경영학 석사 학위논문

The Effect of CEO Outsiderness on Firm-Level Attentional Change

CEO 외부성이 기업 주의 변화에 주는 영향

2018년 02월

서울대학교 대학원

경영학과 경영학 전공

강 지 연

Abstract

Despite the plethora of empirical studies on the effects of CEO succession on the organization, we know very little about the mechanism through which the origin of the new CEO impacts the strategic course of actions at the firm-level. Drawing from the attention-based perspective of firms, we argue that the relationship between the origin of a new CEO and organizational attention is influenced by the predecessor's performance and status. Our empirical results suggest that firm with new outsider CEOs indeed exhibited more attentional change at the firm-level; however, the level of attentional change actually decreased when the predecessor CEO's performance was high. Moreover, we find that the status of the predecessor moderates this effect of prior performance. Specifically, an outsider CEO would lead to the lowest level of firm-level attentional shift when both predecessor's performance and status are high. The results of this study shed light on the interlinkages between CEO turnover and transformation of organizational attention, as well as the role of executive status in the process.

Keyword : CEO succession, managerial attention, attentional change, CEO status
Student Number : 2015-20576

Table of Contents

1. Introduction

"Leaders must wake people out of inertia. They must get people excited about something they've never seen before, something that does not yet exist."

----- Rosabeth Moss Kanter

Over the past few decades, researchers have paid considerable attention to the CEO succession as it is seen as a catalyst to take the organization in new directions. Specifically, the selection of the new outside CEO has often been interpreted as a stark indicator of the organization's need for change (Vancil, 1987). However, despite the plethora of empirical studies on the effects of CEO succession on the organization, there is a lack of consensus on the linkage between the new CEO origin and the magnitude of the subsequent strategic changes. In particular, we know very little about the mechanism through which the origin of the new CEO impacts the strategic course of actions at the firm-level. The implicit or explicit assumption that has been made is that the changes in managerial characteristics directly lead to such organizational outcomes.

In this study, we draw from the attention-based view of the firm (Ocasio, 1997) and attempt to examine the intermediary process in the causal chain. Specifically, we examine why some firms tend to adhere to the existing form of distributed attention instead of displaying attentional shift following managerial succession. We also seek to improve the conceptualization of CEO origin, often overly simplified as a dichotomy of between an ‘insider’ versus ‘outsider’, by proposing and testing the measure of new CEO outsiderness as a continuum (Karaevli, 2007). Furthermore, we also explore the effects of the predecessor CEO that may attenuate the impact of CEO turnover on attentional shift. Influence of the predecessor may remain within and outside the organization even after the former CEO discontinues his official ties with the focal firm, as he serves as a salient reference point both for the organization members and the newly appointed CEO. We argue that the interplay of his prior performance and status would impact the degree to which the firm adheres to the established attentional frame, which in turn would hinder the level of subsequent strategic change.

We test our hypotheses using a dataset comprised of U.S. large manufacturing firms between 1995 and 2007. Our results provide support for most of our hypothesis, indicating that the new CEO origin is positively associated with attentional shift at the firm-level. In other words, the more outsider a new CEO is, the less the firm tended to stick to the existing cognitive schemata. However, the relationship actually becomes negative when the predecessor’s performance is high, implying that the more outsider a new CEO, the less the firm tended to shift its organizational attention if the prior performance under the predecessor CEO was high. Interestingly, our additional analysis also suggest that predecessor’s high status modified the extent to which the organizational attention shifted when the prior performance was poor. This implies that status alone is not a sufficient driver, but must be combined with other performance indicators to be interpreted in the context of CEO succession. To date, our study is the first to examine the CEO-level attributes on post-succession organizational attention, which enables us to further our understanding of mechanisms through which succession affects organizational adaptation.

2. Theory and Hypotheses

2.1. Attentional Change at the Organization Level

According to the attention-based view of the firm, organizations can be viewed as 'systems of distributed attention' as organizational choices are made through routinized process, utilizing distributed issues and answers (Cyert & March, 1963; Ocasio, 1997). Such routine is based on the agreement among organizational members and is entrenched in communication channel and culture. The existence of attentional template within the focal firm leads to reproduction and exploitation, which in turn enhances the legitimacy of the current system.

The attentional structure of the firm is expected to change in response to changes in the external and internal environment. Studies have examined how changes in industry, such as industry velocity (Nadkarni & Barr, 2008) or interorganizational relationships (Maula, Keil, & Zahra, 2013) lead to organization's attentional focus. As for the internal factors, researchers have shown that changes in executives' or board of directors' characteristics or compensation are associated with changes in attentional orientation (Cho &

Hambrick, 2006; Tuggle, Schnatterly, & Johnson, 2010).

However, such changes are not reflected immediately due to structural inertia. Firms also vary in the degree of attentional change following the same external or internal shock. Once formed, the embedded codes are more valued than others and in turn bias the firm in the direction of the current strategy (March, 1991). Furthermore, the degree and the speed of attentional change in response to the new input depend on the degree of consensus among members and other organizational factors. Hence, organizations display delay in adjusting attentional form following environmental change. Unlike the previous studies on managerial attention that had examined the attentional orientation or categories (e.g., Cho & Hambrick, 2006; Kaplan, 2008; Nadkarni, Chen, & Chen, 2015), we study the overall portfolio of the distributed issues and answers within the organization. This allows us to theorize and measure the degree of attentional shift in organizations as a function of environmental, organizational, and managerial changes.

2.2. CEO Origin and Attentional Change at the Organization Level

In organizations, CEOs are the most influential figure with power and authority to lead (Hambrick & Mason, 1984). They affect attentional template at the organization level via communication or actions (Yadav, Prabhu & Chandy, 2007). In doing so, they – intentionally or unintentionally

– reflect their cognitive bias that are shaped by experiences and values (Cho & Hambrick, 2006). Accordingly, psychological properties of the CEOs serve to filter the information and drive the activities of the firm (Ocasio, 1997). As such, whenever a firm undergoes a CEO turnover, the attentional configuration at the organizational level is expected to change, as CEOs as individuals differ in noticing and interpreting various stimuli. We believe that such change will be greater in magnitude as the degree of a new CEO's outsiderness increases for the following reasons: First, outsider CEOs bring relatively new cognitive resources since they have less experience in the focal firm and industry and thus apply different lens through which they see business problems (Beckman, 2006). Furthermore, they are less reluctant to deviate from current organizational norm as they have not formed strong ties with the incumbent executives and hold little psychological investment in the status quo (Hambrick, Geletkanycz & Fredrickson, 1993). Second, outsider CEOs are generally selected when the organization is in the need for change. This means that a new CEO recruited from outside faces a greater expectation to deviate from the inertial path. Hence new outside CEOs are more likely to engage in new initiatives to demonstrate their worthiness and establish their legitimacy as the new leader. In sum, new CEOs with high degree of outsiderness are more likely to shift the pattern of organizational attention to the new direction compared to their insider equivalents following CEO succession. Therefore:

Hypothesis 1: Ceteris paribus, the new CEO outsiderness will be positively associated with attentional shift at the organization level.

2.3. The Moderating Role of the Predecessor

While new outsider CEOs generally have more motivation and resources to initiate change, they differ in the amount of actual change they can bring to the focal firm, as the latitude of action they can exercise is constrained by contextual forces (Hambrick & Finklestein, 1987). Among the myriad of factors that determine the level of managerial discretion, the role of predecessor attributes has been overlooked in the extant literature, with only a few exceptions (Quigley & Hambrick, 2012). Predecessor CEOs can exert both explicit and implicit constraint to the new CEO even when they completely leave the focal firm without any official ties. In some cases, a former CEO remains as a prominent candidate after he steps down from the job and returns to the focal firm, as in the cases of Michael Dell of Dell and Howard Schultz of Starbucks. Therefore, we believe that predecessor's attributes serve as a reference point and influences the performance expectation that the new CEO faces.

The perceived influence of the predecessor will become more salient in case the new CEO's outsiderness is high since they enter the position at a greater disadvantage of firm-specific knowledge and understanding (Gabarro, 1987; Karaevli, 2007). The greater the new CEO outsiderness, the more likely that the predecessor will be used as a reference point both for the new CEO himself and the internal executives. First, new outsider CEOs are relatively less aware of the organizational norm, and their primary repertoire of issues and answers are likely to be different. They face high pressure to promptly show their worthiness by dealing with problems that are foreign to them while they learn about the organization (Gabarro, 1987). Faced with great uncertainty and complexity without sufficient power base early in his tenure, a new outside CEO would tend to simplify his cognitive demand and refer to the predecessor when determining his own actions (Tversky & Kahneman, 1974). Second, board members and other organizational members also lack access to all the relevant information about the new outside CEO, and hence they also resort to the readily-available reference point – the predecessor CEO – when evaluating the successor.

2.4. Predecessor Performance

Among the various attributes of the predecessor, performance is the most salient and widely used criteria of CEO efficacy (Puffer & Weintrop, 1999). If the predecessor's recent performance has been low, it signals the inappropriateness of the current strategy (Boeker & Goodstein, 1993). This is consistent with the behavioral theory of the firm which suggests that the organization will engage in 'problemistic search' in case of poor performance (Cyert & March, 1963). Also, the going-in mandate for the new outsider CEO is likely to be turning the organization into right direction and realigning the current strategy with the external environment, and the outsider successor's foreign experience and perspective will gain more support within the organization. This will allow the new outsider CEO to have greater influence in shifting the organizational attention in a short period of time.

On the other hand, good performance induces the reinforcement of the existing way of operation and the belief in the current system (Hambrick et al., 1993). Even when the new CEO attempts to utilize his new cognitive resources to drive change, other organizational members will be reluctant or even resistant to such initiatives because they do not feel the need for change. Some may also explicitly criticize the new outsider CEO and resort to the inertial path. Hence it will take longer time for the new CEO to persuade other executives and reach consensus on the direction of change. Also, faced with the pressure to demonstrate the efficacy, new outsider CEO himself may resort to the predecessor's strategies as a proven repertoire since they lack firm and industry-specific knowledge.

Hypothesis 2: The relationship between new CEO origin and attentional shift at the organization level is moderated by the predecessor's performance. In other words, the effects of the new CEO's outsiderness on attentional shift would be smaller when the firm performance associated with the predecessor is high.

2.5. Predecessor Status

Besides the performance level of the predecessor, status is another crucial factor that influences the expectation for the new CEO. Status in this context refers to the "social ranking and esteem accorded to an executive or board member in comparison to other members of the corporate elite" (Flickinger, Wrage, Tuschke, & Bresser, 2016). Status influences how the observers interpret the focal actor's actions and the attitude that the audience harbor toward the individual. Depending on the status of the predecessor, other remaining corporate elites will have different perception on the predecessor's repertoires, which in turn will influence the belief in the current system.

In addition to the predecessor's performance, we believe that the status of the predecessor CEO will play a role in the linkage between CEO origin and attentional shift at the firm-level. Studies have shown that the observers tend to have goodwill toward the high-status actor and his actions (Adler & Kwon, 2002; Zajonc, 1980). Furthermore, actions of the high-status actors are considered as beneficial for the organization with genuine intention (Giordano, 1983). In the context of CEO succession, organization members are likely to view strategies of the high-status predecessor as positive and legitimate, and thus will be more reluctant to erode from the predecessor's legacy and hesitant to support the new CEO's initiatives (Wiesenfeld, Wurthmann, & Hambrick 2008). As the organization members use the same schema they had toward high-status predecessor to interpret new CEO's actions, they will expect the new CEO to conform to the predecessor's repertoires rather than deviating from the status quo (Slavich & Castellucci, 2016). Such tendency will be greater when the new CEO is an outsider, as observers have relatively little information and relative schema to judge the quality and intention of his initiatives.

In a similar vein, a new outsider CEO would find it more difficult to challenge the legacy that the high-status predecessor has left behind. Therefore, he will be more receptive to accepting the existing cognitive template to legitimize his position and to enhance his own survival rate early in his tenure. Conversely, if the predecessor's status is low, the firm – as well as the newly appointed CEO – would be less bound by the prior state regardless of the actual performance. This, in turn, lowers the expectation for the new outside CEO, allowing him to exert more discretion and engage in more scanning of stimuli that are more congruent with his prior knowledge base and belief system. Thus, we hypothesize the following:

> *Hypothesis 3: The relationship between new CEO's origin and attentional shift at the organization level is moderated by the predecessor's status. The degree of a new CEO's outsiderness will be negatively associated with attentional shift at the firm-level when the status of the predecessor is high.*

2.6. Three-Way Interaction of New CEO Origin, Predecessor Performance and Status

We believe that, in addition to the independent effects, the prior performance and status of the predecessor CEO would have an interactive effect on the degree to which an organization undergoes attentional shift following a CEO succession. When a new CEO joins a firm, the degree to which he can proactively set a new course of strategic actions will be influenced by the organizational level constraints he faces. In situations where the predecessor CEO was perceived to be both high-status and competent, the newly appointed CEO would face the highest level of obstacles to deviate from prior strategic course of actions. The organization will show greater tendency to stick to the predecessor's perspective, and new CEO will have more difficulty to shift the organizational attention. Likewise, in case the predecessor's both the performance and status were low, organizational members would not credit new CEO for conformity, allowing the new CEO to have more discretion in bringing changes in a way of noticing stimuli.

> *Hypothesis 4: There will be a three-way interaction among the new CEO origin, predecessor's performance and status. Specifically, the negative association between new CEO outsiderness and attentional shift would be the strongest when both predecessor's performance and status are high.*

3. Methods

3.1. Sample and Data Sources

We tested our hypotheses using a sample based on publicly-traded U.S. manufacturing firms between the years 1995 and 2007, inclusive. The full sample that we drew from COMPUSTAT includes all firms with annual sales revenues greater than $100 million, ultimately yielding 95 companies and 1136 firm-years. We then identified all succession events and further constrained our sample by excluding interim CEOs as well as the CEOs who served for less than a year. We compared the information available on Execucomp database with other web-based resources including annual reports, proxy statements, press releases and official company websites to confirm the exact date of predecessor turnover and new CEO succession. Our final sample included 113 succession observations from 76 firms.

3.2. Measures

3.2.1. Dependent Variable

We took the topic modeling approach and conducted a content analysis to capture attentional shift at the organization level by using QDA Miner and Wordstat6. In doing so, we compared the company filings the one year before and after the succession event, excluding the year of succession. Specifically, we used Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of 10-K filings, as it provides the focal firm's perspective on past business results and reflects attentional template through use of words to address the risks and economic conditions that the focal firm faces. We verified that the CEOs on each company filings are the predecessor and the successor CEOs of our interest. We then computed the similarity index of two company filings in terms of distribution of codes, which represents a "hidden structure" of documents (Blei, 2012), and subtracted it from 1. This inductive approach allowed us not to specify categories for each word a priori, and it also corresponds with our theoretical construct of attentional change that studies the shifting form of distribution of issues and answers within the organization.

3.2.2. Independent Variable

We adopt the concept of new CEO outsiderness from Karaevli (2007) and operationalize it as a continuum ranging from complete outsiders with no experience in the focal firm and industry to those with a greater combination of firm and industry tenure. We first verified the number of years each CEOs spent in focal firm and industry and computed the variable by summing the inversed standardized firm and industry tenure, so that the greater value indicates greater outsiderness. As Karaevli (2007) explains, this measurement put twice more weight on firm tenure, which is consistent with the previous literature that put heavier weight on firm experience when determining the new CEO origin (Finkelstein, Hambrick, & Cannella Jr., 2009).

3.2.3. Moderating Variables

In measuring predecessor performance, we chose to use total shareholder returns (TSR), a well-established indicator of the performance. We operationalized it as industry-adjusted TSR averaged during two years before the succession, excluding the year of succession. TSR was industry-adjusted by subtracting the average value of the industry for each year, using all COMPUSTAT firms in the two-digit industry. Predecessor status was measured as number of outside directorship held by the predecessor by the time he left the office. Outside directorship is a common measure to capture individual’s status and social capital, as it reflects the social positon held by a focal actor (Flickinger et al., 2016).

3.2.4. Control Variables

We included number of control variables in our study to rule out alternative explanations. First, we included dummy variables for calendar year and two-digit SIC industry code to control for the general economic tendencies. We controlled for firm-specific characteristics. We controlled inertial tendencies of firms by including firm size and firm age (Hannan & Freeman, 1984), the number of employees and the number of years since the firm’s founding year.

We further included individual-level controls of predecessor and successor CEOs that may affect their influence and ability. Predecessor elite education was included as a dummy variable, equal to 1 if the predecessor holds a bachelor's degree or above from prestigious universities in the U.S[①]. Predecessor founder status was controlled as it reflects the unique power of the CEO (Arthurs & Busenitz, 2003), coded 1 if the predecessor CEO was founder and 0 otherwise. Likewise, Predecessor retained as chair was coded 1 if the predecessor CEO was retained as chair in the year when we measured dependent variable. Predecessor dismissal was measured as a categorical variable: (0) mandatory retirement, (1) voluntary turnover, and (2) ousted by the board. We compared lists of press releases and industry journals to verity the cause of predecessor dismissal. We also controlled Predecessor CEO tenure and non-CEO tenure at the focal firm by counting the number of the years, as it reflects the predecessor's 'insiderness' and firm-specific knowledge. Predecessor media was controlled as it can influence how other executives and new CEOs interpret the predecessor's repertoires, and was measured by counting the number of newspaper articles that the predecessor was mentioned for three years prior to the succession event. For the new CEO characteristics, we controlled New CEO duality, level of education, elite education and age. New CEO duality was coded 1 if the new CEO was also the chairman of the board by the time we measured

① Brown, MIT, Columbia, Northwestern, Cornell, Stanford, Dartmouth, Berkeley, Harvard, UCLA, Princeton, Chicago, University of Pennsylvania, Michigan, Yale the dependent variable. New CEO level of education was measured by an ordinal scale, consistent with past research (e.g. Datta & Rajagopalan, 1998): (1) high school, (2) some college, (3) undergraduate degree, (4) some graduate school, (5) Master's degree, (6) attended doctoral program, and (7) doctoral degree. New CEO elite education was measured in the same was as that of predecessor's and New CEO age was measured as the number of years from the birth to the succession year.

3.3. Data Analysis

Since our study deals only with firms that experienced succession during the observation period, we had to correct for the selection bias as succession event is more likely to occur in poorly performing firms. In addition, we had to correct for the unobserved heterogeneity that affects both the CEO succession and attentional change at the organization level. In order to address the endogeneity issue and selection bias, we adopted Heckman two-stage model, which is a widely-used technique (Heckman, 1979). Specifically, we first estimated the likelihood of CEO succession for the full sample (N = 1136). We then incorporated the parameter to a second-stage ordinary-least-squares (OLS) hierarchical regression model to estimate the attentional change for firms that experienced succession. The State 1 equation took the following form:

$\text{Succession}_t = a + b_1 \text{ roa} + b_2 \log(\text{sales}) + b_3 \text{ tsr} + b_4 \text{ independent directors}$

$+\ b_5 \text{ boardsize} + b_6 \text{ separate CEO/board chair} + b_7 \text{ predecessor founder status}$

$+\ b_8 \text{ length prior interval} + b_9 \text{ time since last event} + b_{10} \text{ number of prior events}$

$+\ [b_{11} \text{ industry dummies}] + [b_{12} \text{ year dummies}] + e$

(independent variables were lagged 1 year)

Consistent with the previous studies (e.g. Karaevli 2007; Zajac & Westphal 1996), we included three additional control variables to minimize the consequences of potentially violating the assumption that a firm's likelihood of succession in a given year is independent of its prior event history (Allison, 1984): (1) the length of the prior interval between successions, measured in years; (2) the length of the time since the prior succession, measured in years; (3) the number of prior successions observed during the time period. Table 2 presents the result of the 1st stage of the Heckman selection.

4. Results

Table 1 reports the means, standard deviations, and correlations of variables for the OLS model, and Table 3 reports estimates of attentional change models. Model 1 reports the results with only the control variables included. Model 2 added the effects of new CEO outsiderness. Model 3 reports the results with the addition of the two-way interaction effect of the new CEO outsiderness and predecessor performance. Model 4 reports the results from adding two-way interaction effects of the new CEO outsiderness and predecessor status. Finally, Model 5 reports the result with the addition of the three-way interaction effect of the new CEO outsiderness, predecessor performance, and predecessor status. Among the control variables, only the firm age was negatively and marginally significant on attentional shift at the organization level (Model 1).

Hypothesis 1 predicted that new CEO outsiderness will be positively related to attentional change. The results on Model 2 of Table 2 show that Hypothesis 1 was marginally supported ($p<0.10$). Thus, we generally found that the more outsider the newly appointed CEO was, the more the firm underwent attentional shift after the succession.

For Hypotheses 2, we had predicted that the new CEO outsiderness will be more negatively associated with attentional shift when the predecessor performance was high. As can be seen in Model 3, the two-way interaction term of new CEO outsiderness and predecessor performance was marginally significant ($p<0.10$), providing support for Hypothesis 2, as indicated in Figure 1. However, the moderating effect of predecessor status was not statistically significant in Model 4, although it was in the expected direction.

The three-way interaction effect of new CEO outsiderness, predecessor performance, and predecessor status was tested in Model 5. The addition of the three-way interaction term significantly increased the explanatory power of the equation over Model 4; Hypothesis 4 was supported ($p<0.05$).

To advance further interpretations, we also employed a slope difference test that computes pairwise differences in simple slopes with Bonferroni correction (Dawson & Richter, 2006). This examines whether differences between pairs of slopes are significantly different from zero. The slopes that were statistically differentiated were the ones with high-status predecessors: high status/high performance and high status/low performance. Predecessor's high status enhanced the effect of the Hypothesis 2, while predecessor's low status was not statistically significant. Figure 2 shows the result. As predicted, attentional change at the organization level was negatively associated with new CEO outsiderness when both the predecessor's performance and status were high. Another slope, which we did not have a priori hypothesis, showed that new CEO outsiderness was positively associated with attentional change when the predecessor's status was high but performance was low. In other words, firms tended to undergo a greater attentional shift when the newly appointed CEO was more of an outsider; furthermore, this effect was magnified when the prior firm performance associated with the predecessor low, but the predecessor himself was of high status.

Combining with the insignificant support for Hypothesis 3 in Model 4, we argue that while high status may lead to positive evaluation of an actor when there exists uncertainty in the performance or quality, it does not have main effect when the actual performance is known. Since high-status actors tend to garner more attention (Merton, 1968), they are more likely to be praised for high performance, while at the same time more likely to be scrutinized and negatively evaluated for low performance. In case of low performance, there exists little uncertainty for quality of predecessor, and this may weaken the relationship between high-status and legitimacy of predecessor's strategies. Therefore, organization may shift to new CEO's strategies instead.

We also conclude that this is a result of a new outsider CEO's effort to detach himself from the poor prior performance and to establish his own legitimacy and latitutde within the organization. New CEOs with greater outsiderness perceive more uncertainty as they enter into their positions and have more concern about their early survival prospects (Finkelstein et al., 2009). Consistent with the behavioral perspective of firms (Cyert & March, 1963), when the prior performance is poor, there would be a greater motivation to deviate from the predecessor's legacy. For one, the CEO himself would be apprehensive about the potential reputation loss; the fear of being ousted by the board within the first few years would be formidable as well, as they are relatively less established in the focal firm and industry compared to the high-status predecessor. Therefore, to gain positive evaluations from the board and other internal stakeholders, a new CEO would have greater incentive to undertake changes at the firm. In turn, this would be manifested as a greater shift in organizational attention.

TABLE 1. Correlation Table

		Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Attentional change	0.21	0.18																	
2	Firm size	1.04	0.71	-0.10																
3	Firm age	71.26	43.11	-0.03	0.51															
4	New CEO education level	4.24	1.23	-0.03	0.15	0.06														
5	New CEO age	51.35	6.37	0.03	0.22	0.27	-0.01													
6	New CEO duality	0.47	0.50	-0.11	0.21	0.23	-0.01	0.25												
7	New CEO elite education	0.37	0.49	-0.08	0.11	0.20	0.39	-0.07	0.08											
8	Predecessor founder status	0.12	0.32	-0.01	-0.19	-0.31	0.00	0.02	-0.17	-0.11										
9	Predecessor retained as chair	0.25	0.43	0.16	-0.03	-0.11	-0.01	-0.07	-0.54	-0.10	0.18									
10	Predecessor elite education	0.32	0.47	-0.10	0.09	0.16	-0.04	0.05	0.08	0.14	0.05	0.00								
11	Predecessor dismissal	0.89	0.78	-0.08	-0.12	-0.08	0.03	-0.07	-0.01	0.06	-0.09	-0.24	0.04							
12	Predecessor media	29.58	70.87	-0.04	0.38	-0.05	0.01	0.03	0.05	-0.01	0.08	0.10	0.19	0.14						
13	Predecessor non-CEO tenure	11.75	11.86	0.17	0.41	0.27	0.01	0.19	0.10	0.07	-0.11	0.03	-0.04	-0.30	-0.01					
14	Predecessor CEO tenure	8.96	7.58	-0.05	-0.01	-0.02	0.07	0.07	-0.09	0.01	0.50	0.28	0.08	-0.39	-0.01	-0.04				
15	Predecessor status	1.35	1.33	-0.10	0.38	0.31	-0.02	-0.04	0.24	0.11	-0.35	-0.03	-0.01	-0.26	-0.02	0.18	-0.04			
16	Predecessor performance	-89.61	629.83	0.11	-0.02	-0.05	0.10	-0.06	-0.11	0.09	0.04	0.06	0.06	-0.14	0.01	0.08	0.05	-0.06		
17	New CEO outsiderness	-29.18	19.99	0.15	-0.23	-0.11	0.08	-0.27	0.10	0.12	-0.05	-0.15	-0.07	0.26	-0.10	-0.17	-0.28	-0.12	-0.15	
18	Heckman value	0.17	0.07	0.02	-0.05	0.02	-0.11	-0.01	-0.07	0.10	0.00	0.01	0.01	0.08	-0.06	-0.04	0.14	0.16	-0.06	-0.03

(Year and industry dummies are excluded)

TABLE 2. Result of Heckman Selection Stage 1 of CEO Succession

Succession	
ROA	- 0.320 **
Sales (log)	0.019
TSR	0.000
% of independent directors	- 0.140
Board size	0.000
CEO/chair separate	0.023
Predecessor founder status	-0.079 *
Length prior interval between successions	-0.001
Time since last succession	0.002
Number of prior successions observed during the time period	-0.028

N=1136, * p<0.05; ** p<0.01

TABLE 3. Results of Hypothesis Testing Using Hierarchical Regression Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5
Firm size	-0.381	-0.285	-0.229	-0.209	-0.198
	(-1.55)	(-1.14)	(-0.93)	(-0.84)	(-0.79)
Firm age	0.006^{+}	0.005	0.006	0.005	0.006^{+}
	(1.67)	(1.48)	(1.59)	(1.48)	(1.73)
New CEO education level	-0.002	-0.018	-0.027	-0.026	-0.025
	(-0.02)	(-0.19)	(-0.28)	(-0.27)	(-0.26)
New CEO age	0.014	0.023	0.029	0.029	0.023
	(0.79)	(1.23)	(1.53)	(1.55)	(1.25)
New CEO duality	0.140	0.055	0.115	0.153	0.138
	(0.50)	(0.20)	(0.41)	-0.53)	(0.49)
New CEO elite education	-0.271	-0.289	-0.343	-0.364	-0.461^{+}
	(-1.02)	(-1.10)	(-1.32)	(-1.38)	(-1.77)
Predecessor founder status	0.141	0.059	0.113	0.108	0.068
	(0.31)	(0.13)	(0.26)	(0.24)	(0.16)
Predecessor retained	0.168	0.170	0.183	0.218	0.266
	(0.53)	(0.55)	(0.60)	(0.70)	(0.87)
Predecessor elite education	-0.021	-0.012	0.036	0.035	0.046
	(-0.09)	(-0.05)	(0.15)	(0.15)	(0.20)
Predecessor dismissal	-0.058	-0.096	-0.037	-0.025	-0.054
	(-0.35)	(-0.58)	(-0.22)	(-0.15)	(-0.33)
Predecessor media	-0.030	-0.018	-0.063	-0.075	-0.091
	(-0.23)	(-0.14)	(-0.49)	(-0.58)	(-0.71)
Predecessor_non-CEO tenure	0.026^{*}	0.025^{*}	0.022^{+}	0.022^{*}	0.024^{*}
	(2.35)	(2.24)	(1.96)	(2.00)	(2.19)
Predecessor_CEO tenure	-0.018	-0.013	-0.017	-0.017	-0.016
	(-0.97)	(-0.67)	(-0.92)	(-0.88)	(-0.87)
Predecessor status	-0.155	-0.146	-0.137	-0.154	-0.319
	(-1.08)	(-1.03)	(-0.98)	(-1.08)	(-1.64)
Predecessor performance	0.159	0.183	1.993^{+}	1.998^{+}	2.927^{*}
	(1.29)	(1.50)	(1.90)	(1.90)	(2.56)
Heckman value	1.552	1.716	2.237	2.451	3.393^{+}
	(0.82)	(0.92)	(1.20)	(1.30)	(1.76)
New CEO outsiderness		0.211^{+}	0.326^{*}	0.321^{*}	0.300^{*}
		(1.69)	(2.33)	(2.28)	(2.09)
New CEO outsiderness x Predecessor performance			-1.248^{+}	-1.259^{+}	-0.741
			(-1.74)	(-1.75)	(-0.84)
New CEO outsiderness x Predecessor status				-0.092	0.266
				(-0.77)	(1.28)
Predecessor performance x Predecessor status					1.026
					(0.76)
New CEO outsiderness x Predecessor performance x Predecessor status					-3.116^{*}
					(-2.18)
_cons	-0.496	-1.072	-1.866	-1.973	-2.187
	(-0.40)	(-0.85)	(-1.41)	(-1.48)	(-1.62)
Model adjusted R^2	0.024	0.048	0.074	0.069	0.106

N = 113, + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

FIGURE 1. The Moderating Effect of Predecessor's Performance

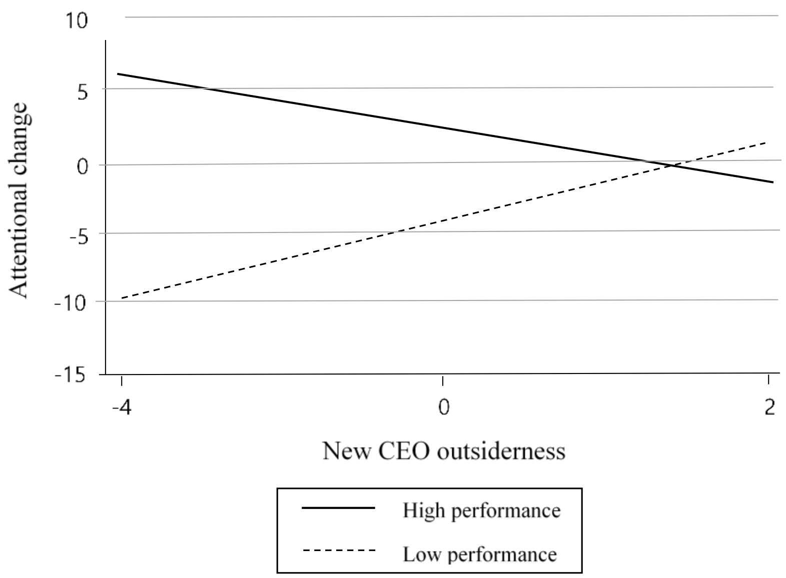
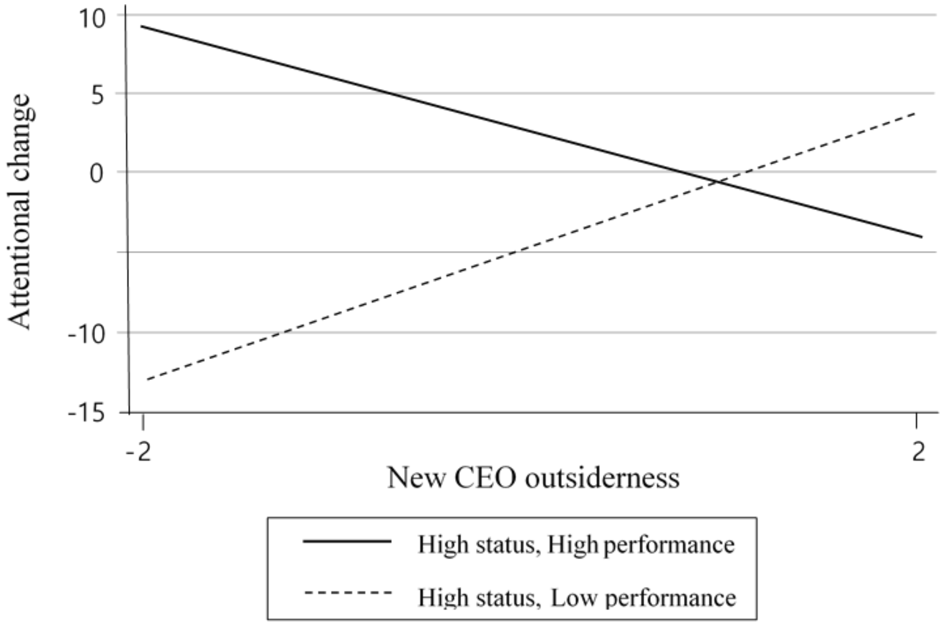


FIGURE 2. Three-way Interaction of Outsiderness, Performance, and Status



5. Discussion

Although past studies on CEO succession has deepened understanding of the linkage between succession event and subsequent strategic and performance change, little is known about the mechanism through which succession brings such organizational outcome. This has led to theoretical inconsistency on the outcome of succession event. Furthermore, studies have paid less attention to the role of predecessor in restricting the degree of managerial discretion of the new CEO, providing insufficient explanation on why new outsider CEOs differ in amount of change they bring to the organization. In this study, we attempted to close this gap in the literature by testing the following questions: How does CEO succession affect post-succession strategic or performance change? How does the CEO's origin, particularly his outsiderness, impact the magnitude of organizational attention following the succession? How does the predecessor's performance and status affect the degree of attentional change after the CEO turnover?

Our results based on a sample of U.S. large manufacturing firms indicate that organizations do not unitarily undergo changes following new outsider CEO succession; instead, they tend to adhere to the existing form of distributed attention, manifested in a low degree of attentional change. Specifically, we first theorized and found that new CEO outsiderness is positively related to attentional shift at the organization level (Hypothesis 1), but the relationship was actually negative when the prior performance was high (Hypothesis 2). In other words, outsider CEOs stick to the existing form of attention and predecessor's repertoires. Furthermore, such tendency is the strongest when both the predecessor's performance and status are high (Hypothesis 4), as there is a greater pressure to not deviate from a competent and high-status predecessor. On the other hand, when the high-status predecessor was associated with poor performance, however, the organization underwent an attentional shift in a greater magnitude. We surmise that this is because the poor performance was attributed to the predecessor, leaving less room for interpretation for the lackluster performance. Subsequently, the new CEO would have even greater motivation to deviate away from the existing course of strategic actions; attentional shift at the organizational level would then increase.

Our results shed light on the extant literature in several ways. First, this study fills the void in the literature on CEO successions by taking the attention-based perspective of firms. No empirical studies, to the best of our knowledge, have examined the CEO-level attributes on post-succession organizational attention. As organizational changes, driven by shifts in organizational attention, lead to performance consequences (Kaplan, 2008), the results of this study will help our understanding of mechanisms through which succession affects organizational adaptation.

Second, our study offers an additional understanding on the phenomenon of CEO successions by examining the linkage between the attributes of the former CEO and the level of attentional shifts that occur at the firm-level after a successor takes over. Specifically, the findings of our study showed that those attributes of the former CEO moderate the relationship between the outsiderness of the new CEO and the degree of attentional change in the post-succession organization.

Third, this study contributes to the literature on status by investigating the how the interplay of predecessor performance and status provide different level of constraint, and in turn influence the organizational outcome. High status of the predecessor CEO, combined with positive prior performance, provides the most fertile platform for conformity. Somewhat counter-intuitively, however, the results also show that when a high-status predecessor was associated with low performance, the newly appointed CEO had the greatest motivation to take charge and set new courses of actions. This gave arise to the highest level of attentional shift at the organizational level.

Fourth, it contributes to the literature on CEO origin by operationalizing new CEO outsiderness as a continuous variable. Past studies have oversimplified the new CEO outsiderness by viewing it as a dichotomous variable based on his prior ties with the firm; this, in turn, provided an inaccurate conclusion that organizational change following outside CEO succession simply depends on his in- or out-group membership. In this study, we refine this by adopting a measurement suggested by

Karaevli (2007), which goes above and beyond a traditional binary distinction.

This study is not without limitations, which suggest opportunities for future research. First, our sample is limited to U.S. large manufacturing firms, which may limit the extent to which our results can be generalized. It is possible that our results hold true only in large firms as the size of the firm would heighten the cognitive burden of both the organizational members and the newly appointed CEO. Future studies may investigate whether our findings would be applicable to small or private firms, as well as in other countries with different business regularities and institutional contexts.

Second, this study only investigates the attentional change at the organization level after a year that the new CEO takes office, as we omitted any consideration of subsequent strategic or performance change in an effort to maintain analytic focus. Future research may investigate how degree of attentional shift changes over time, as the new CEO gains power and knowledge within the focal firm and its subsequent outcome. Another intriguing question is whether showing low degree of attentional shift after succession buffers the firm from maladaptation. Several researchers have argued that slow learning, or focus on exploitation is more beneficial for a successful adaptation compared to fast learning (Greve, 2002; Posen & Levinthal, 2012). Integrating these findings with attentional shift may further our understanding on organizational adaptation.

Third, the documents we used to measure the attentional change at the organization level using topic modeling approach is limited to 10-k filings. However, the use of common and official document allowed us to compare many firms in different industries over several years. An extension of our study, if possible, would be utilizing other corporate texts or public documents to measure organizational attention.

In conclusion, our study is the first to investigate the effects of new CEO origin on attentional shift at the organizational level, as well as how the interplay of predecessor performance and status magnify or constrain that relationship. We hope that our findings contribute toward a more fine-grained understanding of how the CEO succession impacts organizational outcomes.

References

Adler, P. S., & Kwon, S.W. 2002. Social capital: Prospects for a new concept. ***Academy of Management Review,*** 27: 17-40

Allison, P.D. 1984. ***Event history analysis.*** Sage: Newbury Park, CA.

Arthurs, J. D., & Busenitz, L. W. 2003. The boundaries and limitations of agency theory and stewardship theory in the venture capitalist/entrepreneur relationship. ***Entrepreneurship Theory and Practice,*** 28: 145-162

Beckman, C. M. 2006. The influence of founding team company affiliations on firm behavior. ***Academy of Management Journal,*** 49: 741-758

Blei, D. M. 2012. Probabilistic topic models. ***Communications of the ACM,*** 55: 77-84

Boeker, W., & Goodstein, J. 1993. Performance and successor choice: The moderating effects of governance and ownership. ***Academy of Management Journal,*** 36: 172-186

Cho, T. S., & Hambrick, D. C. 2006. Attention as the mediator between top management team characteristics and strategic change: The case of airline deregulation. ***Organization Science,*** 4: 453-469

Cyert, R. M., & March, J. G. 1963. ***A behavioral theory of the firm.*** Englewood Cliffs, NJ: Prentice Hall

Datta, D. K., & Rajagopalan, N. 1998. Industry structure and CEO characteristics: An empirical study of succession events. ***Strategic Management Journal,*** 19: 833-852

Dawson, J.F., & Richter, A. W. 2006. Probing three-way interactions in moderated multiple regression: Development and application of a slope difference test. ***Journal of Applied Psychology,*** 91: 917-926

Finkelstein, S., Hambrick, D. C., & Cannella Jr., A. A. 2009. ***Strategic leadership: Theory and research on executives, top management teams, and boards.*** New York, NY: Oxford University Press

Flickinger, M., Wrage, M., Tuschke, A., & Bresser, R. 2016. How CEOs protect themselves against dismissal: A social status perspective.

Strategic Management Journal, 37: 1107-1117

Gabarro, J. J. 1987. ***The dynamics of taking charge.*** Boston, MA: Harvard Business School Press

Giordano, P. C. 1983. Sanctioning the high-status deviant: An attributional analysis. ***Social Psychology Quarterly,*** 46: 329-342

Greve, H. R. 2002. Sticky aspirations: Organizational time perspective and competitiveness. ***Organization Science,*** 13: 1-17

Hambrick, D. C., & Finklestein, S. 1987. Managerial discretion: A bridge between polar views of organizational outcomes. ***Research in Organizational Behavior,*** 9: 369-406

Hambrick, D.C., Geletkanycz, M.A., & Fredrickson, J.W. 1993. Top executive commitment to the status quo: Some tests of its determinants. ***Strategic Management Journal,*** 14: 401-418

Hambrick, D.C., & Mason, P.A. 1984. Upper echelons: The organization as a reflection of its top managers. ***Academy of Management Review,*** 9: 193-206

Hannan, M. T., & Freeman, J. 1984. Structural inertia and organizational change. ***American Sociological Review,*** 49: 149-164

Heckman, J. 1979. Sample selection bias as a specification error. ***Econometrica,*** 47: 153-161

Kaplan, S. 2008. Cognition, capabilities, and incentives: Assessing firm response to the fiber-optic revolution. ***Academy of Management Journal,*** 4: 672-695

Karaevli, A. 2007. Performance consequences of new CEO 'outsiderness': Moderating effects of pre- and post-succession contexts. ***Strategic Management Journal,*** 28: 681-706

March, J. G. 1991. Exploration and exploitation in organizational learning. ***Organization Science,*** 2: 71-87

Maula, M. V. J., Keil, T., & Zahra, S. A. 2013. Top management's attention to discontinuous technological change: Corporate venture capital as an alert mechanism. ***Organization Science***, 24: 926-947

Merton, R. K. 1968. The Matthew effect in science. ***Science***, 159: 56-63

Nadkarni, S., & Barr, P. S. 2008. Environmental context, managerial cognition, and strategic action: An integrated view. ***Strategic Management Journal***, 29: 1395-1427

Nadkarni, S., Chen, T., & Chen, J. 2016. The clock is ticking! Executive temporal depth, industry velocity, and competitive aggressiveness. ***Strategic Management Journal,*** 37: 1132-1153

Ocasio, W. 1997. Towards an attention-based view of the firm. ***Strategic Management Journal,*** 18: 187-206

Posen, H. E., & Levinthal, D. A. 2012. Chasing a moving target: Exploitation and exploration in dynamic environments. ***Management Science,*** 58: 587-601

Puffer, S. M., & Weintrop, J. B. 1991. Corporate performance and CEO turnover: The role of performance expectations. ***Administrative Science Quarterly,*** 36: 1-19

Quigley, T. J., & Hambrick, D.C. 2012. When the former CEO stays on as board chair: Effects on successor discretion, strategic change, and performance. ***Strategic Management Journal,*** 33: 834-859

Slavich, B., & Castellucci, F. 2016. Wishing upon a star: How apprentice-master similarity, status and career stage affect critics' evaluations of former apprentices in the haute cuisine industry. ***Organization Studies,*** 37: 823-843

Tuggle, C. S., Schnatterly, K., & Johnson, R. A. 2010. Attention patterns in the boardroom: How board composition and process affect discussion of entrepreneurial issues. ***Academy of Management Journal***, 53: 550-571

Tversky, A., & Kahneman, D. 1974. Judgment under uncertainty: Heuristics and biases. ***Science,*** 185: 1124-1131

Vancil, R. F. 1987. ***Passing the baton: Managing the process of CEO succession.*** Boston, MA: Harvard Business School Press

Wiesenfeld, B. M., Wurthmann, K. A., & Hambrick, D.C. 2008. The stigmatization and devaluation of elites associated with corporate failures: A process model. ***Academy of Management Review,*** 33: 231-251

Yadav, M. S., Prabhu, J. C., & Chandy, R. K. 2007. Managing the future: CEO attention and innovation outcomes. ***Journal of Marketing,*** 71: 84-101

Zajac, E. J., & Westphal, J. D. 1996. Who shall succeed? How CEO/board preferences and power affect the choice of new CEOs. ***Academy of Management Journal,*** 39: 64-90

Zajonc, R. B. 1980. Feeling and thinking: Preferences need no inferences. ***American Psychologist,*** 35: 151-175

국 문 초 록

CEO 외부성이 기업 주의 변화에 주는 영향

본 논문은 주의 기반 관점에 기반하여, 전임 최고경영자의 성과와 지위가 새로 부임한 최고경영자의 외부성과 기업 주의 변화 간의 관계에 미치는 영향에 대하여 연구하였다. 분석 결과, 외부성이 높을수록 기업 주의 변화 역시 높게 나타났으나, 전임 최고경영자의 성과가 높은 경우 변화의 정도는 감소하였다. 특히, 기업 주의 변화는 전임 최고경영자의 성과 및 지위가 모두 높은 경우 가장 적은 것으로 확인되었다.

주요어 : 최고경영자 승계, 관리적 주의, 주의 변화, 최고경영자 지위
학번 : 2015-20576