

WHEN THE KNOWN DEVIL IS BETTER THAN AN UNKNOWN GOD: AN EMPIRICAL STUDY OF THE ANTECEDENTS AND CONSEQUENCES OF RELAY CEO SUCCESSIONS

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Taking an organizational learning and adaptation perspective, we compared “relay” CEO successions with nonrelay inside successions and outside successions. Data on 204 CEO successions between 1993 and 1998 in nondiversified U.S. manufacturing firms showed that the likelihood of relay succession was negatively associated with the number of internal candidates and positively associated with presuccession firm performance. We also found that relay successions led to better postsuccession firm performance, particularly at lower levels of presuccession firm performance and higher levels of postsuccession strategic and industry instability.

CEO succession is perhaps one of the most crucial events in the life of any firm because of the substantive and symbolic importance of the CEO position (Finkelstein & Hambrick, 1996; Kesner & Sebor, 1994). There are multiple options and related processes for selecting a successor CEO, including selection and crowning of an “heir apparent,” a “horse race” among internal candidates, and a comprehensive search of internal and external candidates (Finkelstein & Hambrick, 1996; Friedman & Olk, 1995). Of these, the selection and crowning of an heir apparent is the most formal succession process used in corporate America (Vancil, 1987). This process has been commonly described in the literature as *relay succession*: an incumbent CEO works with an heir apparent and passes the baton of leadership to the heir (Vancil, 1987).

Prior research has explicitly discussed the theoretical benefits of relay successions. First, relay successions can facilitate the power transition from a firm’s incumbent CEO to its next CEO (Vancil, 1987). Stakeholder groups also have enough time to get familiar with the person who will most likely be the next CEO of the firm. So the organizational turbulence associated with leadership change is potentially reduced (Cannella & Lubatkin, 1993;

Vancil, 1987). Second, the heir apparent can obtain on-the-job training (Ocasio, 1999) through having access to the tasks of the CEO even before assuming the position. Thus, the firm’s performance risk resulting from a new CEO’s lack of context-specific skills may be reduced (Harris & Helfat, 1997). Third, appointing an heir apparent signals stability to stakeholders because the succession process is under control (Cannella & Lubatkin, 1993). Finally, the presence of an heir apparent also provides insurance should something unexpected happen to the incumbent CEO (Vancil, 1987). However, despite these theoretically compelling arguments, very few studies on CEO succession have empirically examined the normative benefits of relay succession relative to other types of CEO succession. Researchers know even less about how relay successions’ performance consequences may vary with key internal and external contingencies.

Extant literature also indicates that in spite of the acknowledged benefits of relay succession, many firms do not have any formal succession planning. Brady, Fulmer, and Helmich (1982), for example, surveyed 1,484 firms and found that fewer than 50 percent of these firms engaged in succession planning. Indeed, even when heirs apparent have been designated, a significant percentage of them do not succeed (Cannella & Shen, 2001). These observations raise another question: What are the key contextual contingencies, internal and external, that explain the variance in adoption of relay succession? This gap in the extant literature is consistent with Finkelstein and Hambrick’s observation that “the factors that determine which of these succes-

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sion processes will occur have received almost no attention" (1996: 175).

In summary, extant work on relay CEO successions contains both descriptive and normative gaps. In order to address these significant gaps, we investigated three research questions: (1) how do critical internal and external contingencies influence the likelihood of relay succession? (2) How does relay CEO succession influence postsuccession firm performance relative to other types of CEO succession? and (3) How do these performance effects vary with key internal and external contingencies? In addressing these questions, we took the heir apparent experience of new CEOs into account, dividing successions into three categories: (1) *relay succession*, in which a new CEO came from within the firm in question and had been his or her predecessor's heir apparent, (2) *nonrelay inside succession*, in which a new CEO was from within the firm but had not been the predecessor's heir apparent, and (3) *outside succession*, in which a new CEO came from outside the firm.¹

THEORY AND HYPOTHESES

An Organizational Learning and Adaptation View of Relay Succession

CEO succession has been commonly viewed as an important mechanism for organizational learning and adaptation (Friedman & Singh, 1989; Boeker & Goodstein, 1993; Pfeffer & Salancik, 1978). A change in CEO can fundamentally alter the knowledge, skills, and interaction processes at the top of a company, and these alterations can in turn significantly influence postsuccession firm performance (Virany, Tushman, & Romanelli, 1992).

Prior research has distinguished between two types of CEO succession—inside and outside—and has emphasized the role of outside successions in organizational learning and adaptation. However, research evidence consistently indicates that outside new CEOs rarely succeed in their efforts to improve firm performance (Greiner, Cummings, & Bhambri, 2002; Shen & Cannella, 2002a; Wiersema, 2002). It is plausible that although outside successions bring in new competencies and skills (Finkelstein & Hambrick, 1996; Kesner & Sebora, 1994), they are disruptive to firms from a process stand-

point, and thus the enhanced cognitive repertoire may not get translated into improved firm performance (Greiner et al., 2002; Grusky, 1963). Further, the simple distinction between inside and outside succession does not recognize crucial differences between relay and nonrelay inside successions, which may have different implications for organizational learning and adaptation.

In relay succession, the focus of this article, a firm identifies an heir apparent to its CEO well in advance of the actual succession event and uses the interval between designation and promotion to groom the heir for the top job (Vancil, 1987). A relay CEO succession has two phases; during the first phase, the firm decides whether or not to designate an heir, and during the second (the grooming phase), the firm decides whether or not to promote the heir to the CEO position. Both phases offer significant opportunities for organizational learning and adaptation. In the first phase, learning and adaptation occur primarily at the firm level. The firm assesses the availability and desirability of various candidates for the CEO position and evaluates their qualifications in light of key internal and external contingencies in order to decide whether to designate one of them as the heir apparent.

The second phase can be characterized as a two-way learning and adaptation process that occurs at both the individual level of the heir apparent and at the firm level. At the individual level, the heir now has the opportunity to carry out some of the tasks of the CEO position and to thereby acquire and enhance position-specific knowledge and develop broader leadership skills consistent with the position (Vancil, 1987). Meanwhile, at the firm level, because one candidate has been designated the heir, the firm can now conduct a more focused assessment of this particular candidate's capabilities (cognitive and interpersonal) and continuously update its evaluation of whether the candidate's capabilities fit the CEO position. It can then use this evaluation to subsequently decide whether or not to promote the heir apparent. In this sense, the grooming phase is also a probation period for an heir apparent.

To summarize, a relay succession is not only a process in which an heir can learn CEO-position-specific skills, but also one in which a firm can learn about the heir's cognitive and interpersonal skills and how these skills fit the firm. Thus, the chance of mismatch between a new CEO and a firm should be lower in relay succession than in other types of succession and, as a consequence, relay succession should have a positive impact on postsuccession firm performance.

¹ For the sake of simplicity and to avoid repetition, our theory and hypotheses focus the antecedents and consequences of relay succession. However, the empirical analyses compare relay succession with nonrelay inside and outside successions, thus providing a complete empirical treatment of the major succession alternatives.

Further, from an organizational learning and adaptation standpoint, the positive performance effects of relay succession should be particularly strong in challenging circumstances such as poor firm performance and high strategic and industry instability. It has been well noted in the broader organizational adaptation literature that simultaneous changes in multiple organizational processes can be detrimental to both performance and survival (Barnett & Carroll, 1995; Virany et al., 1992). Hannan and Freeman (1984) argued that extensive changes in structures and routines throughout an organization are precarious and increase the probability of organizational failure and death. Empirically, Haveman (1992) and Sastry (1997) provided strong evidence that organizational change enhances performance and survival if it builds on established routines and competencies. To the extent that relay succession builds on established organizational rules and routines (Ocasio, 1999), it can reduce organizational disruption and enable a firm to better manage ongoing strategic and industry instability and turn around poor performance. We elaborate these general learning- and adaptation-based theoretical arguments in the following sections in order to develop specific hypotheses on the antecedents and performance consequences of relay succession.

Antecedents of Relay CEO Succession

As noted earlier, organizational learning and adaptation can occur during the two phases of a relay succession (predesignation and grooming). Using the prior succession literature and the broader organizational learning and adaptation literature, we identified four major antecedents that can influence the likelihood of relay successions. These are (1) the number of internal candidates, (2) pre-succession firm performance, (3) pre-succession strategic instability, and (4) pre-succession industry instability. The number of internal candidates represents the *availability* of internal candidates for a CEO position, and the other antecedents concern the *desirability* of different types of candidates for the CEO position (Zhang & Rajagopalan, 2003).

Number of internal candidates. In CEO succession, the most visible and readily available candidates are those within a firm. In this study, internal candidates were defined as current executives of a firm (other than the incumbent CEO) whose position was executive vice president (EVP) or higher (O'Reilly, Main, & Crystal, 1988). These executives can be considered viable contenders for the CEO position for three reasons. First, requirements of the CEO position are substantially different from

those of other organizational positions (Kesner & Sebor, 1994: 329). Because this is a position with considerable responsibility for overall firm performance, only a few executives with experience at the highest levels of a firm are likely to possess the relevant managerial skills and expertise to make them serious candidates (Harris & Helfat, 1997; Ocasio, 1999). Second, to qualify for consideration, an internal candidate needs to have an established power base, especially in relation to the incumbent CEO and the board of directors of his or her firm (Ocasio, 1999). Such a power base is often evident in formal job titles such as EVP (Finkelstein, 1992). Finally, candidates are more likely to be considered seriously for CEO positions if incumbent CEOs and outside directors have relevant information about the candidates' skills and competencies (Zajac, 1990). Senior executives' prior interaction with an incumbent CEO and outside directors through co-working experiences and boardroom presentations allows them to convey such information (Lorsch & MacIver, 1989; Vancil, 1987).

From an organizational learning and adaptation perspective, the larger the number of internal candidates, the more complex will be the task of assessing the fit between an individual executive's "human capital" and key organizational contingencies. Such assessment is often very difficult because several senior executives may share certain responsibilities. These senior executives also share power and possibly have working and personal relationships with outside directors on their firm's board, so it is hard for one of them to stand out as the most desirable candidate for CEO. In such a situation, the firm will be less likely to designate one of them as an heir apparent.

In addition, even when one candidate from a pool of internal candidates is designated as the heir apparent, a firm can use ongoing assessment of the other candidates' evolving capabilities to update its evaluation of the heir apparent. Such updating is likely to raise the bar for the heir and reduce the probability of successfully meeting evaluation criteria during the grooming period. Indeed, it may turn out that another senior executive is deemed more qualified than the heir when succession eventually occurs. Thus, the chance that the heir will attain the CEO position is also reduced. In other words, if multiple internal candidates are available, a firm will be less likely to designate one of them as an heir apparent, and the likelihood of heir promotion will also diminish. Instead, the firm will wait to select a new CEO until the time of actual succession. Therefore,

Hypothesis 1. The number of internal candidates will be negatively related to the likelihood of relay CEO succession.

Internal and external contingencies. From an organizational learning and adaptation perspective, as internal and external organizational conditions become unstable, the appropriateness of alternative candidates' human capital becomes more difficult to assess. The unstable conditions make CEO selection more challenging because cause-effect relationships are more difficult to evaluate. Hence, under unstable organizational conditions, a firm is less likely to designate an heir apparent and is more likely to wait, because waiting increases opportunities to update knowledge on both various candidates' capabilities and the firm's operating context. In addition, even if an heir apparent is designated, unstable conditions can lessen the heir's chance of promotion, because under unstable conditions new knowledge is continuously incorporated and current knowledge becomes outdated rapidly. Thus, an heir designated early in a succession process may not be considered the best candidate available when actual succession occurs. In other words, unstable conditions militate against both the designation of an heir apparent and the heir's subsequent promotion to CEO. Instead, the firm tends to wait to select a new CEO in order to increase the time available to learn about both the evolving contingencies and the alternative candidates' human capital and how their skills and knowledge bases may best meet the needs of the firm's emerging contingencies.

Presuccession firm performance. Firm performance has consistently been found to be an important determinant of CEO turnover and dismissal and new CEO selection (e.g., Boeker & Goodstein, 1993; Cannella & Lubatkin, 1993; Fredrickson, Hambrick, & Baumrin, 1988; Ocasio, 1994). We argue that good firm performance tends to lead to a relay succession, while poor firm performance tends to discourage it. First, given overlap between an heir's tenure and an incumbent's tenure, the heir may be influenced by the incumbent and tend to preserve the incumbent's vision for a firm after assuming the top position (Zajac & Westphal, 1996). Such continuity is devalued when firm performance is poor (Kimberly & Quinn, 1984) and, as a result, firms will tend to not designate an heir apparent. In keeping with this argument, Zajac (1990) found that firm performance was negatively related to relay CEO succession planning.

In addition, even if an heir apparent is designated, if performance is poor, investors and outside directors may question the capabilities of an en-

tire top management team—including the heir—(Boeker & Goodstein, 1993). In such a situation, the heir may be passed over for the CEO position. In support of this argument, Shen and Cannella (2003) found that the stock market reacts positively to heir promotion if presuccession firm performance is good. Overall, then, poor firm performance will discourage both the designation of an heir apparent and the promotion of the heir to the CEO position, while good performance will have the opposite effects. Therefore,

Hypothesis 2. Presuccession firm performance will be positively related to the likelihood of relay CEO succession.

Presuccession strategic instability. Firm strategic instability² is the extent to which a firm's strategy has changed over time. When strategic instability is high, the cause-effect relationship between strategy and firm performance tends to be ambiguous (Hambrick & Finkelstein, 1987). An extension of this argument is that the qualifications a firm desires in its next CEO may also not be clear, given that future strategy is expected to differ from current strategy. Because of instability in strategy, the firm's prior experience in CEO selection decisions may not provide reliable information. In such situations, firms tend to have a poor understanding of desirable CEO qualifications. Thus, they tend not to name heirs to postpone the selection of new CEOs and to be able to apply the most current criteria at the time of selection (Finkelstein & Hambrick, 1996). Also, even if a firm does choose an heir, the selection criteria may change at the time of succession because of the high strategic instability, reducing the heir's chance of promotion.

In contrast, under conditions of low strategic instability, a firm can anticipate the qualifications needed in its next CEO well in advance. Thus, the potential risk to the firm in committing to a wrong heir apparent is quite low. In keeping with our reasoning, in discussing alternative processes for CEO succession Finkelstein & Hambrick (1996: 177) also argued that the more stable a firm's strategic situation, the more likely it is that the firm will designate an heir, and the earlier it will do so. In addition, under relatively stable conditions,

² Strategic instability in our study is conceptually and operationally the opposite of Finkelstein and Hambrick's (1990) concept of strategic persistence, defined as the extent to which a firm's strategy has remained stable over time. We used the term "strategic instability" to be consistent with the concept of industry instability, which is discussed next.

once an heir is designated, he or she is very likely to be promoted because the selection criteria probably will not change much during the grooming period. In general, high strategic instability diminishes the likelihood of relay succession. Under such conditions, a firm is more likely to wait, to continue evaluating potential candidates as they experiment with diverse new strategies, and to finally choose as the new CEO the candidate whose capabilities and performance are best adapted to the firm's contingencies at the time of succession. Thus,

Hypothesis 3. Presuccession strategic instability will be negatively related to the likelihood of relay CEO succession.

Presuccession industry instability. Previous studies have provided evidence that industry conditions explain significant variance in the origin of new CEOs (Datta & Rajagopalan, 1998; Parrino, 1997; Zhang & Rajagopalan, 2003). In this study, we examined the impact of industry instability, defined as the level of the unpredictability of changes in industry-specific factors over time (Dess & Beard, 1984; Sharfman & Dean, 1991). Firms operating in stable industries rely on established routines because little adjustment is required (Eisenhardt, 1989). In such industries, firms tend to legitimate and enforce the current systems and core values and to manage "symbolically" (Wiersema & Bantel, 1993). Because relay successions often represent organizational rules and routines (Ocasio, 1999), they are likely to occur under more stable industry conditions.

In contrast, unstable industry environments require managers to continuously adapt their perceptions of the industry to accommodate evolving realities (Wiersema & Bantel, 1993). Previous studies have found that industry instability can trigger CEO and executive turnover (Keck & Tushman, 1993; Pfeffer & Leblebici, 1973; Wiersema & Bantel, 1993). Similarly, industry instability should discourage relay succession because changing industry conditions render the preferred characteristics of a firm's next CEO less clear (Rajagopalan & Datta, 1996). Similarly, Finkelstein & Hambrick (1996) argued that the more unstable an industry, the less likely a firm will be to designate an heir, and the later it will do so. This may be because firms tend to wait to select CEOs in order to increase the time available to learn about the changing industry conditions. Accordingly,

Hypothesis 4. Presuccession industry instability will be negatively related to the likelihood of relay CEO succession.

Performance Consequences of Relay CEO Succession

The arguments motivating Hypotheses 1–4 are based on a descriptive theory of the antecedents of relay successions. We will now develop more normative predictions about performance consequences. We argue that relay successions can lead to better postsuccession firm performance than other types of successions and that this positive performance effect should be particularly strong in challenging succession circumstances.

CEO successors who were heirs apparent have not only firm-specific knowledge, but also potential exposure to the specialized tasks of a particular firm's CEO position (Vancil, 1987). Compared to successors who enter CEO positions from narrow functional domains, heir successors have been exposed to broader spectra of issues and functional concerns and thus have potentially broader knowledge. In addition, even if an (outside) successor has been CEO at another firm, his or her prior experience may not be transferable to the new setting because of the idiosyncratic differences between firms. Overall, an heir successor is more likely than nonheir successors to have knowledge and skills that are specific to the CEO position in the particular firm. In other words, this kind of learning starts before the actual succession for heir successors, but after the succession for other successors. The benefit of an heir's learning experience in a relay succession is also theoretically consistent with the idea of "competency multipliers" (March, 1981: 567). According to March (1981), individuals who directly participate in important decision-making processes become slightly more competent than others who do not have this opportunity. This increased competence induces them to participate even more, which makes them even more competent. In relay succession, heir successors can learn from direct experience, repeating actions that are successful and increasing their capabilities, thus increasing their chances of being successful after assuming the CEO positions for which they have been groomed.

In addition, during the grooming phase, an heir also has opportunities to learn how to manage relationships with both internal and external key stakeholders (Cannella & Lubatkin, 1993; Vancil, 1987). Managing internal stakeholders is crucial for building a credible power base and obtaining the support of a company's top management team, both of which are essential for implementing strategic initiatives (Greiner et al., 2002). In contrast, infighting and power plays that are not effectively resolved are likely to distract a firm from more im-

portant adaptations (Eisenhardt & Bourgeois, 1988). An heir successor is likely to have frequent interactions with other senior executives before becoming CEO and is hence more likely than other types of successors to gain the support from key internal constituencies that will be a valuable asset in the postsuccession period. Further, an heir is also well positioned to engage in strategically important interactions with key external stakeholders during the grooming period, either as a participant in CEO-initiated interactions or as a substitute for the CEO when he or she is unable to participate. External interactions (with customers, suppliers, regulatory institutions, and so forth) help the heir develop valuable knowledge and insights about external stakeholders and about how they potentially affect firm performance (Vancil, 1987).

From the point of view of a firm's learning, we have already argued that the risk of mismatch between a successor and a particular firm's CEO position should be lower in relay successions than in other types, which should also have a positive impact on postsuccession firm performance. Prior research has also noted that, in general, inside succession (both relay and nonrelay) impart less risk of mismatch than outside successions because directors know more about internal successors' competencies (Shen & Cannella, 2002a; Zajac, 1990). The risk of mismatch should decline even further in relay succession relative to nonrelay inside succession. Recall that the requirements for the CEO position are substantially different from those for other organizational positions (Kesner & Sebor, 1994: 329), even other senior executive positions. Thus, internal candidates' performance in their prior positions may not reliably indicate their performance in the CEO position. In a relay succession, a firm can conduct a focused and comprehensive evaluation of the heir apparent's competencies during the grooming period. In keeping with these arguments, Zajac (1990) found that firms with relay CEO succession planning had better postsuccession performance than others. Similarly, Shen and Cannella (2003) found that stock markets reacted positively when heirs were promoted to CEO positions.

Hypothesis 5. Relay CEO succession will be positively related to postsuccession firm performance.

Prior research also indicates that the performance consequences of CEO succession vary across contexts (Kesner & Sebor, 1994). We draw upon this literature to argue that an heir successor's learning experience is particularly important under conditions of poor presuccession firm performance

and/or high postsuccession strategic and industry instability. These contingencies increase the complexity of the learning tasks that confront a new CEO and increase both the cognitive and interpersonal capabilities required. Learning acquired during a grooming phase is likely to equip an heir successor with the skills necessary to cope better with these challenges. In contrast, in relatively stable circumstances, because the learning needs are less complex, a new CEO's heir apparent experience may not be that valuable.

The moderating effect of presuccession firm performance. It has been argued that outside successors are better positioned to effect performance turnarounds because they can bring in fresh perspectives and new skills and are more willing to question existing practices and initiate major changes (Kesner & Sebor, 1994). However, several recent studies have found that outside CEOs are generally unable to have positive effects on firm performance (e.g., Greiner et al., 2002; Shen & Cannella, 2002a; Wiersema, 2002). It is likely that the disruptive process of outside succession and the organizational turmoil it often engenders hinder quick turnaround after succession. Outsiders are also less familiar with an organization's particular routines and competencies and thus are more likely to either ignore or even challenge these competencies.

The broader organizational adaptation literature has suggested that changes that build on existing competencies are more likely to enhance performance than changes that require entirely new competencies (Haveman, 1992; Sastry, 1997). Such competence-protecting or competence-enhancing changes are more likely to be initiated by inside successors who have a better understanding of their organizations' resources and constraints. In particular, the grooming period gives an heir added opportunities to learn what does and does not work at the uppermost levels of a particular firm.

In addition, we have argued that an heir successor is more capable of garnering the support of his or her firm's top management team. Internal support is crucial for a new CEO who is trying to turn around performance. In contrast, infighting and power plays within a top management team are likely to distract a firm from more critical adaptations in a postsuccession period. Unfortunately, both nonrelay inside succession and outside succession may suffer from problems of power and politics under conditions of poor performance. First, poor firm performance feeds power struggles and political fighting at the top of an organization (Eisenhardt & Bourgeois, 1988). In a nonrelay inside succession, if firm performance is poor, other

senior executives may contest the new CEO's power if he or she has not yet built a stable power base.

Second, studies have shown that outside successions are usually accompanied by frustration and resistance from inside executives (Greiner et al., 2002). Outside successions also lead to a higher level of senior executive turnover than inside successions (Friedman & Saul, 1991). A high level of senior executive turnover can deprive the outside successors of valuable managerial talents and firm-specific knowledge that they dearly need, especially during transition periods (Shen & Cannella, 2002a). Even those senior executives who remain in a firm may be hostile to an outside successor and so may not fully support his or her change initiatives (Boeker & Goodstein, 1993). Further, we have earlier argued that in a relay succession the new CEO gets time before succeeding to build external relationships. Confidence and support from external stakeholders are also vital for a new CEO's efforts to turn around performance (Greiner et al., 2002). Therefore,

Hypothesis 6. The positive relationship between relay CEO succession and postsuccession firm performance will be stronger at lower levels of presuccession firm performance.

The moderating effects of postsuccession strategic and industry instability. The performance consequences of relay succession can also vary as a function of postsuccession instability in firm strategy and industry conditions. Hannan and Freeman's (1984) structural inertia theory suggests that high instability in a firm's strategy and/or its industry conditions can reduce accountability and thus increase the probability of firm failure and mortality. Strategic and industry instability often place tremendous cognitive demands upon CEOs. For example, instability in an industry requires that CEOs continuously adapt their perceptions of the industry to fit the current reality (Wiersema & Bantel, 1993). Strategic instability requires that CEOs both continuously adapt resource allocations to better implement current strategies and devise new strategies for the future. Under changing strategic and industry conditions, cause-effect relationships are also more difficult to evaluate, and knowledge tends to become outdated quickly. These cognitive challenges further increase the burden on new CEOs who are trying to learn the skills and routines particular to their new positions even as they are developing an understanding of changing internal and external conditions. Given the costs and risks of managing internal and external instability, links to prior periods can be significant sources of stabil-

ity for new CEOs (Virany et al., 1992). Thus, heir successors should be more capable of managing instability than other successors because, during their grooming, they have had time and opportunity to develop position-specific knowledge and skills and to gain the support of the key internal and external constituents.

Hypothesis 7. The positive relationship between relay CEO succession and postsuccession firm performance will be stronger at higher levels of postsuccession strategic instability.

Hypothesis 8. The positive relationship between relay CEO succession and postsuccession firm performance will be stronger at higher levels of postsuccession industry instability.

METHODS

Sample Selection

The sample for this study was drawn from the population of relatively large (annual sales revenues greater than \$100 million), publicly traded, U.S. nondiversified (at least 70 percent of sales from a single "four-digit" industry) manufacturing firms listed continuously on COMPUSTAT between 1993 and 1998 (Zhang & Rajagopalan, 2003). We first identified all such firms (768 in all) from COMPUSTAT. Then we identified 220 CEO successions that had occurred within this group between 1993 and 1998 from the on-line *Wall Street Journal Index* and Standard & Poor's Executive Compensation database. Data were collected for the years before and after successions to provide better understanding of causality. After observations with missing information were excluded, our final sample included 204 CEO successions in 184 firms, of which 164 firms had one CEO succession and 20 firms had two.

Measures

We classified CEO successions in this sample into three categories. First, a relay CEO succession was one in which the new CEO was an executive of the given firm who had firm tenure of at least two years at the time of succession and was the heir apparent to the predecessor CEO. Second, a nonrelay inside succession was one in which the new CEO was an executive of the given firm with at least two years tenure at the time of succession but was not the heir apparent to the predecessor CEO. Third, an outside succession was one in which the new CEO had firm tenure of less than two years at the time of succession. This categorization relies on

identifying heir apparent status. Cannella and Shen defined an heir apparent as “any officer who was the only person in the firm holding the title of president or COO or both and who was at least five years younger than the incumbent CEO” (2001: 258). In our sample (nondiversified manufacturing firms), we did not observe any firm that had more than one person holding the title of president and/or COO (chief operating officer). We also examined tenure outcomes of people with the president/COO title: 80 percent of them (irrespective of age) were promoted to the CEO positions in their firms, and 84 percent of those who were at least five years younger than the incumbent CEOs were promoted. These ratios did not significantly differ and suggested that “five years younger” was not a relevant criterion for defining an heir apparent in our sample. Thus, we identified a new CEO as a former heir apparent if he or she had had the title of president or COO or both before the succession occurred. Our operational definition is also consistent with recent work of Bigley and Wiersema (2002).

Among the 204 CEO successions, there were 75 relay successions, 53 nonrelay inside successions, and 76 outside successions. In three successions, the new CEOs had been brought in from outside as COOs and/or presidents within two years prior to succession (so they had firm tenure of less than two years). We coded these as outside successions rather than relay successions.³ Two dummy variables were then created: *relay succession* was coded 1 for relay succession and 0 otherwise; *outside succession* was coded 1 for outside succession and 0 otherwise.

Number of internal candidates referred to the total number of executives other than an incumbent CEO who had the position of executive vice president (EVP) or higher in the year prior to a succession (O'Reilly et al., 1988). The primary data sources for these variables were the *Dun & Bradstreet Reference Book of Corporate Management* and annual corporate proxy statements. We measured presuccession firm performance using three dimensions: return on assets (ROA), return on sales (ROS), and the ratio of market value to the book value of shareholders' equity (Finkelstein & Hambrick, 1990). We first calculated the average for the three years prior to succession for each of these measures and then standardized them within the sample ($\bar{x} = 0$, s.d. = 1). The average of the three standardized dimensions yielded a composite mea-

sure of *presuccession firm performance*. *Postsuccession firm performance* was measured with the same procedure applied to corresponding data for the three years after a succession occurred.

We measured presuccession strategic instability following Finkelstein and Hambrick's (1990) measurement of strategic persistence, which captures the absence of variance in strategy over time and is conceptually opposite to our concept of strategic instability. Six strategic dimensions were used: (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) nonproduction overhead (selling, general, and administrative [SGA] expenses/sales), (5) inventory levels (inventories/sales), and (6) financial leverage (debt/equity). We first computed a firm's presuccession three-year variance ($\Sigma[t_i - T]/n - 1$, where t_i is the ratio at year i , T is the average of the ratio in the three years, and n is the number of years) for each strategic dimension. Next, we standardized variance scores for each dimension within the sample, and the average of the six standardized dimensions yielded a composite measure of *presuccession strategic instability*. *Postsuccession strategic instability* was measured in a similar fashion, with corresponding data for the three years after a succession.

We followed Dess and Beard (1984) in measuring presuccession industry instability as a composite of instability in sales growth and employment growth in an industry at the four-digit SIC (Standard Industrial Classification) level. First, we calculated instability in industry sales as the standard error of the regression slope coefficient (S_{b1}) divided by the mean value of sales in the three years prior to succession. Then we calculated instability in industry employment following the same procedure. These two dimensions were standardized within the sample, and their average was used for *presuccession industry instability*. *Postsuccession industry instability* was measured similarly, with corresponding data for the three years after a succession. Data for firm performance and strategic and industry instability were all gathered from COMPUSTAT.

Control Variables

In modeling the antecedents of relay successions, we included the following control variables. First, *presuccession firm size* was the natural logarithm of average sales for the three years prior to succession (Dalton & Kesner, 1983; Datta & Rajagopalan, 1998). Second, because a departing CEO's age has been found to be crucial in the succession process

³ Results did not change if we coded these three observations as relay successions.

(Cannella & Shen, 2001; Vancil, 1987), we controlled for *departing CEO age* (years since birth at the time of succession). Third, following previous studies of CEO origin (Cannella & Lubatkin, 1993; Harris & Helfat, 1997; Ocasio, 1999), we controlled for *departing CEO origin*, coded 1 if a departing CEO had been an outsider (with firm tenure of less than two years when assuming the CEO position) and 0 otherwise.

Fourth, power has been found to be important in determining CEO succession and heir apparent tenure outcomes (e.g., Cannella & Shen, 2001; Zajac & Westphal, 1996). Following Zajac and Westphal (1996), we created an index of *presuccession relative board power* as follows: We first calculated the percentage of outside directors, the proportion of a firm's outstanding shares owned by outside directors, and board tenure relative to CEO tenure (the average tenure of a firm's directors divided by its CEO's tenure). We then standardized them and summed them into a single measure. Fifth, although CEO duality (whereby a CEO is also the chairman of his or her firm's board of directors) has been used as an indicator of power in the literature, we observed that most CEOs assumed their firms' chairman positions before they had heirs apparent. This sequence may represent an organizational routine. Thus, rather than including CEO duality in the index of board power, we included a control variable, *departing CEO duality*, coded 1 if a departing CEO was also the board chair when he or she left the CEO position, and 0 otherwise.

Finally, the circumstances in which a CEO left (voluntary departure versus dismissal) influence the selection of a new CEO (e.g., Cannella & Lubatkin, 1993), so we controlled for CEO dismissal. Following Shen and Cannella (2002b: 1198–1199), we used two approaches to identify CEO dismissal. The first relied on news reports (extending from the year before to the year after a succession, collected via Dow Jones databases), and the second relied on CEO age and continuity as a board member at the time of succession (a CEO was considered to be dismissed if he or she terminated his or her service as both CEO and board member before the age of 64 for reasons other than death, poor health, taking a similar position at another firm, or merger or acquisition). *CEO dismissal* was coded 1 if both approaches suggested that a departing CEO was dismissed and 0 otherwise.

In modeling the performance consequences of relay successions, we controlled for *postsuccession firm size* (similar to presuccession firm size but for the three years following succession), *CEO dismissal*, *number of internal candidates*, and *postsuccession relative board power* (board power rel-

ative to a new CEO). We also controlled for *postsuccession industry performance*, measured as the average performance (the same composite measure detailed above for firm performance) of firms in the four-digit industry in the three years after succession. In addition, the "main effects" of presuccession firm performance, postsuccession strategic instability, and postsuccession industry instability were also controlled for.

DATA ANALYSES AND RESULTS

Table 1 reports the means, standard deviations, and correlations for all the variables used in this study. Table 2 presents results for the antecedents model (Hypotheses 1–4). Because the dependent variable had three categories (relay succession, nonrelay inside succession, and outside succession), we used multinomial logit analyses (Parrino, 1997; Zhang & Rajagopalan, 2003). We used this method to simultaneously estimate the likelihood of relay succession and that of outside succession against the base category of nonrelay inside succession. Two models were estimated. Model 1 included only control variables, and model 2 also had the four main effects: the number of internal candidates, presuccession firm performance, presuccession strategic instability, and presuccession industry instability. The variance explained by the two models was significant (pseudo- $R^2 = .15$ and $.22$, respectively; change in pseudo- $R^2 = .07$, $p < .001$).

Hypothesis 1, which predicts that the number of internal candidates will be negatively related to the likelihood of relay succession, was supported ($b = -0.44$, $p < .01$). Although not hypothesized a priori, another finding was that the number of internal candidates was also negatively related to the likelihood of outside succession ($b = -0.32$, $p < .01$). Consistent with Hypothesis 2, presuccession firm performance was positively related to the likelihood of relay succession ($b = 0.85$, $p < .05$). Results also showed that presuccession firm performance was negatively related to the likelihood of outside succession ($b = -0.72$, $p < .05$).

Although presuccession strategic instability was negatively related to relay succession (Table 1: $r = -.21$, $p < .01$) and positively related to outside succession ($r = .29$, $p < .01$), the multinomial results showed that presuccession strategic instability was not significantly related to the likelihood of relay succession ($b = -0.35$, n.s.). Hence, Hypothesis 3 was not supported. In addition, our results did not support Hypothesis 4, which predicts that presuccession industry instability ($b = -0.02$, n.s.)

TABLE 1
Means, Standard Deviations, and Correlations^a

Variable	Means	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Postsuccession firm performance	0	0.59																	
2. Relay succession	0.36	0.48	.31**																
3. Outside succession	0.37	0.48	-.29**	-.58**															
4. Number of internal candidates	2.30	1.47	-.05	-.16*	-.05														
5. Presuccession firm performance	0	0.77	.47**	.18**	-.27**	.09													
6. Presuccession strategic instability	0	0.44	-.24**	-.21**	.29**	.11	-.14*												
7. Presuccession industry instability	0	0.85	.01	.02	.02	-.11	.09	-.02											
8. Postsuccession strategic instability	0	0.53	-.32**	-.18**	.18**	.08	-.11	.34**	.16*										
9. Postsuccession industry instability	0	0.77	-.08	-.02	.07	.05	.01	-.01	.15*	-.01									
10. Presuccession firm size	6.94	1.27	.12	.12	-.11	.21**	.12	-.22**	-.15*	-.18**	.11								
11. Postsuccession firm size	7.14	1.20	.20**	.17*	-.15*	.24**	.22**	-.26**	-.13*	-.20**	.10	.89**							
12. Departing CEO origin	0.44	0.49	-.22**	-.23**	.20**	.16*	-.08	.21**	.00	.09	-.01	-.18**	-.12						
13. CEO dismissal	0.22	0.39	-.32**	-.27**	.24**	.07	-.23**	.25**	-.13*	.19**	-.07	-.20**	-.20**	.21**					
14. Presuccession relative board power	0	1.55	-.14*	-.08	.19**	-.13*	-.19**	-.02	-.16*	.14*	-.05	.12	.01	-.06	.04				
15. Postsuccession relative board power	0	1.78	-.05	-.02	.13*	-.14*	-.13*	-.03	-.11	.15*	-.06	.10	.05	-.12	-.05	.85**			
16. Departing CEO age	60.62	8.04	.25**	.20**	-.29**	-.08	.21**	-.35**	.13*	-.20**	.01	.10	.06	-.25**	-.40**	-.02	.01		
17. Departing CEO duality	0.69	0.46	.16*	.39**	-.09	-.12	.09	-.16*	-.04	-.01	.11	.07	.07	-.18**	-.15*	.12	.17*	.22**	
18. Postsuccession industry performance	0	0.38	.26**	-.01	-.08	-.02	.31**	-.02	.05	-.13*	-.06	-.01	.02	-.06	-.08	.04	.11	.09	.02

^a $n = 204$.

* $p < .05$

** $p < .01$

TABLE 2
Results of Multinomial Models of Alternative Types of CEO Succession^a

Variables	Model 1		Model 2	
	Relay Succession	Outside Succession	Relay Succession	Outside Succession
Constant	-3.18 [†] (1.98)	2.87 (1.89)	-2.98 (2.09)	1.38 (2.07)
Controls				
Presuccession firm size	0.24 [†] (0.14)	0.01 (0.15)	0.39* (0.17)	0.17 (0.16)
Departing CEO origin	-0.71 [†] (0.39)	0.14 (0.36)	-0.38 (0.41)	0.06 (0.38)
Departing CEO duality	2.42*** (0.57)	0.51 (0.38)	2.42*** (0.60)	0.63 (0.40)
Departing CEO age	-0.01 (0.03)	-0.06* (0.03)	-0.02 (0.03)	-0.05 [†] (0.03)
Presuccession relative board power	-0.01 (0.16)	0.34* (0.15)	-0.10 (0.19)	0.31* (0.16)
CEO dismissal	-0.25 (0.67)	0.95* (0.46)	0.06 (0.71)	1.09* (0.50)
Predictors				
Number of internal candidates			-0.44** (0.14)	-0.32** (0.13)
Presuccession firm performance			0.85* (0.42)	-0.72* (0.34)
Presuccession strategic instability			-0.35 (0.60)	0.50 (0.41)
Presuccession industry instability			-0.02 (0.25)	0.19 (0.21)
Likelihood ratio χ^2	72.56***		99.84***	
Pseudo- R^2	0.15		0.22	
Change in pseudo- R^2	—		0.07***	

^a The omitted group is nonrelay inside succession. Values are unstandardized regression coefficients, with standard errors in parentheses.

[†] $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$

All two-tailed tests.

will be negatively related to the likelihood of relay succession.

Table 3 presents the results of ordinary least squares (OLS) regression analyses on the performance consequences of relay successions (Hypotheses 5–8). Six models were estimated. Model 1 included only the controls, and model 2 also included the main effects of relay succession and outside succession. In models 3 to 5, relay succession's and outside succession's interactions with presuccession firm performance, postsuccession strategic instability, and postsuccession industry instability were respectively added. Finally, model 6 included all interaction effects simultaneously. To create these interaction terms, we mean-centered both independent and moderating variables to address the potential problem of multicollinearity (Aiken & West, 1991). All these models were significant ($R^2 = .35-.47$, $p < .001$). Results did not change significantly across different model specifications, which suggested that our findings were quite robust. Hence, we tested our hypotheses

on the basis of the results of model 6, the most complete model specification.

In support of Hypothesis 5, we found that relay succession was positively related to postsuccession firm performance ($b = 0.31$, $p < .001$). Hypothesis 6 proposes that the positive effect of relay succession on postsuccession firm performance will be stronger at lower levels of presuccession firm performance. This hypothesis was supported by a negative and significant coefficient on the interaction of relay succession and presuccession firm performance ($b = -0.36$, $p < .05$). To facilitate interpretation, we have plotted these results in Figure 1. In creating the figure, we constrained the variables in model 6 in Table 3—except relay succession, outside succession, and presuccession firm performance—to their mean values (Cannella & Shen, 2001). Relay succession took the values of 0 and 1 (accordingly, outside succession took the values 0.58 and 0: the probability of outside succession absent relay succession equals $0.37/[1.0 - 0.36]$, and the probability of outside succession given re-

TABLE 3
Results of OLS Analyses: Performance Consequences of Alternative Types of CEO Succession^a

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
Constant	-0.11	(0.22)	-0.12	(0.22)	-0.14	(0.22)	-0.14	(0.21)	-0.20	(0.22)	-0.21	(0.21)
Controls												
Postsuccession firm size	0.03	(0.03)	0.02	(0.03)	0.02	(0.03)	0.02	(0.03)	0.03	(0.03)	0.03	(0.03)
CEO dismissal	-0.26**	(0.09)	-0.21*	(0.09)	-0.18*	(0.09)	-0.13	(0.09)	-0.20*	(0.09)	-0.10	(0.09)
Number of internal candidates	-0.02	(0.02)	-0.01	(0.02)	-0.02	(0.02)	-0.01	(0.02)	-0.02	(0.02)	-0.03	(0.02)
Postsuccession relative board power	0.00	(0.02)	0.00	(0.02)	0.01	(0.02)	0.02	(0.02)	0.00	(0.02)	0.02	(0.02)
Postsuccession industry performance	0.14	(0.09)	0.16 [†]	(0.09)	0.19*	(0.09)	0.19*	(0.09)	0.17 [†]	(0.09)	0.22*	(0.09)
Presuccession firm performance	0.29***	(0.05)	0.27***	(0.05)	0.23***	(0.05)	0.31***	(0.05)	0.25***	(0.05)	0.28***	(0.05)
Postsuccession strategic instability	-0.24***	(0.07)	-0.22***	(0.06)	-0.25***	(0.06)	-0.15*	(0.07)	-0.22***	(0.06)	-0.17*	(0.07)
Postsuccession industry instability	-0.07 [†]	(0.04)	-0.06	(0.04)	-0.06	(0.04)	-0.07 [†]	(0.04)	-0.06	(0.04)	-0.06	(0.04)
Main effects												
Relay succession			0.18*	(0.09)	0.24**	(0.09)	0.25**	(0.08)	0.21*	(0.09)	0.31***	(0.09)
Outside succession			-0.02	(0.09)	0.01	(0.09)	-0.01	(0.08)	-0.02	(0.09)	0.01	(0.08)
Interactions												
Relay succession × presuccession firm performance					-0.43**	(0.17)					-0.36*	(0.16)
Outside succession × presuccession firm performance					-0.13	(0.12)					-0.17	(0.12)
Relay succession × postsuccession strategic instability							0.80***	(0.18)			0.75***	(0.19)
Outside succession × postsuccession strategic instability							0.22	(0.15)			0.23	(0.15)
Relay succession × postsuccession industry instability									0.35**	(0.14)	0.27*	(0.13)
Outside succession × postsuccession industry instability									0.26**	(0.10)	0.23*	(0.10)
<i>F</i>	13.23***		11.50***		10.40***		12.08***		10.50***		10.13***	
<i>R</i> ²	.35		.37		.40		.43		.40		.47	
ΔR^2			.02* ^b		.03** ^c		.06*** ^c		.03** ^c		.10*** ^c	

^a Values are unstandardized regression coefficients, with standard errors in parentheses. In supplementary analyses, we also controlled for departing CEO's tenure and new CEO's age and duality. The results did not change.

^b Relative to model 1.

^c Relative to model 2.

[†] $p < .10$

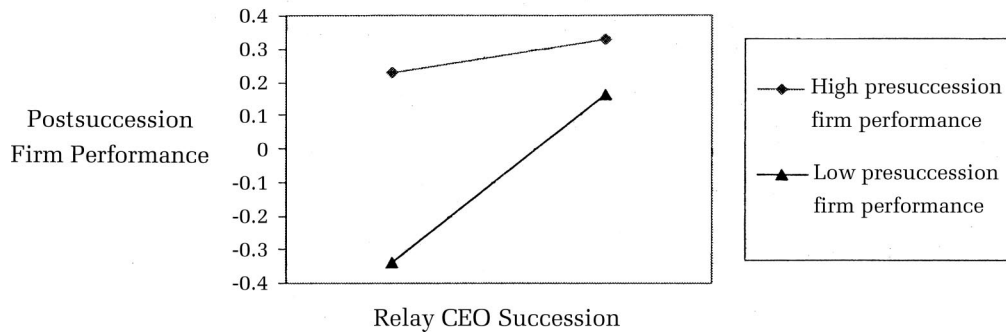
* $p < .05$

** $p < .01$

*** $p < .001$

All two-tailed tests.

FIGURE 1
Relay CEO Succession, Presuccession Firm Performance, and Postsuccession Firm Performance



lay succession is 0). *Presuccession firm performance* took the values of one standard deviation below and above the mean. Figure 1 indicates that there is a stronger, positive relationship between relay succession and postsuccession firm performance when presuccession firm performance is low than when it is high.

Hypothesis 7 proposes that the positive effect of relay succession on postsuccession firm performance will be stronger when postsuccession strategic instability is higher. This hypothesis was strongly supported by the significant, positive coefficient for the interaction of relay succession and postsuccession strategic instability ($b = 0.75, p < .001$). The graphs plotted in Figure 2 further facilitate interpretation and show a strong, positive relationship between relay succession and postsuccession firm performance when postsuccession strategic instability is high but not when it is low. Hypothesis 8, proposing that the positive effect of relay succession on postsuccession firm performance will be stronger the higher the postsuccession industry instability, was also supported ($b = 0.27, p < .05$). Figure 3 shows that the positive effect of relay succession on postsuccession firm

performance is stronger when postsuccession industry instability is high than when it is low.

In addition, outside succession and nonrelay inside succession did not differ in their effects on postsuccession firm performance ($b = 0.01, n.s.$). However, outside succession led to better postsuccession performance than nonrelay inside succession when industry instability was high ($b = 0.23, p < .05$).

DISCUSSION AND CONCLUSION

An emerging research stream in the CEO succession literature specifically focuses on relay CEO succession (Bigley & Wiersema, 2002; Cannella & Shen, 2001; Shen & Cannella, 2003; Vancil, 1987). To better understand the antecedents and performance consequences of relay CEO succession, we distinguished between three types of succession—relay succession, nonrelay inside succession, and outside succession—and empirically investigated three research questions: (1) How do critical internal and external contingencies influence the likelihood of relay succession? (2) What are the performance consequences of relay succession relative to

FIGURE 2
Relay CEO Succession, Postsuccession Strategic Instability, and Postsuccession Firm Performance

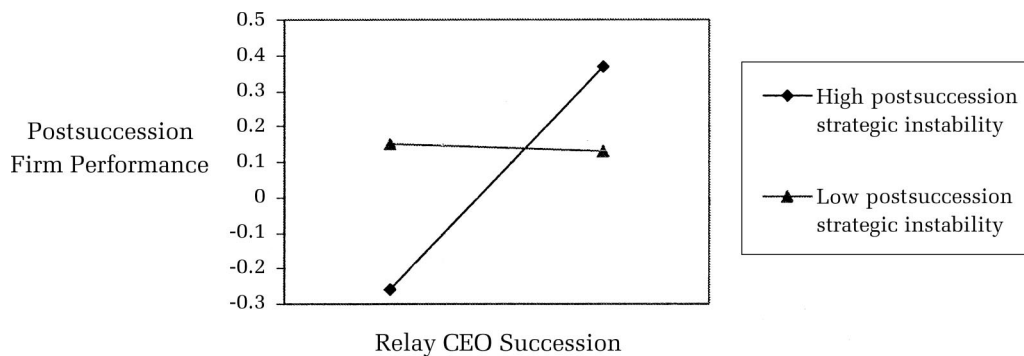
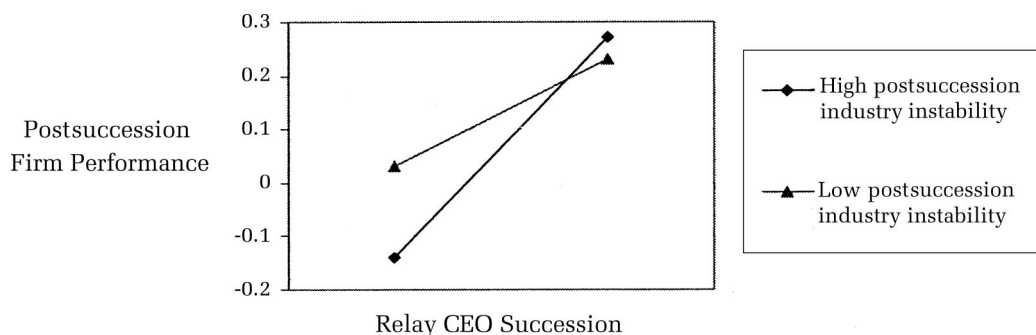


FIGURE 3
Relay CEO Succession, Postsuccession Industry Instability, and Postsuccession Firm Performance



other types of succession? (3) How do these performance consequences vary across internal and external contingencies? Our findings supported two out of four hypothesized antecedent effects (Hypotheses 1 and 2) and all four predictions on the performance consequences of relay succession (Hypotheses 5–8). Overall, these results indicate the usefulness of an organizational adaptation and learning perspective for understanding the succession phenomenon.

Antecedents of Relay CEO Successions

Our results suggest that as the number of internal candidates for a firm's CEO job increases, the likelihood of both relay and outside succession declines, relative to that of nonrelay inside succession. It seems that a firm with many internal candidates tends to select an inside new CEO without having designated him or her as heir. These results shed new light on previous findings that the availability of internal candidates increases the likelihood of inside succession (e.g., Dalton & Kesner, 1983; Zhang & Rajagopalan, 2003). Previous studies did not differentiate between the two different types of inside succession, as did our study, and thus the current work provides additional evidence on how inside CEOs are selected. Our results suggest that if a firm has multiple inside candidates for the CEO position, it is less likely to designate and groom one of them as the heir apparent for the position. Instead, the firm tends to wait to select a new CEO until the time of actual succession.

We also found that strong presuccession firm performance increases the likelihood of relay succession and decreases the likelihood of outside succession, relative to that of nonrelay inside succession. These results are consistent with previous findings that good performance increases the likelihood of inside succession relative to outside suc-

cession (Kesner & Sebor, 1994). Further, because we differentiated between relay and nonrelay inside succession, our study provides evidence on how performance influences the process a firm uses to select a new inside CEO. Under conditions of good performance, a firm is likely to designate an heir apparent and groom him or her for the CEO position (Zajac, 1990). Throughout the grooming period, the heir likely continues to be viewed favorably and thus is likely to be promoted to the CEO position when the incumbent CEO leaves office. In contrast, given poor performance, a firm is less likely to use relay succession.

Overall, our results suggest that in deciding whether or not to use relay CEO succession, firms are guided by adaptive criteria. They consider the availability of internal candidates for their CEO positions and use ongoing firm performance to evaluate the competencies of these candidates, including those of heirs apparent. By distinguishing between the relay and nonrelay alternatives, our study suggests that a firm's internal conditions (number of internal candidates and presuccession firm performance) influence the succession process. Because we also controlled for various factors that represent power and politics (e.g., Cannella & Shen, 2001), we believe that our results offer compelling evidence in support of a learning and adaptive view of relay CEO succession.

Performance Consequences of Relay CEO Succession

In comparing postsuccession firm performance following different types of CEO succession, we found the best performance following relay succession. Further, postsuccession firm performance did not differ for nonrelay inside succession and outside succession. These findings thus highlight the value of a potential new CEO's learning experience (in relay succession) before he or she assumes the

CEO position. Our results may also help to reconcile the inconsistent findings in prior literature on the performance impact of new CEO origin broken down simply into inside versus outside (for a review, see Kesner and Seborá [1994]). A plausible reason is that this simple distinction does not capture the important differences between different types of new inside CEOs.

Our study is among the few that differentiate between different types of inside succession. Shen and Cannella (2002a) distinguished between follower inside succession (inside CEO succession following voluntary predecessor departure) and contender inside succession (inside CEO succession following predecessor dismissal). They found little difference in postsuccession firm performance for these two types. It is possible that the learning experience of a new CEO (reflected in a grooming period as heir) explains more variance in postsuccession performance than the circumstances of predecessor departure. Taken together, these studies highlight the need to adopt a finer-grained classification of inside successions to better understand their performance effects.

Our study also examined how key internal and external contingencies moderate the performance consequences of relay succession. In keeping with theory, we found that the positive performance effect of relay succession was particularly strong under conditions of lower presuccession firm performance, higher postsuccession strategic instability, and higher postsuccession industry instability. These three contingencies can be viewed as presenting “challenging” succession scenarios for a new CEO. Declining firm performance places the new CEO under immediate performance pressure. Unstable strategic and industry conditions increase cognitive demands, in that knowledge has to be constantly updated, and may also increase internal dissension and disagreement on strategic choices. It is likely that the learning benefits conferred by a grooming period (that is, the opportunity to develop competencies that are specific to the CEO position of this particular firm and relationships with key internal and external key constituencies) are particularly significant and may yield positive dividends under these challenging succession circumstances. In contrast, in relatively easy or less challenging succession circumstances (such as good performance and low instability), most new CEOs can probably do quite well, and their prior learning may not confer any particular advantages. These findings are also consistent with broader research on strategic leadership (e.g., Finkelstein & Hambrick, 1996; Hambrick & Finkelstein, 1987) suggesting that leadership at the top matters more

when the going gets tough because the scope for and impact of managerial discretion are particularly significant in such contexts.

The normative implications of our findings are also quite significant because they may help us to understand why so many new CEOs fail to influence firm performance positively. As Greiner and colleagues recently noted, “Given the many pitfalls awaiting new CEOs, as well as their high failure rate, we need to ask ourselves if there is any way to better prepare them for the job. We are not aware of a ‘school for CEOs’ but there should be one” (2002: 15). Our results suggest that the grooming period in a relay succession may allow both a firm and an heir to learn about each other and about key internal and external contingencies, so that there is an increased chance of an appropriate choice at the time of succession and of better firm performance afterward. Thus, the grooming period may be akin to a “school” within which a new CEO’s education takes place. In contrast, without a grooming period, a new CEO’s education is likely to take place after succession and impose higher costs on a firm.

Contrary to the traditional wisdom that outside CEOs are better equipped to turn around poor performance, our results suggest that outside successions do not significantly differ from nonrelay inside successions in terms of postsuccession firm performance, even under conditions of poor presuccession performance and/or high postsuccession strategic instability. Outside successors are usually prized for their new skills and perspectives and their willingness to initiate changes (Harris & Helfat, 1997). Indeed, it has been well noted in the literature that, relative to inside CEOs, outside CEOs are more likely to initiate strategic changes (e.g., Helmich & Brown, 1972; Wiersema, 1995). Most often, though, previous studies have focused upon the impact of outside CEOs on strategic change rather than on the performance consequences of strategic change. The finding that outside CEOs are more likely to initiate strategic change does not necessarily imply that such change improves postsuccession firm performance. Indeed, because outside successors are more likely to lack firm-specific knowledge, it is harder for them to formulate and implement appropriate strategic change (Greiner et al., 2002). In addition, outside CEO successions often disrupt firms, and outside successors find it more challenging to get support from other senior executives within firms. Therefore, it is not surprising that outside succession may not lead to better postsuccession firm performance (Shen & Cannella, 2002; Wiersema, 2002).

However, we did find that when postsuccession industry instability was higher, outside succession

was associated with better postsuccession performance than nonrelay inside succession. Perhaps unstable industry conditions necessitate the introduction of significantly different competencies and in these contexts the potential benefits of outsiders' novel strategic approaches may outweigh the costs of organizational disruption (Tushman & Rosenkopf, 1996).

In conclusion, we would like to acknowledge some limitations of our study that, in turn, suggest interesting avenues for future research. First, like most research on CEO succession, our study relied on archival data rather than on direct observations of succession. For example, we used individuals' having a formal title (president and/or COO) as our identifier of heir apparent status. Future research that uses survey data or field studies may be able to identify heirs apparent who do not have such formal titles.

Second, although in this study we treated outside successors as homogeneous, future research could benefit from adopting a finer-grained classification of outside successions (e.g., Zhang & Rajagopalan, 2003). From an organizational learning and adaptation perspective, the backgrounds of outside successors may influence the extent to which they are prepared for a CEO position. For example, outside successors with prior general management experience (for instance, outsiders who have previously been CEOs/presidents/COOs/division heads) may be better prepared than outsiders with narrower, more function specific experience.

Third, although empirically we simultaneously compared the antecedents and performance consequences of all three types of CEO succession, our theoretical arguments focused mainly on relay succession. Hence, there is an opportunity for future work to extend our theoretical model and to develop arguments that explicitly compare the antecedents and consequences of nonrelay succession.

Fourth, although our use of relatively large, non-diversified manufacturers as a sample enabled us to fairly clearly identify heirs apparent and to explicitly measure strategic and industry instability, this choice of sample may also have limited the generalizability of the findings to other contexts (for instance, diversified firms). Future research needs to refine and extend our theoretical arguments to other contexts in order to build a more generalizable theory of CEO succession.

To the best of our knowledge, ours is the first study to simultaneously examine both the antecedents and performance consequences of relay CEO succession, relative to nonrelay inside suc-

cession and outside succession. We hope that our findings contribute to a more completely specified descriptive and normative theory of relay CEO succession.

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