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THE PRESENCE OF A SEPARATE COO/PRESIDENT AND ITS IMPACT ON STRATEGIC CHANGE AND CEO DISMISSAL

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This study focuses on the leadership structure at the very top of a firm. Specifically, it examines how the presence of a COO/president, who is separate from the CEO, affects strategic change and CEO dismissal. With longitudinal data on the tenures of 207 CEOs, results suggest that the presence of a separate COO/president increases the magnitude of strategic change under conditions of low firm performance but it decreases the magnitude of strategic change under conditions of high firm performance. In addition, the presence of a separate COO/president increases the likelihood of CEO dismissal under conditions of low firm performance, and this effect is stronger when the magnitude of strategic change is high; but it has no impact on the likelihood of CEO dismissal under conditions of high firm performance. These results suggest that the impact of the presence of a separate COO/president on strategic change and CEO dismissal varies across different organizational contexts.

The literature on corporate elites has paid significant attention to the leadership structure at the very top of organizations (for example, the consolidation vs. separation of the chief executive officer (CEO) and board chair positions—for a review, see Daily and Dalton, 1997). This is because corporate elites in different governance positions may have different interests, which means that the leadership structure at the top can influence organizational outcomes (Jensen and Zajac, 2004). Recently, there is an emerging research stream that specifically focuses on an important structure at the top: the presence of a chief operating officer (COO)/president who is separate from a CEO, and examines the performance consequences (accounting performance and stock market reactions) of this structure and the tenure outcomes of the COO/president (e.g., Cannella and Shen, 2001; Davidson, Nemec, and Worrell, 2001; Hambrick and Cannella, 2004; Heenan and Bennis, 1999; Levinson, 1993; Shen and Cannella, 2003).

There can be two separate roles of a COO/president: one representing an heir apparent in training for the CEO position and the other representing a co-leader delegated with internal operating authority. From a co-leader perspective, Hambrick and Cannella (2004: 959) argued that ‘the decision to have a COO represents a major structural choice: it explicitly divides between two people a set of top-level roles that are typically fulfilled by one person; it draws a structural distinction between strategy formulation and implementation; it adds an organizational layer; and it adds a highly-paid executive position to the organization’s costs.’ From a succession (heir apparent) perspective, Vancil (1987) found that many firms identified an heir apparent in the COO and/or president position in advance of the actual succession event and used this position to groom the next CEO. Findings of

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Ocasio (1999) and Zhang and Rajagopalan (2003) have suggested that the presence of a separate COO/president increases the likelihood that a new CEO will be selected from within the firm. These studies suggest that a CEO and a COO/president in general are partners, considering that as co-leaders they work closely in their positions, and from a succession perspective it is likely that the CEO will pass the leadership baton to the COO/president when succession occurs.

On the other hand, however, the relationship of a CEO and a COO/president (as a co-leader or an heir apparent) can involve rivalry. Ocasio (1994), from the perspective of power circulation, found that the number of inside directors on the board increased the likelihood of CEO turnover under conditions of poor firm performance. Similarly, Shen and Cannella (2002), from the perspective of power contestation, found that the proportions of non-CEO inside directors and non-CEO executive ownership have significant influence on the likelihood of CEO dismissal (followed by inside succession). These studies suggested that senior executives can be power contenders to the CEO. Thus, a COO/president, as a co-leader who is only one step from the top post, can be a power contender to the CEO.

Studies from a succession perspective have similar suggestions. Cannella and Shen (2001), for example, noted that a CEO may have complex feelings toward a COO/president. While selecting a COO/president as an heir apparent gives the CEO opportunities to continue his or her influence over the firm, naming an heir apparent also reminds the CEO of his or her own mortality (Sonnenfeld, 1988). In addition, from the point of view of the COO/president as an heir apparent, he or she may become impatient under the shadow of the CEO and want to be his or her 'own man' (Levinson, 1993). As Levinson (1993: 72) noted, the relationship between a CEO and a COO/president has 'built-in and therefore endemic, hazards' that are 'exacerbated rivalry and corresponding defensiveness.'

If in general a CEO and a COO/president are partners, under what conditions will the rivalry between these two be so high that the COO/president may become a contender to the CEO? And accordingly how will the presence of a separate COO/president (i.e., the CEO has either a partner or a contender) influence the firm's strategic behavior and the CEO's tenure outcome? At this point, however, we do not have clear answers to these questions. Examining these questions is important for both theoretical and practical reasons. From a theoretical perspective, addressing these questions can improve our understanding of the coalition behaviors in firms' corporate elites. As Hambrick (1994) pointed out, top management teams are frequently just 'groups' (i.e., not 'teams' in the ordinary sense), and both centrifugal and centripetal forces can act on the groups. Examining the relationship between a CEO and a COO/president can help us to understand the collaboration and rivalry within the group. From a practical perspective, because a CEO and a COO/president are co-leaders of a firm with tasks that are both separate and related, their relationship can have a significant impact on firms. In addition, from a succession perspective, examining the relationship of a CEO and a COO/president can improve our understanding of the management of CEO succession planning.

This study attempts to fill this important gap in the literature. It aims to develop and test a contingency view on the CEO–COO/president relationship. I argue that while in general a COO/president is a partner to a CEO, he or she may become a contender to the CEO under conditions of low firm performance. Then, whether a CEO has a COO/president will have significant impact on the firm as well as on the CEO. Based upon these arguments, I will empirically investigate how the presence of a separate COO/president can influence the magnitude of strategic change and the likelihood of CEO dismissal under different performance conditions.

THEORY DEVELOPMENT

A COO/president as a partner to a CEO

In order to understand the CEO–COO/president relationship, it is important to understand how a COO/president is selected, if there is one. Previous studies have suggested that a CEO usually has an important influence on this decision (e.g., Cannella and Shen, 2001; Hambrick and Cannella, 2004; Levinson, 1993; Vancil, 1987). Considering a CEO's influence on this decision, a CEO is likely to have a COO/president when his or her power is well established within the firm so that he or she is less likely to confront the contest from the COO/president. In support of this argument, Hambrick and Cannella (2004) and Zhang and Rajagopalan (2004) have noted that a separate COO/president position is more likely to be created when a CEO is also the board chair.

Similarly, considering a CEO's influence on this decision, a CEO will not select a COO/president who is likely to present a challenge to him or her. Instead, a CEO will tend to select a COO/president who is similar to him or her, or one who is a long-term protégé. In examining CEOs' influence on the selection of successors, Zajac and Westphal (1996) found that CEOs prefer demographically similar successors. They argued that many CEOs are reluctant to abdicate control (Sonnenfeld, 1988; Vancil, 1987), and thus when custom compels them to retire they prefer to select successors with similar philosophies and skill repertoires in order to preserve their visions for the firms.

In addition, even after a COO/president is selected, the CEO is still more powerful than the COO/president. As noted by Levinson, 'except in unusual circumstances, by definition, the CEO has greater power than the COO' (Levinson, 1993: 71). This is consistent with Cannella and Shen's (2001) finding that CEO power has significant impact on the alternative tenure outcomes of a COO/president. As a less powerful executive, the COO/president tends to partner with rather than compete with the CEO.

Further, the tasks of the CEO and the COO/president are highly related so that they have to work together closely in order to get things done effectively. As Drucker (1954) noted, the tasks of a CEO in a modern company are too much for one person. Bass (1990) also stated that in large companies CEOs should focus more attention on long-term threats and opportunities and set up a COO/president position in charge of the day-to-day operations and short-term goal orientations. In other words, a COO/president can help a CEO execute tasks. In support of these arguments, Hambrick and Cannella (2004) found that CEOs were more likely to have COOs if their backgrounds were in finance/law and if they had never served as COOs. This is probably because these types of CEOs lack operational skills and thus need COOs to help them with the day-to-day operations of the firm. In sum, considering that a CEO has significant influence on the selection of a COO/president and they have to work closely in their positions, the COO/president is generally viewed as a partner to the CEO.

A COO/president as a contender to a CEO under conditions of low firm performance

However, a COO/president could become a power contender to a CEO under certain conditions. This section will develop this argument from Fama's (1980) point of view on managerial monitoring. Fama (1980) argued that managerial monitoring can take place in both directions: from higher to lower levels of management and from lower to higher levels. Prior literature has largely focused on monitoring from higher to lower levels—for example, the monitoring of CEOs by boards of directors, which have the responsibility of hiring and firing CEOs (e.g., Friedman and Singh, 1989; Weisbach, 1988). However, monitoring from lower to higher levels—for example, monitoring of CEOs by other senior executives—is less widely acknowledged (Fama, 1980).

Monitoring from lower to higher levels of management is possible for at least two reasons. First, there exist interest conflicts and competition among top managers. The current literature on corporate governance generally holds the view that, unlike outside directors, who are independent from the influence of the CEO, inside directors and other senior executives are loyal to the CEO and tend to ally with the CEO because they depend on the CEO for their jobs (Walsh and Seward, 1990; Weisbach, 1988). Some scholars, however, have argued that senior executives may be competitors of the CEO because they compete for the top position and want to 'run their own show' (Pfeffer, 1981; Shen and Cannella, 2002).

Second, senior executives have a personal stake in the success of their firms because they are evaluated by external labor markets on the basis of the firms' performance (Fama, 1980). Poor performance can harm their alternative employment opportunities outside the firm. In addition, poor performance increases the likelihood that a new CEO will be hired from outside the firm, who may bring his or her own people to replace the incumbent senior executives (Finkelstein and Hambrick, 1996; Friedman and Singh, 1989). Hence, senior executives may work to remove the CEO and replace him or her with one of them in order to reduce their concerns on outside succession (Shen and Cannella, 2002). Thus, to protect their stake, senior executives have an incentive to monitor the leadership of the CEO. Indeed, Fama has argued that competition among top managers within a firm may represent a more important monitoring mechanism than the board of directors because 'the latter might best be regarded as professional referees whose task is to stimulate and oversee the competition among the firm's top managers' (Fama, 1980: 293).

If senior executives can play a monitoring role with regard to the CEO, the role should be especially prevalent when there is a separate COO/president. There is a certain level of competition between a CEO and a COO/president because the COO/president is assuming responsibility for what the CEO has built during his or her tenure (Levinson, 1993). Compared with other senior executives, a COO/president is only one step from the top post, and the closer one gets to the goal, the greater the tension (Levinson, 1993). Even if a COO/president is a CEO's partner at the beginning, over time he or she may want to be his or her 'own man.' In contrast, if there is no separate COO/president, an alternative political coalition that can challenge the CEO is less likely to emerge. This may happen because the situation lacks a leader for such a coalition. More importantly, when there is no separate COO/president there is no one individual who will clearly be the beneficiary if the challenge is successful or, conversely, accept the responsibility if the challenge fails. Thus, 'free riding' may occur among senior executives, by which each of them expects the others to challenge the CEO even though they are not satisfied with the CEO themselves.

Indeed, the presence of a separate COO/president suggests that a CEO's power is counteracted. Finkelstein (1992) demonstrated that an individual's title and position in the firm's hierarchy (e.g., CEO, president, or COO) represents his or her structural power within the firm. The greater the number of different titles/positions an executive has in a firm, the greater his or her power. When there is no separate COO/president, power is concentrated in the CEO position. In contrast, when there is a separate COO/president, power is split between the CEO and the COO/president; therefore, CEO power is weakened (Worrell, Demec, and Davidson, 1997).

A COO/president is likely to become a contender to a CEO particularly under conditions of low firm performance. The resource dependence view suggests that senior executives link their organizations to environments, and they gain power through their ability to cope with important environmental contingencies (Pfeffer and Salancik, 1978). Low firm performance suggests that a CEO's competencies are not aligned with environmental conditions (Miller, 1991). If a CEO's competencies are less valued within the firm, he or she will become less capable of controlling political conflict and maintaining stability in political coalitions within the firm (Ocasio, 1994). This will give the COO/president opportunities to compete with the CEO. Ocasio (1994), for example, found that under conditions of low firm performance the likelihood of CEO turnover increased with the number of inside directors. These findings suggest that under such conditions senior executives are more likely to limit CEO power and contest it rather than uphold it. In addition, a COO/president has much to lose under conditions of low firm performance because under such conditions investors and outside directors may question the capabilities of both the CEO and the COO/president (Boeker and Goodstein, 1993). Thus, the chance that the COO/president will be promoted to the CEO post will be hurt. For these reasons, a COO/president may become a contender to the CEO under conditions of low firm performance.

In contrast, under conditions of high firm performance, a COO/president tends to remain as a partner to a CEO. High firm performance suggests that a CEO's competencies are well aligned with environmental conditions and therefore his or her power should be well established within the firm (Miller, 1991). When the CEO is powerful, the COO/president tends to partner with the CEO rather than to contest the CEO.

In addition, prior research has found that a firm's success is very often to be attributed to its CEO even though the success could be attributed to other factors (Meindl, Ehrlich, and Dukerich, 1985). Constituents such as journalists tend to seek out information about the distinctiveness and consistency of CEO actions to explain firm success (Zuckerman and Feldman, 1984). Hayward, Rindova, and Pollock (2004) called this 'CEO celebrity.' They argued that a celebrity CEO feels more control over the firm. More importantly, stakeholders may want to have greater access to the resources and opportunities that a celebrity CEO can provide and thus will increase the CEO's actual control over the firm (Hayward *et al*., 2004). As a co-leader, the COO/president can share the celebrity and benefit from firm success. As an heir apparent, high firm performance will increase the chance that the COO/president is promoted to the CEO position when succession time comes (Zajac, 1990; Zhang and Rajagopalan, 2004).

RESEARCH HYPOTHESES

I have argued that while in general a COO/president is a partner to a CEO, the COO/president may become a contender to the CEO under conditions of low firm performance. Based upon these arguments, in this section I will develop research hypotheses on how the presence of a separate COO/president can influence the magnitude of strategic change and the likelihood of CEO dismissal in different performance contexts.

The presence of a separate COO/president and strategic change

According to organizational adaptation theory, low firm performance will drive strategic change because strategic change is necessary for performance turnaround (Kimberly and Quinn, 1984). Firms and their dominant coalitions engage in 'problemistic search,' seeking 'a satisfactory solution to the deficiency at hand' (Cyert and March, 1963). However, it should be noted that there are important external and internal barriers to strategic change (Goodstein and Boeker, 1991). Among those internal barriers are the vested interests and political resistance of the CEO (Hannan and Freeman, 1984; Pfeffer and Salancik, 1978). Miller (1991) argued that over time a CEO becomes 'stale in the saddle' because the fit between his or her competencies and environmental contingencies tends to decline. The CEO thus becomes less capable and less willing to make strategic change (Miller and Shamsie, 2001).

Previous studies have supported the idea that organizational structures that counteract CEO power can facilitate strategic change. For example, Goodstein and Boeker (1991) found that, under conditions of environmental turbulence, adding more outside directors to the board had a positive impact on strategic change. Gibbs (1993) also found that increased outside director power was associated with an increased magnitude of strategic change.

As argued earlier, under conditions of low firm performance, the presence of a separate COO/president can weaken the CEO's power. Therefore, under such conditions, the presence of a separate COO/president should be able to counteract the CEO's resistance to strategic change and make the CEO more open to ideas of strategic change. Another important barrier to strategic change is that the CEO may not have the competencies to initiate strategic change (Miller, 1991; Miller and Shamsie, 2001). In that case, the presence of a separate COO/president can bring in skills and competencies that the CEO lacks. Because the COO/president usually is actively involved in strategic decision-making (Vancil, 1987), the skills and competencies brought in by the COO/president can facilitate strategic change when low firm performance makes strategic change necessary.

In contrast, under conditions of high firm performance firms and their dominant coalitions are not receptive to change (e.g., Kimberly and Quinn, 1984). Instead, they tend to be committed to the status quo in strategy (Hambrick, Geletkanycz, and Fredrickson, 1993) and repeat actions that have made the firm successful in the past (Lant, Milliken, and Batra, 1992). Indeed, Hayward and his colleagues have argued that, as constituents attribute firm success to the CEO, 'a CEO is likely to become more overconfident about her own abilities and more committed to the strategies that made her a celebrity' (Hayward *et al*., 2004: 645).

Under such conditions, the presence of a separate COO/president may further reduce the magnitude of strategic change. If a COO/president is a co-leader, he or she can share the celebrity of the CEO because constituents may attribute firm success to the 'great partnership' of the CEO and the COO/president. Hence, the COO/president may also become comfortable with and committed to the existing strategies. If a COO/president is an heir apparent, the appointment of him or her by and large is meant to guarantee that the CEO's vision and strategies will be continued after the CEO leaves office. Hence, constituents may expect the COO/president to follow the CEO's celebrated strategies. Indeed, if a COO/president acts discrepantly from the past strategies, constituents may view such actions as 'out of character' for the firm, thus undermining his or her ability to establish such actions and even establish himself or herself as reliable and legitimate. The COO/president may then be less able to gain support from key internal and external constituents and thus damage his or her position and opportunities for future promotion within the firm. Therefore, the COO/president tends to stick to the CEO's strategies. Thus, I propose that,

Hypothesis 1: The presence of a separate COO/president is positively related to the magnitude of strategic change under conditions of low firm performance but it has a negative relationship with the magnitude of strategic change under conditions of high firm performance.

The presence of a separate COO/president and CEO dismissal

CEO dismissal, in which a CEO leaves office against his or her will, is very disruptive to organizations (Grusky, 1963). Normally, it does not happen except under unusual conditions. Low firm performance has been found to be a consistent factor preceding CEO dismissal (Finkelstein and Hambrick, 1996; Fredrickson, Hambrick, and Baumrin, 1988). According to organizational adaptation theory, the CEO of a firm may be dismissed under conditions of low firm performance because the change of a firm's CEO represents an important adaptation mechanism (Friedman and Singh, 1989; Goodstein and Boeker, 1991; Pfeffer and Salancik, 1978). This view has received a large amount of empirical support indicating that low firm performance increases the likelihood of CEO turnover, especially CEO dismissal (e.g., Boeker, 1992; Ocasio, 1994; Warner, Watts, and Wruck, 1988). However, it should be noted that organizations are not as adaptive as suggested. The large number of people and vested interests involved may cause organizations to be relatively unadaptive (Hannan and Freeman, 1984; Lieberson and O'Connor, 1972). In addition, powerful interests may be able to divert blame for low performance onto less powerful ones, which indicates that low firm performance may not necessarily lead to the dismissal of the CEO (Boeker, 1992; Gamson and Scotch, 1964). Indeed, Fredrickson and colleagues (1988) suggested that even under conditions of low firm performance the decision to dismiss the CEO depends upon some important social and political forces.

Under conditions of low firm performance, the presence of a separate COO/president represents an important social and political force that can increase the likelihood of CEO dismissal. First, as noted earlier, the presence of a separate COO/president under conditions of low firm performance can weaken a CEO's power, thus making it more likely to remove the CEO. Second, the presence of a separate COO/president under conditions of low firm performance can lead to dissenting expectations within the board. When there is no separate COO/president, the board members' expectations may be less likely to go beyond the vision and strategy of the CEO because they have not been exposed to different visions and strategies for the firm. However, different competencies, skills, and visions brought in by a COO/president may broaden the board's outlook. Under such conditions, the CEO 'can get caught in the "crossfire" as board members debate the firm's health and direction' (Pfeffer, 1981) (c.f. Fredrickson *et al.*, 1988: 257). As a result, the CEO may get dismissed as the board disagrees with him or her regarding the strategic direction of the firm and/or how to execute the strategy.

In addition, the presence of a separate COO/president provides an available replacement for the CEO. As Fredrickson and colleagues (1988) argued, when firm performance is poor, one of the major contextual factors the board of directors considers in the decision as to whether to dismiss the CEO is the availability of alternatives. 'If a supply of qualified candidates is readily available (internally or externally), then the incumbent is more likely to be dismissed' (Fredrickson *et al.*, 1988: 258). The presence of a separate COO/president may trigger CEO dismissal under conditions of low firm performance because it makes the board aware of an alternative candidate.

In contrast, CEO dismissal is very unlikely under conditions of high firm performance (Fredrickson *et al.*, 1988). Under such conditions, if a COO/president is a co-leader, his or her role is to help the CEO execute the tasks. If a COO/president is an heir apparent, his or her role is to continue the CEO's vision and strategy after the CEO leaves office. The appointment of him or her represents institutionalized organizational rules and routines for leadership change (Ocasio, 1999). In neither of the cases, the presence of a separate COO/president should influence the likelihood of

CEO dismissal. Therefore, I propose the following hypothesis:

Hypothesis 2: The presence of a separate COO/ president is positively related to the likelihood of CEO dismissal under conditions of low firm performance but it has no relationship with the likelihood of CEO dismissal under conditions of high firm performance.

The role of strategic change

The relationship proposed in Hypothesis 2 may be further moderated by the magnitude of strategic change. Small changes reinforce a firm's existing strategies and internal organizational conditions and are less apt to do irreversible damage to these conditions (Lant *et al.*, 1992). They are repeatable and easier to implement and can minimize risk and political resistance. Small changes also allow a CEO to build upon past knowledge and experience and therefore become better in implementing the strategic change (Miller and Shamsie, 2001). In addition, small changes encourage incremental learning because new strategies are built upon rather than being damaging to existing strategies (Braybrooke and Lindblom, 1963). A CEO can gradually update and develop his or her skills and competencies in the process of initiating and implementing small strategic changes (Miller and Shamsie, 2001). As learning is continuing and existing skills and competencies continue to be valuable, a CEO is less likely to be dismissed.

In contrast, large strategic changes typically involve significant breaks from past strategies and involve major organizational changes as well (Lant *et al.*, 1992). They undermine the value of existing knowledge by changing the rules of the game, and they tend to be disruptive to the organization and require significant internal restructuring (Hannan and Freeman, 1984). As a result, large strategic changes will render the CEO's experience less valuable. Large strategic changes also benefit little from cumulative learning (Braybrooke and Lindblom, 1963). It will be hard for a CEO to get realigned with changed strategies through learning, and indeed change in the leadership will be necessary (Miller, 1991). Because large strategic changes require different sets of skills and competencies, existing coalitions may be disbanded and new ones formed (Stevenson, Pearce, and Porter, 1985). A COO/president with new skills and competencies may want to upstage the CEO. In addition, under such conditions, the board of directors may attribute low firm performance to the CEO's inability to manage the strategic change. The presence of a COO/president may encourage the board to replace the CEO with the COO/president in the hope that the COO/president's competencies and skills can transform strategic change into better firm performance. These arguments lead to the last hypothesis of this study:

Hypothesis 3: As the presence of a separate COO/president is positively related to the likelihood of CEO dismissal under conditions of low firm performance (as proposed in Hypothesis 2), this relationship is stronger when the magnitude of strategic change is high than when it is low.

METHODS

Sample selection

The sample for this study was drawn from the population of U.S. manufacturing firms that were relatively large (annual sales revenues greater than \$100 million), publicly traded, non-diversified (the firm had to derive at least 70% of its sales from a single 4-digit industry), and listed continuously on COMPUSTAT between 1993 and 1998. Within this population, 220 CEO successions that occurred during the years 1993–1998 were identified from the online *Wall Street Journal Index* and Standard and Poor's *Executive Compensation* databases. I traced the yearly information on the 220 CEOs to the first year of their tenure in the position or the first year in which the firm was publicly listed (until the year in which they left office). After excluding observations with missing information, the final sample included 207 CEOs in 187 firms, of which 167 firms had one CEO and 20 firms had two. Data were collected for each year of these CEOs' tenures. These CEOs' tenure intervals were divided into years and pooled into a sample of 1979 firm-year observations.[1] Because the dependent variables lagged the independent variables by 1 year in models, the data

[1] Data on the early years of some CEOs were not available. In total, there were 186 CEO-years missing from the dataset, representing about 8.5 percent of the possible complete dataset [186/(186 + 1979)].

used for model estimations included 1,772 firm-years.

Measurements

Presence of a separate COO/president was coded 1 for a firm-year if there was an officer other than the CEO who held the title of president or COO or both (Cannella and Shen, 2001; Zhang and Rajagopalan, 2004). In this sample, there was not a single firm that had more than one person holding the title of president and/or COO at any time. The primary data sources for this variable were the *Dun & Bradstreet Reference Book of Corporate Management* and annual corporate proxy statements. *Prior firm performance* was operationalized as return on assets (ROA), which was adjusted for industry differences by subtracting the industry median ROA (excluding the focal firm) (Huson, Malatesta, and Parrino, 2004). Data on firm ROA and industry median ROA were collected from COMPUSTAT.

Because this sample consisted of non-diversified firms, the magnitude of strategic change referred to the extent to which a firm changed its resource allocations in key strategy dimensions. Six strategy dimensions (Finkelstein and Hambrick, 1990; Zhang and Rajagopalan, 2003) were used to create a composite measure of the magnitude of strategic change: (1) advertising intensity (advertising/sales); (2) research and development intensity (R&D/sales); (3) plant and equipment newness (net P&E/gross P&E); (4) non-production overhead (selling, general, and administrative [SGA] expenses/sales); (5) inventory levels (inventories/sales); and (6) financial leverage (debt/equity). These data were obtained from COMPUSTAT.

If a firm was maintaining the status quo, these ratios would be similar across years; in contrast, either a large increase or decrease in these ratios would suggest important changes to a firm's resource allocations. I first calculated the absolute values of differences in these ratios between the prior and current year. For example, ΔR&D intensity = |R&D intensity$_t$ − R&D intensity$_{t-1}$|. Next, I standardized these absolute values within the sample (mean = 0, standard deviation = 1). The average of the six standardized values yielded an overall measure of the *magnitude of strategic change* (see Finkelstein and Hambrick, 1990, for a similar procedure).

Following Shen and Cannella (2002: 1198–1199), I relied on two approaches to separate CEO dismissal and voluntary turnover. The first approach relied on news reports. Two research assistants collected all reports on each of the CEOs during a 3-year period, from the year before to the year after they left office, from the *Dow Jones databases*. The two assistants and I first independently analyzed these news reports, and then we discussed them until we reached agreement. We excluded successions that were consequences of a CEO's death or clear health problems (13 cases), a CEO's acceptance of a similar position at another firm (four cases), or a merger or acquisition (one case). Then we analyzed the remaining news reports and coded a CEO as dismissed if any of the following three criteria were applicable: (1) a CEO was directly reported as having been fired or ousted (nine cases); (2) a CEO was reported as having resigned unexpectedly or immediately, due to poor performance or for undisclosed personal reasons (30 cases); and (3) a CEO was reported as having taken early retirement and there were discussions of performance problems (six cases). We identified 45 CEO dismissals on the basis of the news report analysis. The second approach relied on CEO age and continuity as a board member at the time of succession. A CEO was classified as dismissed if the CEO terminated his or her service as both CEO and board member before the age of 64 for reasons other than death, health problems, acceptance of a similar position at another firm, or the occurrence of a merger or acquisition. We identified 51 dismissals on the basis of this analysis.

I then compared the CEO dismissals identified under the above two approaches and found that the 51 dismissals identified with the second approach included all the 45 dismissals identified with the first approach (news analysis). Further examination of the news reports on the six non-overlapping cases suggested that five of these were reported as normal retirements according to company policy, and one case was reported as an early retirement right before the closing of a major acquisition (with significant restructuring expected). I elected to add only the last case to the dismissals. Thus, overall, I identified a total of 46 CEO dismissals among the 207 precedent CEOs. CEO turnover then was coded as a categorical variable, with 0 representing the occasion in which a CEO remained in the position, 1 representing

CEO dismissal, and 2 representing *CEO voluntary turnover*.

To control for possible confounding effects, this study controlled for the following variables. *Outside CEO* was coded 1 if the CEO was an outside CEO who had firm tenure of less than 2 years when he or she assumed the CEO position, and 0 otherwise (Cannella and Lubatkin, 1993; Harris and Helfat, 1997). *Chairman* was coded 1 in a year if the CEO was also the board chair in the year and 0 otherwise. *CEO shareholding* was measured by the proportion of the firm's outstanding shares owned by the CEO. *CEO tenure* was measured by counting the years a CEO had been in office. To control for the effect of CEO age, the effect of which may be discontinuous (Cannella and Shen, 2001; Ocasio, 1994), two age dummies were created. *Age6163* was coded 1 if in a year a CEO's age was 61, 62, or 63, and 0 otherwise. *Age64up* was coded 1 if in a year a CEO was aged 64 or older, and 0 otherwise. Coefficients for these two dummies in models represent the comparisons of these two groups of CEOs with CEOs aged 60 or under. *Firm size* was operationalized as the natural logarithm of employee number. *Board size* referred to the total number of directors on the board, and *outside director percentage* referred to the proportion of outside directors on the board (Zajac and Westphal, 1996).

Data analyses

A generalized estimating equation (GEE) method was used for data analyses as suggested by Liang and Zeger (1986a, 1986b). GEE is 'a direct generalization of the glm (general linear model), (and) irls command' (Stata, 2001: 332). This approach accounts for any serial correlation in the pooled sample, and thus it increases the efficiency of parameter estimates. In particular, in the pooled dataset of this study, one CEO had multiple observations, and these observations were not independent of one another. A robust variance estimator for cluster data, which is provided in GEE, can correct for the non-independence. It essentially treats each cluster (i.e., all observations associated with one CEO) as a super-observation that contributes to the variance estimate and thus generates robust estimates (Westphal and Khanna, 2004). In addition, in all models the predictor variables and controls lagged the dependent variables by 1 year.

RESULTS

Table 1 reports means, standard deviations, and correlations of variables in this study. While the three-category CEO turnover variable was used in data analyses, it was not appropriate for a correlation matrix. Instead, the two dummy variables of CEO turnover (CEO voluntary turnover and CEO dismissal) were included in Table 1. Table 2 reports the estimates of the GEE models with the dependent variable of the magnitude of strategic change. Model 1 included all controls and the main effects of prior firm performance and the presence of a separate COO/president, and Model 2 added their interaction term. To create the interaction term, both variables were mean-centered in order to address the potential problem of multicollinearity (Aiken and West, 1991). Overall chi-squares of these models, reported in Table 2, indicate very strong model significance.

Hypothesis 1 predicts that the presence of a separate COO/president is positively related to the magnitude of strategic change under conditions of low firm performance but it has a negative relationship with the magnitude of strategic change under conditions of high firm performance. This hypothesis predicts a negative interactive effect between the presence of a separate COO/president and prior firm performance. Model 2 in Table 2 tests this prediction. In this model, the coefficient for the interaction between the presence of a separate COO/president and prior firm performance is negative and significant ($b = -0.364$, $p < 0.01$).

To further illustrate the significant interaction effect, I plotted it in Figure 1, following the procedure suggested by Aiken and West (1991) and Cannella and Shen (2001). In order to create this figure, all variables in Model 2 in Table 2 except the presence of a separate COO/president and prior firm performance were constrained to mean. The presence of a separate COO/president took the values of 0 and 1, and prior firm performance took the values of one standard deviation below and above the mean. In Figure 1, the presence of a separate COO/president has a positive relationship with the magnitude of strategic change under conditions of low firm performance (Line 1), but it has a negative relationship with the magnitude of strategic change under conditions of high firm performance (Line 2). Thus, Hypothesis 1 is supported.

Table 1. Means, standard deviations, and correlations ($N = 1772$)

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13
1. CEO Voluntary Turnover	0.091	0.287	—												
2. CEO Dismissal	0.026	0.159	−0.052*	—											
3. Presence of a Separate COO/President	0.279	0.448	0.120**	0.000	—										
4. Strategic Change	0	0.377	−0.013	0.061**	−0.078**	—									
5. Prior Firm Performance	0.072	0.201	0.007	−0.076**	0.059**	−0.205**	—								
6. Outside CEO	0.408	0.491	−0.004	0.068**	−0.148**	0.143**	−0.044*								
7. Chairman	0.625	0.484	0.040	−0.025	0.291**	−0.019	0.014	−0.207**	—						
8. CEO Tenure	9.209	7.569	0.108**	−0.050*	0.166**	−0.114**	0.111**	−0.101**	0.173**	—					
9. AGE6163	0.134	0.340	0.056*	0.019	0.056*	−0.066**	0.034	−0.049*	0.059**	0.112**	—				
10. AGE64UP	0.176	0.381	0.218**	−0.050*	0.174**	−0.080**	0.036	−0.078**	0.164**	0.384**	−0.182**	—			
11. Firm Size	1.571	1.096	0.042	−0.027	0.147**	−0.260**	0.127**	−0.137**	0.133**	0.005	0.057*	0.056*	—		
12. Board Size	9.925	2.868	0.038	−0.092**	0.179**	−0.167**	0.099**	−0.204**	0.074**	0.005	0.072*	0.051*	0.432**	—	
13. Outside Director Percentage	0.742	0.121	−0.004	−0.001	0.074**	−0.014	−0.076**	−0.124**	0.152**	−0.053*	0.002	−0.077**	0.159**	0.317**	—
14. CEO Shareholding	0.042	0.068	−0.013	−0.023	−0.108**	0.023	0.009	0.155**	0.022	0.171**	−0.036	0.099**	−0.169**	−0.142**	−0.299**

Significance level: * $p < 0.05$; ** $p < 0.01$

Table 2. Presence of a separate COO/president and strategic change

Variables	Model 1		Model 2	
Constant	0.117	(0.075)	0.121	(0.076)
Control				
Outside CEO	0.067**	(0.027)	0.068**	(0.027)
Chairman	0.037	(0.025)	0.038	(0.025)
CEO Tenure	−0.003	(0.002)	−0.002	(0.002)
CEO Shareholding	0.001	(0.221)	−0.012	(0.221)
AGE6163	−0.052*	(0.024)	−0.050*	(0.024)
AGE64UP	−0.050†	(0.027)	−0.045†	(0.027)
Firm Size	−0.067***	(0.011)	−0.066***	(0.011)
Board Size	−0.009*	(0.004)	−0.009*	(0.004)
Outside Director Percentage	0.063	(0.109)	0.062	(0.110)
Prior Firm Performance	−0.204**	(0.068)	−0.243***	(0.064)
Presence of a Separate COO/President (COO)	0.005	(0.023)	0.009	(0.024)
Predictor				
Prior Firm Performance × COO			−0.364**	(0.140)
Wald χ^2	111.12***		118.42***	
$\Delta\chi^2$ from the prior model	—		7.30**	

Significance level: †$p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (two-tail tests)

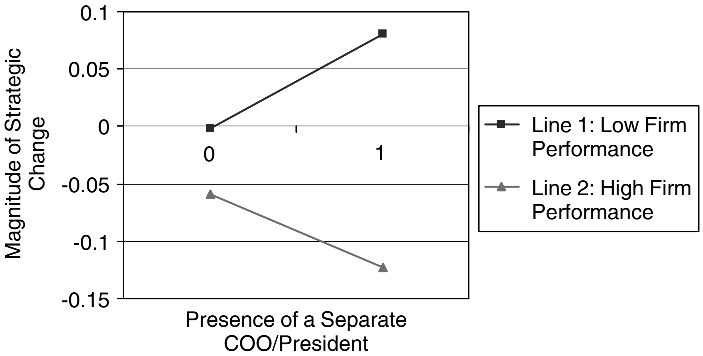

Figure 1. Presence of a separate COO/president and strategic change: the moderating role of firm performance

Table 3 reports the estimates of the GEE models with the dependent variable of CEO turnover.[2] It has two panels, the upper one presenting the coefficients for the independent variables on the likelihood of CEO dismissal and the lower one presenting those on the likelihood of CEO voluntary turnover. These coefficients are interpreted as relative to the omitted outcome, which is CEO continuation in the position. Three models were estimated. Model A included all controls and the main effects of the presence of a separate COO/president, prior firm performance, and the magnitude of strategic change. Model B added the interaction term of the presence of a separate COO/president and prior firm performance. Model C included the three-way interaction of the presence of a separate COO/president, prior firm performance, and the magnitude of strategic change. According to Aiken and West (1991), the three two-way interactions of these three variables were also controlled for in Model C. Overall chi-squares of these three models, reported in Table 3, indicate very strong model significance. In supplementary analyses, I recoded the variable of CEO turnover, using 1 to represent CEO dismissal and 0 otherwise. These analyses led to essentially the same conclusions reported here.

[2] Procedures that use GEE when the dependent variable has a multinomial distribution are available in the program of SUUDAN.

Hypothesis 2 predicts that the presence of a separate COO/president is positively related to the likelihood of CEO dismissal under conditions of low firm performance but it has no relationship with the likelihood of CEO dismissal under conditions of high firm performance. This hypothesis predicts a negative interactive effect of the presence of a separate COO/president and prior firm performance on the likelihood of CEO dismissal. Model B in Table 3 tests this prediction. In the upper panel of Model B, the coefficient for the interaction between the presence of a separate COO/president and prior firm performance is negative and marginally significant ($b = -2.22$, $p < 0.10$). In contrast, in the lower panel of Model B, the coefficient for the interaction between the presence of a separate COO/president and prior firm performance is not significant.

Table 3. Presence of a separate COO/president and CEO turnover

Variables	Model A		Model B		Model C	
CEO dismissal						
Constant	−1.64	(1.19)	−1.68	(1.20)	−1.68	(1.25)
Controls						
CEO Tenure	−0.04	(0.03)	−0.04	(0.03)	−0.04	(0.03)
Outside CEO	0.63†	(0.34)	0.63†	(0.34)	0.72*	(0.34)
Chairman	0.03	(0.35)	0.04	(0.35)	0.04	(0.35)
CEO Shareholding	−3.05	(2.15)	−3.31	(2.21)	−3.30	(2.20)
AGE6163	−0.05	(0.57)	−0.11	(0.59)	−0.07	(0.59)
AGE64UP	−0.79	(0.66)	−0.86	(0.69)	−0.83	(0.69)
Firm Size	0.17	(0.14)	0.16	(0.15)	0.15	(0.15)
Board Size	−0.23***	(0.07)	−0.23***	(0.07)	−0.23***	(0.07)
Outside Director Percentage	0.04	(1.56)	0.20	(1.58)	0.07	(1.55)
Prior Firm Performance	−1.68**	(0.62)	−2.17***	(0.57)	−2.55***	(0.55)
Strategic Change	0.25	(0.36)	0.21	(0.37)	0.24	(0.43)
Presence of a Separate COO/President (COO)	0.58	(0.37)	0.45	(0.42)	0.48	(0.42)
Predictors						
Prior Firm Performance × COO			−2.22†	(1.26)	0.01	(1.47)
Prior Firm Performance × Strategic Change					2.70*	(1.12)
Strategic Change × COO					−0.35	(0.94)
Prior Firm Performance × Strategic Change × COO					−5.90**	(2.12)
CEO voluntary turnover						
Constant	−3.07***	(0.62)	−3.09***	(0.62)	−3.08***	(0.62)
Controls						
CEO Tenure	0.01	(0.01)	0.01	(0.01)	0.01	(0.01)
Outside CEO	0.26†	(0.15)	0.25†	(0.15)	0.28†	(0.15)
Chairman	−0.23	(0.16)	−0.22	(0.17)	−0.24	(0.17)
CEO Shareholding	−1.78	(1.34)	−1.67	(1.35)	−1.81	(1.36)
AGE6163	1.02***	(0.23)	1.02***	(0.23)	1.00***	(0.23)
AGE64UP	1.68***	(0.20)	1.68***	(0.20)	1.66***	(0.20)
Firm Size	0.07	(0.08)	0.07	(0.08)	0.06	(0.08)
Board Size	0.00	(0.04)	0.00	(0.04)	0.01	(0.04)
Outside Director Percentage	−0.04	(0.83)	−0.04	(0.83)	−0.03	(0.83)
Prior Firm Performance	−1.00*	(0.48)	−0.96*	(0.48)	−1.31*	(0.52)
Strategic Change	0.18	(0.24)	0.19	(0.24)	0.26	(0.24)
Presence of a Separate COO/President (COO)	0.66***	(0.17)	0.66***	(0.17)	0.63***	(0.18)
Predictors						
Prior Firm Performance × COO			0.65	(1.05)	1.06	(1.05)
Prior Firm Performance × Strategic Change					1.38	(0.89)
Strategic Change × COO					−0.13	(0.55)
Prior Firm Performance × Strategic Change × COO					−3.16	(2.06)
Model χ^2	146.46***		148.80***		163.65***	
Change in model χ^2	—		2.34†		14.85***	

Significance level: † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (two-tail tests)

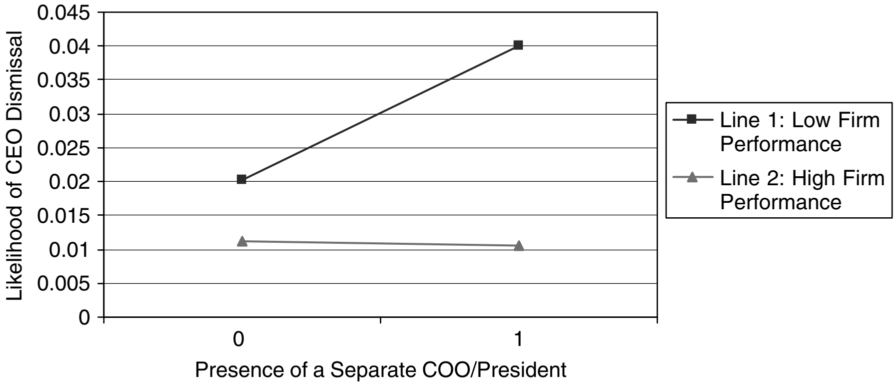

Figure 2. Presence of a separate COO/president and CEO dismissal: the moderating role of firm performance

Following a similar procedure, I plotted the result in Figure 2, in which the vertical axis represents the likelihood of CEO dismissal.[3] In Figure 2, the presence of a separate COO/president has a positive relationship with the likelihood of CEO dismissal under conditions of low firm performance (Line 1), but it has no relationship with the likelihood of CEO dismissal under conditions of high firm performance (Line 2). Thus, Hypothesis 2 receives some support.[4]

Hypothesis 3 predicts that while the presence of a separate COO/president increases the likelihood of CEO dismissal under conditions of low firm performance, this effect is stronger when the magnitude of strategic change is high than when it is low. This hypothesis predicts a negative interactive effect of the presence of a separate COO/president, prior firm performance, and the magnitude of strategic change on the likelihood of CEO dismissal. Model C in Table 3 tests this prediction. In the upper panel of Model C, the coefficient for the interaction of these three variables is negative and significant ($b = 5.90$, $p < 0.01$). In contrast, in the lower panel of Model C, the coefficient for the interaction of these three variables is not significant.

Following a similar procedure (the magnitude of strategic change took the values of one standard deviation below and above mean), the result is plotted in Figure 3. Line 1a (high strategic change) and Line 1b (low strategic change) represent the conditions of low firm performance; Line 2a (high strategic change) and Line 2b (low strategic change) represent the conditions of high firm performance. Comparing Lines 1a and 1b, Line 1a (high strategic change) shows a stronger positive relationship between the presence of a separate COO/president and the likelihood of CEO dismissal than Line 1b (low strategic change). In comparison, Line 2a (high strategic change) and Line 2b (low strategic change) suggest that the presence of a separate COO/president has a weak relationship with the likelihood of CEO dismissal under conditions of high firm performance. Hence, Hypothesis 3 is supported.

The results reported in Table 3 also suggest that CEO dismissal and CEO voluntary turnover are driven by different factors. On the CEO dismissal side, CEO origin as an outside CEO has a weak, positive impact ($p < 0.10$). Board size and prior firm performance have strong, negative impacts ($p < 0.001$). In addition, the interactions between the presence of a separate COO/president, prior firm performance, and the magnitude of strategic change also show significant impacts, as discussed above. In comparison, on the CEO voluntary turnover side, CEO origin as an outside CEO has a weak, positive impact ($p < 0.10$).

[3] The probability of CEO dismissal was calculated as $e^{X\beta(1)}/[1 + e^{X\beta(1)} + e^{X\beta(2)}]$, where X referred to a set of independent variables, $\beta(1)$ referred to a set of coefficients for the independent variables on the likelihood of CEO dismissal, and $\beta(2)$ referred to a set of coefficients for the independent variables on the likelihood of CEO voluntary turnover. This procedure thus compared CEO dismissal to both CEO voluntary turnover and CEO continuation in the position.

[4] I went back to the news reports from the year before to the year after a CEO left office to check what happened to the COO/president if a CEO was dismissed. In this sample, there were eight CEOs who had COOs/presidents and who were dismissed. In seven out of the eight cases, the COOs/presidents were immediately promoted to the CEO position. In the other case, a long-time outside director assumed the interim CEO position and the COO/president was considered a strong candidate for the CEO position. These data suggest that in this sample, when CEOs were dismissed, most of the COOs/presidents, if there was one, were promoted to the CEO position.

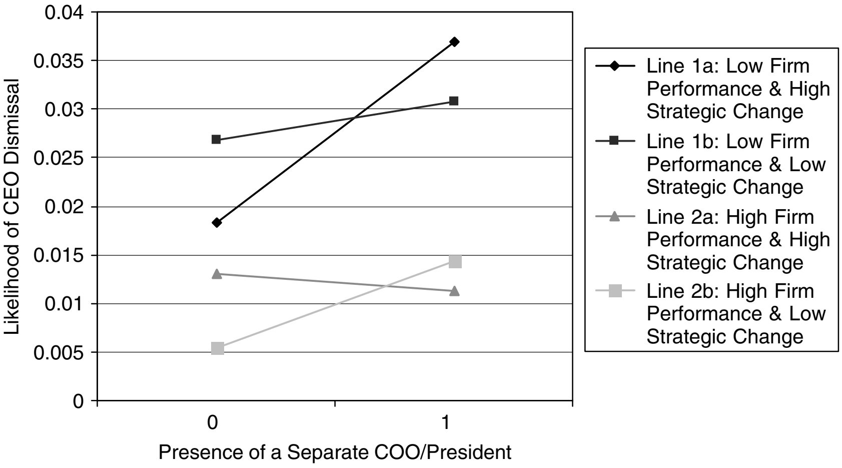

Figure 3. Presence of a separate COO/president and CEO dismissal: the moderating roles of firm performance and strategic change

Prior firm performance has a relatively weak, negative impact ($p < 0.05$). But the CEO age dummy variables and the presence of a separate COO/president all show strong, positive impacts ($p < 0.001$). This difference is not surprising. CEO voluntary turnover represents the implied rule and routine for most companies, while dismissing a CEO requires strong reasons and depends upon various conditions (Fredrickson *et al.*, 1988; Ocasio, 1999). Once a CEO is put in office, the very tendency is that the CEO will stay in office until reaching retirement age and the presence of a separate COO/president can facilitate such leadership change.

DISCUSSION AND CONCLUSION

The role of a COO/president with regard to a CEO

In this study, I argue that while in general a COO/president is a partner to a CEO, the COO/ president may become a contender to the CEO under conditions of low firm performance. The results of this study have provided evidence to support this argument. I found that under conditions of low firm performance the presence of a separate COO/president increases the magnitude of strategic change. It is possible that as the CEO's position becomes vulnerable under conditions of low firm performance, the COO/president may distance himself or herself from the CEO and deviate from the CEO's strategy. This will enable the firm to respond to low performance by making strategic change. In addition, under such conditions, the presence of a separate COO/president increases the likelihood of CEO dismissal. This finding suggests that as the CEO's position becomes vulnerable when performance is poor, having a COO/president may give the firm an alternative, so the firm may dismiss the CEO. This impact becomes even stronger as the magnitude of strategic change increases. A large magnitude of strategic change in association with low firm performance may indicate that the competencies of the CEO cannot be aligned with the changing strategic contexts of the firm. Hence, if the firm has an alternative (i.e., there is a separate COO/president), the CEO is likely to be dismissed. These findings support the assertion that a COO/president could become a contender to the CEO under conditions of low firm performance.

Further, I found that under the conditions of high firm performance the presence of a separate COO/president decreases the magnitude of strategic change. It seems that when firm performance is good, having a separate COO/president can enhance the continuity of firm strategies. In addition, the results show that when firm performance is high the presence of a separate COO/president has no impact on the likelihood of CEO dismissal. This is consistent with previous studies (e.g., Fredrickson *et al.*, 1988) that suggest that there is no need to dismiss a CEO if performance is satisfactory. Under such conditions, a COO/president, as a co-leader, is supposed to help the CEO to execute the tasks of running the firm and as an heir apparent, he or she will take the office when the CEO retires. Overall, these findings suggest that under conditions of high firm performance a COO/president tends to be a partner to the CEO.

Research implications

The results of this study contribute to building a contingency view on the CEO–COO/president relationship. The findings here suggest that the role of a COO/president with regard to a CEO is context-specific. While a COO/president in general is a partner to a CEO, the COO/president may become a contender to the CEO under conditions of low firm performance. Thus, examining the role of a COO/president with regard to a CEO without taking into account the organizational contexts may underestimate the complexity of their relationship. These arguments and empirical evidence also contribute to the understanding of the power circulation and power contestation within political coalitions (Ocasio, 1994; Shen and Cannella, 2002). By focusing on the two top posts (a CEO and a COO/president), this study suggests that the relationships between the key members of dominant political coalitions vary across different organizational contexts and that organizational continuity is enforced by their collaboration under conditions of high firm performance and organizational adaptation is achieved by their rivalry under conditions of low firm performance.

The findings of this study also contribute to a better understanding of the inner workings of corporate elites in general. Many studies using an upper echelon perspective (Hambrick and Mason, 1984) have treated corporate elites as a 'team.' Recent studies have emphasized conflict and competition within corporate elites (e.g., Hambrick, 1994; Jensen and Zajac, 2004; Ocasio, 1994; Shen and Cannella, 2002). While these studies have extended our knowledge of collaboration and competition within corporate elites, we so far know little about the conditions under which the corporate elites are more likely to be collaborative as a 'team' and the conditions under which they are more likely to be competitive. The results of this study suggest that corporate elites are more likely to be collaborative as a team under conditions of high firm performance because they can benefit from the high performance and they have developed equilibrium in their interests and power. In contrast, under conditions of low firm performance, change is expected and the prior equilibrium is disappearing, so competition within corporate elites will rise until a new equilibrium is formed.

Further, the findings of this study contribute to our understanding of the monitoring within corporate elites. While most studies in the literature have focused on monitoring from higher to lower levels of management, this study, following Fama (1980), is one of the few that have examined monitoring in the other direction—from lower to higher levels of management. The study found that the presence of a separate COO/president increases the magnitude of strategic change and the likelihood of CEO dismissal under conditions of low firm performance. Thus, the presence of a separate COO/president represents a healthy antidote to the trend toward celebrity CEOs (Heenan and Bennis, 1999). However, it should be noted that the monitoring from lower to higher levels of management occurs only under conditions of low firm performance. Such context specificity is not surprising given that higher levels of management (e.g., a CEO) are more powerful than lower levels of management (e.g., a COO/president) in most circumstances.

Limitations and future research directions

There are several limitations of this study that, in turn, suggest some interesting avenues for future research. First, in this study I examined how the role of a COO/president with regard to a CEO may be influenced by prior firm performance and strategic change. By no means are they the only contextual factors that matter. Future research can examine other important contextual factors such as CEO power, board structure, and environmental conditions.

Second, while this study focuses only on whether there is a separate COO/president, future research can further distinguish between people in this position. For example, following the research tradition on CEO origin, future research can distinguish between COOs/presidents who are hired from outside and those who are promoted to the position from within (Cannella and Shen, 2001). It will be interesting to examine whether the origin of the COOs/presidents matters.

Third, like most research on corporate elites, this study relied on archival data rather than direct observations. Future research that uses survey data or field studies may be able to provide more detailed understanding of the partnership and rivalry between a CEO and a COO/president.

Fourth, this study used data of the tenures of a sample of CEOs who left office during 1993–98 in relatively large, non-diversified manufacturing firms. Although there are few reasons to expect that the tenures of the CEOs leaving office in this time period should differ from the CEOs leaving office in other time periods, it will be useful to test the models of this study using different samples of CEOs.

The use of a sample of non-diversified manufacturing firms, which could be a limitation, has provided a unique opportunity for examining the research questions of this study. In non-diversified manufacturing firms, typically most senior executives are functional executives with functional rather than profit-center responsibility. Hence, the competition to the CEO, if it exists, mainly comes from the COO/president. In contrast, in diversified firms there may be several divisional heads with profit center responsibility and thus, the CEO may not only confront competition from the COO/president, but also from other senior executives (Shen and Cannella, 2002). Hence, the relationship of the CEO with the COO/president may be guised by the relationships of the CEO with other senior executives in diversified firms. Therefore, focusing on non-diversified firms can help me better explore how the presence of a separate COO/president may contend the CEO position and how this structure may affect the magnitude of strategic change and the likelihood of CEO dismissal. Nevertheless, because of these issues, the results of this study may have limited generalizability to other contexts (e.g., diversified firms and service firms). Future research should refine and extend this study's theoretical arguments to other contexts in order to build a more generalizable theory of the CEO–COO/president relationship.

Finally, as noted earlier, data on the early years of some CEOs were not available so that a small percent of CEO-years (about 8.5%) were missing from the dataset. This should not be a problem for this study for two reasons. First, although the early years of these CEOs were missing, data on the initial conditions of these CEOs (e.g., when they assumed office) were available. Second, the CEOs were traced until the year in which they left office, hence the data were not right centered. These two reasons should reduce concerns on the potential problems of left censoring, according to Tuma and Hannan (1984: 128–132). Nevertheless, it will be useful that future research validates conclusions of this study using different samples of CEOs.

To the best of my knowledge, this is the first study to investigate how the presence of a separate COO/president may influence organizational outcomes such as strategic change and CEO dismissal in different performance contexts. I hope that these findings can contribute to our knowledge on this important issue of corporate elites and stimulate future research on this important yet unexplored issue.

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