

# Agency Cost or Advertising? Corporate Donations for Tsunami Relief

By **Daniel Cahir**, Associate Consultant, Bain & Company

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*About the Author:* **Daniel Cahir** is an associate consultant at Bain & Company, a management consulting firm based in Boston, MA. Previously, he spent four years as a research assistant for the Kravis Leadership Institute, contributing to a number of studies published by Drs. Susan Murphy and Ronald Riggio. Daniel graduated summa cum laude from Claremont McKenna College in 2005. E-mail: daniel.cahir@bain.com

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## **Abstract:**

This study examines the motives underlying corporate contributions to relief efforts for the December 2004 Asian tsunami. Regression analysis of contributions by S&P 500 firms reveals that companies with more international sales, greater name recognition amongst consumers, and less indebtedness donated statistically significant greater amounts to tsunami relief. These results indicate that corporate philanthropy is driven primarily by agency cost (i.e., manager discretion), though profit-maximization also plays an important role.

## **I. Introduction**

The private sector's philanthropic response to the December 2004 Asian tsunami was swift and sizable. U.S. companies donated more than \$452 million in cash and goods within months of the disaster, representing the second-largest outpouring of corporate support since the Chamber of Commerce began collecting data in 1998.<sup>i</sup> According to some sources, tsunami donations even surpassed those for 9/11 rebuilding, making it the largest corporate giving event on record.<sup>ii</sup>

Most large U.S. firms likely had little difficulty finding a connection to 9/11, with many of their employees, customers, suppliers, and investors affected in some way by the tragedy in New York. In the case of the Asian tsunami, this connection is often much less clear. While modern communications technology no doubt brought the Asian disaster close to home for most U.S. citizens, this does not change the fact that the tsunami occurred, from the perspective of many S&P 500 firms, halfway around the world. One must naturally pause to wonder: does this giving reflect genuine concern for the affected citizens? Or, as a recent article in *The Economist* argued, does it represent a calculated attempt to improve public image?<sup>iii</sup>

If one were to simply believe companies' public statements, the answer would be clear: corporate contributions stemmed from a sense of social responsibility. As Marc Schussel of Chubb Corp, which donated \$1 million to tsunami relief, put it: "Our reasons for doing this are not directly connected to our business. I think it's more from a good citizenship standpoint."<sup>iv</sup> While these 'pure' motives may well be the main motivating factor, the claim certainly merits investigation.

In order to uncover the factors driving tsunami relief donations, I examine the relationship between corporate contributions and company characteristics. Based on the results of past research, I identify four variables, including company size and profitability, predicted to affect the level of a firm's charitable giving. Then, I identify an additional four "bottom-line" variables that, unlike the other four, are likely to have differing effects on profitability based on company characteristics. For example, I argue that a company with sales focused in Asia stands to gain more from donating than an otherwise identical company that sells only in the United States. Likewise, a consumer goods company likely stands to derive more 'advertising benefit' from giving than a little-known but otherwise identical industrial supplier.

By examining the extent to which these bottom-line variables correlate with corporate contributions, it is possible to gain insight into the motives underlying giving. If managers view philanthropy primarily as a means of advancing the corporation (i.e., giving as advertising, hereafter referred to as the 'profit maximization' view), one would expect predicted bottom-line effects to correlate highly with giving. If, on the other hand, corporate decision-makers base giving on personal beliefs rather than expected profits (hereafter referred to as the 'agency cost' view), we would expect to find little correlation. If companies' philanthropic decisions stem from managers preferences rather than expected profits, it could even mean that these decisions are based in a genuine desire to help (though, of course, it's always easier for managers to be 'altruistic' when spending shareholders' money).

Ultimately, this study boils down to an attempt to shed light on the following question: what motivates companies to donate to charity? The answer has less to do with profit than you might expect.

## **II. Literature Review**

### ***Motives for Philanthropy***

Studies have identified four main explanations for corporate giving: profit-maximization, agency cost/manager discretion, altruism, and social responsibility. Due to the difficulty of bringing data to bear on individual motives, empirical studies have generally restricted themselves to examining the profit maximization and agency cost explanations. The profit maximization viewpoint – as popularized by many corporate social responsibility advocates – holds that corporate philanthropy works to increase long-term profitability.

In this view, the long-term benefits of contributions wind up paying for themselves even in instances where this might not be immediately evident. These benefits might accrue, for example, as a result of improved public image, employee satisfaction, or to create a sense of community. Thus, it has been noted that corporations may profit by using corporate philanthropy as a form of advertising (Pava and Krausz 1996), a way of managing regulators' perceptions for political ends (Neiheisel, 1994), or as a mechanism for attracting and retaining top employees (Burlingame and Frishkoff, 1996).

There are, on the other hand, those who champion an agency-cost model of giving (Smith and Helland, 2004). Agency theory, which originated in the field of financial economics, is rooted in the basic principal-agent problem: those who own a company often must hire others to manage it. Since owner and manager interests sometimes conflict, situations arise when managers make decisions that suit their own needs but damage the interests of shareholders (the resultant reductions in shareholder value are referred to as "agency cost" -- see Jensen and Meckling, 1976, for a full discussion of agency theory).

Managers may choose, for any number of reasons, to make such decisions. For example, philanthropic donations provide an opportunity for managers and directors to use shareholder money in order to gain favorable public attention. A donation to the opera may result in front-row concert tickets; a donation to fight disease may result in a sound-bite on the news. Alternately, agency costs might derive from entirely 'pure' motives: those managers who choose to donate to a cause out of genuine concern -- but fail to benefit the business as a result -- are nonetheless serving to reduce shareholder value.

A number of studies have examined firm-level data to determine the extent to which philanthropic giving appears to comport to profit-maximization, agency cost, or a combination thereof. Navarro (1988) argues that profit-maximization and managerial utility aren't mutually exclusive: rather, profit-maximization can be seen as nested within considerations of managerial utility, with consideration for shareholders playing a role, albeit secondary, in managerial decision-making. He interprets the findings of his firm-level analysis as completely consistent with profit maximization and generally consistent with managerial utility. Atkinson and Galaskiewicz (1988) examine the giving patterns of 69 publicly held firms in the Twin-Cities area, and find that companies with a higher percentage of ownership by the CEO give less to charity. They find that the same is true of firms with larger institutional blockholders, a finding that they interpret as largely consistent with the agency theory view of the firm: if companies are choosing to give less when CEOs have a greater vested interest in business results, or when powerful blockholders are more able to ensure managerial restraint, it may be the case that managers are contributing higher-than-profit-maximizing amounts in the absence of these restraints.

The results of other studies of firm-level data are generally consistent with these findings. Boatsman and Gupta's (1996) study of the changes in firm giving in response to the Tax Reform Act of 1986 also found that charitable contributions exceeded profit-maximizing levels, indicating a likely combination of profit-maximization and managerial utility as

motives. Using a matched-pair sample to control for industry and company size, Seifert et. al (2003) found that “big givers” (companies that donated at least \$5 million during the year) tended to have significantly more available resources than “small givers”. They interpreted this finding as consistent both with the idea that corporate philanthropy is a discretionary responsibility and that philanthropy represents a form of agency cost. Most recently, Helland and Smith’s (2003) investigation of the annual giving of Fortune 500 companies found a good deal of evidence indicating that contributions represent a form of agency cost. For example, companies with a higher market-to-book (and therefore more disposable resources), lower debt-to-market (and therefore less monitoring from creditors), and larger boards of directors (and therefore more individuals’ fancies to indulge) all gave a statistically significant greater amount.

As will be further described later, few studies have been able to show philanthropic giving to be a clearly profit-maximizing behavior: at best, they have shown that there is no relationship, either negative or positive, between philanthropic giving and corporate performance. There have, however, been studies that point to the strategic use of corporate philanthropy. Griffin (2004) finds that corporate philanthropy increases directly after a major merger or acquisition, indicating the use of corporate philanthropy to enhance reputation and solidify firm culture. Content analysis on 60 firms’ descriptions of their contributions to the arts found that they were justified almost exclusively in terms of firm profit-maximization (Moir and Taffler, 2004). Nevertheless, managers’ descriptions of philanthropic activities must necessarily tend towards rationalization in self-interest – even when this is not the true motivation – in order to protect themselves from legal liability (Balotti and Hanks, 1999).

Thus, the literature has generally shown that philanthropic giving is motivated by a combination of profit-maximization and consideration of managerial utility. Research into the motives for firm-level giving decisions, however, is still unfolding, given the only-recent availability of firm-specific data. None of the studies, thus far, have examined philanthropic giving in response to a specific event. Whereas annual data tend to smooth out differences, thereby obscuring motives, examining a single event may allow us to observe the motives for giving, at least in that particular instance, more directly. This makes it possible to provide keener insight into the decision-making processes underlying corporate philanthropy as a whole.

### **III. Methods**

As detailed in the literature review, there are many theories that attempt to explain the role of philanthropy within a firm. Authors variously measure philanthropy as a form of profit maximization, agency cost, or combination thereof. If firms indeed think of philanthropy as a means to the end of profit maximization, they will make philanthropic decisions based on costs and benefits, dollars and cents. Microeconomic theory predicts that firms deriving more benefit from giving will give more, and firms with less to gain will give less.

Managers making decisions on the basis of profit maximization therefore act based upon bottom-line impact. If, on the other hand, giving decisions depend upon the principles (or whims) of individual managers, it will be their preferences, rather than the interests of shareholders, that drive philanthropic decisions. Therefore, the extent to which post-tsunami contributions correlate to measures of predicted bottom-line impact will provide insight into the actual thinking of business decision-makers: if it is the case that corporate philanthropy is motivated primarily through consideration of business strategy, then we would expect firm giving to be highly correlated with measures of bottom-line impact. If, on the other hand, decisions are primarily individual in nature, then we would expect measures of bottom-line impact to be largely uncorrelated with giving. The results of this correlation will provide insight into whether firms tend to donate “because it makes business sense” or “because the managers chose to for other reasons”.

### ***Bottom-Line Impact Variables***

Since all firms face unique environmental constraints, the costs and benefits of a particular action will vary by firm. Thus, two companies choosing to undertake identical actions may experience significantly different results. Likewise, in the case of the tsunami, there are some companies who stood to gain more than others from identical donations. In the case of the tsunami, companies with more international sales, greater consumer focus, a worse corporate reputation, and a greater number of employees all stand to gain more from relief donations. The following paragraphs review the logic underlying the selection of these ‘shareholder interest’ variables.

Firms must consider the impact of their decisions upon a variety of affected groups. Any decision made by a firm affects many stakeholders, including investors, employees, customers, and suppliers. Though economists disagree as to the relative weighting that ought to be given to various stakeholders’ interests, all agree that firms’ decisions have an affect on a wide group of interested parties.<sup>v</sup> Though managers operating within a maximize-shareholder-value decision-making context may not explicitly factor in stakeholder views, they must nonetheless implicitly consider these views insofar as they affect firm value: if a firm attempts to please its shareholders but in so doing hurts the business by angering customers, the shareholders will, in the end, be displeased. Thus, whether firm decisions are made within a maximize-shareholder-value or stakeholder-based theoretical context, the bottom line remains the same: profit-maximizing firms must consider the effects of their decisions upon the various affected stakeholders.

In the context of post-tsunami giving, firms must consider the effects of their actions upon a variety of interested groups. Employees, customers, investors, regulators, and business partners could all potentially be attuned to a company’s philanthropic activities. Theoretically, there are reasons why all these groups might care: employees might prefer to work for a firm that they perceive to be socially responsible; customers might prefer to buy a company’s products if they associate that company with a good cause; investors may wish to put their money only in companies whose actions they support; regulators might be more likely to look favorably upon socially-engaged companies; and business

partners might read into a company's philanthropic activities assumptions about that company's trustworthiness as a partner. Though these stakeholders may care about a particular company's philanthropic activities, this caring will vary company by company, industry by industry<sup>vi</sup>. Since every company has a different set of actual and potential stakeholders, the extent to which its various stakeholders care will determine the amount a company stands to gain from giving.

The important point here is that perception mediates the mechanism through which corporate philanthropy affects the bottom line: giving to a cause does not benefit your company in and of itself. In fact, if a company gives anonymously to a cause and therefore no one, including its employees, knows that it has given, then that act of philanthropy has brought only costs (and no benefits) to the company. An identical donation given in the company's name and widely announced to its employees would have the same costs but could potentially bring the benefits of improved customer, regulator, and employee perceptions. Thus, corporate philanthropy cannot enhance business performance in and of itself; the act of giving, separate of anyone hearing about it, solely imposes a cost on companies. Companies stand to gain from giving only insofar as stakeholders know and care.

In order to predict the benefits companies will derive from philanthropy, then, one must consider the extent to which stakeholders will *know* and *care* about these actions. If Companies A and B make identical donations, but, for whatever reason, only the stakeholders of company A become aware that their company has donated, then surely Company A has benefited more than Company B from the donation. Likewise, if companies C and D donate, but only the stakeholders of company C are concerned with the cause of tsunami relief, then surely company C has benefited more than company D. As I will detail, there are a number of factors that run across all companies that will predict whether their stakeholders will know and care that they have donated in the case of the tsunami.

Customers are an integral group for companies to consider when making decisions regarding philanthropic giving. In his analysis of firm-level data on philanthropic giving, Navarro (1988) found that advertising spending correlated positively with corporate philanthropy, indicating that companies that are more reliant upon consumer perceptions (i.e., ones that spend more on advertising) may use philanthropy as a means towards that end. Whether it is the case that advertising-oriented companies are giving more because they see it as a good form of advertising – or because they simply are afraid of looking bad – the fact of the matter is that it appears that companies are more in the public eye stand to gain more from giving. If there are two identical companies – one of which is a consumer products company that is well-recognized and closely watched by consumers, and the other an industrial products company that doesn't sell products to consumers at all – it is likely that the consumer-oriented company would stand more to gain from giving. Thus, I hypothesize that **companies better known by consumers will be more likely to donate.**<sup>vii</sup>

Consumers are also concerned with corporate reputation. Corporate reputation and brand image are clearly important in the business world; in a 2003 study examining the market value of popular brand names, *Business Week* and Interbrand estimated that Coca-Cola, the world's most valuable brand, was projected to have a whopping \$67.39 billion value.<sup>viii</sup> A 2004 study by Cone, Inc. revealed that 86% of consumers are "very/somewhat likely to switch from one brand to another that is about the same in price and quality, if the other brand is associated with a cause."<sup>ix</sup> Thus, companies must also consider the reputational effects of giving. The question, then, is whether companies with a higher or lower corporate reputation stand to gain more from a larger donation.

Dean (2003) investigates this question and concludes that companies with a lower corporate reputation stand to gain more from philanthropic activity. Subjects were presented with questionnaires about three fictitious companies (one described in ways to make it seem "socially irresponsible", another "average", and another "scrupulous"), and asked to fill in their attitudinal responses to these companies' hypothetical philanthropic giving. The survey proved the authors' hypothesis: that companies with a worse reputation stand to gain more by giving. The reasoning, in essence, is that consumers have lower expectations about the activities of companies with worse corporate reputations. An identical donation by an ill-reputed company will change a consumer's perceptions more significantly than one by a highly reputed company, even if the consumer thinks that the former is giving largely with the purpose of improving its reputation. Being perceived as a 'bad' company that gives to good causes is still better than simply being seen as a 'bad' company. All a well-reputed company can hope to do, on the other hand, is maintain its current status. Therefore, I predict that **companies with a worse reputation will be more likely to donate.**

Additionally, the opinions of foreign customers and regulators will matter. As Neiheisel (1994) notes, philanthropy can be used as a means of currying favor with regulators. Regulators' opinions are especially important for the foreign divisions of American-based companies. These companies are particularly vulnerable to foreign regulators, both because being a foreign multi-national involves complex legal procedures (and thus high reliance on foreign bureaucracies) and, equally importantly, because these companies lack a local political base. Indeed, they may even be viewed as taking jobs and profits away from local citizenry. In the context of the tsunami, companies with higher sales to Asia are likely to have a greater concern about the opinions of Asian regulators. So long as tsunami relief donations can indeed improve Asian regulators' opinions of U.S. companies, then companies with higher sales to Asia stand to gain more from tsunami relief. Therefore, **companies with more sales to Asia will be more likely to donate.**

Employees are another stakeholder group affected by companies' philanthropic giving decisions. Indeed, a recent Boston College Center for Corporate Citizenship survey of executives from 50 companies who donated to tsunami relief indicated that employees were amongst these leaders' chief concerns. Ninety four per cent of executives cited "employee expectation" as a top motivating factor for giving. The next-most-cited factors, "it's the right thing to do" and "CEO decision", were each only cited by 34% of

respondents. Even factoring in the 16% who responded “strategic business reasons” and 2% who responded “shareholder expectation”, employee expectation received more support than all the other factors combined.<sup>x</sup>

In general, employees seem to care quite a bit about the sort of company that they work for; philanthropy has been posited as a means of attracting and retaining top employees. Past studies have consistently found a positive correlation between labor intensity (defined as number of employees) and philanthropic giving. This held true in all studies of firm-level giving which tested for it, including Navarro (1988), Burlingame and Frishkoff (1996), and Helland and Smith (2003). Therefore, I hypothesize that **firms with greater numbers of employees stand to gain more from donating.**

Having laid out four factors predictive of bottom-line impact in the case of the tsunami, let us proceed to an empirical analysis of the data on tsunami relief.

#### **IV. Empirical Analysis: Motives for Post-Tsunami Corporate Philanthropy**

##### *Description of Data:*

This study focuses upon the post-tsunami giving behaviors of the companies listed in the S&P 500. Together, these companies donated a reported \$316.3 million in total gifts (cash and in-kind) to tsunami relief efforts.<sup>xi</sup> Though these companies’ motives may not be identical to those of smaller and non-U.S.-based companies, an analysis of the S&P 500 will give us insight into the majority of post-tsunami giving.

The data used in this study is derived from three main sources. Information on philanthropic contributions was compiled by searching company press releases and double-checking against other comprehensive donor lists; information on reputation was taken from an annual survey conducted by Harris Interactive and the Reputation Institute; and information on company characteristics, including profitability, number of employees, and geographic breakdown of sales, was taken from Compustat.

204 of the 500 companies participated in tsunami relief in some way, whether through a cash, in-kind, or employee gift-matching donation (or some combination thereof). 157 of the companies donated cash. 29 of the companies made in-kind donations, donating products and services to tsunami relief efforts.<sup>xii</sup> Information on philanthropic contributions was collected from company press releases, as found on PRWire.com and company websites. The list was compiled by searching for ‘tsunami’ in the press releases section of every S&P 500 company’s web site, and by searching for ‘*Company Name* tsunami relief’ on Google. This list was then cross-checked against two established lists of tsunami contributions: the ‘Tsunami Donors List’, based upon press releases on PRNewswire.com (compiled by onphilanthropy.com<sup>xiii</sup>), and ‘American Donations for Tsunami Relief’, compiled on an individual’s Weblog<sup>xiv</sup>, based upon news articles and press releases. Though a Weblog would not generally be viewed as a credible source of

information, its list of tsunami givers included links to all the relevant press releases. The press releases were all double-checked for accuracy.

As noted above, tsunami philanthropy took three main forms: cash, in-kind, or employee gift-matching. Information was collected regarding each company's action in all three of these categories, with the total value of giving in each of these respects, as reported by the company, recorded into a spreadsheet. In keeping with the precedent set in other philanthropy research, any giving by a company or by a Foundation bearing the company's name was counted as a donation by the company (many companies funnel their donations through closely-connected charitable foundations).<sup>xv</sup> A new variable, 'Total Donation Value', was then created, equal to the sum of cash and in-kind giving. This variable does not include the amount given through employee matching funds, since the large majority of companies that created matching funds did not announce the company's final contribution value. To include the few companies who did would unnecessary bias the data against companies that did not publicly announce such a value.

Those firms that donated cash to the tsunami relief effort had greater name recognition and market-to-book ratios, more international sales, employees, and net income, had a lower debt-to-value ratio, and were significantly more likely to offer employee gift matching.

#### *'Bottom-line impact' variables*

**Consumer focus.** As hypothesized, firms with a worse corporate reputation may stand to gain more from donating to the relief effort. Reputation data is taken from the annual 'Reputation Quotient' survey conducted by Harris Interactive and the Reputation Institute. This survey is conducted in two rounds, with answers to the first round of questions determining which 60 companies will be included in the second round's reputation assessment. In the first round, 6,000 participants were asked (by phone or online) to answer the following question: "of all the companies that you're familiar with or that you might have heard about, which TWO – in your opinion – stand out as having the BEST reputations overall." Participants were then also asked to list the two companies with the worst reputations as well. The sixty companies that received the most overall votes (whether for 'best' or 'worst' reputation) were thus considered to be the sixty "most visible" companies in the U.S.

**Corporate reputation.** As hypothesized before, firms that are more reliant upon positive consumer perceptions may stand to gain more from donating to the relief effort. The surveyors from Harris Interactive then went on to explore the reputations of these 60 companies, doing so through a set of questions asked to another set of survey participants. Participants were asked to answer 20 different questions about a single one of these companies. These 20 items, each of which includes an answer on a 1-7 scale, is part of the equation used to calculate each company's 'Reputation Quotient'. This 'Reputation Quotient', which is a number on a 1-100 scale, is comprised of consumer

perceptions on topics including social responsibility, emotional appeal, products & services, workplace environment, financial performance, and vision & leadership.

**International sales.** As hypothesized before, firms that conduct a greater portion of their business in Asia likely stand to gain more from donating to the relief effort. Unfortunately, data on firms' sales to Asia is largely unavailable; companies are not required to report their sales by geographic region, data on sales to Asia was only available for 59 of the S&P 500 firms. Companies do, however, generally report their domestic vs. international sales breakdown (reported by 343 of the 500 companies). While it would be preferable to use 'percentage of sales to Asia', it still stands to reason that companies with a greater international sales component stand more to gain. Firms with a higher 'international percentage' are more likely to be selling or considering selling products in Asia, heightening the importance of consumer and regulator perceptions in that region.

The 157 companies that did not report an international geographic sales breakdown may have failed to do so either because they only sell within the U.S or because doing so would give away strategically useful information. Since this group includes such clearly multinational companies as Citigroup and Wal-Mart, it seems more prudent to assign these companies the average '% international' (28.8%) than to automatically assume that the % international is 0. Two companies (Marathon Oil and Dynegy Inc.) reported negative international sales due to losses on operations abroad; in order to avoid skewing the regression, these values have been changed to 0.

**Employee perceptions.** As hypothesized before, firms with larger numbers of employees may stand to gain more from donating to the relief effort. Employee data was taken from Compustat.

### ***Control Variables***

Helland and Smith (2003) constructed a regression model analyzing the factors contributing to Fortune 500 firms' philanthropic giving decisions, and found that net income, industry classification, value of firm assets (ln), number of employees (ln), book-to-market ratio, and debt-to-value ratio all had effects upon giving that were significant at the .01 level. Firm age and number of directors were also found to be significant, but only at .05 and .10 levels, respectively. With the exception of employees (ln) and firm assets (ln), the variables that Helland and Smith found to be significant at the .01 will be used as controls.<sup>xvi</sup> Though these variables are not specifically predictive of bottom-line impact, their inclusion in the regression model improves robustness and tests their predictive ability when considering giving in response to a particular event.

## **V. Results**

As shown in Table 1 (end of paper), about one-third of all companies in the S&P 500 donated to tsunami relief. Their cash gifts averaged \$800,000, ranging from \$7,500

(Cinergy) to \$10 million (Coca-Cola and Pfizer). Total (cash + in-kind) gifts reached as high as \$83.4 million (Johnson & Johnson).

As shown in Table 2, pharmaceutical companies' gifts were, far and away, the largest amongst all industries: 56% of all pharmaceutical companies participated in relief efforts (as opposed to 32% of companies overall), with each company's donation averaging a total of \$1.34 million in cash. The second most generous industry was mining and construction, for which companies donated an average of \$390,000. Even more noteworthy were pharmaceutical companies' sizable in-kind donations: each company donated an average of \$9.2 million in pharmaceutical products, resulting in a total contribution of \$10.34 million. The second most generous industry, in terms of total contribution, was retail and wholesale trade, whose companies gave an average of \$460,000.

Table 3 shows the correlation between the different variables used in the regression. One potential variable, assets (ln), was removed from the regression model on account of its high correlation with other variables in the model. Otherwise, the correlation between variables in the model was sufficiently low to ensure minimal interference. The highest correlation between two variables in the model, 0.36, was between employees (ln) and net income. Though this correlation is higher than desirable, the model showed a significantly lower r-squared when either was removed.

As shown in Table 4, four regression models were examined. The first model, which looked at the relationship between cash giving (ln) and the seven independent variables mentioned above (in other words, all the variables, excluding industry), indicated a number of significant results. International sales, employees (ln), and net income were all positively correlated with cash giving, and debt-to-total value was negatively correlated with giving, significant at the .01 level. Name recognition was also shown to be positively associated with giving, significant at the .10 level.

The relationship between total giving and the same independent variables was also explored as a robustness check (see regression 2). Though many firms gave significantly differing amounts of cash and in-kind gifts, the relationships remained largely the same. These results, then, appear to provide support for three of the four 'bottom-line impact' hypotheses noted earlier. All else constant, firms with more international sales, name recognition, or employees donated higher amounts to tsunami relief.

In the case of Regression Equation 1, an increase of 10% in international sales predicted an increase of 33% in tsunami-related giving. As postulated before, this may be because managers of internationally-focused firms are rationally more concerned with the opinions of regulators and consumers abroad. It should also be noted, however, that international sales was only used as a proxy for the real variable intended for the model: sales to Asia. In order to check the reasonableness of international sales as a proxy for Asian sales, the correlation between 'percentage international' and 'percentage Asia' was checked for the 59 companies that reported sales to Asia. The correlation of only .52

reveals that ‘percentage international’ can only be viewed as a weak proxy, at best, for a company’s likelihood of involvement in Asia.

In order to isolate the effects of involvement in Asia upon company giving, a regression was run using only those sixty companies who reported sales to Asia. In this regression (not included), the coefficient for ‘percentage Asia’ was negative: companies who reported higher sales to Asia actually gave less to tsunami relief (though the relationship was not statistically significant). Name recognition, number of employees, and net income remained positively correlated to giving ( $p < .001$ ), while debt-to-value remained negatively correlated ( $p < .001$ ). Further analysis revealed that the mean cash contribution for the sixty companies who reported sales to Asia was \$460,000; the mean cash contribution for companies with no sales to Asia was \$678,000.

Regression Equations 3 and 4 take a similar approach to the question of giving (Equation 3 uses cash giving (ln) as the dependent variable, while Equation 4 uses total giving (ln) as the dependent variable). These equations, however, also use the industry groupings as independent variables. It is important to run the regression both with and without the industry grouping variables included: while these variables can pick up valuable information about motivations for firm giving behavior, they also have the potential to confound the results of other variables. Percentage international, for example, has a fairly strong positive correlation with ‘manufacturing’ and negative correlations with transportation and retail and wholesale trade. We can be more certain of the predictive power of variables that remain significant whether or not industry grouping is included.

As shown Table 4, all variables that were significant in equations 1 and 2 remained significant in equations 3 and 4, with the exception of percentage international. The correlation between international sales and certain industries is fairly high, reducing the predictive power of both variables in the model. It may also simply mean that a firm’s percentage of international sales is not an important determinant of philanthropic giving. Additionally, Equations 3 and 4 show that firms in the Transportation, Retail and Wholesale Trade, and Services industries tend to give less (at least, they give less relative to manufacturing, the industry omitted from the regression). The negative relationship between transportation and giving only holds true in Equation 3.

## **VI. Discussion**

The findings can be summarized as follows:

- 1) Companies with more international sales, greater name recognition amongst consumers, and less indebtedness donated statistically significant greater amounts to tsunami relief.
- 2) Companies in the pharmaceuticals industry donated significantly more than companies in any other industry.

- 3) The vast majority of variation in giving (72%) can not be explained in terms of profit maximization, implying that agency cost (i.e., manager discretion) is the principal force driving corporate philanthropy.

**Company characteristics.** The findings support both the profit-maximization and agency cost views of corporate philanthropy. Companies with greater levels of international sales, more name recognition, and more employees were all significantly more likely to donate to tsunami relief efforts, supporting the hypothesis that concern for public image plays a strong role in determining philanthropic giving. The positive correlations discovered between net income and giving and employee count and giving confirms prior research, while the findings that name recognition and international sales lead to higher giving are novel in the literature.

The statistically significant negative relationship between debt-to-value and philanthropic giving provides support for the view of philanthropy as a potential agency cost. If managers behaved in a purely shareholder-value maximizing fashion, we would expect no relationship between the debt-to-value ratio and total giving. Firms with identical levels of available funds but higher levels of debt are nevertheless predicted to donate less to tsunami relief, indicating that managers view philanthropy as an outlet that is discretionary at best, self-indulgent at worst. It could, conversely, be the case that managers of companies with more debt tend to give less for philanthropic causes as a result of risk aversion. Such managers could, in theory, be willing to pass up positive profit-enhancing philanthropic (and other non-core-business) projects as a result of extreme concern over future debt payments. It appears, though, that this finding is consistent with Seifert et al. (2003) and Helland and Smith (2003), who find that philanthropic giving appears to be a form of agency cost.

It is also worth noting that the profit maximization and agency cost hypotheses are not mutually exclusive: managers may give to charity to increase their utility, pursue their principles, and do so because it makes good business sense. The fact that levels of giving decrease as a result of higher debt levels, however, indicates that many managers believe philanthropy is a non-essential or perhaps even money-losing proposition. It may be the case that many managers, buying into values of corporate social responsibility, are eager to give as much as they can justify. When push comes to shove, though, and the creditor arrives, they realize that this giving is one of the first things that must go.

**Industry.** Industry grouping also played an important role in determining giving. Most notably, there is a huge discrepancy between the donations of pharmaceutical products companies and those in other industries. As has been noted, a large amount of the discrepancy between pharmaceutical firms and others' giving is a result of large in-kind gifts of drugs and medicine. In the case of the tsunami, pharmaceutical companies had a unique opportunity to help: a donation of drugs that only entailed \$1 million in marginal costs to produce may be worth \$5 million on the market, allowing pharmaceutical firms to get a good bang for their donated buck.

Differences in industry giving may also be due to competitive effects. If one pharmaceutical company generates a lot of publicity by stepping forward with a large donation (as did Pfizer, with an announcement of an \$85 million dollar relief package three days after the tsunami hit), others may feel pressure to respond in kind. A firm that makes a small contribution that would be generous by a different industry's standards may nonetheless appear to customers or employees to be shirking its social responsibilities. Furthermore, prior research has shown that firms are generally more willing to donate to causes that relate to their core business. For example, Helland and Smith (2003) found that petroleum firms direct a significantly greater-than-average proportion of their giving towards environmental causes, and that pharmaceutical companies do the same towards health-related causes. Pharmaceutical executives viewing philanthropy within the lens of strategic giving may well have seen the tsunami as an excellent cause to which to allocate their philanthropic budgets. Or, finally, the cynical observer may note the tax deductibility of the firms' large in-kind donations; donating excess inventory that would otherwise go unsold could actually earn the firm money by reducing its tax liability.

**Motives.** While many variables had significant effects upon giving, perhaps the most notable results are the lack thereof: despite the fact that there were as many as seven statistically significant regression variables (see Regression 4 in Table 5), they still only managed to account for 28% of the variance in levels of giving. This indicates that other, harder-to-quantify factors – such as the personal beliefs of corporate managers -- played a principal role in determining philanthropic giving. While there are no doubt certain factors related to profit maximization that could not be measured and included in the regression, they would have to be overwhelmingly important in order to tip the balance away from the 72% of variance currently attributed to agency cost. As hypothesized before, much of this unexplained variation likely stems from differences in firms' leaders and cultures, pointing towards the possibility that a large proportion of S&P 500 managers based giving decisions on factors unrelated to the bottom-line.

I suspect that this may come as a surprise to many readers, given that American businessmen are currently widely portrayed in the press in a less-than-flattering context. This could mean that the perception is overblown, with a few bad apples overshadowing the fact that most corporate leaders care about more than just stuffing their wallets. It could also be the case that corporate leaders compartmentalize different activities, behaving in a fiercely competitive fashion in the marketplace while taking a gentler view towards community responsibilities. Or, it could be the case that the unexplained variation in giving is based in another, much less optimistic root: rather than representing genuine caring for employees and the community, otherwise inexplicable corporate giving could simply be self-serving; managers of companies who stand to gain relatively little by giving may nonetheless give to charity not out of any sense of concern or values, but rather with an eye to personal gain: perhaps a large tsunami relief donation would result in the manager's picture on the front page of the local paper, or in the receipt of a coveted community award.

Determining the ‘true’ motives for corporate philanthropy thus still remains an elusive goal. Indeed, while this study adds to the literature, it also highlights the need for additional future research. While it appears that the bulk of corporate giving stemmed from agency cost rather than profit-related thought processes, it is important to note that this conclusion relies heavily on unexplained data; it is certainly possible that there are other, as-of-yet-undefined factors that heavily influenced managers’ decisions. Likewise, further research is needed in order to understand the nature of the captured ‘agency cost’.

On the other hand, this study makes a number of contributions to the literature. Examining an individual event revealed new information about the relative pull of various factors confirming prior research regarding the explanatory power of employee count, net income, and debt-to-total value as predictors of philanthropy. More importantly, it did so through an event-based process, replicating the findings of studies done on the aggregated and firm-specific (but never single event) level. By focusing on this particular event, it was also possible to uncover new areas correlated with firm giving, including name recognition and international sales. Finally, on the highest level, it confirmed the importance of both agency cost and profit maximization as driving factors behind corporate philanthropy.

While research regarding the nature of corporate philanthropy is nowhere near complete, the thrust of the literature, as confirmed by this paper, is clear: managers are indeed thinking about the bottom line when making philanthropic decisions, but non-financial factors are given even greater weight. Whether one views this as a good thing or not depends on one’s view on the proper role of the corporation in society, as well as whether one believes agency cost derives from caring or self-serving managers. Regardless, this study shows that U.S. business leaders thought about much more than just the bottom line when it came to tsunami relief. Despite their recent demonization in the popular media, it appears that corporate managers may still be human after all.

**Table 1: Comparison of donor and non-donor firms**

	Cash Donors (N=151)	Non-Donors (N=322)
Count		
Cash Gift (\$M)	0.8	0.0
Total Gift (\$M)	1.9	0.1
Employee Gift Match?	54%	10%
Cash Gift (\$mm)	0.82	0.00
Name Recognition	0.20	0.03
% Sales International	32%	27%
Employees (M)	78.44	29.49
Reputation	69.84	67.72
Net Income (\$M)	1928	463
Market-to-book	4.02	3.81
Debt-to-value	0.22	0.25

Table 2: Giving By Industry

	Mining	Transportation	Pharma	Manufacturing	Retail & Wholesale	Commercial Banking	Other Finance	Services
Count	23	58	16	190	53	30	56	47
Donors	4	11	9	70	20	13	13	11
% who donated	17%	19%	56%	37%	38%	43%	23%	23%
Avg Cash Gift (\$M)	0.39	0.11	1.34	0.29	0.25	0.14	0.16	0.12
Avg Total Gift (Cash + In-Kind) (\$M)	0.39	0.33	10.54	0.38	0.46	0.14	0.16	0.12
Avg Cash Gift - Donors Only	2.22	0.61	2.38	0.79	0.67	0.31	0.71	0.48
Avg Total Gift - Donors Only	2.22	1.74	16.63	1.01	1.17	0.31	0.71	0.48
Employee Gift Match?	9%	26%	19%	23%	26%	33%	27%	21%
Name Recognition	0.04	0.12	0.13	0.10	0.13	0.03	0.00	0.06
% Sales International	36%	14%	34%	37%	14%	29%	23%	30%
Employees (M)	14.74	35.35	36.97	36.70	130.55	30.39	25.63	45.10
Reputation	68.46	68.96	69.11	69.04	69.29	68.79	68.97	68.97
Net Income (\$M)	464	874	189.1	640	1049	1736	1633	620
Market-to-book	2.68	1.99	5.25	5.01	3.63	2.54	2.35	4.67
Debt-to-value	0.30	0.36	0.18	0.23	0.22	0.22	0.26	0.18

Definition of variables:

Name recognition: Firm assigned '1' if amongst Harris Interactive survey's 60 most recognized firms, and '0' if not

% sales international: percentage of a company's total sales made in non-US markets

Employees: Number of employees working for a firm (in millions)

Reputation: As measured, on a 1-100 scale, by the Harris Interactive Reputation Quotient Survey

Table 3: Correlation between variables (year = 2003)

N=483

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. International Sales													
2. Employees (ln)	-0.01												
3. Reputation	0.04	0.06											
4. Net Income	0.05	0.36	0.01										
5. Market-to-book	0.09	-0.01	0.10	0.01									
6. Debt-to-value	-0.09	0.07	-0.03	0.03	0.04								
7. Mining and Construction	0.08	-0.19	-0.06	-0.05	-0.06	0.08							
8. Transportation	-0.27	-0.04	-0.01	-0.01	-0.16	0.27	-0.08						
9. Pharmaceuticals	0.06	-0.01	0.01	0.08	0.06	-0.07	-0.04	-0.07					
10. Manufacturing	0.34	-0.01	0.02	-0.11	0.21	-0.08	-0.19	-0.31	-0.15				
11. Retail and Wholesale Trade	-0.27	0.34	0.05	0.02	-0.02	-0.04	-0.08	-0.13	-0.07	-0.29			
12. Depository Institutions	0.00	-0.01	-0.03	0.10	-0.08	-0.04	-0.06	-0.10	-0.05	-0.21	-0.09		
13. Other Finance	-0.09	-0.14	-0.01	0.12	-0.13	0.03	-0.08	-0.14	-0.07	-0.30	-0.13	-0.10	
14. Services	0.02	-0.01	-0.01	-0.05	0.06	-0.13	-0.08	-0.12	-0.06	-0.27	-0.12	-0.09	-0.12

**Table 4: Regression Modeling of Post-Tsunami Corporate Philanthropy**

The table shows results for four linear regression models. The dependent variable in models (1) and (3) is the natural log of the dollar value of corporate **cash** gifts for tsunami relief. The dependent variable in models (2) and (4) is the natural log of the dollar value of corporate **cash and in-kind gifts** for tsunami relief. In-kind gifts are valued as announced in company press releases. Following the format of Smith and Helland (2003), the table lists standard errors in parentheses beneath variables' correlation coefficients.

<b>Independent Variables</b>	<b>(1) Cash Giving</b>	<b>(2) Total Giving</b>	<b>(3) Cash Giving</b>	<b>(4) Total Giving</b>
Intercept	-6.632 (-8.192)	-8.275 (8.343)	-6.802 (8.168)	-8.429 (8.298)
Name Recognition	<b>1.933*</b> (1.004)	<b>1.907*</b> (1.022)	<b>1.941*</b> (1.019)	<b>1.882*</b> (1.035)
International Sales	<b>3.266***</b> (1.237)	<b>3.484***</b> (1.26)	1.758 (1.384)	1.961 (1.406)
Employees (ln)	<b>1.362***</b> (0.202)	<b>1.394***</b> (0.206)	<b>1.437***</b> (0.222)	<b>1.478***</b> (0.226)
Reputation	0.085 (0.119)	0.108 (0.121)	0.100 (0.119)	0.122 (0.12)
Net Income	<b>0.0006***</b> (0.0001)	<b>0.0006***</b> (-0.0001)	<b>0.0006***</b> (-0.0001)	<b>0.0006***</b> (0.0001)
Market-to-book	0.014 (0.056)	0.019 (0.057)	-0.011 (0.058)	-0.007 (0.059)
Debt-to-value	<b>-3.866***</b> (1.494)	<b>-3.917***</b> (1.522)	<b>-3.481**</b> (1.58)	<b>-3.563**</b> (1.605)
Mining and Construction			-0.240 (1.19)	-0.251 (1.209)
Transportation, Comm., Oil & Gas			<b>-1.512*</b> (0.892)	-1.415 (0.907)
Pharmaceuticals			<b>2.382**</b> (1.366)	<b>3.061**</b> (1.388)
Retail and Wholesale Trade			<b>-1.631*</b> (0.916)	<b>-1.691*</b> (0.931)
Commercial Banking			0.161 (1.055)	0.069 (1.072)
Other Finance			-1.115 (0.862)	-1.176 (0.875)
Services			<b>-1.727**</b> (0.857)	<b>-1.801**</b> (0.87)
No of obs	473	473	473	473
R-squared	0.254	0.260	0.275	0.283

\*\*\*= significant at the 1% level; \*\*=significant at the 5% level; \*=significant at the 10% level, two-tailed tests

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## FOOTNOTES

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<sup>i</sup> <http://www.uschamber.com/cc/050112tsunami.htm>

<sup>ii</sup> See "Tsunami Rivals 9/11 in Corporate Donations". Adam Geller, The Associated Press. Sunday, January 9, available online at [http://news.orb6.com/stories/ap/20050110/tsunami\\_corporate\\_giving.php](http://news.orb6.com/stories/ap/20050110/tsunami_corporate_giving.php)

<sup>iii</sup> Such a view has been recently argued in "Companies Chip In: An Outbreak of Corporate Charity", *The Economist*, Jan 13, 2005.

<sup>iv</sup> "Tsunami Rivals 9/11 in Corporate Donations". Adam Geller, The Associated Press. Sunday, January 9, 2005.

<sup>v</sup> Neo-classical economists argue that managers' fiduciary duty to maximize shareholder value ought to be the prime consideration, while stakeholder theorists argue that decision-making ought to encompass the needs of all affected parties. See Friedman (1970) for a concise description of the neo-classical perspective, and Wood and Jones (1996) for that of stakeholder theory.

<sup>vi</sup> Stakeholders are defined as "Any party that has an interest in an organization. Stakeholders of a company include stockholders, bondholders, customers, suppliers, employees, and so forth." Source: [www.dictionary.com](http://www.dictionary.com).

<sup>vii</sup> Note that the direction of causality is unknown: it may be the case that being a better known company leads to more giving, or that more giving leads to becoming a better known company. Either way, it is in the interest of companies that are already well-known to give more to charity, as consumers will be more apt to notice whether or not they donate.

<sup>viii</sup> Annual survey published by *Business Week* and Interbrand. 2003 results available online at <http://www.finfacts.com/brands.htm>

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<sup>ix</sup> See '2004 Cone Corporate Citizenship Survey', [http://www.coneinc.com/pages/pr\\_30.html](http://www.coneinc.com/pages/pr_30.html)

<sup>x</sup> See "Corporate Members of Center for Corporate Citizenship at Boston College Provide \$110 Million in Financial Support to Tsunami Relief", press release from the Center for Corporate Citizenship, 1/24/05. Available online at <http://www.socialfunds.com/news/release.cgi/3443.html>.

<sup>xi</sup> According to <http://www.onphilanthropy.com/onthescene/os2005-01-12.html>

<sup>xii</sup> Companies made a wide variety of in-kind donations, which included health products, bottled water, and help with transportation and logistics. The largest in-kind givers, in term of dollar value announced, were Johnson & Johnson, Pfizer, and Mylan Laboratories, who donated \$83.4 million, \$25 million, and \$19 million in pharmaceutical products, respectively.

<sup>xiii</sup> <http://www.onphilanthropy.com/onthescene/os2005-01-12.html>

<sup>xiv</sup> <http://blog.simmins.org/td.pdf>

<sup>xv</sup> Helland, Eric and Smith, Janet Kiholm, "Corporate Philanthropy" (November 22, 2003).

<http://ssrn.com/abstract=472161>; pg. 13.

<sup>xvi</sup> As already stated, employees (ln) will not be used as a control but rather as a variable predictive of self-interest. Firm assets (ln) was correlated strongly with many of the other variables included in the study, reducing the effectiveness of the model; correlation between firm assets and employees is 0.44; net income is 0.56; manufacturing is -0.32;depository institutions is 0.33; and insurance is 0.34.