

**WHO IS GOVERNING WHOM?
EXECUTIVES, GOVERNANCE AND THE
STRUCTURE OF GENEROSITY IN LARGE U.S. FIRMS***

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ABSTRACT

We examine how organizational structure influences strategies over which corporate leaders have significant discretion. Corporate philanthropy is our setting to study how a differentiated structural element—the corporate foundation—constrains the influence of individual senior managers and directors on corporate strategy. Our analysis of *Fortune* 500 firms from 1996 to 2006 shows that leader characteristics at both the senior management and director levels affect corporate philanthropic contributions. We also find that organizational structure constrains the philanthropic influence of board members, but not of senior managers, a result that is contrary to what existing theory would predict. We discuss how these findings advance understanding of how organizational structure and corporate leadership interact and of how organizations can more effectively realize the strategic value of corporate social responsibility activities.

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INTRODUCTION

Charitable giving seems an unlikely province for the strategies of large public companies. Yet, research links philanthropy to strategically important outcomes, including corporate reputation (Fombrun, 1996), consumer support (Sen and Bhattacharya, 2001) and employee commitment (Greening and Turban, 2000). Such *strategic philanthropy* is increasingly seen as a way to address “important social and economic goals simultaneously, targeting areas of competitive context where the company and society both benefit.” (Porter and Kramer, 2002: 58). This perspective contrasts with the dominant critique that corporate philanthropy functions as a managerial perk and, potentially, as an exploitation of shareholder value for managers’ personal gain (Friedman, 1970). Further, overall empirical evidence for a link between social and financial performance is mixed and inconclusive (Margolis and Walsh, 2003), leaving unclear what mechanisms may account for the increased adoption of philanthropy into business strategies.

Recent research has begun to identify contingencies that affect the strategic nature of philanthropy, including features of organizations’ external environments and characteristics of key stakeholders (Barnett, 2007; Wang, Choi, and Li, 2008). But relatively little is known about the effects of factors within the firm on corporate philanthropy. Research has noted that corporate leaders, in particular, have significant and sometimes unchecked discretion over philanthropic activities (Useem and Kutner, 1986; Galaskiewicz, 1997), a key point in the enduring critique that philanthropy is primarily managerial largesse (Jensen, 2002). However, the specific effects of leaders on philanthropic behavior, strategic or otherwise, remain

unexplored. Analysis of leaders' influence thus promises to shine light on the internal contingencies by which philanthropy may arise as a business strategy or as agency loss (Jensen, 2002).

In this study, we focus on the influence of actors in publicly traded firms' upper echelons—senior management and boards of directors—and examine how the formal structure governing philanthropy activities may enable or constrain this influence. We show that corporate philanthropy is influenced by two intra-organizational factors: (1) the idiosyncratic qualities of individual corporate leaders, such as their organizational tenure, centrality in director networks, and the gender composition of the management team and directors, and (2) organizational structures that systematize and align decision-making with the strategy of the firm. Our study thus integrates upper echelons theory, which focuses on how individual senior managers influence firm strategies and governance (Hambrick and Mason, 1984), with research on how an organization's structural features constrain its strategy (Rivkin and Siggelkow, 2003; Davis, Eisenhardt, and Bingham, 2009). While the development of organizational structures is traditionally viewed as a means by which leaders translate strategy into action (e.g., Chandler, 1962), we find evidence of the reverse: Organizational structure constrains individual corporate leaders' pursuit of corporate philanthropy activities.

To empirically test our hypotheses, we constructed and analyzed a unique dataset of the corporate philanthropy behaviors of *Fortune* 500 companies during the period from 1996 to 2006. We focused on large firms because of their dominant role in corporate philanthropy in the United States. Most corporations with sales over \$500 million have philanthropy programs, while many small companies do not (Useem and Kutner, 1986). Large-firm philanthropy is also conducted on a much larger scale: *Fortune* 100 companies donated a median of approximately

\$50 million in 2007 (Coady, 2008) and a recent study suggests that the philanthropy of the largest 200 US companies account for the majority of total corporate philanthropy in the US (Cavicchio and Turok, 2008). Thus, our study pertains not only to the literature on how upper echelons influence corporate strategy, but also provides a novel empirical lens on the increasingly important context of corporate philanthropy.

Our findings extend research on upper echelons and organizational behavior in a number of ways. First, we show that the gender composition of the senior team and board influences strategic outcomes such as philanthropy, an important finding given the increasing gender balance in corporate leadership. Second, while upper echelons theory has found that senior management effects are moderated by external forces (Hambrick, 2007), we show that a differentiated structural element *within* an organization may also modify the discretion of senior leaders to influence corporate strategies. Third, while governance research has shown directors to be influential in myriad corporate practices (Mizruchi, 1996), the idea that organizational structures constrain their influence on strategy has not previously been established. Fourth, our findings contribute to a recent trend in studying the antecedents of philanthropic activity (Marquis, Glynn, and Davis, 2007). We close with a discussion of how corporations can more effectively realize the strategic benefits of corporate social responsibility activities such as philanthropy.

UPPER ECHELONS, CORPORATE STRUCTURE, AND PHILANTHROPY

Upper echelons research focuses on the ways in which the biases, egos, aptitudes, experiences, and other individual characteristics of senior leaders influence the range of strategic options they consider and the decision-making processes by which they select from among those options (Finkelstein, Hambrick, and Cannella, 2009). Specific areas of strategic decision-making

are influenced by senior leadership characteristics attendant to mechanisms specific to that domain. One important category of these characteristics is stable individual differences; for instance, research finds a link between an executive's personality type and his or her likelihood of accepting investment proposals (Nutt, 1986). Other upper echelon effects are contingent on a senior leader's organizational experience and embeddedness; for instance, a company is more likely to translate its innovation investments into new products if it has executives with marketing and sales experience, reflecting the importance of a customer focus to this process (Barbosa, 1985).

An important moderator of upper echelon effects is managerial discretion—the range of behaviors considered acceptable for the firm's leaders (Hambrick and Finkelstein, 1987). The effects of senior managers' predispositions on company strategy are greater where managerial discretion is wide than where it is more constrained. The factors determining managerial discretion range from the cognitive flexibility of the managers themselves (Hambrick and Finkelstein, 1987) to the firm's external environment—for example, its industry (Hambrick and Abrahamson, 1995). Notably, discretion also depends on internal organizational factors, specifically “the degree to which the organization is amenable to an array of possible actions and empowers the executive to formulate and execute those actions” (Finkelstein and Hambrick, 1990). Finkelstein and Hambrick (1990) show that the influence of an individual manager varies with the extent of slack resources or the size of the organization.

The formal structure of the organization is traditionally conceptualized as the outcome of a design process that allows senior leaders to translate their chosen strategies into action (Chandler, 1962). However, the link between structure and managerial discretion suggests the presence of an adverse effect on managerial agency. Organization structures formalize key

decision-making processes; in particular, the way in which resources are allocated among competing organizational functions and goals (Pfeffer and Salancik, 1974; Pfeffer, 1981). By creating formal structure, actors in the upper echelons may create conditions, perhaps unwittingly, that constrain their subsequent ability to pursue their goals. To the extent that senior leaders' goals vary as a result of the idiosyncratic individual characteristics and experiences identified by the upper echelons literature, existing organizational structures might limit the subset of these goals that can be enacted.

Applying this argument to the context of corporate philanthropy, the existence in a corporation of a dedicated formal structure such as a corporate foundation would be expected to limit any particular corporate leader's personal influence over giving. In our hypotheses below, we first identify the leadership characteristics that may affect a firm's philanthropy. In the following section, we explore the role of the corporate foundation as a structural device to constrain managers' discretion over corporate philanthropy.

Upper Echelons and Corporate Philanthropy

Corporate philanthropy strategy is formulated primarily at the top. Previous studies have shown that firm-level philanthropic behaviors are influenced by individual-level characteristics of the managers responsible for disbursement (Galaskiewicz, 1997) and by the relationships of senior management with leaders of other companies and nonprofit organizations (Useem and Kutner, 1986; Galaskiewicz, 1997). To unpack the effects of upper echelons on corporate philanthropy, we examined both senior executives and board members, investigating factors including individual differences, organizational experience, and social embeddedness. Based on these criteria and on data availability, we focus on senior-executive-level characteristics such as CEO tenure and the gender composition of the senior executive team and on board-level

characteristics such as board size, gender composition, and the network connections of board members with the boards of other large companies. In the following sections, we theorize about the effect of these characteristics on corporate philanthropy and make empirical hypotheses.

CEO Tenure: Among senior managers, CEOs have traditionally held prominent roles in determining their companies' philanthropy. Multiple surveys have identified the company CEO as the central figure in the establishment of a firm's giving policies (Siegfried, McElroy, and Biernot-Fawkes, 1983; Useem and Kutner 1986). In a study of corporate philanthropic activity in the greater Minneapolis area during the 1980s, Galaskiewicz (1985, 1997) described how local CEOs gained individual prestige through their companies' generosity. Some philanthropically minded managers avoid high individual taxes by informally taking some portion of their compensation as corporate donations, known as "through the firm giving" (Wolch, 1995). Other CEO intervention is directly observable. For example, Dave Thomas, the late CEO of Wendy's Old Fashioned Hamburgers, who was himself adopted, focused his firm's philanthropy on adoption issues (Marquis et al., 2007).

Upper echelons research similarly theorizes about the primacy of CEOs and their idiosyncratic characteristics in determining a firm's behavior (Chatterjee and Hambrick, 2007). In the context of philanthropy, research suggests a link with CEO tenure. A well-developed line of research highlights changes in a CEO's behavior over the course of his or her tenure (e.g., Hambrick and Fukutomi, 1991). Early on, CEOs are highly attuned to their external environments and are relatively more likely to adapt to them. For instance, the likelihood of implementing strategic change is greater for senior management teams with shorter tenures (Wiersema and Bantel, 1992). However, as time goes on, CEOs become "stale in the saddle" (Miller, 1991) and tend to conform to the strategies of peer companies in the same industry

(Finkelstein and Hambrick, 1990). Externally focused, discretionary activities such as philanthropy would therefore be expected to diminish as CEO tenure increases.

- ***Hypothesis 1: Corporations with shorter-tenured CEOs will have higher philanthropic contributions.***

Directors' Social Embeddedness: Directors have a less formal but still prominent role in determining philanthropic activities. While not as deeply involved as senior managers in day-to-day decision making, boards are an important buffer for the organization in how it integrates external demands with internal strategy (Davis, 2005; Kacperczyk, 2009). In this role, the social embeddedness of the board's members may broaden its exposure to potential philanthropic projects. Research has shown the relational network linking corporate decision makers to be one of the most important mechanisms for stimulating giving by large firms. Useem (1984), for instance, found that companies with highly-connected directors were on average more generous contributors, particularly to arts organizations. Galaskiewicz's 20-year study of corporate philanthropy in Minneapolis showed that corporate leaders' social connections to other local businesspeople transmitted norms and practices of corporate giving and corporate social responsibility (Galaskiewicz, 1985, 1997).

- ***Hypothesis 2a: Corporations with boards of directors that are more central in the director interlock network will have higher corporate philanthropic contributions.***

A second, related feature of the board is its number of directors. Prior cross-sectional work in economics has shown that firms with larger boards donate more, which the authors attribute to free-rider problems and the greater difficulty that large boards have in monitoring the corporation (Aggarwal and Nanda, 2004). Studies of the influence of board size on setting strategy also suggest that large boards have more difficulty coordinating activities and may be more vulnerable to fractures and the emergence of special interests (Goodstein, Gautam, and

Boeker, 1994). Organizational research suggests that individual peer pressure is an important mechanism leading boards to give (Marquis et al., 2007). So, while greater network connections should lead to greater individual pressure on directors to give, larger boards likely face more opportunities to give, possibly with less monitoring.

- ***Hypothesis 2b: Corporations with larger boards will have higher corporate philanthropic contributions.***

Gender Composition of Senior Management and Board of Directors: Philanthropic giving by women tends to be higher than giving by men, although this effect has many contingencies (see Mesch, 2009 for a review). At the individual level, research on gender and philanthropy has shown that women give more money than men despite lower average levels of discretionary income (Capek, 2001) and that women are less sensitive to the “price” of giving (Andreoni and Vesterlund, 2001). Importantly for our setting, the positive link between women and levels of giving appears to be especially significant in social and organizational contexts. In cooperative laboratory teams, the presence of women may cause men to be more philanthropically generous (Kamas, Preston, and Baum, 2008). The Center for Women’s Business Research (1999) has shown that, among businesses with assets greater than \$1 million, over half of women business owners contributed at least \$10,000 annually to charity, compared to only 40 percent of men. These gendered philanthropic preferences may translate to a greater philanthropic focus by woman-led companies.

Such a relationship may also stem from gendered roles within corporations. In corporate philanthropy, leaders of the foundation or the functional unit in which philanthropic activities take place are disproportionately women (Conry, 1998). Research on gender in organizations consistently highlights the importance of sex-segregated occupations to organizational outcomes (Ely and Padavic, 2007). Thus, it could also be that senior women are disproportionately

represented in the corporate leadership roles that are closest to philanthropy and so are more likely to influence it. We predict that the combination of these two processes will lead corporations with more women senior managers to be more generous.

- ***Hypothesis 3: Corporations with a greater proportion of women senior managers will have higher corporate philanthropic contributions.***

In addition, several studies support a potential link between philanthropy and a higher number of women at the director level. A recent study based on interviews with 50 women directors from *Fortune* 1000 boards suggested that an increased presence of women on boards would lead firms to raise issues that pertain to multiple stakeholders such as firms' communities (Konrad, Kramer, and Erkut, 2008), which are typically the targets of philanthropy. Following the occupational sex-segregation argument presented above, it may be that female directors are more likely to be from nonprofit backgrounds (Williams, 2003), which would give them greater awareness of and exposure to corporate philanthropy ideas; firms with more women directors may therefore be more likely to take up those philanthropic activities.

Hypothesis 4: Corporations with more women on the board will have higher corporate philanthropic contributions.

The Moderating Effect of Organizational Structure on Corporate Philanthropy

Because it is difficult to demonstrate that particular philanthropic activities bring about specific business and social outcomes, managerial discretion over such activities is particularly high. In the absence of formal structures and decision-making processes for philanthropy, corporate leaders frequently assume ad-hoc control over all aspects of a company's philanthropy strategy, including the overall amount of giving and the portfolio of recipients (Useem and Kutner, 1986). As a result, decision-making processes under these conditions are highly varied, frequently informal, and largely focused on relational patronage rather than on recipients' merit.

Warren Buffett, a veteran of corporate boards, said of one company's decision-making process that "the whole thing was based on figuring out who was connected to whom" (Kinsley 2008; p. 33).

A distinguishing feature of contemporary corporate philanthropy as a strategic activity is the corporate foundation, a legally separate entity created to manage the parent corporation's philanthropy. As the scale of corporate philanthropy has increased, so have demands by stakeholders for internal accountability and efficiency. These pressures have led corporations to organize foundations with increasingly well-defined roles, processes, and organizational forms managed by specialized professionals (Useem and Kutner, 1986) in areas such as public relations, gift administration, and reporting. The establishment of a corporate foundation also gives the funding company more control over the regularity and tax impact of its gifts. Slightly more than half of large-firm foundations maintain endowments, which allow them to "smooth" their giving and subsequent goodwill over time, making them less sensitive to the firm's financial circumstances (Wolch, 1995). A national study of corporate foundations conducted in 2007 found that over 50 percent had been founded since 1990, suggesting the increasing use of foundations to strategically direct corporate philanthropy (Foundation Center, 2009).

Consistent with organization-design research showing how size is an important reflection of the degree of structural differentiation (Child, 1973; Davis et al., 2009), larger corporate foundations tend to be more structurally differentiated from the rest of the firm. Size permits foundations to hire dedicated staff, establish greater independence, and follow specialized processes for charitable decision making. A recent survey of corporate philanthropy programs found that those giving under \$5 million annually had a median of two full-time employees dedicated solely to philanthropy activities, whereas those giving over \$100 million had a median

of 24 (Coady, 2008). Foundation size also provides an indication of the relative power of the corporate foundation as a political entity competing for limited company resources (Pfeffer, 1981).

In short, the creation and endowment of a structurally differentiated foundation for corporate philanthropy may constrain the discretion of senior managers and board members. Through these structures, senior leaders cede control to specialized professionals located in an independent authority responsible for consistency with overall firm strategy. Thus, we predict that the size of the foundation—reflecting structural differentiation and overall power within the organization—moderates the main effects of senior managers on corporate philanthropy hypothesized above.

- ***Hypothesis 5a: Greater corporate foundation assets will reduce the effect of CEO tenure on corporate philanthropic contributions.***
- ***Hypothesis 5b: Greater corporate foundation assets will reduce the effect of the presence of women senior managers on corporate philanthropic contributions.***

We would also expect the effects of director characteristics to be moderated by the size of the foundation. As an important interface between the corporation and broader society (Davis, 2005), the board is involved in setting corporate policy and funneling requests from outside constituencies. The independence of the specialized philanthropic processes by which these requests are handled will vary depending on the size and differentiation of the corporate foundation. Thus, we believe that the extent to which directors' networks and embeddedness outside the corporation lead their corporations to contribute greater amounts is also reduced by having larger corporate foundations.

- ***Hypothesis 6a: Greater corporate foundation assets will reduce the effect of (i) board network centrality and (ii) board size on corporate philanthropic contributions.***
- ***Hypothesis 6b: Greater corporate foundation assets will reduce the effect of the presence of women directors on corporate philanthropic contributions.***

METHODS AND ANALYSES

Sample and Units of Analysis: To test the hypothesized upper echelon and corporate foundation effects on corporate philanthropy, we assembled data on the *Fortune* 500 companies for even-numbered years during the period 1996 to 2006. The two-year period between observations was based largely on the availability of some key variables, as described below. Owing to missing observations for some of our variables, we tested our predictions on a dataset that includes approximately 2,100 company-years.

Dependent Variable: We manually recorded the total dollar amount of *corporate philanthropy* from the National Directory of Corporate Giving in the years that match our sample (Foundation Center, 1997, 1999, 2001, 2003, 2005, 2007; odd-numbered years report data from the even-numbered years of our sample). We log-transformed this variable to reduce highly skewed values.

Independent Variables: From the same directory, we recorded *foundation assets*. Approximately 70 percent of companies in our sample have foundations; for companies without a foundation, this variable was given the value of zero. Our conceptualization of structure in terms of size builds on existing literature that views organizational structure as a measurable construct, with monotonically increasing effects (Davis et al., 2009). We log-transformed the level of foundation assets because organizational structure does not increase linearly with size, but rather increases marginally less as the organization grows (Pondy, 1969). The *CEO tenure* of each corporation in our sample was obtained from the Standard & Poor's ExecuComp database. *Percentage women senior managers, number of directors, and percentage of women directors* were obtained from Catalyst publications (Catalyst, 1996-2007). The *degree centrality* of board members is calculated from the network of shared directors among the boards of all public firms

in 1997 and 2002. A board's 1997 value was also assigned to 1996, 1998, and 2000 and its 2002 value was assigned to 2002, 2004, and 2006. While we would ideally observe these data every year, prior research suggests that these networks remain stable over time (Mizruchi, 1996).

Control Variables: At the organization level, we controlled for measures of financial performance, size, age, industry, and CEO age. Past studies have repeatedly demonstrated the influence on philanthropy of financial performance (e.g., Navarro, 1988), operationalized as return on assets (*ROA*). *Firm size* is seen to be another important factor, as larger firms have not only greater resources, but also higher visibility in the marketplace (Wolch, 1995). We operationalized size as firm logged *sales*. We believe that the *age* of a corporation is also an important factor; older companies would likely be more embedded in philanthropy networks and there may also be an imprinting effect as older firms were founded during an earlier time when philanthropic contributions were more institutionalized (Marquis, Davis, and Glynn, 2012). We also included *CEO age* to control for any potential cohort effect on philanthropy that may be related to CEO tenure. A number of studies have postulated industry differences for philanthropy (Galaskiewicz, 1997), so a series of industry indicators was included to make sure that the philanthropic patterns observed were not a function of different industry effects. We included variables for the following industries that have been previously shown to have specific giving profiles or preferences: *manufacturing*, *retail*, *financial*, and *service* (Wolch, 1995; Brammer and Millington, 2005). The reference category for these indicators is all other industries that have not been shown to have specific giving interests or preferences: agriculture, mining and construction, transportation and communication, and government.¹ Finally, to account for organization-wide gender effects, we controlled for the percentage of *women*

¹ Results are the same when we add a control variable for each major industry group (one-digit SIC). We report models with this reduced list of controls as they are relevant to the literature on corporate philanthropy.

employment in the industry, measured at the two-digit SIC level. These data were from the U.S. decennial census, with the 1990 values used for years 1996 and 1998 and the 2000 values used for 2000-2006.

Prior research suggests that the location of the corporate headquarters is an important determinant of philanthropy (Marquis et al., 2007) and that community features such as poverty that draws attention to social needs (Weisbrod, 1998) and tax rates that provide incentives (Webb, 1994) may result in greater corporate giving. We therefore included the *per capita income* (from the U.S. Census) and *governmental revenue per capita* (from the Census of Governments²) of the core-based statistical area (CBSA) of the companies' headquarters. Finally, to control for other time effects, indicator variables for each of the years 1998 to 2006—with 1996 as the reference category—were included in the models.

Statistical Model: To analyze our panel data, we used the `xtreg` command in STATA with the random-effects option. As noted, we included year fixed effects to control for any unobserved time effects and used the `cluster` subcommand in STATA to adjust our standard errors to account for the multiple observations per corporation. An alternative approach—to include firm fixed effects—was not ideal because of our interest in including time-invariant variables, such as industry indicators, that prior research had shown to be important determinants of philanthropy. We did, however, estimate fixed-effects models without these time-invariant variables and obtained similar results.

RESULTS

Table 1 presents the descriptive statistics and correlations and Table 2 presents the results

² Taken every five years in years ending in 2 and 7. Again, a firm's 1997 value was also assigned to 1996, 1998, and 2000 and its 2002 value was assigned to 2002, 2004, and 2006.

of our analyses.³ Model 1 estimates the coefficients of our control variables. Models 2 through 6 estimate the main effects of each of our theorized variables for each of the leadership attributes hypothesized to influence overall philanthropy: CEO tenure, board centrality, board size, female senior managers, and female directors. Model 7 contains all of these main effects. Models 8 through 12 estimate the effect of the size of the corporate foundation by adding the interaction of foundation assets with each of the two senior-manager attributes and each of the three board attributes. Model 13 is a full model containing all of the aforementioned variables. This model is presented for informational purposes only, as the inclusion of so many interaction effects makes interpretation of individual estimators difficult.

Main Effects: Model 2 estimates that the coefficient on CEO tenure is negative and significant, providing support for Hypothesis 1. Post-hoc analyses of the philanthropy of companies with new CEOs suggest that this effect is based on new CEOs increasing philanthropy rather than longstanding CEOs detaching from it. Models 3 and 4 investigate the relationship between board attributes and philanthropy. Model 3 shows a positive and significant estimate of the effect of board centrality, supporting Hypothesis 2a. Model 4 shows that the effect of the number of directors on philanthropy is positive and significant, supporting Hypothesis 2b. Model 5 estimates a positive and significant effect of the presence of female senior managers on philanthropy, supporting Hypothesis 3. It is notable that the control variables show an opposite, negative effect of the overall proportion of women employees in a company's industry. This contrast highlights the remarkable main effect of female senior managers on giving. Model 6 estimates the main effect of the proportion of female board

³ Because there are some high individual correlations and since we have a large number of interaction effects, we present each of our main effect findings in separate equations. We furthermore ran regression diagnostics and found that that none of the variables in the equations we present had a variance inflation factor greater than 10, the recommended maximum threshold (Gujarati, 2003).

members on overall philanthropy and finds a positive and significant coefficient, supporting Hypothesis 4.

Interaction with Corporate Foundation Effects: Models 8 through 12 show that the main effects of senior manager influence on philanthropy are not significantly moderated by foundation size. The effects of board member influence, however, are significantly constrained by a company's corporate foundation. Model 8 estimates the interaction effect of foundation assets and CEO tenure and finds that the effect on philanthropy is not significant, failing to provide support for Hypothesis 5a. Model 9 estimates the interaction effect of women senior managers and foundation assets with no significant effect, so Hypothesis 5b is also unsupported. Models 10 and 11 show that having a larger foundation diminishes the previously shown effects of board attributes, supporting Hypothesis 6a. Model 12 estimates a significant negative effect of foundation size on the influence of the proportion of female board members, supporting Hypothesis 6b. Interestingly, the size of the corporate foundation moderates the effect of women directors, but not of women senior managers, on philanthropy. The presence of the moderating effect on boards but not on management holds for the other main effects as well, leading us to conclude that corporate foundation structure constrains the influence of directors on philanthropy, but not the influence of senior managers. We address possible reasons for this in the discussion section.

Control Variables: Examining the control variables highlights a number of additional noteworthy relationships. Regarding the corporate-level factors previously considered, it is somewhat surprising that ROA is not significant, although sales is significant across models. One interpretation, consistent with the literature (Margolis and Walsh, 2003), is that philanthropy is driven more by a firm's size and visibility in the marketplace than by its financial

performance. Age has a positive and significant coefficient, supporting our prior speculation regarding the imprinting effects on firms' philanthropic behavior (Marquis et al., 2012). Our results support prior findings that manufacturing, financial, service, and retail firms all have reasons to be more philanthropically generous than other types of firms. CEO age did not have an effect on philanthropy, supporting our conclusion that our CEO tenure effects are a result of the processes we theorize as opposed to cohort effects. Finally, regarding features of the firm's headquarters community, the coefficient on per capita income is positive and significant, showing that even after the inclusion of a wide array of other factors, community-level economic effects are still an important determinant of philanthropy (Marquis et al., 2012). Additionally, local tax rate has a significant negative coefficient across all the models, supporting prior research that suggests that corporate philanthropy and governmental services are substitutes (Salamon, 1987).

DISCUSSION AND CONCLUSIONS

Our study focused on the ways that organization structure regulates the idiosyncratic influence of individual corporate leaders on corporate philanthropy. A number of individual-level and team-level characteristics of senior management and the board of directors—including CEO tenure, director degree centrality, board size, the percentage of women senior managers, and the percentage of women directors—were shown to affect corporate philanthropic contributions. Furthermore, and perhaps more importantly, we found that the presence of a corporate foundation negatively moderated the effect of the directors' characteristics on philanthropy but not the effect of senior managers' characteristics on philanthropy. Most research on organization structure and leadership has depicted leaders and specialized structures as complementary forces contributing to a unified strategy. Our findings, however, provide

evidence of tensions between leaders and structures and evidence that specialized structures function as an important check on how corporate leaders, particularly directors, influence strategy.

Our findings that the size of a foundation constrains the influence of directors on philanthropy—but not the influence of senior managers—breaks with prevailing assumptions on governance and further suggests that, in the case of corporate philanthropy, structure's moderating effect on director agency exceeds parallel effects on senior managers. Because senior managers have formal day-to-day purview over the organization, they may be more able than directors to co-opt internal structures to their ends. Without this formal power over the organization, directors are more constrained by the organizational structure. The generalizability of our argument is enhanced by the observation of this effect across both directors in general and women directors in particular. We also examined the possible existence of moderated relationships between board and senior management team features, but—in unreported results—found no support for such effects. Examining the strategic consequences of interactions between directors, senior managers, and organizational structure is a ripe area for future research.

Our main effect findings also show patterns that are relevant to advancing research on upper echelons and the growing literature on corporate social responsibility strategies. Our finding that corporate giving decreases with CEO tenure supports theories that depict the early years of a CEO's tenure as qualitatively different from later periods (Hambrick and Fukutomi, 1991). Additional analyses support this result, showing that it is primarily increases in corporate giving during the first two years of CEO tenure that are responsible for this effect.

Further research could employ more granular data and perhaps different methods to examine more subtle dynamics underlying each of the main effects we explored in our broad

analysis. For instance, it is plausible that the mechanisms underlying the influence of structure on leader effects varies among different characteristics. Other characteristics of interest that were not accessible to us given current data limitations include diversity measures that influence cognitive patterns, such as ethnicity, functional work experience, educational background, geographic origin, and age (Kilduff, Angelmar, and Mehra, 2000). Future research in these areas should explore additional variables at both the senior management and board levels to build a comprehensive understanding of the upper echelon characteristics germane to corporate philanthropy.

The finding that the increased presence of women senior managers and directors leads firms to make greater philanthropic contributions not only adds an important gender component to upper echelons theory (van Knippenberg et al., 2011), but also provides additional evidence of the complex relationship between gender and philanthropy (Mesch, 2009). One explanation for these findings that is consistent with the literature is that women senior managers and directors may recognize greater value in the external relationships that are strengthened by corporate philanthropy (Konrad et al., 2008). Our finding of the positive effects of female corporate leaders on philanthropy was in stark contrast to a significant negative effect of female employment on philanthropy, suggesting the presence of distinctive gendered mechanisms relating to gender and senior leaders. Of particular interest for future research is the effect of gender at the CEO level, since this position is so central to corporate philanthropy and to corporate strategy in general. During the period of our sample, the number of female *Fortune* 500 CEOs grew from zero in 1996 to nine in 2006 to 14 in 2010. This number was too small to permit statistical tests in this study, but we strongly believe that future research should investigate the implications of CEO gender, whether through statistical or qualitative methods.

Finally, we also believe that our paper illuminates a key element of the interaction between corporations and society, an increasingly important topic (Marquis et al., 2012). As noted, while researchers recently have guided managers toward strategic philanthropy (Porter and Kramer, 2002), they have failed to reach consensus on the directional effect that socially oriented activities such as philanthropy have on firm performance, let alone to understand the subtleties of how these activities actually influence important firm outcomes (Margolis and Walsh, 2003). Our findings help unpack the influence of senior leaders, but furthermore suggest that organizational structures and processes can be a powerful tool with which to enact strategic corporate social responsibility. Following this view, we suggest that corporations should increasingly utilize the corporate foundation to manage philanthropy as a strategic activity, rather than defer these decisions to the judgment of powerful individuals. While some corporate leaders may treat philanthropy as discretionary, or simply as part of the “overhead” of doing business in certain locales, our results suggest that, by making conscious organizational choices, corporations may be able to more effectively harness the elusive strategic benefits of social responsibility programs.

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TABLE 1: Descriptive Statistics

	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10
1 Philanthropy	3.485	2.898										
2 CEO Tenure	6.126	6.950	-0.129									
3 Director Degree Centrality	14.038	7.796	0.323	-0.095								
4 No. Directors	11.698	2.948	0.253	0.012	0.410							
5 Pct. Women Sr. Mgrs.	0.127	0.096	0.107	-0.056	0.011	0.001						
6 Pct. Women Directors	0.133	0.081	0.189	-0.048	0.116	-0.002	0.292					
7 Foundation Assets * CEO Tenure	48.667	81.631	0.357	0.512	0.132	0.167	0.023	0.026				
8 Foundation Assets * Women Sr. Mgrs.	1.220	1.581	0.520	-0.102	0.223	0.141	0.625	0.296	0.314			
9 Foundation Assets * No. Directors	109.726	102.828	0.695	-0.088	0.398	0.460	0.103	0.136	0.505	0.644		
10 Foundation Assets * Degree Centrality	145.152	160.916	0.611	-0.109	0.703	0.340	0.095	0.154	0.393	0.563	0.840	
11 Foundation Assets * Women Directors	1.300	1.469	0.580	-0.129	0.268	0.121	0.252	0.571	0.350	0.702	0.717	0.653
12 Foundation Assets	8.942	7.801	0.721	-0.113	0.323	0.223	0.116	0.174	0.512	0.690	0.941	0.813
13 ROA	0.046	0.088	0.027	0.033	0.034	-0.002	0.042	0.073	0.009	0.048	0.028	0.041
14 Sales	9.164	0.878	0.190	0.000	0.340	0.223	0.070	0.198	0.145	0.247	0.325	0.378
15 Age	3.041	0.807	0.166	-0.086	0.105	-0.049	-0.049	0.123	0.002	0.090	0.094	0.142
16 CEO Age	4.166	0.124	0.028	0.348	0.121	0.172	-0.162	-0.138	0.196	-0.095	0.044	0.063
17 Service Industry	0.086	0.280	-0.083	0.059	-0.102	-0.102	0.005	-0.019	0.020	-0.024	-0.066	-0.094
18 Retail Industry	0.114	0.318	-0.106	-0.008	-0.073	-0.088	0.117	0.088	-0.058	-0.004	-0.109	-0.097
19 Financial Industry	0.199	0.399	0.121	0.047	0.111	0.341	0.039	0.011	0.073	0.081	0.173	0.117
20 Manufacturing Industry	0.467	0.499	0.163	-0.095	0.092	-0.092	-0.107	0.014	0.033	0.033	0.095	0.131
21 Female Employment	0.363	0.143	-0.104	0.067	-0.061	0.096	-0.028	-0.087	-0.025	-0.073	-0.027	-0.063
22 Per Capita Income	40325	8232	-0.015	-0.003	-0.003	-0.052	0.190	0.147	-0.029	0.103	-0.042	-0.011
23 Tax Rate	1.834	0.664	-0.024	-0.023	0.111	0.062	0.084	0.070	-0.036	0.056	-0.001	0.059
	11	12	13	14	15	16	17	18	19	20	21	22
12 Foundation Assets	0.787											
13 ROA	0.063	0.043										
14 Sales	0.313	0.305	0.113									
15 Age	0.143	0.154	0.128	0.184								
16 CEO Age	-0.095	-0.006	-0.034	-0.054	0.043							
17 Service Industry	-0.033	-0.045	-0.031	-0.052	-0.193	-0.092						
18 Retail Industry	-0.037	-0.098	0.054	0.049	-0.074	-0.071	-0.110					
19 Financial Industry	0.046	0.077	-0.135	0.053	-0.308	0.066	-0.153	-0.179				
20 Manufacturing Industry	0.102	0.142	0.095	-0.010	0.494	0.068	-0.287	-0.336	-0.467			
21 Female Employment	-0.112	-0.070	-0.086	0.003	-0.295	-0.006	0.296	0.118	0.409	-0.579		
22 Per Capita Income	0.064	-0.037	0.035	0.139	-0.010	-0.140	0.018	-0.033	0.051	0.009	0.016	
23 Tax Rate	0.041	-0.012	0.014	0.077	0.019	0.054	0.044	-0.106	0.120	0.015	0.034	0.558

TABLE 2: Corporate Philanthropy of the Fortune 500, 1996-2006
(Random Effects Models with Year Fixed Effects)

	1	2	3	4	5	6	7	8	9	10	11	12	13
1 CEO Tenure		-0.0226** (0.007)					-0.0190** (0.007)	-0.0216* (0.009)	-0.0190** (0.007)	-0.0184** (0.007)	-0.0185** (0.007)	-0.0194** (0.007)	-0.0208** (0.009)
2a Director Degree Centrality			0.0341** (0.008)				0.0267** (0.008)	0.0267** (0.008)	0.0267** (0.008)	0.0524** (0.016)	0.0272** (0.008)	0.0267** (0.008)	0.0469** (0.017)
2b No. Directors				0.0550** (0.019)			0.0423* (0.020)	0.0420* (0.020)	0.0424* (0.020)	0.0394* (0.019)	0.0812* (0.035)	0.0402* (0.020)	0.0652* (0.035)
3 Pct. Women Sr. Mgrs.					0.9044* (0.515)		0.6738+ (0.521)	0.6753+ (0.522)	0.6725 (0.965)	0.7341+ (0.522)	0.6704+ (0.520)	0.7086+ (0.523)	0.5842 (0.965)
4 Pct. Women Directors						2.1951** (0.712)	2.0415** (0.706)	2.0557** (0.703)	2.0414** (0.706)	1.9335** (0.697)	1.9488** (0.704)	2.9087** (1.125)	2.7680** (1.130)
5a Foundation Assets * CEO Tenure								0.0004 (0.001)					0.0003 (0.001)
5b Foundation Assets * Women Sr. Mgrs.									0.0001 (0.072)				0.0189 (0.071)
6ai Foundation Assets * Degree Centrality										-0.0025* (0.001)			-0.0019* (0.001)
6aii Foundation Assets * No. Directors											-0.0046* (0.003)		-0.0033 (0.003)
6b Foundation Assets * Women Directors												-0.1081+ (0.082)	-0.1076+ (0.083)
Foundation Assets	0.2395** (0.011)	0.2370** (0.011)	0.2342** (0.011)	0.2377** (0.011)	0.2366** (0.011)	0.2373** (0.011)	0.2271** (0.011)	0.2249** (0.013)	0.2272** (0.014)	0.2607** (0.016)	0.2814** (0.030)	0.2414** (0.014)	0.3012** (0.031)
ROA	-0.2473 (0.433)	-0.1561 (0.439)	-0.2608 (0.449)	-0.2439 (0.435)	-0.3005 (0.435)	-0.2433 (0.429)	-0.2268 (0.450)	-0.2174 (0.446)	-0.2251 (0.450)	-0.2405 (0.444)	-0.242 (0.444)	-0.2336 (0.446)	-0.2427 (0.433)
Sales	-0.0727 (0.080)	-0.0876 (0.080)	-0.1654+ (0.086)	-0.1181 (0.082)	-0.0629 (0.081)	-0.0974 (0.079)	-0.2019* (0.084)	-0.2021* (0.084)	-0.2021* (0.084)	-0.2000* (0.085)	-0.2012* (0.085)	-0.1997* (0.085)	-0.1982* (0.085)
Age	0.3037** (0.085)	0.2869** (0.087)	0.2931** (0.084)	0.2993** (0.085)	0.3097** (0.089)	0.2764** (0.085)	0.2652** (0.091)	0.2668** (0.091)	0.2649** (0.091)	0.2623** (0.091)	0.2506** (0.090)	0.2600** (0.091)	0.2479** (0.091)
CEO Age	0.0055 (0.385)	0.7363+ (0.431)	0.0001 (0.384)	-0.073 (0.383)	-0.0305 (0.386)	0.0673 (0.384)	0.5329 (0.436)	0.5297 (0.436)	0.5332 (0.436)	0.5514 (0.438)	0.5178 (0.433)	0.5317 (0.437)	0.5323 (0.435)
Service Industry	0.4727* (0.216)	0.5076* (0.218)	0.4922* (0.218)	0.4924* (0.216)	0.4793* (0.215)	0.4115+ (0.215)	0.4815* (0.218)	0.4781* (0.218)	0.4818* (0.218)	0.4478* (0.220)	0.4938* (0.218)	0.4756* (0.218)	0.4539* (0.222)
Retail Industry	0.3469+ (0.210)	0.3721+ (0.218)	0.3642+ (0.208)	0.3623+ (0.210)	0.3548+ (0.214)	0.2673 (0.207)	0.3346 (0.219)	0.3302 (0.219)	0.3347 (0.219)	0.3318 (0.218)	0.351 (0.218)	0.3219 (0.219)	0.327 (0.218)
Financial Industry	1.2324** (0.213)	1.2428** (0.215)	1.1532** (0.205)	1.1088** (0.210)	1.2623** (0.216)	1.1542** (0.213)	1.0657** (0.211)	1.0634** (0.211)	1.0660** (0.211)	1.0594** (0.208)	1.0937** (0.213)	1.0579** (0.211)	1.0689** (0.212)
Manufacturing Industry	0.5766** (0.165)	0.5439** (0.167)	0.5302** (0.161)	0.5641** (0.163)	0.5977** (0.168)	0.5498** (0.164)	0.5044** (0.165)	0.5029** (0.165)	0.5049** (0.164)	0.4991** (0.163)	0.5184** (0.165)	0.4955** (0.164)	0.4994** (0.164)
Female Employment	-1.5382** (0.505)	-1.4860** (0.513)	-1.5026** (0.499)	-1.5156** (0.499)	-1.5741** (0.504)	-1.4285** (0.504)	-1.3753** (0.501)	-1.3623** (0.498)	-1.3738** (0.502)	-1.3252** (0.503)	-1.3841** (0.497)	-1.4084** (0.501)	-1.3585** (0.501)
Per Capita Income	0.0000* (0.000)	0.0000* (0.000)	0.0000* (0.000)	0.0000* (0.000)	0.0000* (0.000)	0.0000* (0.000)	0.0000* (0.000)	0.0000* (0.000)	0.0000* (0.000)	0.0000* (0.000)	0.0000* (0.000)	0.0000* (0.000)	0.0000* (0.000)
Tax Rate	-0.2305* (0.098)	-0.2780** (0.100)	-0.2597** (0.099)	-0.2346* (0.100)	-0.2297* (0.101)	-0.2272* (0.099)	-0.3100** (0.103)	-0.3089** (0.103)	-0.3106** (0.102)	-0.3077** (0.104)	-0.3234** (0.104)	-0.3060** (0.102)	-0.3141** (0.105)
Constant	0.7776 (1.868)	0 (0.000)	0.8351 (1.856)	0.3855 (1.825)	0.2316 (1.832)	0.0712 (1.825)	-1.407 (1.997)	-1.3788 (1.996)	-1.4076 (1.989)	-1.7844 (2.007)	-1.7461 (2.032)	-1.476 (2.004)	-1.9606 (2.028)
Observations	2,241	2,183	2,241	2,229	2,182	2,229	2,122	2,122	2,122	2,122	2,122	2,122	2,122
Number of matrix_idx	646	634	646	640	632	640	618	618	618	618	618	618	618
Robust standard errors in parentheses (** p<0.01, * p<0.05, + p<0.1; one-tailed test for hypothesized effects, two-tail tests for controls)													