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Why do some US manufacturing and service firms with international operations choose to give internationally whereas others opt to give only in the United States?

Adrian Cowan [a,1], Chia-Hsing Huang [b,*,1], Prasad Padmanabhan [c,1]

[a] Analytic Focus, LLC, San Antonio, USA
[b] SolBridge International School of Business, South Korea
[c] St. Mary's University, San Antonio, USA

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ABSTRACT

Although there have been many academic papers dealing with corporate social responsibility including charitable giving, many have focused on domestic giving. Very few papers have focused on foreign giving. We add to the emerging literature on foreign giving by examining separately the determinants of domestic vs. domestic and international giving for a sample of US manufacturing and service firms over the 2004–2010 period. Using a logit regression model, our findings show that firms with larger size and higher percentage of foreign sales tend to opt to give abroad for both manufacturing and service firms. In addition, manufacturing firms with higher debt to asset ratios tend to prefer giving *only* domestically. Service firms with higher return on assets or higher levels of free cash flow also tend to give internationally. These findings suggest that to some degree firms attempt to maximize the strategic value of foreign vs. domestic giving. Firms seem to treat corporate giving as a scarce strategic resource.

1. Introduction

While there is extensive and detailed evidence regarding the determinants of domestic giving, there are very few papers that investigate the determinants of foreign giving.[2] A curious observation from examination of a sample of US firms with international operations is that while all sample firms make foreign ownership investments, only some sample firms choose to give internationally (or both internationally and domestically) while others make the strategic decision to *only* give domestically.[3] Foreign vs. domestic giving is clearly a strategic decision choice made by firms. The research question we ask in this paper is: what determinants identify US firms that give *only* domestically even though they engage in international operations? We investigate this issue separately for manufacturing and service firms motivated in part by perceptions of significant differences in giving patterns between these groups of firms (Committee Encouraging Corporate Philanthropy (CECP), 2012; Cowan, Padmanabhan, & Huang, 2013). A survey of corporate giving by CECP reveals that manufacturing firms and service firms differ in terms of their international giving in the amounts they give, the

* Corresponding author.
E-mail address: koreasing@solbridge.ac.kr (C.-H. Huang).
[1] All authors contributed equally to the paper.
[2] As used in this paper, 'giving' falls under the broad category of corporate philanthropy or corporate social responsibility. Corporate philanthropy is defined as "... gifts or monetary contributions given by corporations to social and charitable causes, such as those associated with education, culture, the arts, minorities, health care and disaster relief..." (Wang & Qian, 2011, p. 1161). If these contributions transcend national boundaries, then they fall under the 'foreign giving' category; else are referred to as domestic giving. The precise definition of foreign giving as used in this paper is presented in the methodology and data sections.
[3] Henceforth, when we refer to foreign giving by firms, we are referring to firms that either only give internationally or give both internationally and domestically. Lack of adequate sample size precluded the possibility of splitting up the sample further into cases where firms gave only internationally and where firms gave both internationally and domestically.

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ways they give, and the types of causes to which they give.[4] Using the determinants established in the literature on domestic giving and foreign giving, we first identify the key variables that discriminate between the groups of foreign givers from those that only give domestically. Using a logit regression methodology and a sample of US manufacturing and service firms making *ownership* acquisitions in foreign countries over the 2004–2010 period,[5] we empirically examine the factors that influence these firms to selectively give internationally or to restrict their giving to domestic markets. We attempt to link our findings to appropriate theories well established in the giving literature (value enhancement theory, legitimacy/reputation theory, and agency theory) for both groups of firms.

Specific knowledge of the variables able to identify key attributes that differentiate between the two groups (the foreign givers vs. the domestic givers) for both manufacturing and service firms will provide useful information to academics and practitioners.[6] For instance, from an academic perspective, knowledge of the specific attributes that differentiate between the domestic vs. foreign givers for the two groups allows an investigation of whether modifications are needed to established theories related to corporate social responsibility. The results of this study should provide insights into the relative strengths of the various theories rationalizing strategic giving behavior. From a practical perspective, knowledge of the variables that selectively discriminate between pure domestic givers and foreign givers for firms with international operations will assist new firms to strategically optimize their giving dollars. Host countries may use this research to develop strategies to attract new investments.

The paper is organized as follows. In Section 2, we present a brief literature review on the determinants of foreign giving for both the manufacturing and service groups of firms and provide a motivation for the paper. Next, in Section 3, we present a very brief description of the data bases used (US M&A database and the Kinder, Lydenberg, Domini (KLD) Socrates) since these databases have been used and described adequately in other papers (for example, Cowan, Padmanabhan, & Huang, 2013; Cowan, Padmanabhan, Huang, & Wang, 2013). In this section, the specific dependent and independent variables utilized in this study are also presented, followed by a brief description of sample characteristics and the logit regression methodology used in the study. Empirical results presented in Section 4 are followed by policy implications and concluding comments in Section 5.

2. Motivation and literature review

2.1. Motivation

Researchers have examined how CSR in general and corporate philanthropy in particular (an easily identifiable and measurable subset of CSR) aid strategic corporate decision making (see for example, Brammer & Millington, 2003; Brown, Helland, & Smith, 2006; Cowan, Padmanabhan, Huang, & Wang, 2013; Lev, Petrovits, & Radhakrishnan, 2010; Maron, 2006; Seifert, Morris, & Bartkus, 2003). With few exceptions (Blonigen & O'Fallon, 2011; Cowan, Padmanabhan, & Huang, 2013; Cowan, Padmanabhan, Huang, & Wang, 2013), this link has not been examined with global giving data. To date, prior research has focused on either the determinants of corporate giving vs. non-giving (Cowan, Padmanabhan, & Huang, 2013; Cowan, Padmanabhan, Huang, & Wang, 2013; Muller & Whiteman, 2009), or the relationship between corporate philanthropy and profits (Cowan, Padmanabhan, & Huang, 2015; Cowan, Parzinger, Welch, & Welch, 2014; LeClair & Gordon, 2000; Zhang, Zhu, Yue, & Zhu, 2010), but not on *differential* determinants of foreign vs. domestic givers for manufacturing and service firms. In addition, much of the prior research (for example, Petrovits, 2006; Seifert, Morris, & Bartkus, 2004; Su & He, 2010) have lumped manufacturing and service firms together in one sample. Some papers using aggregated samples also identify industry specific effects, such as Brammer and Millington (2003, 2008). However, to the best of our knowledge, none of the prior research specifically isolates the determinants of corporate philanthropy (for firms that elect to give either domestically or internationally) separately for manufacturing and service firms.[7,8]

It is clear that the international giving patterns of firms differ significantly between manufacturing firms and service firms. First, the amount of global giving as a percentage of total giving is far higher for manufacturing firms than for service firms. Whereas the 2013 survey of CECP[9] provides evidence that manufacturing firms gave on average 22.6% of all giving internationally during the years from 2007 to 2012, service firms gave internationally only 11.8% of total giving during this same period. Second, service firms prefer to make cash donations whereas manufacturing firms prefer to make donations in kind. Thus, we seek to further investigate the determinants of giving between manufacturing and service firms at the firm level given the substantial differences in giving patterns between the two groups. Hence, this paper addresses a very different research question than the ones posed in earlier studies.

[4] Giving in Numbers: 2013 Edition, Center Encouraging Corporate Philanthropy, available at http://cecp.co/research/benchmarking-reports/giving-in-numbers.html.

[5] It is important at the outset to point out that although we use the international *acquisitions* database, the paper *has nothing to do with international acquisitions*. Unfortunately, we do not have access to any publicly available databases that list all US firms making international investments. To this extent, the findings reported in this paper may not be generalizable across the population of US firms conducting overseas investments. In addition, we are using data for the *subset* of firms with international operations and who make ownership acquisitions during the study period. Hence the conclusions derived in the paper would only be generalizable across all firms if the sample firms do not behave differently than firms with international operations but who do not make ownership acquisitions during the sample time period. Henceforth, when we refer to firms with international operations, we are implicitly referring to the subset of such firms that undertake ownership acquisitions during the study period. We thank an anonymous referee for this important caveat.

[6] However, it is important to point out that we are not making any claims of causality. We are only capturing linear association between giving and the set of independent variables without concluding that key outcomes on the set of independent variables 'cause' more giving, or vice versa. We leave the issue of causality to future research.

[7] The Blonigen and O'Fallon (2011) paper does examine the motivations of a select group of foreign owned firms from Asia, Canada, and Europe who choose to give on the West Coast of the United States. They do not separately examine manufacturing firms and service firms. They also do not investigate foreign giving vs. *domestic* giving in their respective countries by these firms. In addition, they examine *inward* giving into the United States; we examine *outward* giving by US firms. However, Blonigen and O'Fallon (2011) indirectly argue that manufacturing firms are different from service firms. They suggest that "...many non-manufacturing sectors ...are non-tradeable ... and will only be oriented to local market....(and) manufacturing firms that send their good around the world may be less likely to give locally than homeowners insurance firms that rely on their agents developing relationships with local customers..." (p. 19).

[8] To further establish a proper research motivation for this paper, we need to clearly differentiate this study from the Cowan, Padmanabhan, and Huang (2013) and Cowan, Padmanabhan, Huang, and Wang (2013) studies. The Cowan, Padmanabhan, Huang, and Wang (2013) study investigates the determinants of the incidence of foreign giving by US manufacturing firms by comparing such cases to a sample of firms who do not give at all. The Cowan, Padmanabhan, and Huang (2013) paper investigates the determinants of international giving (international givers vs. non-givers) for service firms. In addition, the sample used in this paper is not a subset of the sample used in Cowan et al. papers cited earlier since it excludes non-givers and includes domestic givers. We thank an anonymous referee for directing our attention to this important point.

[9] Giving in Numbers: 2013 Edition, Center Encouraging Corporate Philanthropy (2012), p. 21.

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2.2. Theories of corporate social responsibility

In this section, we first present extant research as it relates to CSR in general and then attempt to provide theory to explain the *differential* giving behavior of firms with international operations.

Two of the primary theories used to motivate research into corporate philanthropy are agency theory and value enhancement theory. Brown et al. (2006) suggest that these theories are not mutually exclusive but rather provide alternate explanations of corporate giving. Value enhancing theory proponents (see for instance, Brown et al., 2006) suggest that CSR generates future value (both financial and nonfinancial), whereas agency cost theory proponents argue that funds diverted to CSR related activities from more profitable ventures reduce the value of the firm (Fama & Jensen, 1983; Jensen & Meckling, 1976) and necessitate costly monitoring activities (Jensen, 1986). There is some limited evidence in support of agency theory (Margolis, Elfenbein, & Walsh, 2007), while there is considerably more support in favor of value enhancing theory (Cowan, Padmanabhan, & Huang, 2013; Cowan, Padmanabhan, Huang, & Wang, 2013; Fombrun & Shanley, 1990; LeClair & Gordon, 2000), for both categories of firms.

In addition, legitimacy and reputation theories play particularly important roles when firms operate in foreign markets. Legitimacy and reputation are closely linked and despite differences (as investigated by Deephouse and Carter (2005)), they generally tend to have similar consequences. Legitimacy theory posits that the very existence of corporations depends on legitimacy (Shocker & Sethi, 1974). Corporate philanthropy serves as a legitimacy-seeking strategy (Chen, Patten, & Roberts, 2008; Dowling & Pfeffer, 1975). Saiia, Carroll, and Buchholtz (2003) suggest that firms consider their philanthropic activities as part of corporate strategy. Corporate philanthropy has been identified by Morris, Bartkus, Glassman, and Rhiel (2013) as a means of providing a positive impact to a firm's reputation and Wilson (1985) provides evidence that corporate giving positively impacts corporate reputation through its link to future profits. Using a survey, Morris et al. (2013) differentiate between conditional and unconditional giving only to find that consumers are favorably influenced by all types of corporate giving. Porter and Kramer (2002) maintain that firm level corporate philanthropy is viewed favorably by all stakeholders. Finally, Blonigen and O'Fallon (2011) find evidence that some foreign firms from Asia, Canada, and Europe can give in the US to "...mitigate.... more political and cultural barriers..." (p. 16) or to overcome local polarization ... (p. 16). Goyal (2006) presents a model where firms signal their accommodating nature in a foreign environment using corporate philanthropy. These findings and the model can also be viewed as support for legitimacy seeking strategies.

2.3. Theory: why do firms with international operations decide not to give internationally?

In this section, we explore specific theory that helps us understand why firms with international operations may choose to only give domestically. Since the database used in this study is restricted to givers, we assume that if firms opt not to give internationally, they only give domestically. Hence, we attempt to explore theory that explains this *differential* choice. Unfortunately, to the best of our knowledge, few papers directly address this issue. Hence, we use existing CSR literature to help provide theoretical support for this paper.

We suggest that establishing legitimacy in a foreign country is a strong motivator for firms to engage in *foreign* corporate philanthropy. Haniffa and Cooke (2005) provide evidence that firms with higher foreign ownership levels relative to total assets implement an assertive legitimacy strategy by providing more CSR disclosures. Other researchers have also found support for the strategic value of corporate philanthropy for firms with international operations. For instance, it has been suggested that firms undertaking international operations can use corporate philanthropy to gain acceptance from various stakeholders that include local customers, suppliers, the government (Aldrich & Fiol, 1994), and/or to obtain political resources for survival and financial returns (Hillman, 2005; Pfeffer & Salancik, 1978). It is possible that firms that opt to only give domestically may not have substantial foreign operations to see the need to establish international legitimacy. If they consider giving dollars as scarce money, then such firms may restrict their giving to the home country. We anticipate the firms with higher foreign operations execute strategic philanthropy in foreign countries if the firm engages in giving as a form of reputation building. Based on these findings, we can conclude that firms may opt to give internationally if they are seeking international legitimacy and restrict their giving dollars to the home country when their foreign operations do not warrant the extra legitimacy seeking investment.

Next, if firms make the strategic decision to only give internationally, it may be because they are operating in a country culturally or economically dissimilar to the home country and must undertake corporate philanthropy to overcome cultural barriers or economic disparity barriers. Firms likely see little need to give domestically since firms generally do not face cultural or economic barriers for domestic operations. The international business literature explains how cultural differences between the home and host countries can influence a variety of business decisions and has used a well-known proxy (see Hofstede & Bond, 1988) to measure these differences. This proxy has been used extensively in the international business literature (for e.g., Musteen, Datta, & Hermann, 2009), and has also been shown as an important determinant of foreign giving (Cowan, Padmanabhan, & Huang, 2013; Cowan, Padmanabhan, Huang, & Wang, 2013).

Blonigen and O'Fallon (2011) suggest that firms may undertake corporate philanthropy to mitigate cultural barriers. Kim, Surroca, and Tribo (2014) introduce a cultural distance variable measure in their study examining the influence of ethical corporate behavior on syndicated loan rates offered to borrowers, using data spanning 19 countries. They find that ethical firms receive lower domestic borrowing rates, ceteris paribus. Since their data spans 19 countries, they proxy cultural distance using the measure described in Hofstede and Bond (1988). They find that "... cultural differences may weaken or hinder the interpretation of ethical borrowers as a signal of trustworthiness by ethical lenders..." (p. 140). Similarly, Shi and Sun (2014) using US public firm data, find a negative association between a high CSR score and bond covenants. The message in both papers is that CSR related activities (if there are no interpretation problems) can reduce information asymmetry between lenders and the firm, thereby leading to lower borrowing costs for the firm. Fatemi (1984) has argued that multinational firms face higher monitoring and bonding costs associated with international operations relative to domestic firms. We suggest that the higher bonding/monitoring costs may extend to the area of international corporate giving. The findings of cited studies are consistent with an agency theoretic explanation for why firms make the selective foreign/domestic giving decision. Foreign giving by firms may entail higher borrowing costs since the cultural differences and the information asymmetry make foreign giving difficult to interpret for lenders. Firms recognize this problem and hence restrict their giving to the home country, where such interpretational ambiguity may be minimized, leading to lower future borrowing costs for the firm. Alternatively stated, if firms give internationally, they may face higher future borrowing costs. Next, as Wilson (1985) points out, since corporate giving positively

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impacts corporate reputation through its link to future profits, foreign giving may negatively impact future profits because of higher future borrowing costs induced by foreign giving. Hence, firms may prefer domestic giving over foreign giving if the latter activity harms their reputation because of lower expected profits. Finally, Porter and Kramer (2002) contend that corporate philanthropy can improve the social and economic conditions in developing countries, generating a win-win situation for society and for corporations. We suggest that corporate philanthropy in developing countries counts as a legitimacy seeking strategy. Cowan, Padmanabhan, and Huang (2013) and Cowan, Padmanabhan, Huang, and Wang (2013) report that US firms that give (when compared to non-givers) are more likely to embrace foreign giving if they operate in developing countries. If firms treat giving dollars as a scarce strategic resource, then they are likely to spend these dollars where they are put to the best use. Based on the Porter and Kramer (2002) and the Cowan, Padmanabhan, and Huang (2013) results, firms may decide to spend more dollars internationally if they operate in developing countries since this can enhance their international legitimacy and they do not need to spend additional giving dollars seeking domestic legitimacy.

To summarize, legitimacy/reputation theory and agency theory can help explain firms' differential choice between giving internationally vs. giving domestically. The specific proxies used to capture these attributes are described in the next section.

3. The methodology, data, dependent and independent variables

3.1. Methodology

Since the dependent variable is a binary variable, this study will adopt the well-known logit methodology considered appropriate for this type of study. The dependent variable is FGIV, which assumes a value of 1 if US firms give internationally, and 0 if they only give domestically.[10] The set of independent variables x_1, x_2, …, x_n will be used to test the model's ability to predict the likelihood of firms who give internationally against those who only give domestically, given the presence of the set of predictor variables introduced into the equation. The probability that the firm will give internationally given the independent variables x_1, x_2, …, x_n is

$$\pi(x_i) = p(FGIV = 1|x_i) = \frac{1}{1 + e^{-(\alpha+\beta x_i)}}$$

where p is the probability that $FGIV = 1$; $FGIV$ is a dummy that captures the incidence of whether the sample firm gives internationally or internationally and domestically[11] (yes = 1), or only domestically (no = 0), and x_i is the vector of independent variables (outlined in a later section), α is the intercept parameter, and β is the vector of regression coefficients (Altman, Avery, Eisenbeis, & Sinkey, 1981; Altman & Brenner, 1981). The logistic regression model can also be written as

$$logit(FGIV) = \ln\left(\frac{p}{1-p}\right) = \alpha + \beta_1 x_1 + \beta_2 x_2 + \cdots + \beta_n x_n + \epsilon_i$$

A positive sign for the coefficient implies that the variable increases the likelihood that the firm will give internationally relative to only giving domestically.

3.2. Data

The study is conducted using a sample of US manufacturing and service firms making *ownership* acquisitions in foreign countries over the 2004–2010 period using data extracted from the publicly available US M&A database. We include only cases where firms are givers and acquire ownership interests in foreign countries. The focus on ownership as opposed to branches is induced by the fact that ownership interests may trigger a greater impetus to giving than if they only invested in foreign branches.[12]

3.3. Dependent variable: operationalization of construct

Based on earlier research (Cowan, Padmanabhan, & Huang, 2013), the sample of manufacturing and service firms are treated separately since there are some documented differences in the giving determinants for each group. For each subgroup of manufacturing and service firms, the dependent variable is captured as **FGIV**, which assumes a value of 1 if US firms give internationally and 0 if they only give domestically. For both groups, **FGIV** is measured in the *same* year as when the foreign acquisition is made. This variable is extracted from the KLD database, which *only* documents the incidence of substantial giving and not the dollar amounts of giving.

3.4. Independent variables and hypotheses

This section describes the list of independent variables used in this study. The selected variables have been identified based on theory used to explain the differential motivation to give internationally vs. give domestically. Exact variable definitions and data sources are presented in Table 1A and B. We identify the independent variables below and indicate our hypotheses related to each. In addition, we briefly describe additional control variables that are drawn directly from prior literature. Given our contention that there are important giving differences between manufacturing and service sector firms, this suggests operational differences as well. We provide tests of differences in means for the service vs. manufacturing data to test this assertion.

Based on theory presented in Section 2, it has been argued that legitimacy/reputation theory and agency theory can help explain manufacturing and service firms' differential choice between giving internationally vs. giving domestically (Aldrich & Fiol, 1994; Hillman, 2005; Pfeffer & Salancik, 1978).[13] To test the validity of the legitimacy theory to explain this choice, we require a proxy variable for international involvement. Haniffa and Cooke (2005) use the foreign ownership to total assets ratio as a proxy in their study. Although we do not have a measure of foreign ownership, we use the foreign sales percentage (**FSPER**) measured in the pre-giving year, as a proxy for the corporate need to establish legitimacy. We anticipate the firms with higher foreign sales to total sales ratio practice strategic philanthropy in foreign countries

[10] Since the KLD database records incidence of instances where firms give 20% or more of their giving dollars overseas, foreign giving implies *substantial* foreign giving as well. We thank a referee for this point. Hence, throughout the paper, when reference is made to foreign giving or international giving, we mean 'substantial giving'.

[11] Lack of sample sizes for meaningful statistical analyses prevents splitting the sample further into firms that only gave internationally vs. firms that gave both internationally and domestically. There were 31 (63) cases of service (manufacturing) firms that gave both internationally and domestically. These firms were merged with the foreign givers sample.

[12] This is purely a conjecture at this point. We are not aware of any study that examines the giving behavior of firms investing in foreign branches. Since we use a database that captures equity ownership abroad, our conclusions are not generalizable to include instances where investments in foreign branches are made. We thank an anonymous referee for this caveat.

[13] Existing evidence (CECP, 2012; Cowan et al., 2015) suggests that although there are some differences in terms of the set of variables that turn out to be significant determinants of giving for manufacturing firms vs. service firms, the theoretical underpinnings are not different. Hence, we do not provide separate hypotheses for each group of firms.

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Table 1
Sample characteristics.

Variable	N	Mean	Std Dev	Minimum	Maximum
(A) Final sample characteristics: foreign givers vs. pure domestic givers: US service firms					
FGIV	150	0.29333	0.45682	0	1.00000
DARATIO	150	10.77389	12.45275	0	51.15500
PBRATIO	150	5.74381	2.44807	2.07700	14.68000
CD	150	1.52790	1.31404	0.08942	4.78431
ECDEV	150	0.25333	0.43638	0	1.00000
FCFRATIO	150	0.10647	0.11703	−0.28693	0.30115
ROA	150	0.12982	0.05645	−0.00723	0.24289
FSPER	150	0.44585	0.15910	0	0.72080
RND	150	0.12923	0.07527	0	0.37742
LTA	150	23.84868	1.27871	18.89572	25.49026
LEMP	150	10.66772	1.09296	6.77992	12.75075
No. of firms = 20; time period: 2004–2010 inclusive					
(B) Final sample characteristics: foreign givers vs. pure domestic givers: US manufacturing firms					
FGIV	180	0.43333	0.49692	0	1.00000
DARATIO	180	20.27819	12.71258	0	59.10500
PBRATIO	180	3.97502	2.59252	0.58000	19.26300
CD	180	1.78575	1.42324	0.08942	4.78431
ECDEV	180	0.31111	0.46424	0	1.00000
FCFRATIO	180	0.06235	0.05240	−0.17992	0.21127
ROA	180	0.08093	0.06948	−0.17970	0.44877
FSPER	180	0.53601	0.16654	0.12926	0.85468
RND	180	0.05116	0.04987	0	0.21130
LTA	180	23.81501	1.42047	19.73304	26.44225
LEMP	180	11.01657	1.25192	7.27031	12.89535
No. of firms = 48; time period: 2004–2010 inclusive					

Data descriptions
- FGIV is assigned a value of 1 if the US firm gives internationally (or internationally and domestically), and 0 if the firm only gives domestically in the acquisitions year.
- DARATIO is the ratio of long term debt to total assets in the pre-acquisition year.
- PBRATIO is the ratio of market to book ratio of the common stock of the firm in the pre-acquisition year.
- CD is a composite index showing the overall cultural distance of each host country from the parent country (the United States) using Hofstede's four indices (Hofstede & Bond, 1988).
- ECDEV is assigned a value of 1(0) if the US firm invests in a developing (developed) country.
- FCFRATIO is the free cash flow divided by total sales in the pre-acquisition year.
- ROA is the firm level profitability measured as return on assets in the pre-acquisitions year.
- FSPER is the ratio of foreign sales to total sales measured in the pre-acquisitions year.
- RND is the ratio of parent's research and development expenses expressed as a function of total sales in the pre-acquisitions year. Missing RND values are replaced by a zero (see Lev et al., 2010).
- LTA is the dollar total assets at the end of the pre-acquisitions year, and is expressed in natural logarithms.
- LEMP represents the number of employees at the end of the pre-acquisitions year and expressed in natural logarithms.

Data sources: For foreign and domestic giving data, the KLD STATS database was utilized. See Cowan, Padmanabhan, and Huang (2013) and Cowan, Padmanabhan, Huang, and Wang (2013) for more information. Other data sources: For all variables (exceptions noted below), US M&A database (DataStream, ZEPHYR). ECDEV is calculated by the authors. CD is computed from the tables provided in Kogut and Singh (1988).

if the firm engages in giving as a form of reputation building.[14] Our hypothesis stated in the alternative is as follows:

H_1. For both manufacturing and service firms with international operations and who engage in corporate philanthropy, there is a positive relationship between FSPER and the propensity of the firm to give internationally vs. giving domestically.

[14] It is acknowledged, however, that since we do not have data on dollar giving or country specific giving, we can only reach a weaker conclusion if the hypothesis is supported. That is, we can only conclude that there is evidence of general 'international' legitimacy, as opposed to a much stronger country specific legitimacy or legitimacy in a given market. We thank a referee for this important caveat.

In general, value enhancement theory suggests a positive relationship between international philanthropy (if the firm engages in corporate philanthropy) and accounting and market measures of performance. A common performance proxy used in the literature is firm level profitability. With specific reference to our sample of firms, we need to explain how this variable influences the decision to give internationally vs. giving domestically. We suggest that firms may view that international giving will prove to be more expensive than domestic giving because of possible increases in future borrowing costs (Kim et al., 2014) or due to information asymmetry associated with international CSR activities (Shi & Sun, 2014). Firms may prefer to give more internationally if these additional costs can be justified by additional profits. Hence, we argue that there will *still* be a positive relationship between current profitability and the propensity to give internationally vs. give domestically. To capture current firm profitability, **ROA** (return on assets in the year preceding the giving/acquisitions year) is introduced.

H_2. For both manufacturing and service firms with international operations who report international acquisitions and engage in corporate philanthropy, there is a positive relationship between a firm's ROA and the propensity of the firm to give internationally vs. domestically.

Tobin's q has been frequently used in the literature related to corporate philanthropy (Brown et al., 2006; Zhang et al., 2010). It has also been suggested that firms with low Tobin's q may have fewer positive net present value opportunities (Lang, Stulz, & Walkling, 1991). In the current context, given the relatively higher costs of international giving (as explained throughout the paper), firms with low Tobin's q may be less inclined to give internationally given these higher costs. We posit a positive relationship between Tobin's q and international philanthropy (relative to domestic philanthropy). We use the price to book ratio per share of common stock in the year preceding the giving/acquisition year as a proxy for Tobin's q (**PBRATIO**) and conjecture as follows:

H_3. For both manufacturing and service firms with international operations who report international acquisitions and engage in corporate philanthropy, there is a positive relationship between a firm's PBRATIO and the propensity of the firm to give internationally vs. domestically.

Jensen (1986) argues that excess free cash flow produces agency problems by providing management opportunities to divert the excess cash from operations. Thus, agency theory would predict a positive relationship between giving and free cash flow. In the current context, ceteris paribus, firms would be more inclined to give internationally vs. giving domestically if enough free cash flow available to overcome the relatively higher costs associated with international giving. We introduce a proxy for the free cash flow available to the firm (Seifert et al., 2003) as **FCFRATIO**, measured as free cash flow divided by total sales in the year proceeding the giving/acquisition year.

H_4. For both manufacturing and service firms with international operations who report international acquisitions and engage in corporate philanthropy, there is a positive relationship between a firm's FCFRATIO and the propensity of the firm to give internationally vs. domestically.

Corporate philanthropy itself can be viewed as an agency cost that necessitates costly monitoring activities. As discussed in the literature review section, firms potentially face higher costs of international giving (Kim et al., 2014; Shi & Sun, 2014). Even apart from the traditional agency theory based arguments (Brown et al., 2006; Zhang et al., 2010), firms with higher debt relative to total

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assets are subject to greater debt covenants and restrictions that inhibit giving in general and international giving in particular. Besides, firms that choose to give internationally might face higher borrowing costs in the future as well. We argue that higher debt to asset ratios further inhibit international giving relative to domestic giving due to these additional costs. We use the debt to asset ratio in the year preceding the giving/acquisition year (**DARATIO**) as a proxy to capture this attribute. We anticipate a negative relationship between the **DARATIO** and the firm's propensity to give internationally vs. giving domestically if the firm engages in philanthropy.

H_5. For both manufacturing and service firms with international operations and who report international acquisitions and engage in corporate philanthropy, there is a negative relationship between a firm's debt to assets ratio, DARATIO, and the propensity of the firm to give internationally vs. domestically.

3.5. Control variables

The selected control variables are motivated by existing literature. First, **SIZE** of the firm is introduced using **LTA** (log of assets of the parent in the year prior to the giving/acquisition year), and/or **LEMP** (the number of employees expressed in log terms in the year prior to the giving/acquisition year). Since both variables are known to be highly correlated with each other, factor scores generated from both variables will be used to capture the **SIZE** proxy (Brammer & Millington, 2006; Muller & Whiteman, 2009). Extant literature suggests that there is a positive link between firm size and international giving (Cowan, Padmanabhan, & Huang, 2013).[15] Next, the variable **RND**, the ratio of research and development expense to total sales of the parent in the year prior to the giving/acquisition year, is introduced as a control variable for investments in intangible assets. Ceteris paribus, firms that invest heavily in intangible assets tend to have higher giving patterns as they tend to perceive corporate philanthropy as a value enhancing proposition. Although **CD** and **ECDEV** should be considered as independent variables based on theory; data limitations force us to treat these variables only as control variables. The KLD database only records the incidence of international giving but not the specific country where the giving dollars were made.[16] For example, a firm may acquire target assets in one international country but may not have made any charitable contributions in that country. Hence, we include **CD** (cultural distance between the US and the host country where the acquisition is made (Hofstede & Bond, 1988) as a control variable. Based on the arguments presented in Section 2, firms may face higher costs associated with international giving (vs. domestic giving) because of cultural differences between the home and host countries (Blonigen & O'Fallon, 2011; Kim et al., 2014).[17]

Next, based on arguments provided in the theory section, firms may be more inclined to give in developing countries to enhance their international legitimacy. However, they may also face higher costs associated with operations in developing countries (Cowan, Padmanabhan, & Huang, 2013; Cowan, Padmanabhan, Huang, & Wang, 2013; Porter & Kramer, 2002). These costs may both dilute the amount available for philanthropy and mitigate the overall benefit to the firm from enhanced legitimacy. We include **ECDEV**, a dummy variable that assumes a value of 1 if the firm invests in a developing country and 0 if it invests in a developed country as a control variable.[18]

Table 2
Comparison of samples – difference in means.

Variable	Service firms, $N = 150$ (standard deviation)	Manufacturing firms, $N = 180$ (standard deviation)	T value
DARATIO	10.77 (12.45)	20.28 (12.71)	−6.84***
PBRATIO	5.74 (2.45)	3.98 (2.59)	6.36***
CD	1.53 (1.31)	1.79 (1.42)	−1.71*
FCFRATIO	0.11 (0.12)	0.06 (0.05)	4.27***
ROA	0.13 (0.06)	0.08 (0.07)	7.05***
FSPER	0.45 (0.16)	0.54 (0.17)	−5.02***
RND	0.13 (0.08)	0.05 (0.05)	10.87***
LTA	23.85 (1.28)	23.82 (1.42)	0.23
LEMP	10.67 (1.09)	11.02 (1.25)	−2.70***

*** (**, *) represents significance at the 1% (5%, 10%) levels.
Data definitions and sources are presented in Table 1.

4. Presentation and discussion of results

In Table 1, we present sample descriptive characteristics for the final selected sample used in this study. In Table 1A, the statistics for the foreign givers vs. the pure domestic givers are presented for US service firms. Similar statistics (for the foreign givers vs. pure domestic givers) for sample US manufacturing firms are presented in Table 1B.[19]

A comparison of the sample statistics between the two sectors is presented in Table 2. It is clear from the difference in means tests that the differences between these samples are statistically significant for all variables with the exception of the log of total assets, **LTA**. This provides evidence of important differences in operations between manufacturing firms and service firms. A critical distinction includes the fact that the manufacturing firms in our sample are more highly levered as measured by the debt to asset ratio, **DARATIO**, than service firms. In contrast, the service firms in our sample are more profitable (**ROA**), have more value added by management (**PBRATIO**), and invest more heavily in research and development (**RND**). This suggests that these

[15] However, Blonigen and O'Fallon (2011) document evidence that firm size is *negatively* related to corporate giving for foreign firms giving in the US.

[16] We thank an anonymous referee for directing our attention to this important point as it relates to the treatment of CD and ECDEV.

[17] The cultural distance index **CD** for each country against the US is computed as follows: $\mathbf{CD}_j = \frac{\sum_{j=1}^{4}((I_{ij}-I_{iu})^2)/V_i}{4}$, where I_{ij} represents the distance measure of the jth country on the ith dimension, and I_{iu} represents the distance measure of the US on the ith dimension, and V_i is the variance of individual scores on the ith dimension. The four dimensions are: Power Distance, Uncertainty Avoidance, Individualism vs. Collectivism, and Masculinity vs. Femininity. See Hofstede and Bond (1988) for more details.

[18] **ECDEV** is calculated by the authors.

[19] For the service sample (but not for the manufacturing sample), the minimum value on the FSPER variable (foreign sales to total assets ratio) is 0. Since these variables are measured in the year prior to the giving year, this means that for these firms this venture represents their first international acquisition. We decided to keep these observations because even if they were not seeking international legitimacy, they may need to overcome cultural/economic barriers when they give internationally. Examining the data revealed that there was only 1 such case for service firms. (The minimum FSPER without this one case was 0.0575.) Although the results excluding this one case were marginally different from those reported here, the conclusions are robust. The results of these alternate runs are available on request from the authors. We chose to keep this case since it represents a valid case and we have no theory to expect the giving behavior of this firm to be a priori different than those of experienced givers. We thank an anonymous referee for directing our attention to this important point.

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Table 3
Sample country profile.

Country	Service firms	Manufacturing firms
Argentina	0	2
Austria	0	1
Bahrain	0	1
Belgium	1	0
Brazil	2	7
Canada	20	22
Switzerland	4	8
Chile	1	0
China	15	20
Columbia	0	2
Germany	11	15
Egypt	1	1
Spain	3	3
Finland	2	0
France	15	7
Great Britain	26	19
Ghana	0	1
Hong Kong	0	4
Hungary	1	0
Iceland	14	7
India	10	9
Italy	1	8
Japan	3	3
South Korea	1	5
Kuwait	0	1
Mexico	1	1
Malaysia	0	2
Netherlands	2	10
Norway	2	2
Peru	1	1
Philippines	1	1
Portugal	1	1
Romania	0	0
Russia	0	5
Sweden	4	3
Singapore	1	2
Thailand	2	0
Turkey	2	1
Taiwan	1	2
Uruguay	0	1
South Africa	1	2
Totals (41 countries)	150 (30 countries)	180 (36 countries)

dissimilarities may consequently lead to differences in determinants of giving between the two groups.

Corresponding country profiles of sample targets are presented in Table 3, followed by industry profiles in Tables 4A and 4B respectively, for each sample category. Finally, correlation coefficients for each category are presented in Table 5A and B.

4.1. The US service firm sample – foreign givers vs. pure domestic givers

The above referenced sample contains 44 cases (from 20 independent firms) of foreign/domestic giving and 106 cases where US service firms only give domestically. Sample assets (in millions of dollars) range from approximately $161 million to approximately $118 billion. The number of employees range from a minimum of 879 employees to approximately 345 thousand employees. Sample debt ratios range from a low of 0% to a high of 51.155%. Market-to-book ratios range from 2.077 to 14.68. Return on assets range from a low of −0.7% to approximately 25%. The sample also reflects diversion in terms of countries and industries. The sample reflects investments in a total of 30 countries. Countries where US service firms have made the most acquisitions and are foreign/domestic givers or pure domestic givers include Canada (20), China (15), France (15), and Great Britain (26). Both developed and developing countries are adequately represented in the sample. The sample includes four different industries as categorized by 2-digit SIC Codes. The industries with the highest incidence of giving include Business Services (107) and Engineering Management Services (31). It has also been determined that the unusual concentration of cases from the Business Services industry does not distort later results.[20]

Table 4A
Total sample industry profile: US service firms, foreign givers vs. domestic givers.

SIC	Category	Frequency
57	Furniture Stores	7
59	Miscellaneous-Retail	5
73	Business Services	107
87	Engineering/Management Services	31
4 industries	Total	150

Table 4B
Total sample industry profile: US manufacturing firms, foreign givers vs. pure domestic givers.

SIC	Category	Frequency
20	Food and Kindred Products	16
23	Apparel	1
24	Lumber and Wood (Not Furniture)	1
25	Furniture and Fixtures	3
26	Paper and Allied Products	5
28	Chemical and Allied Products	29
29	Petroleum Refineries And Industries	2
31	Leather and Leather Products	1
32	Stone, Clay, Glass and Concrete	1
33	Primary Metal Industries	9
34	Fabricated Metal	6
35	Machinery and Comp. Equipment	42
36	Electronics, Excl Computer Equipment	27
37	Transportation Equipment	20
38	Measuring, Analyzing and Control	15
39	Miscellaneous Manufacturing Industries	2
16 industries	Total	180

4.2. The US manufacturing firm sample – foreign/domestic givers vs. pure domestic givers

The final sample contains 78 cases of foreign giving and 102 cases (from 48 independent firms) where US manufacturing firms only give domestically. Sample assets range from approximately $372 million to approximately $305 billion. Number of employees range from a minimum of 1437 employees to a maximum of approximately 399,000 employees. Sample debt ratios range from a low of 0% to a high of 59.105%. Market-to-book ratios range from 0.58 to 19.26. Return on assets range from a low of −0.18% to a high of approximately 21.13%. The sample also reflects diversity in terms of countries and industries. Countries where US manufacturing firms have made the most acquisitions and are foreign givers or pure domestic givers include Canada (22), China (20), Germany (15), Great Britain (19), and Netherlands (10). Both developed and developing countries are adequately represented. Sample also reflects diversity in terms of industries as categorized by 2-digit SIC Codes. A total of 16 industries are represented. The highest incidence of giving has been recorded in the following industries: Chemical and Allied Products (29), Machinery and Computer Equipment (42), Electronics excluding Computer Equipment (27), and Transportation Equipment (20).[21]

[20] The results of these runs are not reported but are available on request from the authors.

[21] Higher-than-normal concentration of cases in these industries did not materially affect final conclusions. The results of these alternate runs are available on request from the authors.

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Table 5
Correlation coefficients.

VARS	FGIV	DARATIO	PBRATIO	CD	ECDEV	FCFRATIO	ROA	FSPER	RND
(A) Sample US service firms: foreign givers vs. pure domestic givers									
DARATIO	**−0.258**	–	–	–	–	–	–	–	–
	(0.0015)								
PBRATIO	0.094	**0.151**	–	–	–	–	–	–	–
	(0.251)	**(0.065)**							
CD	−0.037	−0.032	0.038	–	–	–	–	–	–
	(0.655)	(0.701)	(0.641)						
ECDEV	−0.106	−0.048	−0.105	**0.594**	–	–	–	–	–
	(0.197)	(0.556)	(0.202)	**(<0.0001)**					
FCFRATIO	**0.253**	**−0.289**	**0.167**	0.092	0.094	–	–	–	–
	(0.002)	**(0.0003)**	**(0.041)**	(0.264)	(0.252)				
ROA	**0.308**	**−0.467**	**0.309**	0.118	0.072	**0.232**	–	–	–
	(0.0001)	**(<0.0001)**	**(0.0001)**	(0.150)	(0.382)	**(0.0043)**			
FSPER	0.133	0.019	0.090	−0.076	−0.124	**0.375**	**0.197**	–	–
	(0.106)	(0.816)	(0.272)	(0.354)	(0.132)	**(<0.0001)**	**(0.0157)**		
RND	**0.316**	**−0.384**	−0.090	**−0.182**	**−0.145**	**0.246**	−0.074	**0.324**	–
	(<0.0001)	**(<0.0001)**	(0.275)	**(0.026)**	**(0.076)**	**(0.0024)**	(0.367)	**(<0.0001)**	
SIZE[a]	**0.137**	0.046	**−0.381**	**0.179**	**0.192**	**−0.399**	0.125	**−0.364**	**−0.261**
	(0.095)	(0.575)	**(<0.0001)**	**(0.029)**	**(0.019)**	**(<0.0001)**	(0.126)	**(<0.0001)**	**(0.0013)**
(B) Sample US manufacturing firms: foreign givers vs. pure domestic givers									
DARATIO	**−0.210**	–	–	–	–	–	–	–	–
	(0.0047)								
PBRATIO	0.103	−0.070	–	–	–	–	–	–	–
	(0.168)	(0.349)							
CD	0.048	0.084	0.092	–	–	–	–	–	–
	(0.521)	(0.264)	(0.218)						
ECDEV	−0.006	**0.176**	0.067	**0.612**	–	–	–	–	–
	(0.931)	**(0.0179)**	(0.375)	**(<0.0001)**					
FCFRATIO	**0.139**	**−0.240**	**0.349**	**−0.139**	−0.073	–	–	–	–
	(0.0628)	**(0.0012)**	**(<0.0001)**	**(0.0625)**	(0.332)				
ROA	**0.163**	**−0.326**	**0.489**	−0.041	−0.016	**0.346**	–	–	–
	(0.0290)	**(<0.0001)**	**(<0.0001)**	(0.586)	(0.836)	**(<0.0001)**			
FSPER	**0.325**	**−0.337**	**0.183**	**−0.137**	**−0.186**	**0.322**	**0.171**	–	–
	(<0.0001)	**(<0.0001)**	**(0.0141)**	**(0.067)**	**(0.0126)**	**(<0.0001)**	**(0.022)**		
RND	**0.141**	**−0.344**	−0.057	−0.059	**−0.213**	**0.298**	**0.155**	**0.376**	–
	(0.0600)	**(<0.0001)**	(0.447)	(0.433)	**(0.0041)**	**(<0.0001)**	**(0.0374)**	**(<0.0001)**	
SIZE[a]	**0.348**	**0.216**	−0.011	0.103	0.097	0.067	−0.108	0.0078	0.013
	(<0.0001)	**(0.0035)**	(0.887)	(0.167)	(0.1954)	(0.368)	(0.1485)	(0.9182)	(0.866)

Data descriptions can be found in Table 1. Values in tables are coefficient (significant in bold) and (*p* values).
[a] **SIZE** represents factor scores developed from **LEMP** (number of employees in millions) and **LTA** (dollar total assets), both captured at the end of the year prior to the acquisition year and expressed as natural logarithms, and captures the size of the firm.

4.3. Discussion of results – service firm sample

The correlation table for the service firm sample presented in Table 5A provides preliminary evidence that **FGIV** is highly correlated with sample explanatory control variables. Given the very high correlation between **LTA** (total assets) and **LEMP** (total employees), scores from a factor analysis conducted on these two variables are used as a **SIZE** proxy in all subsequent analyses and reported in data tables. In addition, many of the independent variables are also significantly correlated with each other. For instance, 25 of the 45 correlations reported are significant at the 10% (or lower) level. In particular, **FCFRATIO** is correlated with almost all independent variables used in the study. **ROA** is also correlated with many of the sample independent variables. Hence, we report Variance Inflation Factors (VIFs) for all independent variables in Table 6 because of possible multicollinearity problems

Table 6
Foreign givers vs. pure domestic givers: US service firms, full regression results.

Dependent variable: FGIV is 1 if the US service firm gives internationally (or internationally and domestically) and 0 if it only gives domestically						
Parameter	dF	Estimate	Standard error	Wald Chi-square	PR > CHISQ	Variance inf. factor[a]
INTERCEPT	1	−20.0964	4.8096	17.4587	<0.0001***	–
CD	1	0.0334	0.2423	0.0190	0.8904	1.64219
FSPER	1	9.7615	4.4352	4.8474	0.0277**	1.86966
ECDEV	1	−0.9495	0.6873	1.9087	0.1671	1.63442
SIZE[b]	1	4.0700	1.1320	12.9273	0.0003***	2.12446
ROA	1	37.3024	14.5246	6.5958	0.0102**	2.81331
DARATIO	1	0.00622	0.0551	0.0127	0.9106	2.66781
RND	1	36.6829	9.6970	14.3105	0.0002***	1.74628
FCFRATIO	1	5.7562	2.7882	4.2621	0.0390**	1.52243
PBRATIO	1	−0.1598	0.2801	0.3254	0.5684	2.02340

N = 150; cases where firms only give internationally = 44; cases where firms only give domestically = 106; overall Chi-Sq = 72.8194, 9 dF, $p < 0.0001$.
*** (**, *) represents significance at the 1% (5%, 10%) levels.
[a] The Variance Inflation Factors were generated using the PROC REG procedure in SAS.
[b] **SIZE** represents factor scores developed from **LEMP** and **LTA**, and captures the size of the firm.

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Table 7
Foreign givers vs. pure domestic givers: US service firms, stepwise regression results.

Parameter	dF	Estimate	Standard error	Wald Chi-square	PR > CHISQ	Variance inf. factor[a]
INTERCEPT	1	−20.5466	4.6882	19.2075	<0.0001***	–
FSPER	1	10.2777	3.6233	8.0462	0.0046***	1.30052
SIZE[b]	1	4.1662	1.0008	17.3294	<0.0001***	1.29556
ROA	1	31.9266	8.1339	15.4067	<0.0001***	1.15991
RND	1	36.1295	8.1906	19.4578	<0.0001***	1.22309
FCFRATIO	1	4.6771	2.5679	3.3174	0.0685*	1.39618

$N = 150$; cases where firms only give internationally = 44; cases where firms do not give internationally = 106; overall Chi-Sq = 67.9702, 5 dF, $p < 0.0001$.
*** (**, *) represents significance at the 1% (5%, 10%) levels.
[a] The Variance Inflation Factors were generated using the PROC REG procedure in SAS.
[b] **SIZE** represents factor scores developed from **LEMP** and **LTA**, and captures the size of the firm.

Table 8
Foreign givers vs. pure domestic givers: US manufacturing firms, full regression results.

Parameter	dF	Estimate	Standard error	Wald Chi-square	PR > CHISQ	Variance inf. factor[a]
INTERCEPT	1	−3.8383	0.9816	15.2909	<0.0001***	–
CD	1	0.1265	0.1633	0.6004	0.4384	1.71722
FSPER	1	3.9373	1.3051	9.1009	0.0026**	1.34912
ECDEV	1	−0.0639	0.4993	0.0164	0.8982	1.73154
SIZE[b]	1	1.7331	0.3660	22.4224	<0.0001***	1.09443
ROA	1	5.4333	3.2518	2.7917	0.0948*	1.54903
DARATIO	1	−0.0386	0.0168	5.2445	0.0220**	1.40260
RND	1	−1.1767	4.2672	0.0760	0.7827	1.40871
FCFRATIO	1	−3.2528	4.0481	0.6457	0.4217	1.42705
PBRATIO	1	−0.00781	0.0803	0.0095	0.9226	1.55602

$N = 180$; cases where firms give internationally = 78; cases where firms only give domestically = 102; overall Chi-Sq = 56.9777, 9 dF, $p < 0.0001$.
*** (**, *) represents significance at the 1% (5%, 10%) levels.
[a] The Variance Inflation Factors were generated using the PROC REG procedure in SAS.
[b] **SIZE** represents factor scores developed from **LEMP** and **LTA**, and captures the size of the firm.

associated with the set of independent variables. In view of the strong multicollinearity, we report stepwise regression results and the corresponding VIFs in Table 7.[22]

Table 6 reports regression results for the sample of US service firms giving internationally vs. firms only giving domestically using the entire list of independent variables. The presence of strong correlations between sample independent variables precludes using this table to extract any meaningful conclusions. Nevertheless, it is interesting to note that many independent variables are successfully able to discriminate between foreign givers and pure domestic givers. However, more meaningful conclusions can be drawn by estimating a parsimonious model through a stepwise regression. The results of the stepwise regressions are reported in Table 7. The stepwise logit regressions have significant overall explanatory power with model chi squares of 67.97 ($p < 0.0001$). The results also suggest that many independent variables are also significant and positively influence foreign giving relative to pure domestic giving. For instance, **SIZE** (<1%), **FSPER** (<1%), **ROA** (1%), **RND** (<1%) and **FCFRATIO** (10%) were found to be positively associated with firm level foreign giving, relative to domestic giving. Clearly, these results suggest that firms who have greater size, foreign sales percentage, research and development intensity, higher return on assets and higher levels of free cash flows tend to give internationally, and make intuitive sense. Firms with international operations (but with lower levels of the significant variables) tend to prefer restricting their giving dollars to domestic giving. From a strategic perspective, this suggests that firms use their giving dollars where it generates more in terms of impact on strategic operations. In addition, from a theoretical perspective, it is interesting that there was greater support for value enhancing theories and less support for agency theory for service firms. There seems to be recognition that firm level giving provides legitimacy and value enhancing strategic benefits in addition to altruistic benefits for US service firms. These results support Hypotheses 1, 2, and 4, but not Hypotheses 3 and 5, for U.S. service firms. Clearly, the significance of the **FSPER** variable suggests that service firms seek an assertive international legitimacy strategy when they opt to give internationally, and these findings are consistent with the findings of Haniffa and Cooke (2005). Similarly, the significance of the **ROA** and the **FCFRATIO** variable indicates that higher levels of profitability and free cash flows are needed for firms to overcome the relative higher costs associated with international giving.

4.4. Discussion of results – manufacturing firm sample

The correlation table for the manufacturing firm sample presented in Table 5B also provides evidence that **FGIV** is highly correlated with sample explanatory control variables. As before, given the very high correlation between **LTA** (total assets) and **LEMP** (total employees), scores from a factor analysis conducted on these two variables are used as a **SIZE** proxy in all subsequent analyses and reported in data tables. In addition, many of the independent variables are also significantly correlated with each other. For instance, 26 of the 45 correlations reported are significant at the 10% (or lower) level. In addition, **DARATIO** and **ROA** seem to be strongly correlated with almost all explanatory variables. Hence, we report VIFs for all independent variables in subsequent regular (Table 8) and stepwise regression runs (Table 9).[23]

Regression results for the manufacturing firms in the sample are presented in Table 8 (full regression with all independent variables) and 9 (stepwise regression). As before, only stepwise regression results are interpreted. For the stepwise regressions presented in Table 9, the logit regressions suggest significant

[22] In addition, normality tests conducted on continuous independent variables confirm that they do not violate the normality assumption. Results of the normality runs are available on request from the authors.

[23] As before, normality tests conducted on continuous independent variables confirm that they do not violate the normality assumption. Results of the normality runs are available on request from the authors.

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Table 9
Foreign givers vs. pure domestic givers: US manufacturing firms, stepwise regression results.

Parameter	dF	Estimate	Standard error	Wald Chi-square	PR > CHISQ	Variance inf. factor[a]
INTERCEPT	1	−3.1490	0.8528	13.6360	0.0002***	–
FSPER	1	3.6641	1.1690	9.8240	0.0017***	1.09310
SIZE[b]	1	1.6304	0.3419	22.7375	<0.0001***	1.12612
DARATIO	1	−0.0414	0.0155	7.1147	0.0076***	1.21860

$N = 180$; cases where firms give internationally = 78; cases where firms only give domestically = 102; overall Chi-Sq = 52.7392, 3 dF, $p < 0.0001$.
*** (**, *) represents significance at the 1% (5%, 10%) levels.
[a] The Variance Inflation Factors were generated using the PROC REG procedure in SAS.
[b] **SIZE** represents factor scores developed from **LEMP** and **LTA**, and captures the size of the firm.
Data descriptions can be found in Table 1.

overall explanatory power with model chi squares of 52.74 ($p < 0.0001$). The results also suggest the statistical ability of a number of explanatory variables to discriminate between foreign givers and pure domestic givers for the manufacturing sample. For instance, **SIZE** (<1%) and **FSPER** (<1%) were found to be positively associated with firm level foreign giving, relative to domestic giving. Explanations similar to the ones provided for the findings reported for service firms can also be provided here. **DARATIO** (1%) was found to be negatively associated with the incidence of foreign giving. The strong significance of the **DARATIO** variable suggests greater support for agency theory for the manufacturing sample of firms. In other words, US manufacturing firms are less likely to give internationally (vs. domestically), if they have high debt-asset ratios, implying that the higher costs of international giving relative to domestic giving reduce their relative strategic ability to give internationally. These findings affirm the findings of Kim et al. (2014) and Shi and Sun (2014). Firms in our sample that chose to give internationally (as opposed to giving domestically) may recognize that international giving relative to domestic giving can lead to higher future borrowing costs induced by a weaker signal because lenders cannot extract the precise information content from foreign giving.[24]

Overall, these results provide support for Hypotheses 1 and 5 only. Both the differences and similarities between manufacturing firms and service firms are worthy of note. **SIZE** is an important determinant of foreign giving for both types of firms. This is consistent with the domestic literature as well as the international literature (Cowan, Padmanabhan, & Huang, 2013; Cowan, Padmanabhan, Huang, & Wang, 2013), but not consistent with the findings of Blonigen and O'Fallon (2011), for foreign firms giving in the US. The positive relationship between **FSPER** and the firm's propensity to give (if the firm gives) suggests tentative support for reputation and legitimacy theories.

Although the results for both manufacturing and service firms provide some support for agency theory, the variable that captures this relationship differs between the two. The monitoring variable, **DARATIO**, is statistically significant for manufacturing firms. Given these firms are already highly levered relative to service firms, any decision to give internationally (vs. domestically) must be balanced against the higher costs associated with international philanthropy. In contrast, **FCFRATIO** is statistically significant for service firms. As free cash flow as measured by **FCFRATIO** increases, the propensity to give internationally also increases, since firms must have higher than normal free cash flow to overcome the costs associated with international giving. However, **FCFRATIO** is only significant at the 10% level.

The results for service firms as presented in Table 7 also provide evidence in relative support for value enhancement theory. There is a statistically significant and positive relationship between foreign giving and **ROA** (Brown et al., 2006).

Our results provide evidence that the determinants of charitable giving differ for manufacturing firms and for service firms and therefore that these categories of firms should not be lumped together as one homogeneous group. These findings are not surprising given the significant differences in the operational characteristics of these types of firms. These operational nuances are reflected in charitable giving irrespective of whether giving is domestic or international.

5. Policy implications, limitations, and conclusions

We draw some valuable implications and suggestions from this research. For both manufacturing and service firms, the higher the foreign sales percentage, the greater the propensity to give internationally, assuming the firm gives at all. Tentatively, this suggests that legitimacy is a motivator for both manufacturing firms and service firms to engage in international philanthropy as opposed to domestic philanthropy. The larger the company as measured by **SIZE**, the greater the likelihood that a firm will give internationally (relative to giving domestically) if it engages in philanthropy.

Based on our findings, it seems that corporate philanthropy between manufacturing and service firms differ in terms of the motivation for giving. Whereas we find evidence in support of agency theory for manufacturing firms, we primarily find evidence in support of value enhancement theory for service corporations. Based on our findings, it seems that service firms may be inclined to give abroad if they are profitable. The foreign giving ability for the manufacturing group seems to be constrained by the presence of agency monitoring. These significant differences support the findings of the Committee Encouraging Corporate Philanthropy (2012), and indicate the serious limitations of research that ignores the differences between manufacturing and service corporations.[25]

Given these findings, we offer some policy implications for firms and countries. Based on our preliminary findings, it seems

[24] Finally, a surprising result is that **RND** (a control variable) was found significant for the service sample but not for the manufacturing sample. A possible explanation can be found from an examination of Table 1. The range of sample **RND** values is narrower for manufacturing firms (=0.21) than for the service sample (=0.38), implying that there is less variation in sample **RND** values for manufacturing firms vs. service firms. Since the dispersion in the **RND** proxy across firms used in the manufacturing sample is lower than for the service sample, it is unable to statistically discriminate between foreign givers vs. domestic givers for manufacturing firms but not for service firms. An alternative explanation is that service firms tend to invest more heavily in intangible assets than their manufacturing counterparts. The management of servicing firms is seemingly more willing to invest for future returns. The finding that these firms also have a propensity to invest internationally suggests that the management of service firms may more readily recognize the value enhancing potential of corporate philanthropy abroad. Thus, it is likely that this is an important determinant for service firms merely based on this characteristic difference between service firms and manufacturing firms.

[25] However, caution must be exercised in the interpretation of the results. Our results only use the incidence of giving internationally and not the dollar amount of giving, nor giving by country. Second, we only examine data points available in the equity database used in this study, and not the entire population conducting equity investments abroad. We also exclude foreign branches. In addition, there may be other variables that can also capture the essence of the various theories used in support of our analysis, but are not captured here.

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that, in addition to the altruistic reasons for giving, firms also treat giving as a scarce strategic resource. Should a firm give domestically or internationally for maximizing the benefits of giving? With few exceptions, sample firms with international equity investments make this strategic choice by taking the pool of giving dollars and using it to the best possible strategic advantage. Firms undertaking equity investments abroad must take care when allocating scarce giving dollars, and must not assume that because they invest internationally, they must give internationally. Host governments can utilize these findings to provide ways for foreign firms to motivate more giving in their countries. Since **ROA** is a key determinant of foreign giving for service firms, host governments can provide tax benefits to global firms to induce local giving.

We also offer some suggestions for future research in this area. The limitations of this study generally involve the lack of information regarding the dollar amount of giving as well as being limited to a study involving only US firms. First, do these results carry over when dollar giving (instead of the incidence of giving) is captured? Second, an interesting area of future research, in light of the Kim et al., and the Shi and Sun studies, is to investigate whether foreign givers have higher borrowing costs relative to pure domestic givers. Third, do these results also generalize when firms from other countries are considered? Fourth, are these conclusions generalizable across all manufacturing and service firms that undertake foreign investments? Do these conclusions extend to cases where foreign branch type investments are also included? Fifth, new researchers in this area are cautioned from pooling manufacturing and service firms when undertaking studies related to the giving behavior of these firms. Finally, although we provided some theory to rationalize firms' inclination to give internationally vs. giving domestically, there is considerable scope for theory development in this direction. We anticipate that further research in these areas will uncover new insights into this important strategic behavior by corporations.

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