Two Heads May Be More Responsible Than One: Co-CEOs and Corporate Social Performance

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Extant research on the co-CEO structure is very limited. We extend this area of inquiry by examining the influence of the co-CEOs on corporate social responsibility (CSR) and irresponsibility (CSI). Drawing from dual leadership theory, we hypothesize that firms led by co-CEOs demonstrate higher levels of CSR and lower levels of CSI. Based on a propensity score-matching sample of co-CEOs and solo CEOs for U.S. firms from 1996 to 2014 and KLD ratings, we found strong support for our hypotheses. Our findings suggest that firms interested in enhanced corporate social performance (CSP) might consider the benefits of a co-CEO structure.

INTRODUCTION

There has been a long tradition of research on the influence of chief executive officers (CEOs) on organizational performance. However, as the upper echelons perspective demonstrates, research on groups of executives rather than an individual leader, may yield better explanations of organization outcomes (Hambrick & Mason, 1984; Hambrick, 2007). Here, research on one of the key executive dyads, i.e. co-chief executive officers (co-CEOs)—“two executives who, over time, perform the top job together in a coordinated fashion and are held jointly accountable for the company or unit’s results” (Alvarez & Svejenova, 2005, p.115)—has been largely neglected. While the classical ideology of the organization is based on having one CEO in charge, some firms have begun to challenge this approach by appointing two CEOs or co-CEOs, to lead simultaneously. There have been multiple calls for research on alternative forms of leadership arrangements, including the co-CEO management structure (Dennis, Ramsey & Turner, 2009; Hambrick & Cannella, 2004).
In the past 30 years, the upper echelons and related literatures have focused on the ways in which a firm’s strategic leaders influence both corporate financial and social performance (Finkelstein & Hambrick, 1997; Hambrick & Mason, 1984; Thomas & Simerly, 1994; Wong, Ormiston & Tetlock, 2011; Wood, 1991). Specifically, in the corporate social responsibility (CSR) literature, empirical studies have provided compelling evidence of how strategic leaders (e.g. CEOs and Top Management Teams) can influence decisions regarding strategic direction, including corporate social performance (CSP) policies (McGuire, Dow & Arghyed, 2003; Ruf, Muralidhar, Brown, Janney & Paul, 2001). However, to our knowledge, no past research has examined the influence of co-CEO leadership on CSP. The aim of this study is to extend this limited understanding of the co-CEO structure and to investigate whether this structure is associated with higher CSP as compared with the traditional solo CEO form. By doing so, we extend the nascent literature on co-CEO leadership to examine outcomes beyond financial performance. We also contribute to dual leadership theory, as our paper provides empirical support for this theory in the context of co-CEOs. We demonstrate that this unique leadership structure can influence firm social performance.

The paper begins with a brief review of the existing co-CEO literature. We then direct our attention to relationships with CSR. Next, we build two hypotheses that examine the CSP implications of the co-CEO structure. We follow with a description of our research methods and data analysis and then provide our results. Finally, our paper concludes with a discussion of our findings, limitations of our study, and suggestions for future research in this area.

THEORY AND HYPOTHESIS DEVELOPMENT

Dual leadership theory (Etzioni, 1965) argues that as organizations get more complex, they may require two mutually supportive leaders to be effective. The theory also suggests that groups will be more effective in terms of task-achievement and members' satisfaction when they are commanded by both instrumental leaders (i.e. leaders who mainly focus on productivity) and expressive leaders (i.e. leaders who mainly focus on maintaining group cohesion) (Balkundi & Harrison, 2006). It further suggests that while these two kinds of leadership might be provided by a single actor ("great man or woman"), this tends not to be the case. Finally, when two actors carry out the two leadership roles, mutual support is required for effective leadership of the group.

Although Etzioni (1965) introduced the idea of dual leadership over fifty years ago, its roots date to ancient times. Sally (2002) stated that “Republican Rome had a successful system of co-leadership that lasted for over four centuries. This structure of co-leadership was so effective that it extended from the lower levels of the Roman magistracy to the very top position, that of consul” (p. 84).

This theoretical argument is also broadly consistent with the basic premises of shared leadership theory, which also suggests that complex organizations can be successful when leadership is carried out by the team as a whole, rather than solely by a single designated individual (Pearce and Conger, 2003). This theory suggests that a dynamic, interactive influence process among individuals in groups can lead to the achievement of group or organizational goals.

At its most effective, shared leadership can foster greater commitment and information sharing within teams. Using multiple leaders’ complementary knowledge and skill sets, groups can foster creative decision-making (Cox, Pearce, and Perry, 2003). Several past empirical studies have found that teams led by shared leadership outperformed teams led by a single leader (e.g., Carson, Tesluk, & Marrone, 2007; Ensley, Hmieleski, & Pearce, 2006; Hmieleski, Cole, & Baron, 2012; Pearce and Sims, 2002).

However, dual or shared leadership theory is contrasted with the traditional unity-of-command theory (Barnard, 1968; Gulick & Urwick, 1937; Simon, 1997), which is prevalent in much of the psychological, administrative, and political science literature. Unity-of-command theory expects effective leadership to be provided by one individual and views leadership as a top-down process. According to this view, organizations can have maximum effectiveness, when a single actor highly placed in the hierarchy makes decisions for the people below them (Bass, 1985; Fayol, 1949; House, 1977; House, Shane & Herold, 1996; Stodgill, 1974; Weber, M., 1924/1947). This theoretical approach also focuses on one leader whose
personal vision and values become the motivational forces for the whole organization (Bass, 1985; Bennis & Nanus, 1985; House, 1977). Scholars who advocate this view believe that a single leader can achieve a rational and efficient process and avoid confusion and conflicts (e.g. Fayol, 1949).

The vast majority of public firms adopt the single CEO structure, recently, however, several prominent public firms such as JP Morgan Chase, Bed Bath & Beyond, Chipotle, and Whole Foods Market have challenged the unity-of-command theory by having co-CEOs (Arena, Ferris & Unlu, 2011). Because of this variance in the traditional distribution of power, the co-CEO leadership form provides a unique empirical setting in which we can test the relative merits of the unified versus shared command principle. In the following pages, we examine the CSP implications for the co-CEO and solo CEO structures.

Past Research on Co-CEOs

Co-CEOs are important in family businesses where 20 percent of U.S. family firms reported co-CEOs in 2007 and 42 percent were considering this structure for the next generation (Frauenheim, 2009). Although co-CEOs are not yet as common in public firms, their numbers are also growing rapidly. In the last decade, U.S. public firms with a co-CEO management structure grew from 0.8 percent in 2004 to 4.4 percent in 2014 (William Mercer, Inc. and Wall Street Journal, 2004; Zillman, 2014).

Research has shown that firms turn to the co-CEO structure primarily under four circumstances: when co-founders lead their firms, when existing leaders join to become co-CEOs in the wake of a corporate merger, when family-run firms ease the transition between generations, and when sitting CEOs invite others to share power with them (O’Toole, Galbraith, & Lawler, 2002). Research has shown that co-CEO arrangements resulting from corporate mergers are seldom successful as the two parties often have no basis of trust or history of working together, and each may prefer to be the sole leader (O’Toole et al., 2002). However, the average tenure reported for co-CEOs in U.S. public firms of 4.69 years (Arena et al., 2011) is comparable to the 5.4 years tenure of solo CEOs (Quigley & Hambrick, 2015), indicating the relative stability of the co-CEO structure.

Furthermore, in some cases, the market has reacted positively to co-CEO appointments and their presence may increase firm valuation (Arena et al., 2011). Firms that appoint co-CEOs tend to have lower leverage, a more limited firm focus, less independent board structure, fewer advising directors, lower institutional ownership, and greater levels of merger activity (Arena et al., 2011). However, others have reported that the co-CEO structure may be unrelated to past or future performance measures (Dennis et al., 2009). Moreover, Krause, Priem and Love (2015) found that when a power gap exists between co-CEOs, firm performance improves until the power gaps become very large.

Corporate Social Performance

Corporate social performance has often been used as a synonym for CSR (Wartick & Cochran, 1985). Moreover, the traditional CSR literature has tended to focus much more on responsible behavior than on corporate social irresponsibility (CSI) (Lange & Washburn, 2012). Researchers, however, have increasingly come to see that firms can do both good and bad simultaneously (Muller & Kraussl, 2011) and that CSR and CSI can be seen as two theoretically separate and distinct constructs that should be treated as such empirically (Capelle-Blancard & Petit, 2016; Godfrey, Merrill, & Hansen, 2009). Previous empirical studies have suggested, for example, that companies may engage in CSR in order to offset CSI (Bear, Rahman, & Post, 2010; Kacperczyk, 2009; Lin-Hi & Muller, 2013; Strike, Gao, & Bansal, 2006). Hence, we define CSP as a more comprehensive and integrated assessment of fulfillment of stakeholder expectations entailing both CSR and CSI.

We see CSR as essentially connecting to the idea of “doing good.” It refers to firm behavior that may go beyond mere compliance of legal requirements to provide some social good (McWilliams & Siegel, 2001) and make additional contributions to the well-being of society (Carroll & Shabana, 2010). In contrast, although in practice CSR and CSI may be very much connected, we see CSI as referring to the dark side of the enterprise (Popa & Salanta, 2014). CSI refers to “a set of actions that increases externalized costs and/or promotes distributional conflicts” (Kotchen & Moon, 2012, p.2). Here the firm
may not meet minimum behavioral stakeholder expectations (Campbell, 2007) and executives may show disregard for the welfare of others (Pearce & Manz, 2011).

According to stakeholder theory, there are multiple constituent groups who affect or are affected by a firm’s CSP (Freeman, 1984). Leaders of firms are responsible for determining and addressing these stakeholders’ needs (Thomas & Simerly, 1994). An organization may be considered to have a high degree of CSR, when it meets the needs of multiple stakeholders without sacrificing the needs of other stakeholders (George, Dahlander, Graffin, & Sim, 2016; Hollensbe, Wookey, Loughlin, George, & Nichols, 2014; Wong et al., 2011), whereas an organization may be considered to have a high degree of CSI, when a gain by one party is made at the expense of the total system (Simons, Vermeulen, and Knoben, 2016).

**Co-CEOs and CSP**

Scholars who are proponents of unity-of-command theory suggest that solo CEOs may outperform co-CEOs due to two reasons. First, rather than facilitating effective decision making, researchers have theorized that shared leadership structures can result in lower CSP due to coordination issues, strong egos, conflict and competition for power between co-CEOs (Alverez & Svejenova, 2005; Hackman, 2002; Mintzberg, 1989). Second, concerns about accountability have been raised regarding other forms of shared leadership structures (Abelson, 1999), which may also create issues for co-CEOs. If co-CEOs are extremely cohesive they may not be motivated to carefully monitor each other and instead may become an alliance more powerful than the board itself. This may have been the case that led to a recent scandal involving two co-CEOs of PetroTiger Ltd. who paid bribes for a multi-million-dollar oil-service contract (Voreacos, 2015).

However, we suggest that the presence of two individuals serving simultaneously as CEOs can positively influence the firm’s decision making process regarding CSR and may help discourage engagement in CSI actions in comparison to having a solo CEO structure due to multiple reasons. According to dual leadership theory, co-CEOs can more effectively communicate, handle crises, allocate and reallocate joint tasks and decision making, and develop consensus positions on key issues than can a sole leader (Etzioni, 1965). Co-CEOs also often bring complementary skills to the firm’s senior leadership position, providing a range of competencies and perspectives that a single individual might not possess. Thus, we expect co-CEOs to seek and acquire a greater variety of information and viewpoints in making strategic decisions than solo CEOs (Arena et al., 2011; Hinsz, Tindale and Vollrath, 1997).

Co-CEOs have the potential to better understand and represent diverse perspectives and be more successful at pursuing a variety of goals simultaneously (Arena et al., 2011). Also, within a designated co-CEO pair, influence can emerge from either one or both individuals (Krause et al., 2015). Co-CEOs may be more likely to develop a comprehensive CSP strategy by making informed decisions, thoughtfully considering trade-offs, and satisfying the needs of multiple stakeholders without sacrificing the needs of other stakeholders.

Co-CEOs can also increase organizational ambidexterity by being present at different locations and/or examining multiple strategic issues at the same time (Gibson & Birkinshaw, 2004). In particular, co-CEOs can succeed by simultaneously exploring and exploiting contradictory and interrelated demands by multiple stakeholders (Simsek, Heavey, Veiga, & Souder, 2009). Therefore, co-CEOs can balance and combine different initiatives (i.e. instrumental and moral) in addressing social issues in an ambidextrous manner which can result in enhanced CSP.

A co-CEO structure facilitates in decreasing the power controlled by one individual, which may reduce the potential for self-interest and dysfunctional political maneuvering for certain CSP strategies (Pearce & Manz, 2011). Shared leadership can help establish a set of checks and balances that reduce the likelihood of CSI. Also, from an agency theory perspective, shared leadership may reduce agency costs through increased monitoring as each executive watches his or her respective co-CEO (Arena et al., 2011). Thus, shared leadership may ultimately help deter corruption and prevent co-CEOs from investing in social strategies that are not in the best interest of their firms (Pearce, Manz, & Sims, 2008).
Co-CEOs may also seek ways to simultaneously satisfy multiple stakeholders’ needs. Co-CEOs may have added capacity to determine various solutions and weigh the pros and cons of each solution before selecting a more thoroughly researched strategy. In sum, we suggest that in a co-CEO leadership environment, power is likely diffused and monitoring increased, and that this shared leadership form may help enhance CSP by allowing the CEOs to divide tasks and roles, leverage complementary skills and perspectives, enhance organizational ambidexterity, and acquire more relevant information and perspectives for effective decision making. Therefore, we offer the following two hypotheses:

Hypothesis 1: Firms led by co-CEOs will demonstrate higher levels of CSR than those led by solo CEOs.

Hypothesis 2: Firms led by co-CEOs will demonstrate lower levels of CSI than those led by solo CEOs.

METHODOLOGY

Sample and Data Collection

Our sample consists of publicly traded U.S. firms that were led by co-CEOs at some point between 1996 and 2014. To identify the firms with co-CEOs, we followed Krause et al., (2015) and did a search of AuditAnalytics, Execucomp, Directory of Corporate Affiliations and major business press outlets for all executives whose job titles included the term “co-CEO,” or “co-chief executive officer.” Similar to Krause et al., (2015), we excluded any cases in which executives listed as co-CEOs were the leaders of subsidiaries and not of whole organizations. In total, we found 82 publicly traded U.S. firms, which adopted a co-CEO structure at some point between 1996 and 2014. Next, we excluded 11 firms with co-CEO leadership structures lasting less than two years because these structures were unlikely to have been in place long enough to significantly affect CSP. After eliminating 16 firms with missing CSP data, we had a final sample of 55 co-CEO firms. This resulting sample size compiled over the nineteen year period of examination reflects the relative rarity of the co-CEO leadership form in publicly traded U.S. firms.

The CSP data was collected from the Kinder, Lydenberg, Domini, and Company (KLD) dataset. All accounting data were obtained from COMPUSTAT. For firms not included in one of these databases, we collected and coded the data manually from information contained in corporate proxy reports.

Measures

Solo CEOs and Co-CEOs

Using an extensive search we obtained a final sample of 55 publicly traded U.S. firms with co-CEOs between the years of 1996-2014. Next, we created a matched sample of firms with solo CEOs, using 2-digit SIC codes for the same year. This approach was used to reduce potential sources of non-comparability (Chaplinsky & Ramchand, 2000). We also employed the propensity-score matching method to select a subset of comparison units similar to the co-CEO led firms based on number of employees, firm revenue, and total assets (Dehejia & Wahba, 2002; Rosenbaum & Rubin, 1983). We dummy coded the co-CEO variable as 1, and solo CEO as 0. The final sample comprises 110 total firms including 55 firms each with co-CEOs and solo CEOs. We collected three years of longitudinal data for each firm resulting in 330 firm year observations.

CSR and CSI

The measures of CSR and CSI were obtained from the KLD dataset. KLD ratings have been used extensively in research examining CSR (e.g., Agle, Mitchell, & Sonnenfeld, 1999; Hart & Shafman, 2015; Kang, 2015; Muller & Kraussl, 2011) and are considered to be a comprehensive measure of multiple stakeholder positions (Agle, Mitchell, & Sonnenfeld, 1999). These ratings are based on sources including reports from company data, research partners, articles ranking companies on various issues, public documents such as Securities and Exchange Commission filings, and information from
government and nongovernmental organizations (e.g., Entine, 2003). KLD scores are based on performance regarding seven categories of stakeholder service (community relations, diversity, employee relations, environment, product, corporate governance, and human rights), each composed of several sub-indicators. The ratings are designed as a binary system, where for each strength or concern rating applied to a company, KLD includes a 1 indicating a presence or a 0 indicating an absence.

Previously, scholars have faced issues developing a composite CSR measure using the KLD dataset when a single CSR score was computed by subtracting total concerns from total strengths (e.g., Wong et al., 2011). Such a single measure of CSR is problematic because “doing good” is strategically different from “doing no harm,” and empirically, total concerns and total strengths are highly correlated in the KLD database (Mazutis, 2013; Ioannou & Serafeim, 2015). Therefore, we operationalized CSR and CSI by measuring their equally weighted sum of total strengths and total concerns respectively (Ioannou & Serafeim, 2015; Ormiston & Wong, 2013; Slater & Dixon-Fowler, 2009; Waddock & Graves, 1997; Waldman, Siegal, & Javidan, 2006). Because the number of sub-category items changed over the course of the years covered in our sample, we standardized each of the scored items to put each dimension on the same scale so that even with variations in the number of items, each dimension carried equal weight (Hart, Shao, Fox, & Westermann-Behaylo, 2015). Similar to CEO level data, all performance data was also captured for three years, but was lagged by one year to better gauge the effect of CEOs on CSP.

Control variables

We also used several control variables in our analysis: total number of employees to control for firm size; number of years since the firm was founded to control for firm age; R&D expenses to sales ratio to control for firm R&D intensity; return on equity (ROE) to control for firm performance; and a dummy variable, current acquisitions, to reflect whether the firm engaged in any acquisition activities in any given three years. We also controlled for the firm’s long-term debt-to-assets ratio because prior research has shown that firms with co-CEOs tend to have a higher level of debt (Arena et al., 2011). In addition, we controlled for industry, by using two-digit SIC codes. At the board level, we controlled for board independence, measured as the percentage of directors classified as independent in firm proxy statements (Dalton, Daily, Ellstrand, & Johnson, 1998). Finally, our analyses included year dummy variables.

ANALYSIS and RESULTS

Summary statistics and pairwise correlations among research variables are shown in Table 1. Our model did not encounter an independence of the error terms violation (DW statistic ≈ 2) nor was the assumption of no correlation between independent variables and the error term violated. In addition, to demonstrate that the results are robust across different modeling techniques and do not suffer from any endogeneity issues, we tested our model using ordinary least square (OLS) regression with robust standard errors (Greene, 2008); generalized estimating equations (GEE) (Ballinger, 2004); and two-stage least-squares (2SLS) (Bascle, 2008). For the GEE model, we specified an identity link function, a Gaussian family, and an exchangeable error correlation structure. For the 2SLS model, two theoretically and statistically relevant instrumental variables were selected. A prior study found that co-CEO structures were more likely to be formed due to M&As and to have weak governance structures (Arena et al., 2011). Therefore, whether a firm engaged in any acquisitions prior to an adoption of a co-CEO structure and the level of institutional ownership as measured by equity held by public pension funds, mutual funds, endowments and foundations, divided by the total amount of common stock were employed as instrumental variables. The results from all three analyses are very robust, and are presented in Table 2.
### TABLE 1
DESCRIPTIVE STATISTICS AND PAIRWISE CORRELATIONS

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Solo CEO and co-CEO</td>
<td>0.50</td>
<td>0.50</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Total CSR strength</td>
<td>-0.01</td>
<td>2.97</td>
<td>0.16</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Total CSR concern</td>
<td>-0.01</td>
<td>3.38</td>
<td>-0.18</td>
<td>0.25</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Employees</td>
<td>81.33</td>
<td>194.40</td>
<td>-0.01</td>
<td>0.68</td>
<td>0.45</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) ROE</td>
<td>-0.09</td>
<td>2.77</td>
<td>0.05</td>
<td>-0.09</td>
<td>-0.12</td>
<td>-0.33</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Firm age</td>
<td>39.47</td>
<td>37.37</td>
<td>-0.23</td>
<td>-0.07</td>
<td>0.10</td>
<td>0.12</td>
<td>-0.13</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7) R&amp;D intensity</td>
<td>0.01</td>
<td>0.04</td>
<td>0.05</td>
<td>0.08</td>
<td>-0.02</td>
<td>-0.04</td>
<td>-0.05</td>
<td>-0.08</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8) Current acquisition</td>
<td>0.27</td>
<td>0.45</td>
<td>0.01</td>
<td>-0.01</td>
<td>0.15</td>
<td>0.05</td>
<td>0.01</td>
<td>-0.01</td>
<td>0.19</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(9) Long-term debt ratio</td>
<td>0.14</td>
<td>0.17</td>
<td>-0.02</td>
<td>-0.22</td>
<td>-0.10</td>
<td>-0.01</td>
<td>-0.08</td>
<td>0.14</td>
<td>-0.08</td>
<td>-0.02</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>(10) Board independence</td>
<td>0.62</td>
<td>0.19</td>
<td>0.03</td>
<td>0.09</td>
<td>0.11</td>
<td>0.18</td>
<td>-0.07</td>
<td>-0.01</td>
<td>-0.12</td>
<td>-0.01</td>
<td>0.15</td>
<td>1.00</td>
</tr>
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</table>

N = 330; Correlations are significant at 0.05 level if they are more than $|0.11|$. 
Hypothesis 1 states that firms led by co-CEOs will demonstrate higher levels of CSR than those led by solo CEOs; Hypothesis 2 states that firms led by co-CEOs will demonstrate lower levels of CSI than those led by solo CEOs. The regression coefficients obtained from OLS, GEE, and 2SLS reveal that both hypotheses were strongly supported. For Hypothesis 1, we found that firms led by co-CEOs had significantly higher total CSR strengths in comparison to firms led by solo CEOs with a positive unstandardized coefficient (b) of 0.83 in OLS (p-value = 0.001), 0.81 in the GEE model (p-value = 0.001) and 1.70 in 2SLS model (p-value = 0.03). For Hypothesis 2, we found that firms led by co-CEOs had significantly lower CSI concerns in comparison to firms led by solo CEOs, with a negative unstandardized coefficient (b) of -1.17 in OLS regression (p-value = 0.001), -1.15 in the GEE model (p-value = 0.001) and -2.60 in 2SLS model (p-value = 0.02).

### TABLE 2
REGRESSION MODEL USING OLS, GEE, AND 2SLS

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>CSP Strengths</th>
<th>CSP Concerns</th>
<th>CSP Strengths</th>
<th>CSP Concerns</th>
<th>CSP Strengths</th>
<th>CSP Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OLS</td>
<td>GEE</td>
<td>2SLS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-1.25**</td>
<td>0.08</td>
<td>-0.90†</td>
<td>0.52</td>
<td>-1.69*</td>
<td>0.78</td>
</tr>
<tr>
<td>Employees</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>ROE</td>
<td>0.12**</td>
<td>0.03</td>
<td>0.14**</td>
<td>0.04</td>
<td>0.11**</td>
<td>0.03</td>
</tr>
<tr>
<td>Firm age</td>
<td>-0.01†</td>
<td>-0.00</td>
<td>-0.01*</td>
<td>0.00</td>
<td>-0.01</td>
<td>-0.00</td>
</tr>
<tr>
<td>R&amp;D intensity</td>
<td>5.76**</td>
<td>-1.29</td>
<td>6.44**</td>
<td>-1.15</td>
<td>5.36*</td>
<td>-0.64</td>
</tr>
<tr>
<td>Acquisition</td>
<td>-0.12</td>
<td>0.98*</td>
<td>-0.41†</td>
<td>0.63</td>
<td>-0.12</td>
<td>0.99*</td>
</tr>
<tr>
<td>Board independence</td>
<td>-0.08</td>
<td>0.59</td>
<td>-0.01</td>
<td>1.16</td>
<td>-0.14</td>
<td>0.70</td>
</tr>
<tr>
<td>Solo CEO and Co-CEO</td>
<td>0.83**</td>
<td>-1.17**</td>
<td>0.81**</td>
<td>-1.15**</td>
<td>1.70*</td>
<td>-2.60*</td>
</tr>
<tr>
<td>N</td>
<td>330</td>
<td>330</td>
<td>330</td>
<td>330</td>
<td>330</td>
<td>330</td>
</tr>
<tr>
<td>R² (χ²)</td>
<td>0.59</td>
<td>0.34</td>
<td>330.43</td>
<td>68.20</td>
<td>0.57</td>
<td>0.30</td>
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</tbody>
</table>

Number of firms=110; †p ≤ 0.1. *p ≤ 0.05. **p ≤ 0.01.
DISCUSSION

Prior research on co-CEOs has been limited to only a very few studies (Krause, et al., 2015) and previous CSP research has often not distinguished between CSR and CSI (Muller & Kraussl, 2011). To our knowledge, the present study is the first in the management field to examine the relationships between co-CEOs and CSP.

Our findings suggest than an important potential benefit of the co-CEO structure is enhanced CSP. Results from our study indicate that firms in our sample with co-CEOs exhibit both higher CSR and lower CSI than their solo CEO counterparts. This is an interesting finding, as several previous studies have suggested that firms engage in CSR activities in part to offset previous CSI and also that CSR may be an antecedent to CSI due to moral credits achieved through CSR (Ormiston & Wong, 2013).

CEO positions in many firms have become so complex that they may have outgrown their traditional one-person boundaries. Modern CEOs must address multiple escalating and often conflicting economic and social expectations that vary both within and between stakeholders over time. Our findings suggest that one way to increase the chances that CEOs may make both more responsible decisions and fewer irresponsible ones is to share the CEO title. Such collaboration at the top may help reduce the isolation of the solo CEO and result in better-vetted solutions.

In order to further explore the breadth of CSP in our sample, we also conducted a post-hoc analysis using the same KLD dataset. Here we examined if co-CEOs differed in the internal (e.g. focusing on employee policies, diversity and corporate governance) and external (e.g. focusing on environmental performance or human relations issues) dimensions of CSR (Tang, Hull and Rothenberg, 2012). We found that co-CEOs simultaneously performed better in terms of both internal and external aspects. Co-CEOs may achieve this by sharing leadership roles, dividing tasks and roles, and leveraging complementary skills and perspectives. These findings further suggest that co-CEOs may be better with simultaneously balancing the needs of multiple stakeholders in comparison to solo CEOs.

The nature of our sample, selected from publicly traded U.S. firms has some strengths and weaknesses. Our sample includes co-CEOs reported in large publicly traded firms from 1996–2014. The number of such firms adopting this leadership structure has been limited. However, the co-CEO form is growing rapidly (Zillman, 2014), and this alternative configuration of top leadership appears to hold much promise (Krause et al., 2015). To strengthen our analysis, we included instrumental variables along with three years of longitudinal data for each observation and lagged our dependent variables. Nonetheless, due to the nature of our sample, care must be exercised when making any causal interpretations of our results.

Our sample does not include private and small businesses where the co-CEO structure is most likely to be found. Future studies on the co-CEO structure should be extended to samples of companies at different stages of their lifecycles, including private, small and medium size firms.

In addition, 20 percent of U.S. family firms reported co-CEOs in 2007 (Frauenheim, 2009). Co-CEOs in family firms face special challenges, and with generational concerns, the co-CEO structure may be better suited for family firms to pursue a variety of goals simultaneously. Such a structure may also be useful in avoiding a clash among relatives in a family firm (The Economist, 2010). Future studies should examine the influence of the co-CEO structure on CSP in family firms.

We also believe there is an opportunity to study shared leadership structures in international settings. Co-CEOs are more common in countries like Germany where collective management practices are well established (Feloni, 2014). Examining the role of co-CEOs in international settings may offer additional insights to the study of this shared leadership practice.

Finally, given that there are only a few studies on co-CEOs, this emerging area might also benefit greatly from qualitative research. While scholars may find it challenging to get an insider’s view of co-CEOs through interviews, case studies and direct observations, those gaining access can shed light on the micro-processes involved (Crilly, Hansen, & Zollo, 2016).
CONCLUSION

Today, corporate leaders must address multiple stakeholder issues that go beyond shareholder wealth maximization. They must strive to both do well and do little harm. Under the traditional dominant solo CEO form of top firm leadership, significant gaps have continued to exist between firm performance and societal expectations. Our research suggests that when it comes to enhancing corporate social performance, one option firms may want to consider is the alternative co-CEO leadership form. Here, two heads may indeed be better than one.

REFERENCES


