and with a post-2010 dummy (that equals 1 if the year is 2010 or any subsequent year until 2014, the end of our sample). Our estimated coefficient of interest is the interaction term between the time dummy and political donations (treatment), which is expected to be significantly positively related to firm value if political donations were to have a positive effect on firm value.

$$Firm\ value_{it} = \beta_0 + \beta_1(Political\ donations_{it}) + \beta_2(Political\ donations_{it} * Dummy_{year=2010\ or\ year\geq 2010}) + \beta_3(Dummy_{year=2010\ or\ or\ year\geq 2010}) + \beta_4(Firm\ charac._{it}) + Industry\ FE + \varepsilon_{it} \quad (5)$$

V. Results

5.1. Charitable donations and managerial discretion

We first examine what types of firms make charitable donations, in cash and in kind. Are these the firms in which management has a lot of discretion on corporate decision making, in other words where management is more entrenched? If this is indeed the case and if charitable donations are not related to firm value, then it is likely that donations may be an agency problem from the perspective of shareholders. We first turn to testing Hypothesis 1 in Table 3 where we relate total charitable donations to various measures of managerial entrenchment, proxied by a set of indicators measuring the lack of internal corporate governance mechanisms (the presence of a staggered board, (super)majority requirements to change the acts of incorporation and bylaws, limitations on shareholder influence on takeover decisions, a golden parachute, and a poison pill). All models are estimated using Tobit regressions. Model 1 shows that none of these managerial entrenchment mechanisms statistically affect total charitable donations with exception of the presence of a golden parachute (but this is only weakly statistically significant at the 10%). Aggregating these internal governance mechanisms into an E-index confirms that managerial entrenchment has no impact on charitable donations (Model 2). A related measure is the number of anti-takeover devices as many anti-takeover devices shield management from shareholder involvement in decision making on asset restructuring, but this dummy variable capturing

that a firm has more than 2 anti-takeover mechanisms in place is again not related to charitable donations (Model 4). Models 3 and 5 point test the impact of board size and CEO-chairman duality and find no relation either. When we combine as many of these managerial entrenchment variables in one model, while avoiding multicollinearity, we can confirm that there is little relation with donations (with exception of the weak relation with golden parachutes and larger boards, which may still proxy for firm size). So, these findings are not in line with an agency view on corporate donations and hence fail to support Hypothesis 1. The Tobit regressions of Table 3 also point out that larger firms and those spending more on R&D are more prone to do corporate philanthropy. The positive sign of the coefficient on R&D expenditures is in line with the literature and suggests that charitable donations may be consistent with value maximizing behavior (Brown et al., 2006). In unreported regressions, we dissect total charitable donations into cash and in-kind donations, we find very similar results in that there is no indication that agency problems-riddled firms are doing more donations.

In Table 4, we examine the determinants of distributing charitable donations by means of a corporate foundation. Model 2 shows that high managerial entrenchment (a high E-index) is positively related to giving through a corporate foundation. Models 1 and 6 indicate that shareholder limitations on takeover decisions and golden parachutes drive this result. Models 4 and 5 confirm that firms in which agency problems may be an issue, proxied by CEO-chairman duality (whereby the CEO can wield more power given that he is also chairman of the board of directors whose task it is to monitory the executive) and a high number of anti-takeover devices which induces immunity to takeover attempts, are more likely to use a foundation. These findings are consistent with Hypothesis 1 in the sense that firms that are more prone to agency costs use a corporate foundation. Alternatively, the results are also consistent with the notion that the use of a foundation may be a way to address the issue of agency problems as the foundation structure puts the corporation management to some extent at arm's-length (although there is in most cases still some degree of control by the corporation), makes it easier to maintain stable levels of donation pay-outs to charity, and avoids corporate timing of contributions to the foundation with respect to business cycle and tax purposes. We will perform further analyses below to investigate which hypotheses receive empirical support.

[Insert Tables 3 and 4 about here]

5.2. Charitable donations and shareholder control

Our second hypothesis concerns the impact of external corporate governance (shareholder influence) on charitable corporate donations and the use of a corporate foundation. If donations reflect an agency

problem, we would expect that strong shareholder control would limit corporate philanthropy. Table 5 shows no support for Hypothesis 2 as none of variables capturing shareholder power (the ownership stake of the largest shareholder, whether or not the ownership is concentrated or dispersed, the control wedge which measures deviations from voting and cash flow rights, the presence of a largest shareholder of a specific type such as a corporation, individual or family, financial institution, the state) are correlated with corporate donations. We find that larger, profitable, and relatively younger companies with high R&D expenditures are giving more money to charity but this is not curbed by shareholders. When we examine the subsamples of cash and in-kind donations, we also do not find a strong relation between potential shareholder monitoring and donations.[16]

When we turn to corporation foundations, we find that the likelihood that a company donates funds via a foundation is much lower for companies with strong external governance. The logit analysis of Table 6 demonstrates that the percentage of shares held by the largest shareholder, a proxy for shareholder monitoring, is negatively related to a corporate foundation. For every 10% ownership by the largest shareholder, the probability that the firm donates via a foundation decreases with 4%. Also, the control wedge of the largest shareholder, reflecting the monitoring incentives for a given level of voting rights, is negatively related to a corporate foundation. This potentially indicates that monitoring by large shareholders reduces the need to a corporate foundation. Moreover, both proxies of state ownership are negatively associated with the likelihood of a foundation. This could be related to the fact that firms in which the state holds an important stake make fewer political donations, possibly because state-owned firms may be able to cater to expectations of stakeholders (society at large, customers, supplies) in different ways such as through their operational activities.

So far, we have documented that the managerial entrenchment does not lead to more corporate donations, nor do donations decrease in firms with strong shareholders. In firms with strong monitoring owners, there is less need to resort to corporate foundations to distribute corporate donations.

[Insert Tables 5 and 6 about here]

5.3. Political donations

We turn to the relation between political donations, managerial entrenchment and shareholder power. A positive relation between managerial discretion in decision making and a negative one with shareholder equity ownership concentration would suggest that political donations are beneficial for

[16] Tables available upon request.

managers but do not create net value for shareholders (Hypotheses 1 and 2). Table 7 presents some (but not strong) evidence of agency problems of political donations as managerial entrenchment is positively correlated with political donations: we report a positive significant parameter estimate for the presence of a poison pill, CEO-chairman duality, and strong anti-takeover devices – all of which strengthen the power of management relative to that of shareholders. For instance, firms with a poison pill in place make on average political donations that are 3.2% higher. Shareholder voting power is not significantly related political donations in Table 8. Interestingly, the only exception is the negative relation with government equity holdings in the firm. This is not unexpected as it is less critical for firms with share blocks held by the government to build up a relationship with political parties by means of political donations; presumably because there are more efficient ways to improve or maintain their relation with the government or political parties who may be represented on the firm's board (Wang & Qian, 2011).

[Insert Tables 7 and 8 about here]

5.4 Corporate philanthropy and investor protection

Our third hypothesis states that more charitable donations in firms with weak shareholder voting power and weak shareholder rights (which implies a relatively more entrenched management) is congruent with donations being an agency problem. If donations are mainly benefitting management to the detriment of shareholders, one would expect shareholders who are strong because of ownership concentration and regulation to curb corporate philanthropy. Legal investor protection against management is represented by the anti-director rights index (ADRI). In Table 9, we find that the ADRI is negatively associated with total charitable donations, political donations, and donating via a corporate foundation. For charitable cash and in-kind donations the results are insignificant, which could be because the number of observations on these forms of donations is smaller and stems from a few of countries, which leads to little variation in the values of the ADRI and therefore reduces statistical power (not tabulated). We also observe that when the largest shareholder owns a large share block, there are fewer charitable and political donations (but has not effect on working with a foundation). This also points at donations being an agency problem because shareholder power by law or by voting rights reduces corporate giving, and is consistent with the prediction of Hypothesis 3. The interaction term between the ADRI and ownership of the largest shareholder is positive for total charitable donations (Model 2) and political donations (Model 4). This may imply that shareholder influence by regulation (shareholder protection) and by voting power (largest shareholder) are substitutes, and that investor legal rights are mainly important in the absence of a large shareholder that is monitoring management. The

other way around, this finding could also imply that strong legal investor rights substitute the need for a large shareholder that monitors the giving. Indeed, La Porta et al. (1998) show that greater investor protection is associated with lower ownership concentration.

[Insert Table 9 about here]

5.5 Charitable donations and firm value

We examine the relation between corporate philanthropy and firm value by means of three measures of corporate finance performance: Tobin's Q, a market-based value and hence our main measure, and two operational variables (ROA and sales growth). In order to address endogenous concerns regarding donations and firm value/performance, we implement an instrumental variable approach with 2SLS estimation. As mentioned above, the instrumental variable is the average amount of total charitable donations made by firms in the same industry and country in a given year. The first column of Table 10 and the following tables shows the first stage regression in which the actual total charitable donations are regressed on the instrumental variable and control variables in order to obtain a predicted value. In the second stage, we relate the predicted variables of donations to firm value. A negative or insignificant relation in the second stage regression would be consistent with agency theory whereas the alternative hypothesis predicts a positive relation and would be consistent with the value-enhancement theory.

Our instrument is significantly positively related to actual total charitable donations (Model 1 of Table 11) and in the second stage we find that total charitable donations are strongly positively related to (current and future) Tobin's Q. Total charitable donations are also positively related with current ROA, and to future sales growth. These results are also economically significant, as a 10% increase in the ratio total charitable donations on sales is associated with an increase of 0.11 in Tobin's Q ratio, of 0.12% in ROA and 0.1% in future sales growth. Our results further support Hypothesis 4 that total charitable donations enhance firm value. When we turn to the 2SLS instrumental variable results for the subsample of in-kind donations, we also find a positive and significant relation with future Tobin's Q, ROA and sales growth (Table 11). Given that our marked-based value is forward looking, it seems odd that only the future value of Q is affect. This is consistent with the notion that donations in kind may be less value enhancing because they are not perfect substitutes for individual donations. It may also be that it takes some time before the market incorporates in-kind assets donated to charity as investors may not immediately aware of these contributions, e.g. due to delayed reporting in annual/sustainability reports. It also seems to take some time before in-kind donations actually improve corporate financial performance (as reflected in future ROA and future sales growth).

In Table 12, the results for cash charitable donation show stronger results: both current and future Tobin's Q are positively affected by cash donations as are ROA and future sales growth. Again, we find strong support for the value-enhancement hypothesis. While charitable donations in cash and in-kind assets are both positively related to firm value, this relation is stronger and more significant for cash donations. The reason could be that cash donations function as a better substitute for individual donations since they help solve the collective action problem. They may also serve as a signaling mechanism of future corporate performance because of their transparency and salience, as proposed by Shapira (2012). Moreover, the fact that cash donations can be transferred via a corporate foundation, which facilitates a fair and objective decision making process, could also contribute to cash donations being perceived as a more genuine altruistic gesture.

We also study the interaction of the type of charitable donations with using a corporate foundation to donate and its effect on firm value and performance. However, the exact amount of donations transferred via a foundation is not available, which is a major limitation to this proxy. In-kind donations on only rarely made by means of a corporate foundation. We find that cash donations enhance firm value, mainly when distributed via a foundation (not tabulated). Of course, we acknowledge that peer firms' donations may not be a perfect IV, especially if lobbying activities are prominent, and there may be a "reflection problem" (Manski, 1993). Nevertheless, the consistency between OLS results and 2SLS results are supportive to the value-enhancement view rather than to the agency view.

[Insert about here Tables 10-12]

5.6 Political donations and firm value

In Table 13, when we use the same 2SLS estimation for political donations, we fail to find any significant correlations with firm value, which is consistent with the agency explanation of political donations. Therefore, financing politics does not seem to pay off in general. We turn to a difference-in-differences analysis of political donations on Tobin's Q in order to examine whether the political donations lead to a change in value (Tobin's Q) in the year of the election (the 2010 UK general election in our setting) and the subsequent period. The main variables of interest are the interaction terms, which depict a change in the trend in firm value for firms with high political donations compared to other firms. The insignificant interaction terms of political donations, as shown in Table 14, reveal that political donations do not affect firm value in election years and beyond, which does not support Hypothesis 5. One possible reason for the lack of relation between political donations and firm value in the UK may be that most political donations had gone to the Labour party, which had been in power for more than a

decade and lost the elections in 2010. Unfortunately, the data do not enable us to partition the political donations by political party or politician. However, evidence on the US elections from 1979 to 2004 points out that firms with high political contributions experience positive stock returns as a result of elections, even when this leads to a change in power (Cooper et al., 2010). Another reason why we do not find a relation could be the increased political uncertainty induced by a change in power as no party obtained an absolute majority (which has been very rare in the UK). Still, quickly after the election, it became clear that the Conservatives could and wanted to form a coalition government with the Liberal Democrats, which attenuated uncertainty. Another reason for the non-relation could be that firms thrive better under a Labour government, but this may not be a plausible explanation because the Conservatives are generally regarded as more business friendly, which was reflected in an FTSE 100 surge by 2.3% on the day of the elections.

[Insert about here Tables 13 and 14]

5.7 Robustness tests and alternative explanations

We conducted some robustness checks. First, we repeated our analysis with the market-to-book value, the return on equity (ROE), and the five-yearly sales growth. The results for market-to-book value and ROE were similar to those for Tobin's Q and ROA, respectively, whereas the five yearly sales growth did not yield any relation and appeared to be in inappropriate measure. Second, we also studied whether the results on donations depended on the scaling (by sales) and now used (a) total assets and (b) cash holdings as the denominator in the donations ratios. Most results appeared robust to scaling. Third, we also performed robustness checks on various control variables; e.g. for firm age, we also used the year of the foundation and the year of incorporation; for firm size, we used the number of employees; and instead of accounting performance, we included free cash flows. Our conclusions are upheld. Fourth, we also find that the outcomes are robust to the effect of potential outliers, based on tests with winsorizing at the 5% and 95% levels, instead of 1% and 99%.

An alternative explanation of our results may be a "cover-up" story, which is consistent with the agency argument. That is, high donation companies may be inherently malicious, in that they are actually the most irresponsible companies and intend to cover-up their malign nature by giving more to charities. If responsible conduct is value-diminishing, there will be a positive relation between firm value of corporate donations, not because corporate donations are value enhancing but because the most irresponsible companies give the most and they also create highest shareholder value by not adopting a policy of corporate social responsibility. A simply sanity check on the correlations between our

donations data and the corporate CSR ratings that we obtain from ASSET4 rejects this alternative explanation: all correlations are positive and highly significant. The correlations of overall donations with the overall CSR rating, the environmental rating, and the social rating are about 13%, 15%, and 13%, respectively. This indicates that high donation companies are also more socially responsible, and is inconsistent with a "cover-up" hypothesis.

VI. Conclusion

In this paper, we examine whether corporate donations are the result of agency problems or are consistent with value-enhancement. In doing so, we distinguish between total charitable donations (which comprise cash and in-kind giving) and political donations. To mitigate potential endogeneity concerns, we employ an instrumental variable approach with peer-based IVs and also conduct a difference-in-difference analysis on political donations around the 2010 UK election. Our results show that corporate donations are very unlikely to be agency problems: when management has a lot of discretion (because they are entrenched due to the lack of internal governance mechanisms, regulation or monitoring), they do not make more charitable donations. Likewise, strong external governance by powerful shareholders does not lead to lower charitable donations, though investor protection by law at the country level is negatively correlated with donations. Charitable donations are positively related to measures of current and future firm value (Tobin's Q) and firm performance (ROA and sales growth). These positive relations are consistent for charitable donations made in cash and in-kind assets, but are stronger for the former type of donation.

In addition, we also study the role of corporate foundations in channeling donations to the beneficiaries. A corporate foundation is used by firms which suffer from agency problems, that is, it is associated with poor internal governance, reflected by the presence of an M&A limitation, a golden parachute, a larger board size, anti-takeover devices, CEO-chairman duality, and a higher E-index value. Moreover, corporate foundations are also more common in firms with poor external corporate governance, specifically in the absence of a powerful shareholder and monitoring incentives. The choice of corporate giving via a corporate foundation may actually be the solution to the aspects of poor governance. This is confirmed by the fact that using a foundation is related to higher firm value (as reflected by Tobin's Q and ROA). This implies that a foundation helps to ensure that donations are spent in the best interest of the firm, which is most critical in case the firm suffers from severe agency problems.

Moreover, political donations do not contribute to shareholder wealth and are positively correlated with indicators of poor internal corporate governance and managerial entrenchment (namely the poison pill, CEO-chairman duality, and anti-takeover devices). This is consistent with further tests showing that political donations do not enhance Tobin's Q, and are unrelated to any measure of firm profitability. Moreover, a difference-in-difference approach applied to the 2010 UK elections unveils a non-significant effect of political donations on firm value for companies characterized by high political donations.

Overall, our findings may imply that policymakers and firms should focus on donations to charity, preferably in cash and by means of a corporate foundation in order improve the effectiveness of its giving, in particular when they have little power to control managers. All in all, doing well by doing good seems possible. Of course, our research suffers from some limitations induced by data availability: first, while we know whether or not the firm donates by means of a corporate foundation, the firm could still combine a direct giving programme with donations via its corporate foundation, and we do not have information on this split of the donations. Second, in-kind donations could not be differentiated by asset category (donations of products in stock, research executive on behalf of a specific beneficiary, share donations, etc.). As pointed out above, we do not know the recipient political parties or politicians of the political donations, which would enable us to differentiate between contributions to winning and losing parties and measure the potential surprise effect of unexpected election results. Similarly, it would be interesting to compare how charitable donations made to specific charitable organizations impact firm value. Furthermore, the exact announcement date of donations would be very useful data, because it would enable us to perform direct tests by means of an event study approach on how financial markets reacts to philanthropic news.

VII. References

Adams, M., & Hardwick, P. (1998). An analysis of corporate donations: United Kingdom evidence. *Journal of management Studies*, *35*(5), 641-654

Aggarwal, R. K., Meschke, F., & Wang, T. Y. (2012). Corporate political donations: investment or agency? *Business and Politics*, *14*(1).

Andreoni, J. (1990). Impure altruism and donations to public goods: a theory of warm-glow giving. *The economic journal*, 464-477.

Angrist, J. & Pischke, J. S. (2009). Mostly harmless econometrics: an empiricist's companion.

ASSET4. (2015). ESG Data Glossary. Retrieved from: http://extranet.datastream.com/data/ASSET4%20ESG/documents/ASSET4_ESG_DATA_GLOSSARY_april2013.xlsx

Balotti, R. F., & Hanks Jr, J. J. (1999). Giving at the office: A reappraisal of charitable contributions by corporations. *The Business Lawyer*, 965-996.

Baysinger, B. D. (1984). Domain maintenance as an objective of business political activity: An expanded typology. *Academy of Management Review*, *9*(2), 248-258.

Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance? *Review of Financial studies*, *22*(2), 783-827.

Boatsman, J. R., & Gupta, S. (1996). Taxes and corporate charity: empirical evidence from microlevel panel data. *National Tax Journal*, 193-213.

Brammer, S., & Millington, A. (2005). Corporate reputation and philanthropy: An empirical analysis. *Journal of Business Ethics*, *61*(1), 29-44.

Brown, W. O., Helland, E., & Smith, J. K. (2006). Corporate philanthropic practices. *Journal of corporate finance*, *12*(5), 855-877.

CECP, in association with The Conference Board. (2014a). *Emerging trends in corporate contributions*. Retrieved from: http://cecp.co/pdfs/2014summit/Emerging_Trends%20_in_Corporate_Contributions.pdf

CECP. (2014b). *Giving Around the Globe: 2014 Edition*. Retrieved from: http://cecp.co/pdfs/global/CECP_GivingAroundtheGlobe_2014_FINAL_Web.pdf

CECP, in association with The Conference Board. (2014c). *Giving in numbers: 2014 edition*. Retrieved from: http://cecp.co/pdfs/giving_in_numbers/GIN2014_Web_Final.pdf

CECP, in association with The Conference Board. (2015). *Giving in numbers brief 2015*. Retrieved from: http://cecp.co/pdfs/giving_in_numbers/GIN_8x11_HighRes.pdf

Center for Responsive Politics. (2015). Super PACs. Retrieved from: https://www.opensecrets.org/pacs/superpacs.php

Claessens, S., Feijen, E., & Laeven, L. (2008). Political connections and preferential access to finance: The role of campaign contributions. *Journal of Financial Economics*, *88*(3), 554-580.

Cooper, M. J., Gulen, H., & Ovtchinnikov, A. V. (2010). Corporate political contributions and stock returns. *The Journal of Finance*, *65*(2), 687-724.

Duchin, R., & Sosyura, D. (2012). The politics of government investment. *Journal of Financial Economics*, *106*(1), 24-48.

Elfenbein, D. W., & McManus, B. (2010). A greater price for a greater good? Evidence that consumers pay more for charity-linked products. *American Economic Journal: Economic Policy*, *2*(2), 28-60.

Faccio, M. (2010). Differences between politically connected and nonconnected firms: A cross-country analysis. *Financial Management*, *39*(3), 905-928.

Faccio, M., & Parsley, D. C. (2009). Sudden deaths: taking stock of geographic ties. *Journal of Financial and Quantitative Analysis*, *44*(03), 683-718.

Fama, E. F. (1980). Agency Problems and the Theory of the Firm. *The journal of political economy*, 288-307.

Ferrell, A., Liang, H., & Renneboog, L. (2016). Socially responsible firms. *Journal of Financial Economics*, forthcoming.

Fich, E., Garcia, D., Robinson, T., & Yore, A. (2009). *Corporate philanthropy, agency problems, and shareholder wealth*. Working paper.

Financial Accounting Standards Board. (1993). Statement of financial accounting standards No. 116: Accounting for contributions received and contributions made. Norwalk: Financial Accounting Standards Board.
Fisman, R. (2001). Estimating the value of political connections. *American Economic Review*, 1095-1102.
Friedman, M. (1970). A theoretical framework for monetary analysis. *The Journal of Political Economy*, 193-238.
Gautier, A., & Pache, A. C. (2013). Research on corporate philanthropy: A review and assessment. *Journal of Business Ethics*, *126*(3), 343-369.
Goldman, E., Rocholl, J., & So, J. (2009). Do politically connected boards affect firm value? *Review of Financial Studies*, *22*(6), 2331-2360.
Gompers, P., J. Ishii, and A. Metrick. 2003. Corporate Governance and Equity Prices. Quarterly Journal of Economics 118:107–55.
Hill, M. D., Kelly, G. W., Lockhart, G. B., & Ness, R. A. (2013). Determinants and effects of corporate lobbying. *Financial Management*, *42*(4), 931-957.
Hillman, A. J., Keim, G. D., & Schuler, D. (2004). Corporate political activity: A review and research agenda. *Journal of Management*, *30*(6), 837-857.
Jayachandran, S. (2006). The Jeffords Effect*. *Journal of Law and Economics*, *49*(2), 397-425.
Jensen, M. C. (2001). Value maximization, stakeholder theory, and the corporate objective function. *Journal of applied corporate finance*, *14*(3), 8-21.
Koehn, D., & Ueng, J. (2010). Is philanthropy being used by corporate wrongdoers to buy good will?. *Journal of Management & Governance*, *14*(1), 1-16.
La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. W. Vishny. (1998). Law and Finance. Journal of Political Economy 106:1113–55.
La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of financial economics*, *58*(1), 3-27.
Lev, B., Petrovits, C., & Radhakrishnan, S. (2010). Is doing good good for you? How corporate charitable contributions enhance revenue growth. *Strategic Management Journal*, *31*(2), 182-200.
Liang, H., Renneboog, L., and Sun, L. (2015). The Political Determinants of Executive Compensation: Evidence from an Emerging Economy. *Emerging Markets Review* 25, 69-91.
Liang, H. & Renneboog, L. (2016), On the Foundations of Corporate Social Responsibility, *Journal of Finance*, forthcoming.
Library of Congress. (2015). *Campaign Finance: United Kingdom.* Retrieved from: http://www.loc.gov/law/help/campaign-finance/uk.php.
Masulis, R. W., & Reza, S. W. (2015). Agency problems of corporate philanthropy. *Review of Financial Studies*, *28*(2), 592-636.
McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of management review*, *26*(1), 117-127.
Navarro, P. (1988). Why do corporations give to charity? *Journal of Business*, 65-93.
Patten, D. M. (2008). Does the market value corporate philanthropy? Evidence from the response to the 2004 tsunami relief effort. *Journal of Business Ethics*, *81*(3), 599-607.
Petrovits, C. M. (2006). Corporate-sponsored foundations and earnings management. *Journal of Accounting and Economics*, *41*(3), 335-362.
Porter, M. E., & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. *Harvard business review*, *80*(12), 56-68.
Rajan, R. G., & Wulf, J. (2006). Are perks purely managerial excess? *Journal of Financial Economics*, *79*(1), 1-33.
Schwartz, R. A. (1968). Corporate philanthropic contributions. *The Journal of Finance*, *23*(3), 479-497.
Seifert, B., Morris, S. A., & Bartkus, B. R. (2004). Having, giving, and getting: Slack resources, corporate philanthropy, and firm financial performance. *Business & Society*, *43*(2), 135-161.
Shapira, R. (2012). Corporate Philanthropy as Signaling and Co-optation. *Fordham Law Review*, *80*(5).
Spamann, H. (2010). The "antidirector rights index" revisited. *Review of Financial Studies*, *23*(2), 467-486.
Thomson Reuters. (2012). *Data collection and rating methodology – frequently asked questions.* Retrieved from:

http://extranet.datastream.com/data/ASSET4%20ESG/documents/ASSET4_ESG_Methdology_FAQ_0612.pdf
Wang, H., & Qian, C. (2011). Corporate philanthropy and corporate financial performance: The roles of stakeholder response and political access. *Academy of Management Journal*, *54*(6), 1159-1181.
Webb, N. J. (1994). Tax and government policy implications for corporate foundation giving. *Nonprofit and Voluntary Sector Quarterly*, *23*(1), 41-67.
Weisbach, M. (1988). Outside directors and CEO turnover. *Journal of Financial Economics*, 20, 431-460.
Yermack, D. (2009). Deductio ad absurdum: CEOs donating their own stock to their own family foundations. *Journal of Financial Economics*, *94*(1), 107-123.
Yu, F., & Yu, X. (2012). Corporate lobbying and fraud detection. *Journal of Financial and Quantitative Analysis*, *46*(06), 1865-1891.

TABLE 1
Descriptive Statistics

Variables	Obs.	Mean	Median	St. dev.	Min.	Max.
Corporate philanthropy variables						
Total charitable donations/sales (w.)	11,205	1.792	0.559	4.231	0	31.968
In-kind charitable donations/sales (w.)	1,572	2.414	0.261	7.293	0	50.785
Cash charitable donations/sales (w.)	2,389	1.060	0.530	1.623	0	10.708
Political donations/sales (w.)	3,754	0.011	0	0.042	0	0.317
Company foundation	11,831	0.418	0	0.493	0	1
Financial performance variables						
Tobin's Q (w.)	11,566	1.614	1.276	0.973	0.665	6.868
ROA (%,) (w.)	11,609	7.026	5.910	7.537	-19.130	36.890
Sales growth (annual)	11,319	0.094	0.068	0.221	-0.486	1.047
Internal governance variables						
Staggered board	10,914	0.989	1	0.106	0	1
Majority requirement	8,106	0.645	1	0.479	0	1
M&A limitation	4,455	0.284	0	0.451	0	1
Golden parachute	7,398	0.457	0	0.498	0	1
Poison pill	3,761	0.188	0	0.391	0	1
E-index	3,247	1.942	2	1.111	0	5
Board size	11,817	11.016	11	3.682	1	45
CEO-chair duality	11,831	0.363	0	0.481	0	1
Anti-takeover devices	6,573	3.017	2	2.097	1	12
Dual class shares	11,831	0.107	0	0.309	0	1
External governance variables						
Largest shareholder (%)	10,456	25.181	15.045	21.550	0	100
Ownership concentration	9,997	0.682	0	1.072	0	3
Control wedge	9,411	-0.599	0	4.009	-32.020	4.530
Government holdings	11,588	0.024	0	0.109	0	0.990
Ultimate owner is corporation	10,973	0.588	1	0.492	0	1
Ultimate owner is finance institution	10,973	0.221	0	0.415	0	1
Ultimate owner is individual or family	10,973	0.109	0	0.312	0	1
Ultimate owner is state	10,973	0.081	0	0.273	0	1
Firm level variables						
Leverage	11,795	0.186	0.165	0.153	0	1.456
Age	10,783	52.703	34	45.066	2	362
Size (billion)	11,798	63.283	9.054	234.601	0.018	4766.626
Capital expenditures/total assets (w.)	11,100	5.894	4.24	6.105	0.010	42.530
R&D expenditures/sales (w.)	11,827	0.053	0	0.036	0	0.210
Country level variables						
ADRI	11,447	3.659	4	1.004	2	5
GDP (ln billion)	11,831	10.310	10.621	0.828	6.950	11.642

TABLE 2
Country distribution of corporate donations

This table shows the different types of donations as a % of sales by country. ADRI stands for the anti-directors rights index. The definitions are given in Appendix A.

Country	General		Total charitable donations (% of sales)		Cash charitable donations (% of sales)		In-kind charitable donations (% of sales)		Political donations (% of sales)	
	Obs.	ADRI	Obs.	Mean	Obs.	Mean	Obs.	Mean	Obs.	Mean
Australia	447	4	418	0.220	111	0.088	69	0.055	143	0.001
Austria	17	4	11	0.050	1	0.174	1	0.028	9	0.001
Belgium	86	2	81	0.063	31	0.030	9	0.077	3	0.001
Brazil	262	5	261	0.404	10	0.176	7	0.069	37	0.008
Canada	557	4	516	0.291	82	0.126	55	0.168	110	0.001
Chile	44	5	44	0.068	3	0.090	0	0.000	1	0.001
Colombia	42	4	42	0.224	6	0.057	5	0.033	4	0.001
Denmark	42	4	41	0.305	7	0.1.75	0	n.a.	2	0.001
Egypt	10	4	10	0.224	0	n.a.	0	n.a.	0	n.a.
Finland	94	4	86	0.023	23	0.021	3	0.011	24	0.001
France	257	5	243	0.115	49	0.059	47	0.126	13	0.001
Germany	211	4	195	0.081	35	0.101	7	0.062	58	0.001
Greece	91	3	91	0.200	15	0.310	4	0.132	10	0.001
Hong Kong	779	4	775	0.127	53	0.078	17	0.016	9	0.001
India	274	4	271	0.125	11	0.029	3	0.025	49	0.003
Ireland	48	4	28	0.038	6	0.038	0	n.a.	40	0.001
Israel	45	3	44	0.099	9	0.070	10	0.030	6	0.001
Italy	239	2	233	0.124	40	0.068	28	0.017	31	0.002
Japan	488	5	466	0.064	108	0.067	43	0.033	2	0.001
Jordan	6	2	6	0.865	0	n.a.	0	n.a.	0	n.a.
Malaysia	64	4	62	0.195	11	0.032	4	0.119	4	0.001
Mexico	68	2	67	0.173	3	0.012	3	0.081	8	0.001
Netherlands	151	4	131	0.057	29	0.043	18	0.033	27	0.001
New Zealand	82	5	82	0.040	7	0.015	2	0.000	17	0.001
Nigeria	3	3	3	0.155	0	n.a.	0	n.a.	0	n.a.
Norway	48	4	45	0.052	3	0.015	1	0.000	8	0.001
Peru	4	4	4	0.060	0	n.a.	0	n.a.	0	n.a.
Philippines	45	4	45	0.299	2	0.319	0	n.a.	6	0.001
Portugal	72	3	71	0.098	22	0.090	20	0.013	8	0.001
Singapore	94	4	87	0.117	12	0.013	1	0.001	4	0.001
South Africa	308	4	302	0.246	26	0.171	25	0.228	89	0.001
South Korea	355	4	351	0.256	19	0.098	6	0.004	29	0.001
Spain	256	5	238	0.164	52	0.109	52	0.054	67	0.002
Sweden	83	4	81	0.087	27	0.091	6	0.055	13	0.001
Switzerland	127	3	113	0.297	22	0.084	17	0.148	38	0.001
Taiwan	421	5	417	0.073	29	0.032	21	0.133	28	0.001
Thailand	42	3	42	0.153	7	0.051	3	0.021	3	0.001
Turkey	80	4	79	0.221	7	0.044	5	0.007	5	0.001
UK	2,837	4	2,647	0.128	684	0.093	422	0.177	2,192	0.001
USA	2,268	2	2,098	0.254	801	0.141	642	0.370	614	0.003

TABLE 3
Total charitable donations and internal corporate governance

The dependent variable is total charitable donations scaled by sales and winsorized at 1% and 99%. Estimates are based on a tobit regression. Standard errors are reported in parentheses and are robust and clustered at the firm level. Variable definitions are presented in Appendix A. ***, **, and * denote the statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Variables	(1) Total charitable donations	(2) Total charitable donations	(3) Total charitable donations	(4) Total charitable donations	(5) Total charitable donations	(6) Total charitable donations
Staggered board	0.714					0.758
	(0.542)					(0.558)
Majority requirement	-0.276					-0.234
	(0.503)					(0.495)
M&A limitation	0.249					0.167
	(0.975)					(0.966)
Golden parachute	0.668*					0.694*
	(0.372)					(0.379)
Poison pill	0.327					0.346
	(0.607)					(0.638)
E-index		0.233				
		(0.228)				
Board size			0.137			1.401**
			(0.299)			(0.704)
Anti-takeover devices				0.055		
				(0.164)		
CEO-chairman duality					0.188	-0.260
					(0.240)	(0.571)
Tobin's Q	0.501	0.522	0.225	0.195	0.220	0.495
	(0.338)	(0.339)	(0.150)	(0.211)	(0.148)	(0.343)
Leverage	-0.028	0.004	-0.534	-0.573	-0.518	-0.014
	(0.848)	(0.851)	(0.544)	(0.717)	(0.544)	(0.842)
Age	-0.311	-0.299	-0.315**	-0.270	-0.323**	-0.327
	(0.212)	(0.210)	(0.141)	(0.168)	(0.137)	(0.212)
Size	0.509***	0.530***	0.332***	0.291***	0.335***	0.394***
	(0.140)	(0.142)	(0.085)	(0.105)	(0.089)	(0.136)
Capital expenditures	0.037	0.040	0.037	0.094**	0.037	0.039
	(0.041)	(0.041)	(0.028)	(0.047)	(0.028)	(0.041)
R&D expenditures	0.474***	0.483***	0.304***	0.317***	0.302***	0.481***
	(0.130)	(0.132)	(0.083)	(0.094)	(0.083)	(0.131)
R&D indicator	-1.662**	-1.681**	-1.115***	-1.065***	-1.119***	-1.621*
	(0.842)	(0.842)	(0.300)	(0.382)	(0.300)	(0.839)
ROA	0.029	0.028	0.055***	0.040	0.055***	0.030
	(0.046)	(0.046)	(0.021)	(0.028)	(0.021)	(0.046)
Constant	-8.827	-10.834	-4.176**	-3.529	-3.876**	-10.204
	(6.474)	(6.885)	(1.691)	(3.049)	(1.640)	(6.656)
Industry and year FE	Yes	Yes	Yes	Yes	Yes	Yes
Other control vars. (GDP, R&D investments)	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,584	1,584	6,227	3,710	6,230	1,582

TABLE 4

Corporate philanthropy via a corporate charitable foundation and internal corporate governance

The dependent variable is a dummy whether the firm maintains a corporate foundation. Coefficients represent the marginal effect of a logit estimation. Standard errors are reported in parentheses. Variable definitions are presented in Appendix A. ***, **, and * denote the statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Variables	(1) Corporate foundation	(2) Corporate foundation	(3) Corporate foundation	(4) Corporate foundation	(5) Corporate foundation	(6) Corporate foundation
Staggered board	0.018					0.013
	(0.117)					(0.084)
Majority requirement	0.024					0.018
	(0.020)					(0.019)
M&A limitation	0.094**					0.079*
	(0.047)					(0.041)
Golden parachute	0.094***					0.071***
	(0.027)					(0.025)
Poison pill	0.027					0.012
	(0.026)					(0.026)
E-index		0.047***				
		(0.013)				
Board size			0.083**			0.052
			(0.041)			(0.044)
Anti-takeover devices				0.065***		
				(0.017)		
CEO-chairman duality					0.101***	0.096***
					(0.021)	(0.021)
ROA	-0.001	-0.002	-0.001	0.001	-0.001	-0.001
	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
Tobin's Q	0.030**	0.031***	0.037***	0.052***	0.030**	0.024**
	(0.013)	(0.010)	(0.012)	(0.013)	(0.012)	(0.011)
Leverage	-0.043	-0.048	-0.029	-0.019	-0.004	-0.047
	(0.076)	(0.084)	(0.083)	(0.077)	(0.076)	(0.065)
Age	0.012	0.022*	0.034	-0.001	0.027	0.001
	(0.015)	(0.013)	(0.027)	(0.020)	(0.023)	(0.015)
Size	0.078***	0.084***	0.135***	0.135***	0.128***	0.064***
	(0.011)	(0.012)	(0.012)	(0.010)	(0.011)	(0.010)
Capital expenditures	-0.003	-0.004**	-0.003*	-0.001	-0.003*	-0.002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
R&D expenditures	0.381	0.408*	1.478***	0.885**	1.267**	0.258
	(0.293)	(0.245)	(0.559)	(0.441)	(0.498)	(0.266)
Industry and year FE	Yes	Yes	Yes	Yes	Yes	Yes
Other control vars. (GDP, R&D investments)	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,648	1,648	6,505	3,879	6,508	1,647

TABLE 5
Total charitable donations and external corporate governance

The dependent variable is total charitable donations scaled by sales and winsorized at 1% and 99%. Estimates are from a tobit regression. Standard errors are reported in parentheses and clustered at the firm level. Variable definitions are presented in Appendix A. ***, **, and * denote the statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Variables	(1) Total charitable donations	(2) Total charitable donations	(3) Total charitable donations	(4) Total charitable donations	(5) Total charitable donations
Largest shareholder	0.007				
	(0.005)				
Ownership concentration		0.086			
		(0.105)			
Control wedge			0.084		
			(0.081)		
Government holdings				1.455	
				(0.954)	
Institutional owner					0.035
					(0.243)
Individual/family owner					0.359
					(0.323)
State owner					0.333
					(0.395)
ROA	0.057***	0.055**	0.065***	0.052**	0.051**
	(0.022)	(0.023)	(0.022)	(0.021)	(0.022)
Tobin's Q	0.201	0.247	0.149	0.237	0.286*
	(0.155)	(0.161)	(0.169)	(0.150)	(0.158)
Leverage	-0.334	-0.645	-0.369	-0.457	-0.603
	(0.537)	(0.590)	(0.560)	(0.546)	(0.561)
Age	-0.281*	-0.345**	-0.298**	-0.325**	-0.331**
	(0.145)	(0.156)	(0.141)	(0.140)	(0.146)
Size	0.329***	0.337***	0.340***	0.338***	0.341***
	(0.089)	(0.086)	(0.088)	(0.087)	(0.090)
Capital expenditures	0.020	0.044	0.029	0.037	0.035
	(0.020)	(0.032)	(0.022)	(0.028)	(0.029)
R&D expenditures	0.305***	0.295***	0.304***	0.305***	0.315***
	(0.083)	(0.079)	(0.086)	(0.083)	(0.085)
Constant	-3.796**	-3.868**	-3.431*	-4.166**	-3.859**
	(1.682)	(1.726)	(1.795)	(1.650)	(1.785)
Industry and year FE	Yes	Yes	Yes	Yes	Yes
Other control vars. (GDP, R&D investments)	Yes	Yes	Yes	Yes	Yes
Observations	5,651	5,600	5,169	6,200	5,893

TABLE 6
Corporate philanthropy via a corporate charitable foundation and external corporate governance

The dependent variable is a dummy whether the firm maintains a corporate foundation. Coefficients represent the marginal effects of a logit estimation. Standard errors are reported in parentheses. Variable definitions are presented in Appendix A. ***, **, and * denote the statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Variables	(1) Corporate foundation	(2) Corporate foundation	(3) Corporate foundation	(4) Corporate foundation	(5) Corporate foundation
Largest shareholder	-0.004***				
	(0.001)				
Ownership concentration		-0.025			
		(0.015)			
Control wedge			-0.012***		
			(0.005)		
Government holdings				-0.198**	
				(0.094)	
Institutional owner					0.014
					(0.036)
Individual/family owner					-0.017
					(0.042)
State owner					-0.172***
					(0.044)
ROA	-0.001	-0.001	0.000	-0.000	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Tobin's Q	0.039***	0.044***	0.042***	0.035***	0.036***
	(0.011)	(0.014)	(0.014)	(0.011)	(0.012)
Leverage	0.019	0.019	0.000	-0.006	0.014
	(0.088)	(0.091)	(0.096)	(0.075)	(0.076)
Age	0.022	0.012	0.020	0.026	0.009
	(0.028)	(0.036)	(0.024)	(0.025)	(0.027)
Size	0.142***	0.166***	0.148***	0.143***	0.144***
	(0.014)	(0.016)	(0.010)	(0.011)	(0.011)
Capital expenditures	-0.002	-0.003	-0.003*	-0.003*	-0.003*
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
R&D expenditures	1.250**	1.718***	1.301**	1.279***	1.127**
	(0.493)	(0.542)	(0.557)	(0.385)	(0.438)
Industry and year FE	Yes	Yes	Yes	Yes	Yes
Other control vars. (GDP, R&D investments)	Yes	Yes	Yes	Yes	Yes
Observations	5,904	5,853	5,405	6,478	6,165

TABLE 7
Political donations and internal corporate governance

The dependent variable is political donations scaled by sales and winsorized at 1% and 99%. Estimates are based on a tobit regression. Standard errors are reported in parentheses and clustered at the firm level. Variable definitions are presented in Appendix A. ***, **, and * denote the statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Variables	(1) Political donations	(2) Political donations	(3) Political donations	(4) Political donations	(5) Political donations	(6) Political donations
Staggered board	-0.079					-0.086
	(0.077)					(0.077)
Majority requirement	0.009					0.010
	(0.014)					(0.015)
M&A limitation	-0.005					-0.003
	(0.022)					(0.022)
Golden parachute	-0.000					-0.005
	(0.015)					(0.015)
Poison pill	0.035*					0.032*
	(0.018)					(0.017)
E-index		0.009				
		(0.007)				
Board size			0.002			-0.001
			(0.021)			(0.027)
CEO-chairman duality					0.046***	0.022*
					(0.011)	(0.011)
Anti-takeover devices				0.020**		
				(0.009)		
Tobin's Q	0.009	0.010	0.012**	0.012**	0.010	0.008
	(0.010)	(0.010)	(0.006)	(0.006)	(0.006)	(0.010)
Leverage	-0.000	0.002	0.033	0.050*	0.041	0.010
	(0.041)	(0.040)	(0.031)	(0.031)	(0.031)	(0.042)
Age	0.021**	0.020**	0.015**	0.016**	0.012*	0.019**
	(0.009)	(0.009)	(0.006)	(0.007)	(0.006)	(0.009)
Size	0.031***	0.032***	0.038***	0.032***	0.035***	0.030***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.006)
Capital expenditures	0.003***	0.004***	0.002**	0.002**	0.002**	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
R&D expenditures	0.003**	0.003**	0.004***	0.004***	0.004***	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
ROA	0.001	0.001	-0.000	-0.001	-0.001	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Constant	-1.181**	-1.483***	-0.808***	-0.915***	-0.732***	-1.094**
	(0.521)	(0.546)	(0.149)	(0.190)	(0.130)	(0.538)
Industry and year FE	Yes	Yes	Yes	Yes	Yes	Yes
Other control vars. (GDP, R&D investments)	Yes	Yes	Yes	Yes	Yes	Yes
Observations	712	712	2,606	1,642	2,606	712

TABLE 8
External corporate governance and political donations

The dependent variable is political donations scaled by sales and winsorized at 1% and 99%. Estimates are based on a tobit regression. Standard errors are reported in parentheses and clustered at the firm level. Variable definitions are presented in Appendix A. ***, **, and * denote the statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Variables	(1) Political donations	(2) Political donations	(3) Political donations	(4) Political donations	(5) Political donations	(6) Political donations
Broad governance score	0.001***					
	(0.000)					
Largest shareholder		0.000				
		(0.000)				
Ownership concentration			0.008			
			(0.008)			
Control wedge				0.009		
				(0.009)		
Government holdings					-0.410***	
					(0.102)	
Institutional owner						-0.001
						(0.016)
Individual/family owner						0.017
						(0.019)
State owner						-0.030
						(0.033)
ROA	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Tobin's Q	0.010**	0.010	0.010	0.006	0.011*	0.011*
	(0.005)	(0.007)	(0.007)	(0.006)	(0.006)	(0.006)
Leverage	0.035	0.039	0.038	0.039	0.031	0.040
	(0.021)	(0.032)	(0.031)	(0.033)	(0.031)	(0.031)
Age	0.015***	0.017**	0.014**	0.017**	0.015**	0.016**
	(0.004)	(0.007)	(0.006)	(0.007)	(0.006)	(0.006)
Size	0.035***	0.039***	0.037***	0.037***	0.038***	0.038***
	(0.002)	(0.005)	(0.004)	(0.005)	(0.004)	(0.004)
Capital expenditures	0.002***	0.002**	0.002**	0.002**	0.002**	0.002**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
R&D expenditures	0.004***	0.004***	0.004***	0.004***	0.004***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Constant	-0.669***	-0.835***	-0.793***	-0.856***	-0.770***	-0.755***
	(0.070)	(0.160)	(0.150)	(0.158)	(0.141)	(0.140)
Industry and year FE	Yes	Yes	Yes	Yes	Yes	Yes
Other control vars. (GDP, R&D investments)	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,606	2,430	2,313	2,305	2,598	2,507

Table 9
Corporation donations and shareholder protection

This table shows the relation between total charitable and political donations as well the use of a corporate foundation, as dependent variables, and anti-director rights and shareholder voting rights as main explanatory variables. Models 1-4 are tobit regressions, models 5-6 are logistic regressions (for which marginal effects are shown). Robust and clustered standard errors are reported in parentheses. Variable definitions are presented in Appendix A. ***, **, and * denote the statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Total charitable donations	Total charitable donations	Political donations	Political donations	Corporate foundation	Corporate foundation
ADRI	-0.313***	-0.535***	-0.032***	-0.048***	-0.260***	-0.207***
	(0.111)	(0.164)	(0.006)	(0.009)	(0.050)	(0.045)
ADRI × Largest shareholder		0.013***		0.001***		-0.001**
		(0.005)		(0.000)		(0.000)
Largest shareholder		-0.042**		-0.004***		0.009
		(0.018)		(0.001)		0.014
ROA	0.039**	0.043**	-0.001	-0.001	0.000	0.000
	(0.019)	(0.020)	(0.001)	(0.001)	(0.001)	(0.000)
Tobin's Q	0.216	0.174	0.006	0.004	0.013**	0.011**
	(0.132)	(0.140)	(0.005)	(0.006)	(0.005)	(0.004)
Leverage	-0.625	-0.491	0.028	0.040	-0.024	-0.017
	(0.520)	(0.512)	(0.028)	(0.029)	(0.034)	(0.026)
Age	-0.283**	-0.265**	0.015**	0.017**	0.008	0.005
	(0.129)	(0.135)	(0.006)	(0.007)	(0.008)	(0.006)
Size	0.264***	0.234***	0.028***	0.027***	0.051***	0.038***
	(0.079)	(0.083)	(0.004)	(0.004)	(0.009)	(0.007)
CapEx	0.048*	0.031	0.002***	0.002**	-0.001*	-0.001*
	(0.027)	(0.021)	(0.001)	(0.001)	(0.001)	(0.001)
R&D expenditures	0.273***	0.268***	0.003***	0.003***	0.125	0.115
	(0.078)	(0.078)	(0.001)	(0.001)	(0.178)	(0.123)
Constant	-1.092	-0.140	-0.391***	-0.333**		
	(1.628)	(1.771)	(0.132)	(0.145)		
Industry and year FE	Yes	Yes	Yes	Yes	Yes	Yes
Other control vars. (GDP, R&D investments)	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,698	6,081	2,796	2,606	6,975	6,332

TABLE 10
Total charitable donations and firm value (IV approach)

The dependent variable is either Tobin's Q, ROA, or yearly sales growth, winsorized at 1% and 99%. Estimates are based on a 2SLS instrumental variable regression, with the first stage regression reported in the first column. The instrumental variable is the year's average total charitable donations by industry peers in the same country. Standard errors are reported in parentheses. Variable definitions are presented in Appendix A. ***, **, and * denote the statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	First stage	*Second stage*					
Variables	Total charitable donations	Tobin's Q	Future Tobin's Q	ROA	Future ROA	Sales growth	Future sales growth
IV: Total charitable donations by local industry peers	0.656***						
	(0.124)						
Predicted total charitable donations		0.048***	0.023***	0.152**	0.057	-0.002	0.005**
		(0.008)	(0.007)	(0.063)	(0.073)	(0.002)	(0.002)
ROA	0.004	0.029***	0.029***				
	(0.008)	(0.001)	(0.001)				
Leverage	-0.206	-0.021	-0.378***	-6.681***	-0.693	-0.028	-0.010
	(0.587)	(0.076)	(0.077)	(0.692)	(0.804)	(0.020)	(0.021)
Age	-0.240*	0.019	-0.016	-0.191	-0.011	-0.020***	-0.010**
	(0.125)	(0.021)	(0.021)	(0.176)	(0.197)	(0.004)	(0.004)
Size	0.034	-0.189***	-0.141***	-0.835***	-1.342***	-0.002	-0.010***
	(0.071)	(0.010)	(0.009)	(0.083)	(0.092)	(0.002)	(0.002)
Capital expenditures	0.018	0.005***	-0.001	0.159***	-0.009	0.006***	0.004***
	(0.012)	(0.002)	(0.002)	(0.016)	(0.018)	(0.001)	(0.001)
R&D expenditures	0.153***	0.017***	0.027***	-0.061	0.010	0.001	0.000
	(0.048)	(0.005)	(0.005)	(0.039)	(0.045)	(0.001)	(0.001)
Constant	0.937	5.318***	4.977***	30.493***	39.485***	0.597***	0.613***
	(1.538)	(0.229)	(0.223)	(1.917)	(2.171)	(0.048)	(0.051)
Industry and year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other control vars. (GDP, R&D investments)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,484	6,441	6,389	8,266	6,362	7,971	6,439
Number of firms	1,548	1,539	1,514	1,867	1,513	1,854	1,525

TABLE 11
In-kind charitable donations and firm value (IV-approach)

The dependent variable is either Tobin's Q, ROA, or yearly sales growth, winsorized at 1% and 99%. Estimates are based on a 2SLS instrumental variable regression, with the first stage regression reported in the first column. The instrumental variable is the year's average in-kind charitable donations by industry peers in the same country. Standard errors are reported in parentheses. Variable definitions are presented in Appendix A. ***, **, and * denote the statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

	First stage	*Second stage*					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	In-kind charitable donations	Tobin's Q	Future Tobin's Q	ROA	Future ROA	Sales growth	Future sales growth
IV: In-kind charitable donations by local industry peers	0.552***						
	(0.140)						
Predicted in-kind charitable donations		0.012	0.020**	-0.010	0.138*	0.002	0.003*
		(0.010)	(0.008)	(0.078)	(0.079)	(0.002)	(0.002)
ROA	-0.058**	0.026***	0.030***				
	(0.027)	(0.003)	(0.003)				
Leverage	-0.203	-0.698***	-0.581***	-10.815***	-3.460	0.018	0.003
	(1.830)	(0.206)	(0.220)	(1.863)	(2.141)	(0.049)	(0.048)
Age	-0.393	0.033	0.059	-0.064	0.341	-0.015	-0.019**
	(0.346)	(0.048)	(0.048)	(0.400)	(0.457)	(0.009)	(0.009)
Size	0.434	-0.183***	-0.165***	-1.068***	-1.631***	-0.001	-0.012**
	(0.303)	(0.027)	(0.025)	(0.224)	(0.244)	(0.005)	(0.005)
Capital expenditures	0.050	0.008	-0.015***	0.311***	-0.030	0.004***	0.007***
	(0.046)	(0.006)	(0.006)	(0.054)	(0.059)	(0.002)	(0.001)
R&D expenditures	0.352***	0.020**	0.010	-0.013	0.032	-0.000	-0.001
	(0.118)	(0.009)	(0.009)	(0.079)	(0.089)	(0.002)	(0.002)
Constant	-7.664	5.000***	5.827***	20.490***	34.559***	0.297*	0.325**
	(6.149)	(0.763)	(0.797)	(6.760)	(7.687)	(0.163)	(0.159)
Industry and year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other control vars. (GDP, R&D investments)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,085	1,079	1,004	1,285	997	1,235	1,009
Number of firms	333	331	317	405	318	390	320

TABLE 12
Cash charitable donations and firm value (IV approach)

The dependent variable is either Tobin's Q, ROA, or yearly sales growth, winsorized at 1% and 99%. Estimates are based on a 2SLS instrumental variable regression, with the first stage regression reported in the first column. The instrumental variable is the year's average cash charitable donations by industry peers in the same country. Standard errors are reported in parentheses. Variable definitions are presented in Appendix A. ***, **, and * denote the statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

	First stage	*Second stage*					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	Cash charitable donations	Tobin's Q	Future Tobin's Q	ROA	Future ROA	Sales growth	Future sales growth
IV: Cash charitable donations by local industry peers	0.746***						
	(0.134)						
Predicted cash charitable donations		0.075**	0.061**	1.197***	-0.016	-0.014**	0.016**
		(0.032)	(0.029)	(0.228)	(0.282)	(0.007)	(0.008)
ROA	0.001	0.029***	0.027***				
	(0.005)	(0.002)	(0.003)				
Leverage	-0.345	-0.521***	-0.678***	-8.202***	-2.573	-0.020	0.028
	(0.298)	(0.168)	(0.181)	(1.487)	(1.792)	(0.043)	(0.048)
Age	-0.030	-0.006	-0.004	-0.120	-0.047	-0.013*	-0.016*
	(0.072)	(0.039)	(0.040)	(0.320)	(0.378)	(0.008)	(0.009)
Size	0.047	-0.195***	-0.169***	-0.842***	-1.258***	-0.002	-0.013***
	(0.045)	(0.019)	(0.019)	(0.160)	(0.183)	(0.004)	(0.004)
Capital expenditures	0.011	0.003	-0.013***	0.112***	-0.080*	0.004***	0.003**
	(0.008)	(0.005)	(0.005)	(0.039)	(0.048)	(0.001)	(0.001)
R&D expenditures	0.033**	0.025***	0.018**	-0.071	0.095	0.002	0.001
	(0.014)	(0.007)	(0.007)	(0.060)	(0.070)	(0.002)	(0.002)
Constant	-0.671	5.689***	5.637***	27.414***	35.570***	0.490***	0.503***
	(0.899)	(0.605)	(0.618)	(5.041)	(5.943)	(0.131)	(0.148)
Industry and year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other control vars. (GDP, R&D investments)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,459	1,450	1,450	1,872	1,442	1,764	1,460
Number of firms	489	485	495	631	494	605	499

TABLE 13
Political charitable donations and firm value (IV approach)

The dependent variable is either Tobin's Q, ROA, or yearly sales growth, winsorized at 1% and 99%. Estimates are based on a 2SLS instrumental variable regression, with the first stage regression reported in the first column. The instrumental variable is the year's average political donations by industry peers in the same country. Standard errors are reported in parentheses. Variable definitions are presented in Appendix A. ***, **, and * denote the statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

	First stage	*Second stage*					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	Political donations	Tobin's Q	Future Tobin's Q	ROA	Future ROA	Sales growth	Future sales growth
IV: Political donations by local industry peers	0.892***						
	(0.086)						
Predicted political donations		47.263	-9.967	198.918	-41.498	-4.756	1.995
		(47.601)	(11.550)	(241.961)	(172.611)	(3.688)	(2.311)
ROA	0.000	0.022***	0.034***				
	(0.000)	(0.005)	(0.002)				
Leverage	0.001	0.075	-0.501***	-7.298***	-0.178	-0.038	-0.034
	(0.006)	(0.381)	(0.132)	(1.970)	(1.647)	(0.039)	(0.031)
Age	0.002	-0.156	0.023	-0.349	0.921	-0.002	-0.020**
	(0.002)	(0.196)	(0.053)	(1.106)	(1.133)	(0.015)	(0.008)
Size	0.001	-0.344**	-0.085**	-1.441**	-2.178***	0.015	-0.016*
	(0.001)	(0.157)	(0.039)	(0.651)	(0.413)	(0.014)	(0.008)
Capital expenditures	-0.000	0.003	0.004	0.220***	0.018	0.006***	0.003**
	(0.000)	(0.009)	(0.004)	(0.044)	(0.041)	(0.001)	(0.001)
R&D expenditures	0.001*	-0.027	0.037***	-0.263	-0.057	0.006	-0.001
	(0.000)	(0.058)	(0.013)	(0.224)	(0.137)	(0.005)	(0.003)
Constant	-0.030	9.644**	3.136***	35.985*	44.450**	0.097	0.611***
	(0.025)	(4.894)	(1.011)	(20.239)	(17.293)	(0.352)	(0.220)
Industry and year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other control vars. (GDP, R&D investments)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,734	2,467	2,313	2,821	2,298	2,729	2,324
Number of firms	657	602	585	659	580	655	588

TABLE 14 Diff-in-Diff:
Political donations around 2010 UK elections

The dependent variable is Tobin's Q, winsorized at 1% and 99%. Year variables are dummies that equal one if for the reflected years and zero otherwise. .Robust standard errors are reported in parentheses. Variable definitions are presented in Appendix A. ***, **, and * denote the statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Variables	(1) Tobin's Q	(2) Tobin's Q
Political donations	0.190	-2.026
	(2.135)	(2.404)
Political donations * Year 2010	0.774	
	(1.699)	
Year 2010	0.137***	
	(0.024)	
Political donations * Year 2010 or later		0.114
		(3.576)
Year 2010 or later		0.088***
		(0.033)
ROA	0.012***	0.012***
	(0.003)	(0.003)
Government holdings	-0.128	-0.259
	(0.404)	(0.455)
Leverage	0.455*	0.478*
	(0.261)	(0.263)
Age	-0.061	-0.052
	(0.057)	(0.057)
Size	-0.280***	-0.283***
	(0.058)	(0.058)
Capital expenditures	0.009**	0.010***
	(0.004)	(0.004)
R&D expenditures	2.279	2.257
	(1.805)	(1.824)
Constant	-19.681***	-18.920***
	(1.721)	(1.701)
Industry FE	Yes	Yes
Other control vars. (GDP, R&D investments	Yes	Yes
Observations	1,761	1,761
Number of firms	318	318

Appendix A: Variable definitions

Variables	Definitions	Source
Corporate philanthropy variables		
Total charitable donations	Donations to charitable (i.e. tax-exempt) organizations: sum of cash charitable donations and in-kind charitable donations, scaled by sales: log(1 + total donations / sales) x 10^3 [w]	ASSET4
In-kind charitable donations	In-kind donations to charitable (i.e. tax-exempt) organizations: pro-bono services, products, volunteer work, support of research, shares, and other non-cash assets. Scaled by sales: log(1 + in-kind donations / sales) x 10^3 [w]	ASSET4
Cash charitable donations	Cash donations to charitable (i.e. tax-exempt) organizations: direct cash giving and cash giving via a corporate foundation. Scaled by sales: log(1 + cash donations / sales) x 10^3 [w]	ASSET4
Political donations	Expenditures on political lobbying: support of political candidates and contributions to parties, scaled by sales: log(1 + political donations / sales) x 10^3 [w]	ASSET4
Corporate foundation	Equals 1 if firm has established a corporate foundation (separate legal entity, that is exempt from paying taxes, receives funding from parent company, and is usually controlled by parent company's employees or directors (Petrovits, 2006)).	ASSET4
Corporate financial performance variables		
Tobin's Q	Market value over book value of total assets: ((total assets – book value of common equity + market value of common equity) / total assets) [w]	Worldscope
ROA	Net income / book value of total assets [w]	Worldscope
Sales growth	Yearly growth in net sales: ln(sales year t / sales year t-1) [w]	Worldscope
Internal governance variables		
Staggered board	Equals 1 if all board members are not individually subject to re-election every year because of a staggered or classified board structure	ASSET4
Majority requirement	Equals 1 if shareholders ability to amend corporate charters or bylaws is limited by a supermajority or qualified majority vote requirement	ASSET4
M&A limitation	Equals 1 if shareholder rights to vote on significant company transitions such as M&As are limited, e.g. by a supermajority requirement or no rights to vote	ASSET4
Golden parachute	Equals 1 if firm has a severance agreement that provides benefits to management/board members in the event of firing, demotion, or resignation following a change in control	ASSET4
Poison pill	Equals 1 if a shareholder right is triggered in the event of an unauthorized change in control that makes the target company financially unattractive or dilutes the voting power of acquirer	ASSET4
E-index	Managerial entrenchment reflected by the entrenchment index as defined by Bebchuk et al. (2009): sum of the five internal corporate governance dummy variables above	Own
Board size	Logarithm of total number of members of the board directors	ASSET4
CEO-chair duality	Equals 1 if chairman of the board is also (ex-)CEO	ASSET4
Anti-takeover devices	Number of other anti-takeover devices (e.g. limitation of director liability, people pill, customer refund program) in place in excess of two.	ASSET4
Dual class shares	Equals 1 if company has a dual class share structure	ASSET4
External governance variables		

Largest shareholder	Percentage of ownership (i.e. cash-flow rights) held by the direct shareholder with the most voting rights	ASSET4
Ownership concentration	Degree to which direct and indirect ownership is concentrated in hands of single shareholder. Equals 0 for independent firm: no shareholder with < 25% of direct or total ownership; equals 1 if minority owned: at least one shareholder with >25% of direct or total ownership; equals 2 if indirectly majority owned: one shareholder with >50% of total ownership; equals 3 if directly majority owned: one shareholder with >50% of direct ownership.	Orbis
Control wedge	Largest shareholder's cash-flow rights minus its voting rights	ASSET4
Government holdings	Ownership percentage by government or government institutions holding more than 5%	ASSET4
Industrial owner	Equals 1 if ultimate owner[uo] is an industrial company.	Orbis
Institutional owner	Equals 1 if ultimate owner[uo] is a bank, insurance company, financial company, private equity firm, venture capitalist, hedge fund, or mutual/pension fund.	Orbis
Individual/family owner	Equals 1 if ultimate owner[uo] is one or more named individuals or families.	Orbis
State owner	Equals 1 if ultimate owner[uo] is a public authority, state, or government.	Orbis
Firm level variables		
Leverage	Long-term debt / total assets	Worldscope
Age	Logarithm of number of years since firm incorporation	Orbis
Size	Logarithm of firm's total assets book value (in USD)	Worldscope
Capital expenditures	Capital expenditures / total assets [w]	Worldscope
R&D expenditures	R&D expenditures / sales [w]	Worldscope
Industry dummies	Based on industry classifications by NACE Rev. 2	Orbis
Country level variables		
ADRI	Anti-director rights index: shareholder legal protection against management, based on Spamann's (2010) corrected version of the original index by La Porta et al. (1998). High value is high level of investor protection. Index is based on 3 dummy variables related to shareholder voting (voting by mail, voting without blocking of shares, and calling an extraordinary meeting) and 3 variables related to minority protection (proportional board representation, preemptive rights, and judicial remedies)	Spamann (2010)
Country dummies	Based on country classifications by Reuters	Worldscope
GDP per capita	Logarithm of GDP divided by midyear population (in current USD)	Worldbank

W = winsorized at the 1% level to account for extreme outliers. UO = Ultimate owner is shareholder with highest direct or total % of ownership, but at least 25%. If this highest shareholder does not have an owner holding more than 25% of his shares, the shareholder is considered as independent and defined as the ultimate owner of the subject company. The process is repeated until the final ultimate owner is identified (and not further ultimate owner can be identified higher up in the pyramid.