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Keywords

corporate philanthropy, institutional environment, multinational enterprises

Disciplines

Corporate Finance | Management Sciences and Quantitative Methods

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Abigail S. Hornstein* and Minyuan Zhao**

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1. Introduction

In recent years, a large literature has investigated the motivations as well as performance implications of corporate charitable giving (e.g., Navarro, 1988; Rodriguez, Siegel, Hillman and Eden, 2006; Benabou and Tirole, 2010). Do firms give because they expect to do well as a result? This perspective is commonly referred to as the value enhancement theory for corporate philanthropy as it would enhance customer loyalty, decrease the firm's systematic risk, and provide insurance that protects companies in difficult times (Godfrey, 2005; Godfrey, Merrill, and Hansen, 2009; Albuquerque, Durnev, and Koskinen, 2013). However, if the firm's charitable giving comes at the expense of alternative uses that might better enhance shareholder value, then corporate philanthropy might represent an agency cost (Brown, Helland, and Smith, 2006). Empirical studies have generated mixed evidence favoring both the value enhancement and agency cost hypotheses.

One possible reason for the mixed evidence is that both charitable giving and firm performance are measured at the firm level and thus may be driven by the same unobserved firm characteristics. McWilliams and Siegel (1997) also suggest that charitable activities occur at the plant or product level, so the use of firm-level data such as stock prices might not be appropriate. Nonetheless, most research on corporate philanthropy continues to rely on firm-level observations due to data constraints. By introducing intra-firm variation into the picture, multinational enterprises (MNEs) offer an excellent setting for identifying important internal and external factors behind charitable giving. Specifically, we examine how MNEs' donations to foreign charitable organizations vary depending on local institutional environments and the nature of the firm's presence in that country.

If corporate giving is purely philanthropic or for the consumption of corporate executives, then charitable flows to a foreign country should not correlate with the type of business an MNE conducts in that country, given firm characteristics. Moreover, since most charitable giving passes through local NGOs, international organizations, or their local affiliates, we would expect higher levels of charitable giving in countries with more effective and less corrupt local governments because donors would expect their money to be used in a more efficient and transparent manner. On the other hand, if corporate giving is a vehicle for gaining reputation in the market (Fombrun and Shanley, 1990), overcoming liabilities of foreignness (Zaheer, 1995), or building ties with local stakeholders (Henisz, Dorobantu, and Nartey, 2013), we would expect the level of giving to be higher when there is less transparency in the local business environment, and when accessing local networks is important for the operations of the local subsidiaries.

Using a unique dataset of cross-border charitable giving by 152 U.S.-based MNEs from 1993 to 2008, we find that firms are more likely to give to charities in host countries where the government is less effective, more corrupt, and lacking in checks and balances. This suggests that MNEs use charitable giving as a means to navigate opaque foreign institutions. We also find that MNEs are more likely to make cross-border donations in a newly entered market, where the need to reduce information asymmetry or build legitimacy is the strongest. Finally, charitable giving is higher when the local subsidiaries are actively engaged in marketing or supply chain management, both requiring stronger connections with local stakeholders. These results are consistent with the view that corporate philanthropy is part of the overall corporate strategy (Porter and Kramer, 2002), and firms are *doing good* for the purpose of *doing well*.

2. MNEs and Corporate Philanthropy

MNEs represent a unique combination of assets and resources in which far-flung units may have interests that overlap with, or diverge from, those of their parent companies (Greene, Hornstein, and White, 2009). They are also exposed to different markets and institutional environments in different countries. Accordingly, MNEs may adopt practices or policies that vary according to labor market characteristics (e.g., setting up labor-intensive operations in countries with lower-cost labor), regulatory characteristics (e.g., locating knowledge-intensive activities in countries with stronger protections for intellectual property rights), and consumer preferences (e.g., altering the product mix by market). What is particularly interesting about MNE's philanthropic strategy is that charitable donations are a relatively generic practice—unlike product offerings or customer services—and yet it varies significantly depending on the firm's local operations and the business environments in the host countries.

2.1 *Philanthropy as a part of corporate strategy*

Researchers have developed various theoretical frameworks to help understand the antecedents and consequences of corporate philanthropy. Most of them have modeled corporate philanthropy—and corporate social responsibility (CSR) in general—as part of firms' differentiation strategies with regard to customers, employees, or other stakeholders (Rodriguez et al., 2006). Internally, firms may engage in CSR to attract talented employees who care for social or environmental causes. Externally, firms may use CSR to differentiate themselves in markets characterized by information asymmetry (McWilliams and Siegel, 2001; Siegel and Vitaliano, 2007). Extending the demand-side considerations, Fisman et al. (2006) test the theory that corporate philanthropy acts as a “signal of trustworthiness” and thus correlates positively

with market competition: in industries where firms are able to signal their type to consumers (i.e., advertising-intensive industries), firms tend to spend more on charity, while in industries with low need or ability to signal, charitable giving is more likely to correlate negatively with profits. Moreover, positive returns from charity are significant only for agents with limited tracking records and hence greater information asymmetry with customers (Elfenbein et al., 2012). Similarly, Siegel and Vitaliano (2007) investigate if industry type could predict a firm's CSR engagement. They find that firms selling experience goods and credence services, about which information is highly asymmetric, tend to have stronger CSR, supporting their assertion that "CSR is a form of advertising to establish or sustain brand loyalty."

2.2 Philanthropy as a response to the institutional environment

With globalization, more firms are venturing abroad and interacting with various host governments and social activists. The heterogeneity of institutional environments across countries is well documented. For example, Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2002) find large differences across countries in terms of the time, number of procedures, and costs involved in establishing a new business. Accordingly, firms often adjust their organizational structures in response to local institution characteristics. In countries with weak institutions, firms overcome these "institutional voids" by either forming large internal markets (Khanna and Palepu, 1997) or investing heavily in political ties (Zhao, Fogel, Morck, and Yeung, 2010). As a result, MNEs with more experience in countries with high political hazards are less sensitive to such hazards when they entered new markets (Delios and Henisz, 2003; Perkins, forthcoming). MNEs are also in a unique position to arbitrage opportunities across countries (Ghemawat, 2003). For instance, by relying on internal complementarities for knowledge protection, MNEs can take advantage of the lower cost of human capital in countries

with weak intellectual property rights protection while also minimizing the negative impact of knowledge outflows (Zhao, 2006).

Together with the expansion of MNEs, foreign charitable giving is also increasing in both value and frequency. According to the Committee on Encouraging Philanthropy (2010), by the end of 2009, 21-26% of all charitable giving by larger U.S. manufacturing corporations and 4-7% of donations made by U.S. service companies were going to overseas organizations. Our conversations with managers in charge of the charitable programs of large MNEs confirmed that cross-border giving is an important part of their charitable programs, and the firms' local offices or subsidiaries have significant influence on the scale and direction of cross-border giving. In fact, if firms consider charitable giving to be a de facto cost of doing business, then their donations to organizations in foreign countries can be more or less considered an extension of FDI. Thus, local institutional environments and specific local operations will shape the philanthropic practices MNEs adopt in different countries.

There has been a large literature on the antecedents and consequences of domestic charitable giving (see Kitzmueller and Shimshack, 2012, for a comprehensive overview). However, little is known so far about cross-border giving by MNEs, probably due to data limitations. The few papers in the field of corporate philanthropy have examined how institutional environments in the host countries influence MNEs' CSR behavior. For example, Luo (2006) provides several hypotheses regarding the inter-relationships between a multinational firm's political behavior, CSR activities, and the firm's perceptions of whether the host environment is corrupt. Based on survey data and archival sources covering 350 foreign-owned subsidiaries in China, Luo reports that an increase in the perceived level of corruption decreases MNEs' philanthropic contributions. Brammer, Pavelin, and Porter (2009) suggest that firm-level

charitable giving is not directly affected by firm-level internationalization, but is positively associated with the firm's presence in countries with extremely weak political rights or civil liberties. However, neither Luo (2006) nor Brammer et al. (2009) examine variations in charitable giving across countries.

We propose that MNEs operating overseas are exposed to demands from various stakeholders in multiple countries. Institutional environments in host countries where MNE units operate may influence not only their parent firm's overall giving strategy, but giving in the specific host country. If corporate philanthropy is associated with a firm's reputation in the global market (both for products and for human capital), as suggested by Brammer et al. (2009), then it will not matter in what countries the firm gives, and there will be no systematic relationship between overseas charitable giving and market entry. However, if corporate philanthropy is meant to help firms overcome country-specific information asymmetries and reach stakeholders in the absence of a transparent business environment, then we expect to observe the effects of (1) local institutions and (2) the type of business being conducted in the host countries on charitable giving in the host countries.

3. Empirical Framework

3.1 Data sources

We obtain data on U.S. corporations' philanthropic donations to foreign recipients from the Foundation Center's grant database. The dataset identifies every grant of \$10,000 or more given by a U.S. organization intended for a foreign recipient, whether it went directly to the foreign recipient or went indirectly via an intermediary organization such as the Red Cross in the U.S. or abroad. Brown et al. (2006) show that most large firms establish charitable foundations

for the purpose of corporate philanthropy: 83.9% of the firm observations have foundations. In addition, 42.0% of the corporate foundations involve their CEOs in foundation management, and 62.4% of them involve at least one top corporate executive (CEO, CFO, COO). Thus, we feel confident that, while all grants in our sample are technically made by charitable foundations, they represent the strategic directions of the parent corporations behind these foundations. To avoid idiosyncratic observations, we excluded from analysis all grants that represent the sole foreign grant given to any recipients in a country in a particular year.¹ Grants given to a broad area (e.g., Southeast Asia) or a large group of countries (e.g., developing countries) are excluded as it is not clear how the grant's value should be apportioned across recipient countries.

Information about the corporate foundations' total assets, total giving, and philanthropic goals was obtained from the Foundation Center's Map of Cross-Border Giving and supplemented with data from GuideStar. In addition, we use Compustat to construct measures of firm performance and financial constraints. At the firm-country level, we use the Directory of Corporate Affiliations (DCA) from Lexis-Nexis to construct measures of the firm's footprint in each country. Country level data were obtained from three sources: Data on economic assistance for each country was obtained from the OECD's Query Wizard for International Development Statistics, while economic and institutional characteristics (i.e., the World Governance Indicators) were obtained from the World Bank and Henisz (2000).

Finally, we restricted our analysis to publicly-listed firms incorporated and headquartered in the U.S. Following traditions in international economics, we excluded firms in the highly regulated industries such as finance, insurance, real estate, and legal services from our analysis.

¹ This rule led to the dropping of several smaller countries such as Burma/Myanmar from the dataset. If this exclusion rule is set higher so that we only include a country-year if there were at least three distinct grants given to local organizations in a year, then several major countries such as Mexico drop out of the sample for multiple years.

3.2 Empirical model

Individual corporate charitable grants can be part of an overarching program set by the headquarters, or they can be the results of influence from the country-level managers who oversee the firm's actual on-the-ground activities. Accordingly, charitable giving by firm i in country c and year t is depending on a series of firm, unit, and country characteristics:

$$\ln(\text{Giving}_{ict}) = \beta_0 + \beta_1 \text{Firm}_{it} + \beta_2 \text{Firm}_{ict} + \beta_3 \text{Country}_{ct} + \nu_i + \eta_t + \varepsilon_{ict}. \quad [1]$$

The vector of firm-year variables, Firm_{it} , is included in all regressions to control for firm-level characteristics while the vector of firm-country-year variables, Firm_{ict} , are included in most regressions to capture various aspects of the firm's presence in the host country. In addition, a set of country characteristics are included to control for local need for foreign donations and the firm's ability to derive value from the local market. Firm and year fixed effects are included in all regressions. Because we can only observe grants of \$10,000 or more, we use a truncation model to allow the possibility that the observations of zero donations are driven by a different mechanism. Finally, robust standard errors are clustered at the firm-year level.

3.3 Variables

Table 1 reports the definitions of all variables and Table 2 reports the summary statistics. In total, the dataset includes 152 firms distributed in a wide array of industries, with the majority in food and kindred products, chemicals and allied products, primary metal industries, electronic and other equipment, and instruments and related products.

Our work builds on the debate as to whether the agency theory or value enhancement theory explains the observed patterns of corporate philanthropy. Our corporate-level independent

variables and country-level institutional characteristics, as described in the following sections, can be interpreted as supporting one or the other of these two theories in the context of MNEs.

3.3.1 Philanthropy

The 152 firms in our dataset made 1,063 grants to recipients in 70 countries, ranging from \$10K (the truncation point) to \$10M (Coca-Cola's donation to Vision Mexico in 2004). To avoid skewness, we take the logarithm of the donation amount in our analysis. We also include the total value of all philanthropic donations made by the firm in a particular year world-wide less donations to the focal country. Total giving elsewhere controls for any idiosyncratic firm-level events in the particular year, which may have affected the firm's general tendency to make charitable donations. It also allows us to identify whether giving in a particular country substitutes for or complements grants given to organizations in other countries.

The Foundation Center indicates up to two purpose codes for each grant based on the textual description of each grant. Some of these codes are similar enough that we can tell a code has been given for a narrow purpose (e.g., B20 captures elementary and secondary education while B25 denotes only secondary education). On the other hand, it is harder to tell the true purpose of a grant when it has been assigned two more dissimilar codes such as B20 for secondary education and W52 for telecommunication services. Brown et al. (2006) report that most firms make the majority of their charitable donations in areas that directly complement their businesses (e.g., pharmaceutical firms donate to health and medical related causes). We therefore use the broader sample in our main analysis, and include only those grants that have one type of purpose code in robustness checks.

3.3.2 Firm-level characteristics

The set of firm-level covariates includes five characteristics of a firm that might affect its ability or willingness to make charitable donations in a given year. First, we include the log of property, plant, and equipment (PPE) because PPE is a relatively stable measure of firm size. PPE is also known to be highly correlated with firm age, and larger and older firms are both more likely to have corporate foundations and to donate extensively and routinely to charitable causes.

Second, financial constraints greatly affect a firm's ability to conduct philanthropy by tightening their budget constraint (Hong, Kubik, and Scheinkman, 2012). To the extent that managers may perceive charitable giving to be a personal perquisite of power, monitoring by external financiers may serve as a check on their ability to indulge in pet projects (Jensen, 1986; Cheng, Hong, and Shue, 2013). Thus, we control for the firms' financial leverage, which is measured as the ratio of total loans and liabilities to total assets.

Third, while corporate foundations are expected to operate at arm's length from their parent firm and try to maintain stable giving levels (Brown et al., 2006), a corporation's charitable giving may be higher in years when the firm itself has higher levels of free cash flow. To control for the possibility that cash flows may be related to the level of charitable giving, we include liquidity, the ratio of cash and short-term investments to total assets, in our analysis.

Finally, we also control for the value of research and development (R&D) in progress, and advertising intensity. Firms that engage in active R&D are more likely to have high intangible assets and thus experience higher information asymmetry with external stakeholders. Meanwhile, firms with high advertising intensity are more likely to compete in highly

competitive industries in which corporate philanthropy has the greatest impact on firm performance (Fisman et al., 2006).

3.3.3 *Firm characteristics in the host country*

A firm's presence in the host country is captured by some firm-country-year level variables obtained from the DCA. A firm may donate money to organizations in a particular country because the firm is more aware of local need for philanthropy or because the firm expects local reputational gains stemming from such donations. In the former case, we would expect higher levels of charitable giving in countries where the MNE has had a larger presence. On the other hand, corporate philanthropy may be designed for MNEs to overcome liability of foreignness (Zaheer, 1995) in a newly entered market. If firms use charitable giving to signal quality or reliability in an environment featured by information asymmetry, we should see higher levels of giving with new entries. We use the dummy variable *new-entry* to indicate whether the MNE entered the host country within the past five years.

In addition, we control for the relationship between the local subsidiary and the parent company with a diversification variable: the percentage of subsidiaries in a firm-country-year that have no overlap with the headquarters' SIC codes. Subsidiaries that show up with different SIC codes are often outside of the main businesses of the company and thus draw less attention from the corporate foundation.

The nature of presence in the host country is proxied by the titles of top managers at the local subsidiaries. Since only a handful of names are shown for each subsidiary, we believe that these managers represent the most important functions of the subsidiary and hence their primary activities in the host country. We expect that the activities of the local subsidiaries will

significantly influence the need for connections with the local community or political support, and hence the extent to which the firm may benefit from donating to organizations within the country. For example, the success of sales and marketing depends on the perception of the firm from the local community, and the management of supply chains is closely related to the rapport with local regulators, particularly in developing countries. Using data from DCA, we categorize all job titles into five groups: Top management team and board members (TMT), research and development (R&D), manufacturing, sales and marketing, alliances and corporate outreach, and supply chain management. We use the titles for functional departments (e.g., head of human resources, accounting and legal services) as the default type in the regressions.

3.3.4 Host country characteristics

Because our sample firms are all U.S.-based MNEs, we control for the possibility that a firm would be more likely to donate to countries with which it has a greater familiarity or to countries that are considered more in need of assistance. As most firms begin their international expansion through investments in similar markets ([Ghemawat, 2003](#)), it is possible that that U.S. MNEs may give more in relatively wealthier countries. Alternatively, the firm may desire to help fulfill unmet social needs, and such needs may be greater in poorer countries. We therefore include GDP per capita in our analysis.

GDP per capita measures average wealth but not social inequities within a country. Thus, we use total overseas development assistance (ODA) aid to a country (not just ODA from the U.S.) to proxy for the aggregate local need for aid. We also use the component measure “developmental food aid” to capture a specific aspect of ODA closely related to the needs of the poor. If firms donate for the purpose of improving local conditions or helping the local poor, we

should see more monies flowing to poorer countries and countries with a higher level of unmet needs from the poor. Both ODA and developmental food aid include outright grants as well as subsidized loans.²

To control for the possibility that cross-border giving is driven by major natural disasters or other unexpected events, we obtained the dataset from the Center for Research on the Epidemiology of Disasters (CRED), which contains over 15,000 extreme weather events from 1960 to 2013. We use a dummy variable to indicate whether there was at least one natural disaster in each country-year.

Another reason for more local giving is the pressure from local NGOs. A large presence of NGOs may indicate an activism culture that encourages more giving by firms. We capture the presence of local NGOs with data from the Yearbook of International Organizations compiled by the Union of International Associations, which covers 66,000 Intergovernmental Organizations (IGOs) and International Nongovernmental Organizations (INGOs) in 300 countries and territories. We include a simple count of NGO numbers in each country-year in all regressions.

A key focus of our attention is the host country's institutional environment. We obtain country-level governance data from the World Bank's Worldwide Governance Indicators (WGI) databases, and the political constraint dataset from Henisz (2000). Wang and Qian (2011) argue that corporate philanthropy enables firms to gain socio-political legitimacy and thus enjoy reputational benefits from stakeholders and gain political access that may improve their ability to operate profitably in that country. Political connections enable firms to commence operations in a country and smooth the way for continued success in that country. Thus, firms that lack

² This variable will show up as negative if the country made net debt payments in the year.

political connections may use philanthropy to generate governmental goodwill (Ma and Parish, 2006; Neiheisel, 1994), while firms that already have political connections may make donations in anticipation of future need for political benefits (Li and Zhang, 2007; Peng and Luo, 2000). For example, Exxon Mobil contributed to anti-malaria campaigns in Africa which led to improved government relations for the firm and privileged access to scarce natural resources (Porter and Kramer, 2002). Accordingly, corporations may find philanthropy to be particularly beneficial in countries with less effective or more corrupt governments, or with less checks and balances on policy makers, where political access is more valuable.

There are six measures in the WGI database, among which four capture dimensions of how a government may affect business: government effectiveness, regulatory quality, rule of law, and control of corruption.³ These variables are highly correlated, and they are therefore used separately in empirical analysis. First, government effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Second, regulatory quality captures perceptions of the government's ability to implement appropriate policies and regulations that are appropriate for private sector development. Thus, this measure helps capture business expectations for the government's ability to create appropriate operating conditions in the future. Third, rule of law measures perceptions of the extent to which people believe market participants will honor laws and legal decisions, and the quality of contract enforcement, property rights, the police, and the courts. Fourth, control of corruption captures the extent to which there is corruption and a diversion of state resources for the benefit of privileged insiders. Finally, the political constraint

³ The other two dimensions are Voice and Accountability, and Political Stability and Absence of Violence.

index (Henisz, 2000) is used to measure the political structures' ability to support credible policy commitments and prevent abrupt policy changes. On the one hand, in countries with less effective governments, there may be a greater need for private organizations to provide public or social welfare services. On the other hand, worse institutions can also lead to lack of transparency in markets, which creates higher demand for the differentiating effect of philanthropic activities. Lack of checks and balances or high corruption also increases the value of corporate giving aimed at strengthening political ties with policy makers. We therefore use these five measures to test whether corporate philanthropy is a substitute for, or a complement to, local institutions.

In all regressions, we also include firm and year fixed effects to capture unobserved firm characteristics and potential changes in underlying economic and political conditions over time.

4. Empirical results

We perform three sets of empirical analysis. First, we examine how firms respond to perceptions of host country characteristics, including local needs for charitable assistance and government quality. Second, we test whether firms donate more when they are new entrants to an economy. Finally, we examine how cross-border corporate giving is influenced by the type of firm presence in the host country: functions of local subsidiaries, and when they are within the main businesses of the parent company.

4.1 Local country characteristics

Firms give more in larger (high GDP) but poorer countries (low GDP per capita). In addition, firms appear to make more donations in countries with grader need for aid. The positive

coefficient on food aid in Model 2 and the positive coefficient on ODA in Model 3 indicate that firms are making more substantial donations in countries where the poor are in need of basic assistance, and helping countries with weak infrastructure or health needs.

In Models 4-7 we now separately include measures of the local institutional environment. Each of these measures has a negative and statistically significant coefficient estimate. Foreign companies make larger donations when the government is less efficient (Model 4), lower quality (Model 5), less bound by the rule of law (Model 6), and has a weak control on corruption (Model 7). These results suggest that the firms are making donations strategically to substitute for the local government's inability to provide an efficient business environment. Charitable giving to local recipients may help the MNEs to reduce information asymmetry with the local stakeholders, or to connect into the local political networks, which is crucial in an environment featured by opaque rule of law. This result is consistent with the findings in Brammer et al. (2009) that U.K. multinational firms make larger charitable donations when they invest in countries with weaker or less effective governments, although they did not specify where the donations go.

Regarding the control variables, firms appear to make more donations when they have more ongoing research and development programs, consistent with the finding in Brown et al. (2006) that firms with higher levels of R&D donate more to charity. Also, firms with higher advertising intensity give significantly more in foreign countries, consistent with the prediction in Fisman et al. (2006) that corporate philanthropy is more valuable to firms with stronger need to signal their quality.

4.2 *Firm entry in the host country*

In this set of regressions, we included a dummy variable to indicate whether the MNE entered the host country in the past five years (Table 4). In almost all models, the coefficients are positive and statistically significant. These results suggest that firms make donations to create goodwill and reduce information asymmetry in a newly entered market. In other words, charitable donations could serve as public relations for the donating firm and bring the firm to the attention of local stakeholders.

We also tried to include, in addition or separately, the total number of subsidiaries in the regressions, but the results are insignificant. That is, the extent or scale of local presence is not as important an influence on firms' philanthropic activities as the need for signaling as new entrants.

4.3 Type of activities in the host country

In Table 5, we include the diversification measure, and the measures of MNEs' local operations, proxied by the job titles of the local executives. In all models, the administrative function is used as a benchmark case, so the coefficients on all other activities should be interpreted as a relative indicator in comparison.

Diversification is strongly and negatively associated with charitable giving in foreign countries. That is, ExxonMobil would give more in an oil drilling business in the host countries but less to local non-oil operation outside of the main business domain of the company. This indicates that diversified operations receive less attention from the decision makers at corporate foundations.

Interestingly, having high-ranking officials on board does not lead to more local giving, which to some extent dismissed the agency argument of corporate philanthropy. Active engagement in alliances, joint ventures, and other corporate outreach activities reduces local giving, probably because of the substitution effect: MNEs with local alliance or joint venture partners have better access to the local networks and thus less need for other means of bonding. The effect of R&D and manufacturing on local giving is insignificant. One possible reason is that these are job-creating and tax-contributing activities, so there is less need for corporate philanthropy to establish better rapport with the local stakeholders. As expected, subsidiaries with large sales operations and supply chain management functions rely on good relationship with the local suppliers and customers. Therefore, each of these two types is strongly associated with higher levels of charitable giving. These results suggest in aggregate that the firms use charitable giving to strategically complement their local operations by giving more monies in countries where relationships and goodwill may pay greater dividends.

5. Conclusion

MNEs, representing the largest corporations in the world, play a pivotal role in the realm of corporate philanthropy. Yet, with few exceptions (e.g., Luo, 2006; Brammer et al., 2009), very little attention has been paid to the cross-border giving of MNEs, and how that giving is influenced by the institutional environments of the host countries in which an MNE operates. Using a dataset of 152 U.S.-based MNEs from 1993 to 2008, we compiled a unique dataset including firm characteristics, their local operations, and the institutional environment in the host countries. The dataset used herein thus includes both cross-sectional variation of 152 firms in 70 countries and time variation over 15 years. These data represent a big advancement over Luo (2006) who uses data on 126 MNEs in one country, China, in 2005 and over the Brammer et al.

(2009) study which examines the donations of 305 British firms in 2002 at the firm level. Due to the cross-country and time series variation, we are able to examine how changes in firm behavior such as market entry and staffing affect charitable giving in different countries.

Our empirical results show that firms are more likely to give to charities in a host country when the need for local connection is stronger, and when the host country's government is less effective. By introducing cross-country variance into the firm, we demonstrate the effect of local operations and local institutional environments on charitable giving while controlling for firm-specific characteristics. These results are consistent with the view that firms make charitable donations in response to perceived business needs, presumably because corporate giving enables MNEs to navigate opaque business environments and reach directly local stakeholders.

This study suggests that firms may do well by doing good. Our research is related to that of Hong et al. (2012) who use data on U.S. corporations' CSR ratings from KLD to examine a related precursor question: when do firms do good? They find that firms do good when they do well. Our results, in conjunction with those of Hong et al., suggest there may be a virtuous circle of endogeneity whereby certain firms are intrinsically more likely to both do good and do well.

Of course, there are many limitations to this study. First, our sample is restricted to U.S.-based MNEs, which are by no means representative of firms worldwide. Second, our proxies for local operations are too rough to allow a more careful treatment of endogeneity and interaction effects. For example, FDI entries are endogenous, and the factors driving charitable giving in a country may overlap with some of the factors driving entry. Furthermore, it would be interesting to examine the interaction between local operations and characteristics of the institutional environment, which would give us more insight into the "match" between the compositions of an

MNE's local business units and local public policies, and the role played by corporate philanthropy in this matching process. In spite of these limitations, we believe this study makes a valuable step toward understanding MNEs' non-market strategies in different countries, and more broadly, the interaction between FDI and stakeholders in the host countries.

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Table 1. Variable definitions

Variable	Definition
Amount	Log of amount that firm donated to a country in a year plus 1 (US\$)
Total giving	Log of total charitable giving worldwide
Total else	Log of total charitable giving worldwide excluding grant
PPE	Log of property plant and equipment (US\$ mn)
Leverage	Ratio of total liabilities to total assets
Liquidity	Ratio of cash and short term investments to total assets
R&D	Log of value of R&D expenditures scaled by sales (US\$ mn).
Advertising	Ratio of advertising expenses to revenue
Total subsidiaries	Count of corporate offices or subsidiaries world-wide
Subsidiaries	Count of corporate offices or subsidiaries in a host country
Diversification	Percentage of subsidiaries in a firm-country-year that have no overlap with the headquarters' SIC codes
New entry	Dummy variable for whether the firm first entered a country in the last five years
Top management team	The total number of managers that are Board members and chairmen
Alliance and corporate outreach	The total number of managers that are Corporate outreach (joint venture managers, business development, and alliance management)
Manufacturing	The total number of managers that work on manufacturing
Research and development	The total number of managers that engage in R&D-related activities
Sales and marketing	The total number of managers that engage in sales and marketing
Supply chain management	The total number of managers that manage supply chain in the host country
GDP per capita	Log of GDP per capita (US\$); World Bank data
ODA	Log of total overseas development assistance plus 1 (US\$ mn); reported by the OECD
Food aid	Log of total developmental food aid plus 1 (US\$ mn); reported by the OECD
Natural disaster	Dummy variable whether or not a natural disaster happened in that country-year
NGO presence	Log of the number of NGOs in the country-year
Government effectiveness	Perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies; reported by the World Bank
Regulatory quality	Perceptions of the government's ability to implement appropriate policies and regulations that are appropriate for private sector development; reported by the World Bank
Rule of law	Perceptions of the extent to which people believe market participants will honor laws and legal decisions, and the quality of contract enforcement, property rights, the police, and the courts; reported by the World Bank
Control of corruption	Perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests; reported by the World Bank
Political constraint	The extent to which the legislative, executive and judicial branches of government and provide checks and balances on policy commitments; constructed by Witold Henisz

Table 2. Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max.	# obs.
Amount	10.458	1.136	9.210	15.173	3,815
Total giving	13.849	1.627	9.210	17.068	3,815
Total else	13.845	1.630	9.210	17.068	3,713
PPE	8.738	1.681	0.000	11.706	3,767
Leverage	0.263	0.164	0.000	0.955	3,815
Liquidity	0.094	0.095	0.000	0.645	3,814
R&D	0.032	0.058	0.000	0.426	3,815
Advertising	0.018	0.030	0.000	0.170	3,815
Total subsidiaries	67.439	98.946	0.000	859.000	3,815
Subsidiaries	15.657	32.911	0.000	159.000	3,815
Diversification	0.828	0.377	0.000	1.000	1,573
New entries	0.425	0.494	0.000	1.000	3,815
Top management team	12.237	26.246	0.000	156.000	3,815
Alliance and corporate outreach	0.073	0.330	0.000	3.000	3,815
Research and development	0.128	0.492	0.000	5.000	3,815
Sales and marketing	1.617	4.264	0.000	32.000	3,815
Supply chain management	0.051	0.275	0.000	2.000	3,815
GDP per capita	10.795	1.902	6.576	16.005	1,063
ODA	0.993	2.358	0.000	8.152	3,800
Food aid	0.232	0.816	0.000	4.905	3,810
Government effectiveness	0.554	0.893	-1.637	2.031	1,073
Regulatory quality	0.483	0.853	-2.203	2.023	1,073
Rule of law	0.289	0.961	-1.931	1.962	1,073
Control of corruption	0.386	1.017	-1.590	2.241	1,073
Political constraints	0.310	0.215	0.000	0.718	512

Table 3. The effect of country characteristics. Coefficients that are significant at the 10% level are denoted with a * ; 5% level, **; and 1% level, ***; standard errors are clustered at the firm-year level and are reported in parentheses. Firm and year fixed effects are included in all regressions.

	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PPE	0.054 (0.257)	0.075 (0.256)	0.077 (0.255)	0.050 (0.257)	0.052 (0.257)	0.043 (0.258)	0.042 (0.257)
Leverage	-0.296 (0.761)	-0.242 (0.765)	-0.252 (0.764)	-0.290 (0.763)	-0.289 (0.763)	-0.277 (0.763)	-0.291 (0.764)
Liquidity	0.664 (1.067)	0.694 (1.069)	0.628 (1.069)	0.662 (1.069)	0.662 (1.069)	0.660 (1.068)	0.647 (1.071)
R&D	-2.971 (1.966)	-2.858 (1.948)	-2.900 (1.912)	-2.974 (1.968)	-2.977 (1.968)	-2.934 (1.962)	-2.959 (1.967)
Advertising	0.270 (4.856)	0.357 (4.809)	0.649 (4.691)	0.169 (4.862)	0.214 (4.853)	-0.089 (4.849)	-0.035 (4.851)
Giving elsewhere	0.458*** (0.077)	0.457*** (0.077)	0.446*** (0.076)	0.455*** (0.076)	0.456*** (0.077)	0.452*** (0.076)	0.453*** (0.076)
Real GDP	0.088*** (0.031)	0.075** (0.032)	0.030 (0.033)	0.083*** (0.031)	0.083*** (0.032)	0.073** (0.032)	0.069** (0.033)
GDP per capita	-0.105*** (0.037)	-0.101*** (0.037)	-0.059 (0.038)	-0.102*** (0.036)	-0.102*** (0.037)	-0.094** (0.037)	-0.092** (0.037)
Food aid		0.039 (0.034)					
ODA			0.057*** (0.017)				
Government efficiency				-0.029 (0.053)			
Regulation quality					-0.022 (0.057)		
Rule of law						-0.086* (0.048)	
Control of corruption							-0.079* (0.046)
Constant	2.920 (2.166)	2.978 (2.148)	3.738* (2.138)	3.079 (2.159)	3.044 (2.179)	3.382 (2.165)	3.477 (2.177)
sigma							
Constant	1.072*** (0.032)	1.070*** (0.032)	1.067*** (0.032)	1.072*** (0.032)	1.072*** (0.032)	1.070*** (0.032)	1.070*** (0.032)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LL	-2.5e+03	-2.5e+03	-2.5e+03	-2.5e+03	-2.5e+03	-2.5e+03	-2.5e+03
N	1904.000	1899.000	1875.000	1904.000	1904.000	1904.000	1904.000

Table 4. The effect of new entries. Coefficients that are significant at the 10% level are denoted with a * ; 5% level, **; and 1% level, ***; standard errors are clustered at the firm-year level and are reported in parentheses. Firm and year fixed effects are included in all regressions.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PPE	0.051 (0.256)	0.074 (0.255)	0.077 (0.253)	0.045 (0.256)	0.048 (0.256)	0.038 (0.256)	0.036 (0.255)
Leverage	-0.436 (0.761)	-0.387 (0.764)	-0.399 (0.761)	-0.438 (0.762)	-0.431 (0.763)	-0.437 (0.762)	-0.457 (0.763)
Liquidity	0.683 (1.059)	0.715 (1.060)	0.656 (1.060)	0.679 (1.060)	0.680 (1.061)	0.681 (1.059)	0.665 (1.061)
R&D	-2.875 (1.987)	-2.746 (1.969)	-2.785 (1.930)	-2.874 (1.992)	-2.882 (1.991)	-2.815 (1.985)	-2.841 (1.993)
Advertising	0.504 (4.847)	0.630 (4.791)	0.938 (4.659)	0.348 (4.851)	0.397 (4.835)	0.111 (4.829)	0.163 (4.835)
Giving elsewhere	0.441*** (0.076)	0.439*** (0.075)	0.428*** (0.075)	0.436*** (0.075)	0.437*** (0.075)	0.431*** (0.075)	0.433*** (0.075)
Real GDP	0.086*** (0.031)	0.071** (0.032)	0.024 (0.033)	0.078** (0.031)	0.076** (0.032)	0.067** (0.032)	0.061* (0.033)
GDP per capita	-0.106*** (0.037)	-0.100*** (0.037)	-0.056 (0.038)	-0.100*** (0.036)	-0.098*** (0.037)	-0.092** (0.037)	-0.088** (0.037)
New entries	0.219 (0.135)	0.240* (0.137)	0.257* (0.139)	0.238* (0.141)	0.239* (0.141)	0.258* (0.139)	0.264** (0.140)
Food aid		0.048 (0.034)					
ODA			0.061*** (0.018)				
Government efficiency				-0.051 (0.056)			
Regulation quality					-0.050 (0.059)		
Rule of law						-0.106** (0.050)	
Control of corruption							-0.102** (0.047)
Constant	3.193 (2.141)	3.307 (2.117)	4.088* (2.108)	3.499* (2.127)	3.504 (2.145)	3.805* (2.135)	3.966* (2.147)
sigma							
Constant	1.069*** (0.032)	1.067*** (0.032)	1.063*** (0.032)	1.069*** (0.032)	1.069*** (0.032)	1.067*** (0.032)	1.067*** (0.032)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LL	-2.5e+03	-2.5e+03	-2.5e+03	-2.5e+03	-2.5e+03	-2.5e+03	-2.5e+03
N	1904.000	1899.000	1875.000	1904.000	1904.000	1904.000	1904.000

Table 5. Effect of firm activities in the host country. Coefficients that are significant at the 10% level are denoted with a * ; 5% level, **; and 1% level, ***; standard errors are clustered at the firm-year level and are reported in parentheses. Firm and year fixed effects are included in all regressions.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PPE	1.498*** (0.557)	1.464*** (0.551)	1.515*** (0.536)	1.461*** (0.541)	1.502*** (0.554)	1.513*** (0.555)	1.497*** (0.550)
Leverage	0.951 (1.651)	0.946 (1.668)	1.583 (1.601)	1.115 (1.563)	1.405 (1.613)	1.336 (1.546)	1.279 (1.523)
Liquidity	2.166 (1.883)	2.253 (1.903)	2.301 (1.851)	2.140 (1.918)	2.354 (1.927)	2.059 (1.906)	2.013 (1.921)
R&D	5.204 (3.546)	5.284 (3.558)	5.569* (3.364)	5.072 (3.286)	4.858 (3.358)	5.111 (3.351)	5.077 (3.329)
Advertising	31.514* (17.605)	31.669* (17.736)	32.312** (16.384)	30.610* (16.903)	30.019* (17.369)	31.152* (16.801)	30.404* (16.884)
Giving elsewhere	0.293** (0.128)	0.300** (0.129)	0.306** (0.125)	0.276** (0.128)	0.287** (0.126)	0.279** (0.127)	0.288** (0.127)
Real GDP	0.041 (0.056)	0.019 (0.066)	-0.111 (0.073)	-0.059 (0.077)	-0.107 (0.088)	-0.027 (0.066)	-0.075 (0.077)
GDP per capita	-0.072 (0.067)	-0.054 (0.074)	0.124 (0.090)	0.037 (0.091)	0.082 (0.097)	0.005 (0.077)	0.049 (0.087)
New entry	0.552*** (0.176)	0.566*** (0.183)	0.532*** (0.173)	0.488*** (0.176)	0.510*** (0.175)	0.481*** (0.176)	0.489*** (0.178)
Diversification	-0.568*** (0.179)	-0.541*** (0.182)	-0.477*** (0.176)	-0.540*** (0.175)	-0.526*** (0.175)	-0.554*** (0.175)	-0.518*** (0.173)
Top management team	-0.098** (0.044)	-0.096** (0.044)	-0.039 (0.044)	-0.057 (0.049)	-0.058 (0.047)	-0.055 (0.047)	-0.050 (0.050)
Manufacturing	1.065 (0.763)	1.032 (0.772)	0.617 (0.803)	0.863 (0.845)	0.846 (0.832)	0.844 (0.827)	0.864 (0.856)
R&D	1.965 (1.347)	1.984 (1.380)	1.987 (1.273)	1.888 (1.299)	1.883 (1.334)	1.870 (1.273)	1.882 (1.320)
Sales and marketing	0.235** (0.104)	0.252** (0.102)	0.204** (0.103)	0.205* (0.111)	0.217** (0.108)	0.196* (0.107)	0.208* (0.109)
Alliance and outreach	-0.943*** (0.364)	-0.859** (0.354)	-0.946*** (0.359)	-1.036*** (0.385)	-0.976*** (0.372)	-1.110*** (0.372)	-1.061*** (0.377)
Supply chain management	0.482* (0.322)	0.523* (0.324)	0.437* (0.323)	0.371* (0.349)	0.376 (0.346)	0.339 (0.340)	0.370 (0.356)
Food aid		0.049 (0.072)					
ODA			0.148*** (0.040)				
Government efficiency				-0.358** (0.167)			
Regulation quality					-0.447**		

					(0.203)		
Rule of law						-0.275**	
						(0.117)	
Control of corruption							-0.322**
							(0.136)
Constant	-8.137	-6.767	-6.423	-5.015	-4.634	-6.172	-5.223
	(5.338)	(5.044)	(4.752)	(4.989)	(5.087)	(5.000)	(4.990)
<hr/>							
sigma							
Constant	0.964***	0.963***	0.933***	0.952***	0.952***	0.952***	0.951***
	(0.049)	(0.050)	(0.051)	(0.051)	(0.050)	(0.050)	(0.051)
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Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LL	-651.687	-651.135	-634.330	-646.618	-646.600	-646.459	-645.954
N	506.000	506.000	504.000	506.000	506.000	506.000	506.000
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