SCREENING EARNINGS CALLS FOR SIGNALS OF CEO SUCCESSION PLANNING

by

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(Under the Direction of Scott Graffin)

ABSTRACT

Despite the importance of CEO succession planning, firms do not typically disclose much information regarding their CEO succession plans due to fear of incurring proprietary costs. Building on screening theory and the skills based model of leadership, however, I theorize that firm stakeholders may screen firms' quarterly earnings calls for signals related to three important CEO succession plan details—whether the firm intends to promote an insider or outsider to CEO, when CEO succession will occur, and who might take over. Specifically, I argue that executive participation on quarterly earnings calls, as well as changes in executive participation on these calls over time, is related to the aforementioned outcomes. In addition, I also theorize that quarterly earnings call experience prior to becoming CEO impacts financial analysts' reactions to CEO succession announcements and that newly appointed CEOs with conference call experience will receive more favorable evaluations from analysts during the early stages of their tenure as CEO.

INDEX WORDS: CEO succession, Earnings calls, Screening theory, Corporate communication skills, Executives, Financial analysts, Signals

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CHAPTER 1

INTRODUCTION

"Only 3.3 percent of S&P 500 companies disclose CEO succession plans" - (Equilar, 2016: 1)

"I can't tell you any of the replacements [for confidentiality]" - Bob Greifeld, former CEO of Nasdaq (Feloni, 2017: 1)

Mounting evidence indicates that CEOs are of great importance to firms. Indeed, while the importance ascribed to CEOs has fluctuated over the years in accordance with scholars' focus on theories that emphasize external versus internal factors (Hoskisson, Wan, Yiu, & Hitt, 1999; Mahoney & McGahan, 2007), recent research suggests that CEOs have a great deal of influence on firm outcomes and that this influence is increasing over time (e.g., Quigley, Crossland, & Campbell, 2017; Quigley & Hambrick, 2015). As a result of this influence, it is vital for firms to not only have a high quality CEO in place, but also to have a succession plan that ensures a smooth transition upon the inevitable eventual exit of the standing CEO (Grusky, 1960; Vancil, 1987). In fact, research indicates that CEO succession planning has a significant impact on future firm performance (Berns & Klarner, 2017; Favaro, 2015; Worrell & Davidson III, 1987).

Despite the importance of CEO succession planning, firms tend not to disclose much detail regarding their CEO succession plans due to fear of incurring proprietary costs (Finkelstein, Hambrick, & Cannella, 2009: 179; Wiersema, 1995). Put simply, firms are concerned that disclosing important CEO succession plan details—such as whether the firm intends to promote an insider or outsider to CEO, when the succession will occur, and who might take over—will cause them to incur performance losses resulting from competitors having this

information (Busenbark, Lange, & Certo, 2017a; Lang & Sul, 2014). Most notably, and as the opening quotes allude to, the vast majority of large public companies are concerned about competitors poaching CEO succession candidates (Cannella & Shen, 2001; Feloni, 2017) or discerning the future strategic direction of the firm (Finkelstein et al., 2009; Whole Foods, 2014). As such, firm stakeholders generally do not have much insight into firms' CEO succession plans and thus seemingly cannot incorporate this important information into their evaluations of firms.

While firms typically do not formally disclose CEO succession plan details, building on screening theory (Stiglitz, 1975), I theorize that firm stakeholders may "screen" firms for clues related to these plans. Screening theory suggests that through screening, one party can analyze another party for indicators, or what the theory terms signals, that may be correlated with the unobservable characteristic or information they are hoping to ascertain (Stiglitz, 2002). This is not to be confused with signaling theory, where the term "signal is also used."[1] For instance, research suggests that employers screen job candidates for signals—such as their educational attainment—that may be related to their potential quality as an employee (Stiglitz, 1975; Weiss, 1995). Similarly, Stevens, Makarius, and Mukherjee (2015) suggest that when entering foreign markets, firms screen other firms for signals—such as their reputation—that might be correlated with their ability to be a good alliance partner. In this case, I theorize that external stakeholders can gain understanding regarding firm's CEO succession plans by screening them for signals that might be correlated with the aforementioned important CEO succession plan outcomes—whether the firm intends to promote an insider or outsider to CEO, when the succession will occur, and who might take over.

[1] While management research mostly commonly uses the term "signal" with signaling theory (Connelly, Certo, Ireland, & Reutzel, 2011), signals are also at the core of screening theory, which is the mirror image of signaling theory (Sanders & Boivie, 2004). These two theories, however, have two differentiating factors: signaler intentionality and who takes the initiative. The differences in these theories are discussed in more detail in chapter 5 and are depicted in Figure 1.

Specifically, I hypothesize that external stakeholders can screen firms' quarterly earnings calls for signals related to the aforementioned outcomes because skill development is critical to CEO succession planning. Skill development is critical to grooming, which firms carry out as they are preparing for a new CEO to take over (Berns & Klarner, 2017). Indeed, the skills based model of leadership, a leadership theory, as well as research on grooming CEO successors, suggests that skills are the most critical determinant of leader performance and can be developed. (Berns & Klarner, 2017; Dragoni, Oh, Vankatwyk, & Tesluk, 2011; Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2000c). Building on these arguments, as well as anecdotal evidence from CEOs and board members of large public companies,[2] I theorize that firms use earnings calls as a developmental activity to help firm executives enhance their corporate communications skills, which are critical to being a successful CEO (Gallo, 2018). As such, executive participation on calls, as well as changes in executive participation on these calls over time may provide insight into firms' succession planning.

In addition to executive participation on quarterly earnings calls being a signal that may be correlated with CEO succession planning outcomes, I also theorize that this experience prior to becoming CEO may impact post CEO succession outcomes. Specifically, I posit that executive experience on quarterly earnings calls will impact a specific external stakeholder that CEOs primarily interact with on these calls—financial analysts (Chen, Demers, & Lev, 2018). I hypothesize that analysts will react more positively to a CEO succession announcement when the appointed CEO has previous quarterly earnings call experience. I also develop theory suggesting that newly appointed CEOs with conference call experience will receive more favorable

[2] I am indebted to Scott Graffin and Steve Boivie for the quotes and anecdotal evidence included in this study from CEOs and directors of S&P 500 firms. During the process of interviewing these individuals for a qualitative paper on corporate governance practices, they were kind enough to ask questions on my behalf. The quotes and anecdotal evidence noted in this paper are thus a result of their efforts and a part of their working paper. I therefore cite their working paper where appropriate.

reactions from analysts following quarterly earnings calls in the early stages of their tenure.

This paper makes a number of contributions to the literature. First, I contribute to the CEO succession literature by illustrating that even though firms tend not to disclose details of their CEO succession plans (Schepker, Nyberg, Ulrich, & Wright, 2017), external stakeholders can still glean insights about firms' plans by screening these firms for signals. Specifically, integrating screening theory research with insights from research on CEO grooming and leadership and development, I develop theory suggesting that there may be signals of firms' CEO succession plans in their quarterly conference calls, which external stakeholders can screen. Given the impact CEO succession has on future firm performance (Berns & Klarner, 2017; Favaro, 2015; Worrell & Davidson III, 1987), this research has direct implications for how stakeholders might value firms and assess future performance.

Second, this study contributes to research on CEO succession planning by developing theory regarding how firms go about grooming CEOs. Firms attempt to "help executives cultivate skills relevant to the CEO position" (Dragoni et al., 2011; Schepker et al., 2017: 5); however, research has largely lacked a theoretical explanation for how they go about this and what specific skills might be important. Building on research surrounding CEO grooming and leadership development, and specifically the skills based model of leadership, I suggest that firms attempt to groom CEOs through participation on conference calls, specifically to help them cultivate strong corporate communication skills. This research thus sets the stage for research to investigate other skills that firms may want CEO successor candidates to develop as well as for how they go about developing said skills.

Finally, this study advances researches on financial analysts by continuing a recent line of research that has taken a behavior approach to studying this important stakeholder. Analysts

were traditionally viewed as a key external control mechanism (Jensen & Meckling, 1976) by providing "independent and external assessments of the firm" (Wiersema & Zhang, 2011: 1163). Recent research, however, suggests that biases and relationships with executives may influence analysts (Bowers, 2014; Westphal & Clement, 2008). I also contribute to research in this domain by examining analyst reports—an important but understudied analyst-related outcome.

CHAPTER 2

CEO IMPORTANCE

Implicit in research on CEO succession planning is the notion that CEOs matter. As such, in this chapter, I review research on CEOs' importance to firms to help establish an understanding of why CEO succession, and more specifically, CEO succession planning is vital for organizations.

Early Importance of CEOs

Early organizational scholarship prescribed great importance to CEOs. In the earliest days of organizational research sought to understand how the inner-workings of the firm, including CEOs, affected firm outcomes (Hoskisson et al., 1999). Researchers discovered that CEOs play a number of critical roles. Barnard (1938) and Selznick (1957), for example, emphasize that CEOs establish organizational meaning, as well as define an organization's mission and goals. Fayol (1949) suggests that CEOs engage in five critical functions: planning, organizing, coordinating, commanding, and controlling. Organizational research even deemed CEOs to be of such importance that they even compared CEOs to a "vital organ" (Barnard, 1938: 3) and suggested that understanding CEOs' leadership "must have a high place on the agenda of social inquiry" (Selznick, 1957: 1).

Perhaps as a consequence, CEOs were also central to early organizational theories. The behavioral theory of the firm (Cyert & March, 1963; Simon, 1945), for example, focuses on behavioral processes within firms, including individual decision-making processes. As the main decision maker within firms, CEOs are arguably critical to this theory. The work of Penrose

(1959), which set the stage for the resource based view of the firm (Barney, 1991; Wernerfelt, 1984), also prescribed great significance to CEOs. Penrose (1959) related firm growth to its bundle of resources, which included the capabilities of its top managers, including its CEO. Further, the Harvard Model (Andrews, 1971; Learned, Christensen, & Andrews, 1961), which "served as the principal guide for business policy thinkers in the 1960s and 1970s" (Finkelstein et al., 2009: 6), viewed CEOs as influential figures driving firm outcomes. As Learned (1969: 3) notes, in this model, "the problems which affect the character and success of the total enterprise" are from the viewpoint of the CEO "whose primary responsibility is the enterprise as a whole."

Focus on External Factors

Following this early research, however, a number of perspectives essentially disembodied organizations by suggesting that external factors, rather than the CEO, determined an organization's structure and actions (for a summary, see Finkelstein et al., 2009). Population ecology, which focuses on the survival and death of organizations, is one view that prescribed little importance to CEOs (Hannan & Freeman, 1977, 1984). Population ecology suggests that variation among firms is largely random or accidental (Hannan & Freeman, 1977). Indeed, this theory suggests that internal and external constraints limit managerial action, and as such, "organizations—and their top managers— are largely inertial" (Finkelstein et al., 2009: 21).

New institutional theory (DiMaggio & Powell, 1983; Meyer & Rowan, 1977) also saw external factors as more important than CEOs. Specifically, new institutional theory posits that organizations operate in an open environment where they are influenced by the broader environment (Meyer & Rowan, 1977). In this environment, an organization's primary goal is to survive. In order to do so, firms need to do more than succeed economically, they need to adopt established structures, rules, and norms to gain legitimacy (Meyer & Rowan, 1977).

Isomorphism, or constraining processes that force one firm to resemble other firms to gain legitimacy (DiMaggio & Powell, 1983), thus leads CEOs to doing "little more than administering the organization's ongoing conformity campaign" (Finkelstein et al., 2009: 7).

Similar to these aforementioned perspectives, Industrial and Organizational (I/O) economics views external factors as more important than CEOs. I/O economics, which set the stage for much strategic management research (Hoskisson et al., 1999), is based on an external approach in which the "primary unit of analysis [is] the industry or competing groups of firms, rather than either the individual firm or the economy wide aggregate of enterprises" (Bain, 1968: vii). The core idea of this perspective is the Structure-Conduct-Performance paradigm (a.k.a., the Bain-Mason Paradigm) (Bain, 1968; Bain, 1956; Mason, 1939), in which a firm's performance is largely a function of the industry environment. Because the industry is thought to determine performance, this perspective suggests that conduct and actions, including those taken by the CEO can be ignored, and performance can be explained by structure (Porter, 1981).

Building on I/O economics, research utilized variance decomposition models to understand the percentage of performance attributable to CEOs. This research, or at least early research in this area, suggests that little variance in firm performance is attributable to CEOs. In a seminal piece, Lieberson and O'Connor (1972) analyze 167 companies over 20 years and suggest that industry and firm explain the majority of firm performance and leadership explains only between 6.5 and 14.5 percent of variance depending on the outcome measure used. Following up on this work, Salancik and Pfeffer (1977) examine mayors from 20 cities, and find that mayors account for 5 to 15 percent of variance in expenditures. Further, Bertrand and Schoar (2003) find that as little as 5 percent of variance is attributable to CEOs.

Finally, a stream of research suggested that CEOs play more of a symbolic than

substantive role in organizations (March & March, 1977; Pfeffer, 1981). Indeed, scholars suggested that the belief that CEOs matter is based on the fundamental attribution error, or the strong human tendency to believe that leaders matters (Meindl, Ehrlich, & Dukerich, 1985). Because of the fundamental attribution error, there a romanticized conception of leaders was suggested whereby we attribute more influence to CEOs than perhaps they actually have (Chen & Meindl, 1991; Meindl et al., 1985).

CEOs of Great Importance

While the perspective that CEOs were of little importance dominated strategic management research for many years, for researchers today, "the question is not *whether* managers matter, but rather *how much* they matter" (Quigley & Hambrick, 2015: 822). Central to this idea that CEOs are of great importance is upper echelons theory (Hambrick & Mason, 1984). Building on the work of Kotter (1982), upper echelons theory presented a view that switched scholar's focus from external factors to internal factors—specifically CEOs. This theory suggests that CEO are the "central determiners of the direction of the firm" as they make the strategic decisions that ultimately impact firm performance (Finkelstein et al., 2009: 9). More specifically, upper echelons theory suggests that a CEO's characteristics impact how they filter and interpret situations facing their firm, and thus, these characteristics are related to strategic decisions and ultimately firm outcomes (Hambrick & Mason, 1984).

Building on upper echelons theory, a number of studies indicate that CEOs indeed impact firm outcomes. Research that built on this theory initially investigated whether CEO characteristics were related to organizational performance and structure. Virany and Tushman (1986), for example, found that CEOs in the microcomputer industry with significant industry experience had greater performing firms, whereas Miller and Dröge (1986) found that CEO

personality influences organizational structure. More recent work focuses on the relationship between CEO characteristics and specific strategic decisions. Gamache, McNamara, Mannor, and Johnson (2015), for instance, focus on how CEO regulatory focus impacts acquisition activity, and Campbell, Jeong, and Graffin (In Press) examine how CEO birth order impacts risk taking.

Variance decomposition models also now, unlike in previous times, confirm that CEOs have great influence on firm performance and outcomes. Early variance decomposition models were flawed as the performance measures used were highly correlated with firm size and because these early studies designated a new leader whenever a new board chair or president was appointed without any attempt to identify the CEO (Finkelstein et al., 2009). These studies also excluded companies from their samples that were in diverse industries or that engaged in major mergers or acquisitions, essentially limiting the effects to only firms that carried out incremental strategies (Finkelstein et al., 2009).

As such, studies today find wildly different results than these early studies. Mackey (2008), for example, suggests that we need to look at CEOs that have served across two firms, and in doing so, she finds that CEOs explain up to 29.2 percent of variance. Quigley and Hambrick (2015) examine the CEO effect over a 60-year period and show that the percentage of variance explained has increased over the years, suggesting that CEOs are of increasing importance. Research showing that market reactions to sudden CEO deaths has increased over the past 60 years, further confirms this notion by suggesting that shareholders also view CEOs to be of increasing importance to firms (Quigley et al., 2017). Further, research by Crossland and Hambrick show that CEOs are of great importance across countries, with CEOs explaining somewhere between 10 to 35 percent of variance in outcomes depending on the country

(Crossland & Hambrick, 2007, 2011).

Research building on early organizational scholarship that focused on CEOs also suggests that CEOs matter a great deal. The resource based view (RBV), which builds on Penrose (1959), prescribes significant importance to CEOs. Indeed, one main resource category is human capital resources, which includes firm employees like the CEO. CEOs with prior experience can generate greater performance from fungible resources than less fungible resources (Mannor, Shamsie, & Conlon, 2016). In addition to being an important resource, CEOs also thus appear to be critical in getting the most out of a firm's resources.

Agency theory research also prescribes great importance to CEOs. Agency theory is largely based on the principle-agent problem—because of the separation of ownership and control, a problem arises whereby the interests between shareholders (the principles) and CEOs (the agents) often diverge (Fama & Jensen, 1983; Jensen & Meckling, 1976). As a result, much agency theory research attempts to understand how to best compensate CEOs so that they will act in the best interests of shareholders (Eisenhardt, 1989). Primarily, research looks at the consequences of incentivizing CEOs through stock options (e.g., Sanders & Hambrick, 2007; Wowak, Mannor, & Wowak, 2015). Clearly, given the focus on ensuring executives' interests align with shareholders' interests, this theory prescribes great importance to CEOs.

Finally, later research by population ecologists and on industry structures directly contradicts early research in this area that suggested CEOs were of little importance. Indeed, population ecology researchers have recently examined how CEO departures impact firm survival rates (Bermiss & Murmann, 2015; Haveman, 1993; Haveman & Khaire, 2004). This research largely suggests that CEO departures are positively associated with firm mortality, suggesting CEOs matter a great deal. Recent work on industry structures also suggests a decline

in the importance of industry. In fact, industries have become "extremely amorphous in recent decades" (Quigley & Hambrick, 2015: 825), meaning that industry boundaries are less clearly defined than they used to be (Bettis & Hitt, 1995; Ruefli & Wiggins, 2003). Further, even within industries, firms are becoming increasingly heterogeneous (Hambrick, Finkelstein, Cho, & Jackson, 2004), suggesting that industry structures are not driving organizations as much as they perhaps used to be.

All of this to say, while the literature has over time debated how much CEOs matter, the consensus now appears to be that they matter a great deal to firm outcomes. As such, the process of planning for CEO succession is of critical importance for firms.

CHAPTER 3

CEO SUCCESSION

To best understand how firms go about CEO succession planning, one must have an understanding of the broader research domain on CEO succession. With this in mind, in this chapter I review CEO succession research generally before zeroing in on CEO succession planning in the next chapter.

Overview of CEO Succession Research

Largely as a result of CEO's importance to firms, much attention has been dedicated to investigating CEO succession. Indeed, CEO succession is arguably "the most important judgment call any organization will ever make" (Tichy, 2014: 15). The first scholarly attention dedicated to CEO succession was early case studies. In arguably the first case study on CEO succession, Whyte (1949) studied restaurants, and in particular, restaurant managers. He suggested that a successor's leadership style impacts subsequent conflict, turnover, and absenteeism among subordinates. Gouldner (1954) examined events surrounding managerial succession at a mining facility. He noted that succession appeared to lead to organizational instability, and that changes new managers make could increase tension and reduce morale and productivity. Dale (1957) investigated Du Pont and noted that succession was critical to DuPont's survival following the death of its founder, General Henry Du Pont. Specifically, he highlighted how the company did not have an automatic succession whereby the eldest son took over. Instead, the company decided that the successor needed to have studied physical science at a top university in the country.

The early case studies were essential in establishing scholarly interest in CEO succession, yet it was the works of Grusky (1960, 1961, 1963, 1964) that seemingly "set the agenda for how researchers approached the topic over the succeeding decades" (Kesner & Sebora, 1994: 330). Grusky's work shifted focus from case studies to an examination of multiple CEO successions using quantitative approaches (Kesner & Sebora, 1994). He also identified key succession variables and illustrated the importance of firm size in succession frequency, noting that "greater size necessitates increased bureaucratization and that this, in turn, increases the likelihood that succession will be rationally treated by being routinized" (Grusky, 1961: 269). Further, Grusky (1960) was the first to illustrate CEO succession's importance, noting that it is inevitable in organizations and can cause instability.

Building on Grusky's work, research on CEO succession has been characterized by "rapid growth" (Kesner & Sebora, 1994) with subsequent research primarily focusing on the antecedents and consequences of CEO succession (Berns & Klarner, 2017; Finkelstein et al., 2009; Giambatista, Rowe, & Riaz, 2005). Indeed, this event focus seems to prevail because data collection that takes an event focus and examines either the antecedents or consequences of CEO succession is "easier and quicker" than focusing on the important processes and outcomes surrounding CEO succession planning (Berns & Klarner, 2017: 84).

Antecedents of CEO Succession

Antecedents of CEO succession are commonly grouped into five main categories: board of directors, leader characteristics and actions, firm characteristics, industry and environmental factors, and firm performance (Giambatista et al., 2005). Boards play a vital role in CEO succession; in fact "the task of selecting [and firing] a new CEO is expressly bestowed on the board of directors" (Finkelstein et al. (2009: 183). As such it is perhaps not surprising that

researchers have studied a number of board-related antecedents of CEO succession and have adopted a number of theoretical perspectives in doing so. Zajac and Westphal (1996), for example, show that psychological and sociopolitical factors impact board decisions surrounding CEO succession. Ocasio (1994) takes a political dynamics perspective and develops a model of the circulation of power to show that a CEO's tenure influences the power CEOs have in relation to the board and thus the likelihood of succession. Barker III, Patterson Jr, and Mueller (2001) adopt agency and resource dependence perspectives and show that greater outside control of the board is positively associated with the likelihood of CEO replacement during turnaround situations. Flickinger, Wrage, Tuschke, and Bresser (2016) take a social status perspective and show that a CEO's board network embeddedness—as indicated by the number of outside directorships—protects underperforming CEOs against dismissal.

Research on leader characteristics primarily investigates CEO characteristics that help buffer CEOs from dismissal. Phan and Lee (1995) adopt social network theory and find that CEOs are less likely to be dismissed when they have personal prestige. Boeker (1992) takes an agency theory perspective and shows that dismissal is less likely when CEOs have greater ownership stake as well as when stock ownership is more widely dispersed. Similarly, CEO power derived from tenure (Ocasio, 1994) or duality (Finkelstein & D'aveni, 1994) helps buffer against dismissal. Further, research in this area has investigated CEO characteristics that might be related to a CEO clinging to the CEO position rather than just dismissal. Most notably, Sonnenfeld (1991) suggests that some executives cling to the job because they have a "heroic-self-concept" and so thus may be less likely to exit. Personality constructs, such as narcissism and need for power, thus might be influential (Finkelstein et al., 2009).

Firm characteristics have been another important area of focus on antecedents of CEO

succession. There is lower likelihood of dismissal for family CEOs (Chen, Cheng, & Dai, 2013; Tsai, Hung, Kuo, & Kuo, 2006), and that subordinate talent in an organization is associated with an increased likelihood of involuntary turnover (Fizel & D'Itri, 1997; Fizel & D''Itri, 1999). Research also shows that institutional shareholders reduce their stock ownership to express their dissatisfaction with a firm ultimately leading to greater likelihood of CEO turnover (Parrino, Sias, & Starks, 2003). Yet, arguably the most studied firm characteristic is firm size. A number of studies indicate that larger firms are more likely to dismiss their CEO (e.g., James & Soref, 1981).

Industry and environmental factors also have been shown to impact CEO succession. Rates of CEO succession vary with industry characteristics, such as industry age. Firms in young industries likely have younger executives (Harris & Raviv, 1979), and thus there should be less turnover due to mandatory retirement, death or illness; however there may be more turnover due to dismissal in these industries as the "ambiguity of the means-end relationship is greater in young industries that more mature ones" (Finkelstein et al., 2009: 176). Size and homogeneity of the industry also appear to be relevant. Fredrickson, Hambrick, and Baumrin (1988) suggest that the more firms there are in an industry, the greater the supply of talented executives, and thus, the greater the likelihood of CEO succession. Parrino (1997) also suggests that there may be a higher likelihood of CEO turnover in homogenous industries because firms are more directly comparable, and so, it will be easier for directors to identify if a firm's poor performance is directly attributable to the CEO.

In terms of environmental factors, environmental discontinuities appear to be one important antecedent. Haveman, Russo, and Meyer (2001) examine the impact of environmental discontinuities on CEO succession, and they find that the rate of CEO succession does not

immediately increase following a discontinuity, but rather gradually increases over time. Fads (Abrahamson, 1991) and styles (Ocasio & Kim, 1999) also appear to increase the likelihood of CEO succession. For example, there was a noted increase in the rate of CEO successions in the 1990s, which is attributed to a fad that became institutionalized (Finkelstein et al., 2009).

Finally, arguably the most influential antecedent of CEO succession is firm performance. Firm performance has a "long heritage as an important antecedent to CEO succession" (Giambatista et al., 2005: 968), and "the research is abundantly clear; poor organizational performance tends to precede executive departure" (Finkelstein et al., 2009: 168). A number of different firm performance measures confirm this relationship. Huson, Parrino, and Starks (2001), for example, conduct a long-term study by investigating the likelihood of CEO turnover from 1971-1994 and find that three different financial performance measures increased the likelihood of CEO turnover—ROA, change in ROA, and stock returns. Puffer and Weintrop (1991) find that dismissal is impacted by the gap between earnings and analysts expectations, and Boeker (1992) finds that low sales growth is related to CEO dismissal.

The impact of firm performance on CEO dismissal is so abundantly clear, that studies have also looked at the impact of factors that moderate the financial performance–dismissal relationship. Hubbard, Christensen, and Graffin (2017), for instance, find that CSR investments amplify the relationship. Further, Crossland and Chen (2013: 78) show that this relationship varies across countries, as they "provide robust evidence – across both market based and accounting-based measures – that CEOs are more likely to be dismissed following poor firm performance in countries where managerial discretion is high, where firm performance measures are more meaningful, and where the CEO labor market is more developed."

Consequences of CEO Succession

In terms of consequences of CEO succession, research suggests that CEO succession is a critical turning point for organizations (Finkelstein et al., 2009). CEO turnover can cause disruption to firm operations (Vancil, 1987), but at the same time can "provide an opportunity to adapt a firm's strategy to current and future demands" (Finkelstein et al., 2009). Given the potential consequences, scholars have dedicated significant attention to examining CEO succession consequences, with research largely falling into one of three areas (Berns & Klarner, 2017; Finkelstein et al., 2009; Giambatista et al., 2005): market reactions to CEO succession, firm performance implications, and firm strategy implications.

Research on market reactions to CEO succession is largely driven by the assumption that CEO succession events contain important information about a firm's future strategic direction (Finkelstein et al., 2009). Friedman and Singh (1989), for example, find positive abnormal returns to CEO dismissal, especially when the firm has been performing poorly, and Worrell, Davidson, and Glascock (1993) find positive abnormal returns to CEO dismissal when the announcement contain information about permanent replacements. Further, Ang, Lauterbach, and Vu (2003) find that investors react more positively to appointment of high quality CEOs, which they proxy based on CEO pay premium (which investors would not be aware of at the time of appointment), and Quigley et al. (2017) find large abnormal returns around sudden CEO deaths. Yet, while a number of studies have found abnormal market reactions, many succession events might be considered routine, or there might be other confounding factors such as strategic noise around a CEO succession (Graffin, Carpenter, & Boivie, 2011), thud there are commonly no abnormal returns associated with this transition (Finkelstein et al., 2009).

Like market reactions, the consequences of CEO succession on organizational performance are decidedly mixed. This makes sense; if succession was clearly good for

performance, “firms would start replacing their executives weekly” (Finkelstein et al., 2009: 204). Research thus primarily investigates when succession hurts or helps performance the most. Much of what is know in this regard succession is derived from sports teams studies, which build on the tradition of looking at succession among major league baseball teams as a proxy for how CEO succession might operate (Gamson & Scotch, 1964; Grusky, 1963). Cannella Jr and Rowe (1995), for example, find that in the context of MLB manager successions, coaching ability and intensity of rivalry moderates the succession-performance relationship. Other studies directly examine CEO successions’ impact on organizational performance. Tushman and Rosenkopf (1996) find that CEO succession positively impacts ROA, but is contingent on environmental turbulence and executive. Additionally, Chen and Hambrick (2012) find that CEO replacement is beneficial in turnaround situations, especially when the CEO fits the conditions at hand.

Finally, research has looked beyond performance consequences and examined the impact of CEO succession on firm strategy, specifically the strategic actions taken by new CEOs (Giambatista et al., 2005). Much of this research examines the impact of CEO succession on strategic change. Results are again largely mixed in this area. Romanelli and Tushman (1994) find that CEO succession impacts revolutionary transformations, an extreme form of strategic change, in the US mini-computer industry. Other studies, however, find no relationship between CEO succession and strategic change (e.g., Boeker, 1997; Sakano & Lewin, 1999). Perhaps as a result of these mixed findings, a number of moderating factors have been examined. Quigley and Hambrick (2012) show that CEOs carry out less strategic change when the prior CEO stays on as the board chair. Similarly, Datta, Rajagopalan, and Zhang (2003) find that younger CEOs with less firm tenure and more education are more open to change, and Tushman and Rosenkopf (1996) find that environmental jolts impact the relationship.

CHAPTER 4

CEO SUCCESSION PLANNING

Importance of CEO Succession Planning

While scholarship over the last few decades has substantially advanced our understanding of CEO succession, one subset of this research stream that we do not yet have much knowledge about is CEO succession planning. The lack of comprehension surrounding this subject matter is problematic given that CEO succession planning is a key fiduciary duty for boards (Wiersema, 1995) and that poorly managed successions negatively influence shareholder wealth (Beatty & Zajac, 1987; Worrell & Davidson III, 1987). Indeed, CEO successions that are not well planned out can impose significant costs. Firms may incur major costs, for example, due to engaging an executive search firm to find a CEO replacement and carrying our emergency board meetings. Given the uncertainty surrounding a poorly planned succession, the stock market also tends to react negatively when this is the case (Berns & Klarner, 2017; Favaro, 2015). Further, research shows that if a company puts an interim CEO in place, the firm is likely to perform poorly (Ballinger & Marcel, 2010). Taken together, a 2014 survey suggests that large public companies that have a poorly managed CEO succession can forego as much as $2 billion in shareholder value (Favaro, 2015).

The lack of understanding regarding CEO succession planning is also problematic given that CEO succession regularly occurs among large public firms. While CEO succession rates vary from year-to-year, dating back to 2000, there has typically been greater than 10% CEO turnover among S&P 500 companies each year (Tonello, Larking, & Schloetzer, 2018). In other

words, on average, more than 50 CEO successions occur among this subset of firms every year. In 2017, for instance 54 CEO successions took place among the S&P 500 companies (Tonello et al., 2018). Similar rates of CEO succession appear to be occurring around the world. A study by PWC of the world's 2,500 largest public companies, noted that there was a 16.6% turnover rate among CEOs of these firms in 2015 (PWC, 2016).

Further highlighting the importance of CEO succession planning is the increasing extent to which CEO succession planning is discussed and scrutinized by both the media and regulators. Shen and Cannella (2003: 191) note the media's view: "there is an ongoing discussion in the business press urging boards of directors and CEOs to give succession planning top priority. Some firms even demand that their CEOs start preparing a succession plan right after taking office." For instance, the media recently noted that Amazon needs to be thinking about its succession planning, with one outlet's headline noting that "For Amazon, It's Not Too Early to be Talking About Its Next CEO" (Swartz, 2019). Regulators have expressed similar sentiments in recent years, especially following instances, such as that of when in 2009 "Bank of America CEO Ken Lewis abruptly tendered his resignation, and left his board fumbling to find a new successor" (Tichy, 2014: 31-32). This ultimately led the Securities and Exchange (SEC) commission to publish a non-binding rule that in part states the following:

> "One of the board's key functions is to provide for succession planning, so that the company is not adversely affected due to a vacancy in leadership. Recent events have underscored the importance of this board function to the governance of the corporation. We can now recognize that CEO succession planning raises a significant policy issue regarding the governance of the corporation that transcends the day-to-day business matter of managing the workforce." (SEC, 2009)

While this rule is non-binding and does not rise to the legal standard of fiduciary responsibility or due diligence, it has seemingly put CEOs and boards on notice that CEO succession planning is very important (Tichy, 2014).

Internal Nature of Succession Plans

Given the clear significance of CEO succession planning, companies seem to engage in this important process and to have some succession plan details worked out (Equilar, 2016), even if the plan is just a company being aware of who would take over if the current CEO suddenly became ill or died, which research shows does indeed happen (Quigley et al., 2017). Indeed, based on conversations with directors of large public companies, most firms at the very least, have a sheet of paper that indicates who would take over if the CEO suddenly died (Boivie (Boivie, Graffin, Withers, & Corley, Working Paper), Graffin, Withers, & Corley; working paper). Through these conversations, however, it became clear that most companies are planning out much more than that, which I discuss in more detail later in this paper.

Yet, while companies appear to be aware of the implications of having a poorly planned CEO succession and are heeding the warnings of the media and SEC, as mentioned previously, little is known about CEO succession planning. The dearth of understanding regarding this topic is not for a lack of trying to investigate and develop theory about firms' CEO succession planning. Little is understood about CEO succession planning because firms typically keep this information internal, often even from individuals being considered as potential CEO successors (Cannella & Shen, 2001; Feloni, 2017). There are in fact countless examples of firms' lack of willingness to share details about their CEO succession plans. Arguably the most prominent example is Berkshire Hathaway. Warren Buffet, the firm's now 88 year old CEO, has countless times over the years refused to reveal any details of his firm's CEO succession planning despite his rising age (Simpson, 2013).

The reason this information is typically kept internal is that firms are concerned with disclosing proprietary information, or "information whose disclosure reduces the present value of

cash flows of the firm endowed with the information" (Dye, 1986). This most commonly takes the form of a firm incurring proprietary costs where the firm suffers performance losses because competitors have access to this proprietary information (Ali, Klasa, & Yeung, 2014: 2490; Busenbark et al., 2017a; Lang & Sul, 2014). For example, the noted reluctance of companies to release environmental disclosures is because outside stakeholders, such as government and environmental agencies, could use the information to impose litigation or boycotts. Firm's typically only provide proprietary information when they believe the benefits of disclosure outweigh the costs (Guidry & Patten, 2012; Lewis, Walls, & Dowell, 2014).

While shareholders and regulators promote that firms publicly disclose details of their CEO succession plans so that they can understand how firms might be prepared to handle a CEO succession (Equilar, 2016; McConnell & Qi, 2016), the costs of disclosing this information appear to outweigh the benefits. Indeed, a recent report notes that "only 3.3 percent of S&P 500 companies disclose CEO succession plans" (Equilar, 2016: 1), meaning that they provide specific details related to succession planning outcomes they have planned out.

The main proprietary cost associated with disclosing details of CEO succession plans appears to be the possibility of losing top executives. Larry Fink, the CEO of Blackrock, for example, expressed that if Blackrock's succession plans did not remain confidential, "some of those top seven or eight executives may […] leave" (Huang, Lehavy, Zang, & Zheng, 2017: 11). Similarly, despite Steve Job's illness, Apple's board was also opposed to sharing the firm's CEO succession plan noting that it "could inspire others to recruit high-value executives away from Apple" (Investors Business Daily, 2011: 1).

In addition to the potential cost of losing top executives, a second main reason firms are reluctant to disclose their CEO succession plans is because they believe that disclosing their

succession plan might provide insight into the future strategic direction of the company (Equilar, 2016; Finkelstein et al., 2009). Naming a CEO successor with a specific background, for example, might indicate that the firm is planning to align its strategy with that background. Whole Foods in their 2014 proxy appears to subscribe to this logic. The company suggested that shareholders vote against the proposal that would have required them to detail their CEO succession planning processes on the basis that it would "result in competitive harm" (Whole Foods, 2014: 44). Belen Gomez, Director of Research and Board Intelligence Services at Equilar, stated a similar sentiment when noting that firms are afraid of "compromising the strategic position of the company" (Equilar, 2016: 1).

Further, a few companies have stated that they do not like to disclose their succession plans as they argue that it micro-manages the board of directors. Indeed, Apple and Whole Foods have both mentioned this argument (Investors Business Daily, 2011; Whole Foods, 2014). This may be a result of the increased scrutiny surrounding firms following the passing of Sarbanes Oxley, which resulted in firms primarily having sole-insider boards, or only the CEO as an insider on the board (Joseph, Ocasio, & McDonnell, 2014). Boards may view the notion that they have to disclose their succession plans as a step too far.

Some companies are less forthcoming about the reason for their lack of disclosure. For example, Bob Greifeld, former CEO of Nasdaq, stated that, "I can't tell you any of the replacements [for confidentiality]" (Feloni, 2017: 1). Similarly, Amazon's CEO, Jeff Bezos, admits that his firm has a succession plan but that it is a secret, and provides no reason for the secrecy. Regardless of the reason, it seems clear that firms believe they might incur proprietary costs by disclosing details of their CEO succession plans. As such, the limited transparency surrounding CEO succession plans seems to be "appropriate"; "a corporation is not a tribe, it is a

voluntary society of individuals" (Vancil, 1987: 7). Yet, it is this lack of disclosure that has to this point limited our knowledge of CEO succession planning.

CEO Succession Planning Details

While firms largely do not formally disclose details of their CEO succession plans for the aforementioned reasons, scholars have uncovered a few insights regarding CEO succession planning. Early research in this domain "provided conceptual arguments and selective qualitative insights on elements of the CEO succession process" (Kesner & Sebora, 1994: 354). Based on his review of succession planning practices across 60 firms, Mahler (1980), for example, was arguably the first to suggest the importance of CEO succession planning. Perhaps most relevant to this research, however, is that in the succession planning process, firms appear to try and work out a number of important succession plan details, most notably whether the firm intends to promote an insider or outsider to CEO, when the succession will occur, and who specifically might take over.

Insider versus outsider. In CEO succession planning, firms must decide on the CEO successor's origin. Specifically, firms choose between two main types of CEO successors—those promoted from within the organization—insiders—or those promoted to CEO from outside the firm (Finkelstein et al., 2009; Kesner & Sebora, 1994). All things being equal, choosing an insider is the most common and most preferred choice. There are several reasons this. For one, boards already have a great deal of information about insiders, so there is less information asymmetry than outside succession (Harris & Helfat, 1997; Tian, Haleblian, & Rajagopalan, 2011). Insider successors also tend to have company-specific and industry-specific human capital and skills that may be required for the job (Becker, 1964; (Kotter, 1982) (Nahapiet & Ghoshal, 2000). Further, they also have developed social capital, specifically social ties with the firm's

employees (Finkelstein et al., 2009; Zajac, 1990). For these reasons, an outside succession has been called a “Hail Mary pass” and a “clear-cut and utterly unnecessary failure” as it relates to CEO succession planning (Tichy, 2014: 202).

That said, even despite the preponderance of insider CEOs, outside succession occurs and so, research has begun to investigate when they tend to be most likely. Research finds that much like dismissal, the main driver of a firm choosing an outsider is poor firm performance, as well as a need for a change in strategic direction (Lant, Milliken, & Batra, 1992). (Boeker & Goodstein, 1993; Cannella & Lubatkin, 1993; Datta & Guthrie, 1994; Guthrie Datta & Deepak, 1997). There is also some evidence that social and political factors influence the likelihood of an outsider CEO. For example, Boeker and Goodstein (1993) show that the greater the proportion of board insiders, the lower the likelihood of an outside successor, and Cannella and Lubatkin (1993) show that when the incumbent CEO is also the board chair, there is a lower likelihood of outside succession.

While the aforementioned research has helped us gain an understanding of CEO succession planning related to whether a firm intends to promote a CEO successor from inside or outside the organization, scholarly understanding remains limited. Indeed, in their review of this literature, Finkelstein et al. (2009) note that the amount of variance explained by current studies remains limited; the most prominent predictor—poor firm performance—typically only explains 10-20% of variance in whether a firm chooses an insider or outsider. This low amount of variance explained is only further confounded by the fact that the rate of outside succession is becoming much more common (Huson et al., 2001; Wiersema, 2002). As opposed to historic levels where outside successions were in the vast minority (20% or less), rates of outside succession rose to 44.4 percent in 2017 among the S&P 500 companies (Tonello et al., 2018).

Timing of the succession. Research on the timing of CEO succession seems to be the most limited area as it relates to these succession planning details that firms tend to work out. Indeed, while "CEOs are likely to work with their boards to define the timing of their departure" (Berns & Klarner, 2017: 93), little academic research has examined when that time might be. Instead, researchers have examined other time related aspects of succession. Hashemi (1983), for example, examined the duration of a typical succession, meaning from when the position is offered to when the transition is fully completed. In his study of hospital executive, he found that this process usually lasted one year. Further, CEO successions work best when there is a "seamless" continuity in leadership, but when this "seamless transition" might occur is largely unknown (Kesner & Sebora, 1994: 360)

CEO successor. Finally, that firms tend to make plans regarding which individual is specifically going to be the CEO successor. The literature in this domain has primarily focused on how firms go about grooming CEOs, most notably as through two common grooming approaches—a horse race and a relay succession. The horse race involves candidates from within the firm competing against one another. Ultimately, the best candidate is appointed CEO (Friedman & Olk, 1995; Vancil, 1987). While horse races can help evaluate candidates, they are considered disruptive (Favaro, 2015) and an "option of last resort" (Berns & Klarner, 2017: 85), as the company risks losing key executives not promoted (Biggs, 2004). Johnson and Johnson, for example, set up a horse race between Sheri McCoy and Alex Gorsky; Gorsky was appointed CEO and McCoy left to become the CEO of Avon (Lublin, 2012). Further, it is important to note, that while this is a common way to identify CEO successors, companies typically do not disclose that this is what they are doing while it is unfolding.

Given the issues with horse races, a common alternative is the relay succession. In a relay

succession, there is not a contest between executives, but instead a heir apparent is groomed to become the next CEO (Vancil, 1987; Zhang & Rajagopalan, 2003). Commonly, the heir apparent takes the position of president or COO (Sebora & Kesner, 1996; Vancil, 1987). While the naming and subsequent appointment of an heir apparent can be beneficial, especially if announced in advance, like with research on horse races, research in this area provides limited insight. The primary limitation is that even if an heir apparent is named, they often are not promoted to CEO. For example, Cannella and Shen (2001) investigate when a heir apparent does not become CEO. Westphal and Zajac (1998) suggest that this might be due to the fact that the naming of a heir apparent (or of a COO) is just a symbolic practice. Indeed, Hambrick and Cannella (2004) illustrate that many COO's are just COO's and have no expectation of becoming COO. Further, only a third of firms appear to have a heir apparent Zhang and Rajagopalan (2003) based on the crude COO measure.

Still to be Understood

While research on CEO succession planning has helped advance our understanding of the processes surrounding this important occurrence, there is much still to be understood. As I highlight, little is known related to the important succession plan details firms work out, specifically whether the firm intends to promote an insider or outsider to CEO, when the succession will occur, and who specifically might take over. I attempt to develop theory related to each of these succession planning details. Despite the fact that firms typically do not want to disclose their CEO succession plans due to proprietary costs, screening theory suggests that external stakeholders can screen organizations for signals that provide insights into these important details. This is a possibility I develop theory about beginning in the next section, where I introduce screening theory and relate it to CEO succession planning.

CHAPTER 5

SCREENING FOR SIGNALS OF CEO SUCCESSION PLANS

Screening Theory

While firms tend to not disclose details of their CEO succession plans, I theorize that stakeholders may be able to screen firms for signals related to these plans. This possibility is rooted in screening theory (Stiglitz, 1975). Screening theory is based on the concept of information asymmetry, which occurs when "different people know different things" (Stiglitz, 2002: 469). Historically, researchers ascribed to the notion of perfect information, meaning every party had the same information (Stiglitz, 2002). Screening theory, however, challenged this assumption and suggested that "information imperfections are pervasive in the economy" (Stiglitz, 2002: 469). Indeed, screening theory assumes that "some information is private", and as such, "information asymmetries arise between those who hold that information" and those who do not (Connelly, Certo, Ireland, & Reutzel, 2011: 42).

In the case of this study, information asymmetry arises between firm insiders—who are aware of details related to firm's CEO succession plans but choose not to share that information (e.g., Finkelstein et al., 2009; Schepker et al., 2017)—and firm stakeholders—who would like to know that information given the impact CEO succession planning has on future firm performance (e.g., Favaro, 2015; Worrell & Davidson III, 1987). Indeed, it is largely for this reason that "Shareholders have a deep interest in how their portfolio companies prepare to handle major events like a CEO transition" (Equilar, 2016: 1).

While screening theory assumes there is information asymmetry, it suggests that through

screening, the party that holds the information asymmetry disadvantage, commonly referred to as the receiver, can analyze the other party, the signaler, for signals that may be correlated with the unobservable characteristic or information they are hoping to ascertain (Stigler, 1961; Stiglitz, 2002). Here signals are defined as "conduct and observable attributes that alter the beliefs of, or convey information to, other individuals in the market about unobservable attributes and intentions" (Ndofor & Levitas, 2004: 688). Signals can be sent out whether signalers intentionally send them or not, which I describe in more detail in the next section.

The classic screening theory example is that of an employer screening a potential employee (Stiglitz, 1975; Weiss, 1995). Employers lack information about the quality of job candidates and thus screen job candidates for signals—that may be related to their potential quality as an employee. Withstanding the rigors of higher education, especially from more elite or prestigious schools, can signal the quality of these individuals as prospective employees to employers (Stiglitz, 1975; Weiss, 1995). On the other hand, an unintentional signal that receivers could screen for is the length of time spent at each position. Spending just a few months at each position may indicate a job candidate's lack of commitment.

Screening versus Signaling

Given that the abundance of research on information asymmetries in management research has drawn on signaling theory rather than screening theory (Connelly et al., 2011), it is important to clarify the differences between these two theories so that the assumptions of screening theory are understood. In the broadest sense, "screening theory is the mirror image of signaling theory" (Sanders & Boivie, 2004: 169). These two theories, however, have two differentiating factors: signaler intentionality and who takes initiative.

Differentiating Factor	Screening Theory	Signaling Theory
Signaler Intentionality	Does not assume that signalers deliberately send signals. Receivers evaluate signals that are sent.	Assumes that signaler deliberately sends signals to pain themselves in the best light.
Who Takes Initiative	The receiver takes initiative to screen the signaler.	The signaler takes initiative to send signaler to receiver.
Examples	Screen other poker players, screen potential co-authors, acquirers screen target firms, stakeholders screen firms	Employee lists education on resume, hire CEO with turnaround experience following restatements, put together a high quality board pre-IPO

Figure 1: Screening Theory Versus Signaling Theory

In regards to signaler intentionality, screening theory does not assume that signalers purposefully send out signals. Instead, this theory makes the assumption that the receiver evaluates signals that the signaler sends out and "places differential value on the signals they might send" (Connelly et al., 2011; Gomulya & Mishina, 2017). This is consistent with the fact that parties are always sending out signals whether they are intentional or not. When playing poker, for example, a player might unconsciously signal to other players that he or she has a good hand—what people call a tell—such as by whistling, which may serve as a signal that the other party can screen for (Siler, 2010). Similarly, much of the information banks glean about their borrowers and insurance companies gather about their insured comes from making inferences based on their behavioral signals (Stiglitz, 2002: 472). In these instances, prior behavior is thus a signal of how these individuals might be expected to act in the future. Borrowers who tend to not pay back their loans or insured individuals who tend to get into car accidents might be expected to act the same way in the future.

In contrast to screening theory, signaling theory assumes that signalers intentionally send

signals. This is so that signalers can paint themselves in the best light and indicate the ability to "fulfill the needs or demands of an outsider" (Connelly et al., 2011: 43). In other words, signalers are often trying to minimize information asymmetries to illustrate to receivers that they have positive characteristics that the receivers would benefit from. Indeed, this is clearly illustrated by Spence (1973)'s seminal work that introduced signaling theory. Prospective employees attempt to signal their ability to meet the demands of the job by making sure they put their educational attainment on their resume for employers to see. This is also illustrated by two early works by Bhattacharya (1979) and Ross (1973), which suggest that firm's attempt to signal themselves to be a quality investment to stakeholder's by illustrating that they can make interest and dividend payments over the long-term. Similarly, in an initial public offering (IPO) setting, Lester, Certo, Dalton, Dalton, and Cannella (2006) suggest that firms put together a prestigious top management team to signal their quality to potential IPO investors.

Finally, these two theories differ in terms of who takes initiative—the signaler or the receiver. Screening theory assumes that the receiver takes the initiative to analyze the other party for information it would like to know (Khan, Kalelkar, Miller, & Gerard Sanders, 2018). For example, an academic might take initiative to screen potential co-authors for signals that might be correlated with them being a quality co-author, such as having worked with other quality people or having a good publication record.

In contrast, signaling theory assumes that the signaler takes the initiative to signal. Signalers want the receiver to be aware of their ability to meet their needs or demands. As such, signalers try to make their signals of quality clear to the receiver so that they can benefit. Continuing Spence (1973)'s example of employees, employees might clearly signal their education by putting this information at the top of their resume. This characteristic of signals of

quality is illustrated by research on successions following restatements. As Gomulya and Boeker (2014) suggest, firms likely want to indicate to the financial community that there are a quality firm despite the restatement and so they often hire new CEOs with turnaround experience following a financial restatement sends signals to signal that they are a quality firm and are taking serious effort to restore the view of the firm following the restatement.

Research on Screening

In early research on screening theory, the focus was most commonly on hiring situations. Prospective employers actively screen job candidates on the basis of observable characteristics when the desired attribute cannot be observed (Stiglitz, 1975; Weiss, 1995). Employers screen potential employees for a minimum level of training and education credentials (Weiss, 1995), which may be related to their ability to do the job. They also attempt to screen job candidates to see if they would be good match with the company and for their work ethic (Dobbs, Sun, & Roberts, 2008).

Despite its early roots, signaling theory is broadly applicable and is relevant to management research. Indeed, a growing body of literature in this regard indicates that screening is relvant to firms in a number of domains. First, researchers have shown that screening is relevant to acquisitions and alliances. Acquirers appear to screen potential target firms for characteristics that they think might lead to a successful merger (Capron & Shen, 2007). Similarly, when entering foreign markets and looking for alliance partners, firms tend to screen other firms based on their reputations (Stevens et al., 2015).

Second, researchers have shown that screening is relevant to the entrepreneurial context. Venture capitalists appear to engage in screening to minimize *ex post* contracting problems. Specifically, these venture capitalists “screen and conduct extensive due diligence on potential

investments, and structure their investments in ways that reduce downside risk (for example, by forming an investment syndicate)" (Wuebker, Kräussl, & Schulze, 2015). Third, and most relevant to this research, external stakeholders screen firms. Sanders and Boivie (2004: 167) show that the financial community ultimately values publicly traded internet firms based on "such characteristics because they are perceived to be correlated with desired but unobservable characteristics and actions", specifically those characteristics that might be related to a lower risk of both adverse selection and moral hazard. Similarly, Gomulya and Mishina (2017: 578) show that investors screen firms following a financial restatement by looking for "signals that are ordinarily weaker proxies but less susceptible to errors and manipulations".

CHAPTER 6

CEO SKILL DEVELOPMENT

The reason external stakeholders may be able to screen firms' quarterly earnings calls for signals related to their CEO succession plan details is because skill development is critical to CEO succession planning. Specifically, skill development is critical to executive grooming that firms to some extent carry out as they are preparing for a new CEO to take over (Berns & Klarner, 2017). Indeed, the skills based model of leadership, a leadership theory, as well as research on grooming CEO successors, provides helpful insights in regards to why there may be signals of firms' CEO succession plans.

Skills Based Model of Leadership

The skills based model of leadership (Mumford et al., 2000c) is a theory of organizational leadership that suggests that skills represent the most direct determinant of leader performance. This perspective suggests that in today's hypercompetitive environment (D'aveni, 1995; Ruefli & Wiggins, 2003), leaders deal with a great deal of complexity, conflict, and change that presents ill-defined problems for leaders to solve (Mumford et al., 2000c). Solving these problems depends on leaders having the skills to do so (Yammarino, 2000). As such, the theory posits that leaders with the skills needed to solve these ill-defined problems will be the most successful (Mumford et al., 2000c).

Unlike other leadership theories, the skills based model of leadership suggests that effective leaders are developed. Indeed, in contrast to research on trait based approaches

suggesting that leadership is genetic (e.g., Ilies, Gerhardt, & Le, 2004) and theories of leadership behavioral styles, such as transformational leadership (e.g., Bass & Avolio, 1994), that focus on the impact of leader behaviors on leader performance, this theory places "effective leadership performance on learned (and learnable) skills rather than on traits" or specific behaviors (Burkus, 2010: 1). This is consistent with research noting that skills reflect something above and beyond general intelligence (Mumford et al., 2000c; Okuda, Runco, & Berger, 1991; Sternberg & Lubart, 1991). At the same time, the skills based model of leadership does not discount the importance of traits and behaviors. Instead, the theory suggests that skills are seen as "developing as a function of the interaction between traits and experience" and that "leadership can be framed not in terms of specific behaviors, but instead in terms of […] skills that make effective leadership possible" (Mumford, Zaccaro, Connelly, & Marks, 2000b: 156).

Categories of Leadership Skills

The skills based model of leadership proposes that two main categories of skills contribute to effective leadership: problem solving skills and social skills. Empirical research on each of these categories of skills, as well as specific skills within each category, illustrates that these skills are relevant to leader performance (e.g., Connelly et al., 2000; Zaccaro, Mumford, Connelly, Marks, & Gilbert, 2000). Perhaps most illustrative of the impact of skills, a meta-analysis by Hoffman, Woehr, Maldagen-Youngjohn, and Lyons (2011) shows that a number of skills that fall within these two categories are positively related to leader performance.

Problem-solving skills (Mumford et al., 2000c) relate to how leaders attempt to solve the ill-defined problems that cannot be addressed with routine information (Baughman & Mumford, 1995). Instead, they must reshape and reform this information to come up with new solutions, which suggests that problem solving is critical to leader performance. This notion is supported

by a number of studies that indicate that divergent thinking skills are positively related to leader performance (e.g., Chusmir & Koberg, 1986; Rusmore, 1984; Sinetar, 1985).

Social skills relate to how leaders must marshal support, motivate others, guide subordinates, and frame actions (Mumford et al., 2000c). Leaders operate in organizations, which are commonly characterized as being distinctly social institutions (Mumford et al., 2000c: 18-19). Indeed, leaders are typically required to "develop and implement solutions with and through others" (Mumford et al., 2000c: 12; Zaccaro, Gilbert, Thor, & Mumford, 1991). As such, social skills are essential to effective leadership (Geiwitz, 1996), and are positively related to leader performance. For example, research shows that social perceptiveness, (Zaccaro, Foti, & Kenny, 1991), conflict-resolution skills (e.g., Kabanoff, 1985), and persuasion skills are all important to effective leadership (e.g., House & Shamir, 1993).

Skill Development

The skills based model of leadership proposes that these important skills are developed over time as a function of career experiences (Mumford et al., 2000c). Building on work in psychology on skill acquisition that occurs when people practice tasks (Ackerman, 1987; Fleishman, 1972), as well as experiential learning theories (Dewey, 2007), the theory proposes that people "no matter how gifted, initially enter organizations as novices" (Mumford, Marks, Connelly, Zaccaro, & Reiter-Palmon, 2000a: 89). More specifically, upon entering an organization, employee performance is generally situation contingent (Mumford et al., 2000c). The kinds of problems and situations they face tend to be highly structured and closely supervised, and they often rely on skills that they gathered during prior educational or work-related experiences (Podsakoff, MacKenzie, & Bommer, 1996).

To become a leader, and an effective one, however, requires integrating in career

experiences with initial knowledge structures to develop skills relevant to being a leader, such as the aforementioned social skills and problem solving skills. The skills based model of leadership proposes that this process requires employees being given assignments of increasing complexity where they have primary supervisory responsibilities and increasing amounts of discretion (Mumford et al., 2000a). More specifically, the theory suggests that any exercise that promotes "the acquisition of these skills and mentoring by experienced senior leaders should prove useful as well as assignments that present novel, challenging organizational problems calling for autonomy, risk taking, ongoing environmental assessment, and long-term solutions of multiple subsystems" (Mumford et al., 2000a: 90).

A number of research studies appear to support the notion that skills can be developed through career experiences. Research by Bray, Campbell, and Grant (1974) and McCauley, Ruderman, Ohlott, and Morrow (1994), for example, illustrates that assignments that contain novel and challenging problems promotes leadership skill development as they stimulate the exercise of creative problem-solving skills. Further, research by Mumford et al. (2000a) examines how employees develop skills over the course of their careers. In a sample of U.S. Army officers, they find greater levels of problem-solving and social skills at higher grade-levels.

Many leadership training programs have also received widespread praise for developing skills necessary for leadership through the type of assignments and developmental activities proposed by the skills model of leadership (e.g., Barling, Weber, & Kelloway, 1996; Streufert, Nogami, Swezey, Pogash, & Piasecki, 1988). Indeed, "approximately 45% of the $56 billion that organizations spent on organizational learning and development in 2006 was targeted specifically at leadership development" (DeRue & Wellman, 2009). This spending even occurs

at the executive level. Firm's invest significant money in training programs, such as Harvard's MBA and various education programs. Estimates suggest that spending on executive education in the US is about $800 million annually (Bloomberg, 2011). As such, not only does the skills based model of leadership suggest that leaders can be developed, but organizations also seem to prescribe to this notion and feel that it is not just relevant getting rank and file employees to middle management, but it is also needed for executives.

Taken together, the skills based model of leadership and supporting empirical research suggests that skills represent the most direct determinant of leader performance and that these skills can be developed. Indeed, a recent review "notes that there is now considerable consensus in the existing literature that the primary source of leadership development is experience" (DeRue & Myers, 2014: 840). That said, "without appropriate developmental experience, even the most intelligent and motivated individual is unlikely to be an effective leader in organizational settings" (Mumford *et al.*, 2000b: 24). This is perhaps no where more true than for CEOs, making this directly applicable to CEO succession planning and perhaps as a result leading to external stakeholders being able to screen firms for signals of succession plan details.

Skill Development and CEO Succession Planning

As suggested by the skills based model of leadership, skills are central to effective leadership and thus organizations should carry out skill development to help develop leaders. As arguably the most important leaders in organizations given their position atop the organizational hierarchy (Finkelstein et al., 2009) and effect on firm performance (e.g., Crossland & Hambrick, 2011; Quigley & Hambrick, 2015), organizations should have certain skills in mind that they view as central to being an effective CEO. Given that skills can be developed (Mumford et al., 2000a), organizations should also carry out activities as part of their CEO succession planning

that help potential CEO successors develop these skills.

Evidence seems to suggest that organizations do indeed identify skills relevant to the CEO position as well as carry out developmental activities to help them develop these skills in potential successors. Indeed, traditionally succession planning was viewed as "a necessary human resources system for every company," companies "rarely considered the possibility that is might be deployed for genuine development or for retention of talented individuals" (Fulmer & Conger, 2004: 4). However, beginning in the late 1980s, many organizations became "deeply interested in leadership development", and attention was turned toward succession planning systems with the idea that "succession systems could be re-invented as a tool to support talent development" (Fulmer & Conger, 2004: 5-6). Research by Collins and Porras (2005) also supported this increased emphasis on leadership development as they noted that the best companies developed talent and promoted from within. Most companies now have management development programs and rotational programs that help with leader identification (Day, 2000). The individuals who are in these programs often eventually funnel into CEO succession candidates as they work their way up the corporate ladder.

Scholars have highlighted the importance of skills for potential CEO successors. Recent qualitative research into the succession planning process suggests that a central activity in CEO succession planning is boards determining the skills necessary to drive a firm's future (Schepker et al., 2017). Indeed, selecting a new CEO is a key responsibility of the board of directors (Lorsch, 1989; Vancil, 1987), and some theorists have concluded that it is the only task that the board can credibly or effectively perform (Mizruchi, 1983). Further, research suggests that skill development is critical to firm's CEO succession planning and survival. Indeed, "development activities help executives cultivate skills relevant to the CEO position" (Schepker

et al., 2017: 5), and that a firm's survival depends on its ability to develop independent leaders below the top who are capable of taking top command themselves" (Drucker, 1993; Tichy, 2014: 53). Further, in an interview conducted with a director of a large public company, she noted that it is important to give potential successors "additional responsibilities or to give them additional projects" so that they can develop and show additional leadership abilities."[3]

While it might seem counterintuitive that firms would need to help potential CEO successors develop or enhance their skills, the reason that organizations carry out developmental activities in CEO succession planning is because the skills relevant to being a CEO are different than all other positions in an organization. Indeed, "It has been recognized by scholars for decades that leadership skill requirements change across organizational levels" (De Meuse, Dai, & Wu, 2011: 120), including from an executive to CEO. The position of CEO differs from all other positions within an organization (Kesner & Sebora, 1994), as the CEO has the greatest influence on organizational outcomes (Quigley & Hambrick, 2015), is the most powerful individual in the corporation (Finkelstein et al., 2009), enjoys very high levels of compensation (Finkelstein et al., 2009), and can even leverage their position into fame and notoriety (Wade, Porac, Pollock, & Graffin, 2006). Most relevant to this research though, this position involves a "larger number of interactions among a wider range of constituencies." (Mumford et al., 2000c: 25)."

Research has begun to investigate what skills may be relevant to the CEO position. Mumford, Campion, and Morgeson (2007) propose a strataplex model whereby skill requirements are stratified by organizational level, such that the CEO position has the greatest skill requirements. Castanias and Helfat (1991) suggest that CEO skills can be categorized based

[3] This quote comes from an interview with directors of large public companies being conducted for a separate research project that is using interviews with directors to provide qualitative insights into corporate governance.

on their level of transferability and specificity between firms, such that they are either categorized as general, industry-specific, or firm-specific. Researchers have also suggested that finance skills may be relevant to being a CEO (Fligstein, 1993).

Taken together, it is important for firms to develop skills in potential CEO successors, and as I will argue in the next section, external stakeholders may be able to screen firms conference calls for signals of this skill development that provide insight into a firm's CEO succession planning.

CHAPTER 7

EARNINGS CALL PARTICIPATION AS A SIGNAL

Corporate Communication Skills

One skill that is I theorize is central to being a CEO, but is not typically central to other executive positions, and thus needs to be developed and enhanced in potential CEO successors, is corporate communication skills. Corporate communication skills refer to the "controlled, purposeful transfer of meaning by which leaders influence a single person, a group, an organization, or a community" (Barrett, 2006: 386). The reason this skill is essential to being a CEO is because CEOs operate at the boundary between their firm and the external environment (Katz & Kahn, 1966; Thompson, 1967). As such, it is important for CEOs to manage the organizations' interactions with external stakeholders (Hirschhorn & Gilmore, 1992).

A great deal of research indicates that interacting with external stakeholders is important for CEOs. Findings of Mintzberg (1973)'s interviews with CEOs suggests that CEOs are the figureheads and spokespersons for their organizations, and thus, they are required to communicate information about the organization with external constituencies. Building on Mintzberg's work, scholars have corroborated this suggestion. Levinson and Rosenthal (1986) interviewed CEOs and found that a significant component of their job is interacting with external constituencies. Behavioral complexity theories also emphasize the need for CEOs to coordinate the demands of external stakeholders (Zaccaro, 2001). Further, Finkelstein et al. (2009: 20) note that "The CEO of a publicly held corporation may engage in many more external activities" than

any other employee of an organization For a firm's constituencies, a CEO is thus often the “face of the firm” (Love, Lim, & Bednar, 2017: 1462), and, as such, “a CEO can't easily sidestep the communication obligations of working with increasingly vocal and demanding stakeholders” (Pincus, Rayfield, & DeBonis, 1991: 22). This skills is also seemingly important as it falls within the social skills category suggested by the skills based model of leadership (Mumford et al., 2000c) as well as the general skills suggested by Castanias and Helfat (1991).

Since such a critical part of a CEO’s job is interacting with external stakeholders, corporate communication skills are in turn essential for a CEO to be successful. Indeed, according to classic communication models, communication is how information is transmitted from one party to another (Shannon, 1975). The success of an individual’s ability to effectively convey this information largely depends on their corporate communications skills (Ashcraft, Kuhn, & Cooren, 2009; Barrett, 2006). Indeed, CEOs must be able to control the organizational discourse (Gao, Yu, & Cannella Jr, 2016). CEOs with good corporate communication skills “can use language to help induce cooperation from competitors or gain stakeholder support” (Gao et al., 2016: 22). For this reason, “many managers systematically behave as if impression management were a core part of their task” (Davis, 2009: 96). On the other hand, CEOs without strong corporate communication skills might communicate poorly with external stakeholders, which could negatively impact firm value (Schultz & Kitchen, 2004).

For instance, a number of CEOs, have made comments that have ended up haunting the firm (Kitchen & Schultz, 2001: 26) . Guido Barilla, CEO of Barilla— the largest pasta maker—spoke out against gay rights in 2013 leading to boycotts against the firm. Chip Wilson—former CEO Lulelmon—resigned following statements that his company’s clothes were not made for overweight individuals (Forbes, 2014). While these might be considered gaffs, some CEOs are

also poor communicators in general, which is problematic for their firm. For example, Elon Musk, the CEO of Tesla and SpaceX, has consistently received negative press due to his failure to communicate effectively (La Monica, 2019).

A great deal of evidence supports this notion that corporate communication skills are essential to being a successful CEO. One executive recruiter when asked the most important skills for a CEO to have noted the ability to "communicate, communicate, communicate" (Groysberg, Kelly, & MacDonald, 2011: 67). Axelrod (2002) in his study of some of the greatest leaders of all time noted that they were all good communicators. Further, "When CEOs and other senior executives in all industries and countries are asked to list the most important skills a manager must possess, the answer consistently includes good communication skills." (Barrett, 2006: 385). Additionally, Craig Conway, the former CEO of Peoplesoft, further confirms this notion as he suggests that "Good communicators have an enormous advantage over poor communicators because so much of running a company is […] external," and Richard Branson, the former CEO and current chairman of the Virgin Group, stated that "communication is the most important skill any leader can possess" (Gallo, 2015: 1) .

There is also reason to believe that corporate communication skills can be developed even among, high level leaders, such as executives being considered as a potential CEOs successors. As Gallo (2015: 1) notes, "communication is a skill that you can learn," and "it is developed through practice." For example, one CEO Gallo interviewed stated that he used to have poor corporate communication skills and was horrendous at public speaking, but he enhanced his skills and learned how to communicate more effectively (Gallo, 2018).

Analysts and Conference Calls

One means through which firms may have potential CEO successors develop and

enhance their corporate communication skills is by having them interact with analysts on quarterly earnings calls. Analysts are an important group of external constituents that CEOs interact with on a regular basis (Brown, Call, Clement, & Sharp, 2015; Soltes, 2014). More specifically, financial analysts are individuals employed by broker houses and investment banks. They analyze the performance and future prospects of firms and ultimately provide their opinions to the investment community (Feldman, 2013; Hayward & Boeker, 1998). These opinions influence important firm outcomes, such as stock market reactions (Jensen, 2004), the ability to garner important resources (e.g., Pollock & Gulati, 2007), and even CEO turnover (e.g., Wiersema & Zhang, 2011).

While analysts have traditionally been thought to be driven by economic rationality or market efficiency, analysts are also influenced by behavioral factors, including their own cognitions, career motivations, and influence from CEOs (Brauer & Wiersema, 2018; Busenbark, Lange, & Certo, 2017b; Westphal & Clement, 2008). This notion that they are influenced by interactions with CEOs is further illustrated by the fact that analysts interact with CEOs at conferences and strategy presentations, during earnings calls or private office meetings, and via phone conversations (Brown et al., 2015; Soltes, 2014).

Arguably the most important means through which CEOs communicate with analysts is through quarterly earnings calls. Indeed, although these calls are voluntary, they have become so commonplace that they are "now more or less routine" (Kaplan, Klebanov, & Sorensen, 2012: 973). They also are of such great importance "that practically all calls are conducted by the CEO" (Chen et al., 2018: 2). This is likely a result of the fact that these are "arguably the most important corporate disclosures" (Chen et al., 2018: 5) given that earnings calls are associated with a number of financial consequences, such as stock trading, stock volatility, and abnormal

price changes (Kaplan et al., 2012),

A typical quarterly earnings call consists of an uninterrupted presentation by firm executives followed by a question and answer (Q&A) session with analysts (Kimbrough, 2005; Lev, 2012). The presentation section of the call typically consists of executives reading from a script whereby they describe financials and events of the last quarter (Matsumoto, Pronk, & Roelofsen, 2011). In contrast, the Q&A portion of the call consists of a live discussion between executives of the firm and financial analysts.

Communicating with analysts on quarterly earnings calls requires strong corporate communication skills. Indeed, in these calls, especially in the Q&A session, the executives on the call face "pressures to respond extemporaneously to questions in conference calls" (Washburn & Bromiley, 2014: 854). Analysts' questions often require executives to clarify a firm's position or about issues that they would rather avoid (Washburn & Bromiley, 2014). As such, conference calls require the executives on the call to be well-prepared to answer a variety of questions about the firm as a whole and to convince analysts that the firm is "well-positioned and capably managed" (Matsumoto et al., 2011).

These calls also necessitate the need for executives on the calls to be able to "influence external perceptions of past events by shifting responsibility or by reframing events in positive terms" (Washburn & Bromiley, 2014: 854). Firms want to present a coherent and consistent message to the media in terms of their financial results, and so this requires a great deal of time "both preparing for and undertaking a conference call" (Washburn & Bromiley, 2014: 854), as the messages must be "created, rehearsed, confirmed, and orchestrated" (Van Riel & Fombrun, 2007: 185). Ultimately, "successfully handling analyst conference calls requires the nuancing abilities of a diplomat and the patience of a saint. A slip of the tongue can send a company's

stock price into cardiac arrest, or years later become the basis for a multi-million dollar class action settlement" (Findlaw, 2018: 1).

Executive Participation on Calls and Inside Succession

Because quarterly earnings calls require strong corporate communication skills, participation of executives other than the CEO on the call may indicate that the firm is using executive participation on these calls as a form of skill development to help develop potential CEO successors. Traditionally, CEOs and CFOs were the only executives represented on these calls. In recent years, however, this has changed and other executives are participating in these calls. Indeed, in the sample used for this paper, the average number of executives on the calls other than the CEO—and investor relations people who are unlikely to be promoted to CEO—is 1.74. This may thus be a signal that external stakeholders can screen for that indicates that firms are carrying out skill development as part of their CEO succession planning. Indeed, having executives involved in conference calls aligns with the notion of a development activity in that it is an "assignments where the leader has primary supervisory responsibilities", meaning the CEO, and where there is "limited discretion," in that the executives may be delegated by the CEO to answer some of the questions (Mumford et al., 2000a: 90).

This signal of skill development as part of CEO succession planning may indicate that a firm is planning to promote a CEO successor from within the company, meaning an insider. Indeed, since these development activities are visible to the public, it provides insights into the firm's intentions regarding its CEO succession planning, even if the firm does not want to share this information. Stakeholders may thus infer that firms that have a great deal of executive participation on conference calls place a priority on developing talent and thus likely intend to appoint an insider candidate when CEO succession does occur.

Specifically, firms are likely to have intentions of promoting an insider when CEO succession does occur because these potential successors may have developed strong corporate communication skills—a skill important to being a CEO. This means that there is likely a broader list of available succession candidates facilitating an ordinary inside succession (Finkelstein et al., 2009; Zhang, 2008). This planning also helps in instances where there is an unexpected CEO departure, such as death (Berns & Klarner, 2017). Further, because the board knows that these candidates have developed and enhanced their corporate communications skills, there is less information asymmetry than with outside candidates (Harris & Helfat, 1997; Tian et al., 2011).

Anecdotal evidence suggests that this is a process that is occurring. Continuing the tradition of sports examples in succession research, Denny Greene—a former NFL head coach (arguably the equivalent of a CEO for a public firm)—believed that it was important for assistant coaches he was grooming to be his successor (similar to executives in firms) to gain exposure to external stakeholders of the team to help them "learn this acquired skill" (Dungy, 2007). More specific to the CEO position, one CEO spoken to noted that *"part of the grooming process"* is *"getting them [executives] in front of analysts for calls (Boivie et al., Working Paper).* As such, I theorize that executive participation on conference calls is a signal that external stakeholders can screen for that is likely related to a firm to promote an inside successor when CEO succession does occur. I thus formally hypothesize the following:

> *H1: The extent of executive participation on quarterly conference calls is positively associated with the likelihood of inside succession when CEO succession occurs.*

Participation and When Succession Might Occur

In addition to executive participation on conference calls being relevant to a firm's succession plans to promote an insider, I theorize that characteristics of executive participation

on the quarterly earnings calls are also a signal that external stakeholders can screen for that can provide insight into when CEO succession might occur. In many cases, CEOs "work with their boards to define the timing of their departure" (Berns & Klarner, 2017: 93). Yet, at the same time there is a scarcity of research on how boards determine the appropriate timing of CEO departure (Nyberg et al., 2017).

Because an essential part of skill development is getting increasingly harder tasks and more responsibility (Mumford et al., 2000a), changes in the participation of the CEO on the call compared to the participation of other executives may be indicative that a firm is giving potential successors more and more responsibility. As a result, a succession may be likely to occur sooner rather than later, and this change over time may be a signal of a firm's plans regarding this. As such, I theorize that a reduction in CEO participation will be a signal indicative that a firm intends to have a CEO succession occur sooner. More formally, I theorize the following:

> *H2: A decrease in CEO participation on quarterly conference calls is negatively associated with the time until CEO succession occurs.*

Participation and Who Might Be Named CEO

Changes in an individual executive's participation in a quarterly earnings call may also be indicative of which individual may be named a CEO successor when succession does occur. As alluded to earlier, increasing responsibility is an essential part of skill development (Mumford et al., 2000a). As such, when a specific individual is increasingly taking on more and more responsibility it may be a signal that a firm intends to promote that specific individual.

Indeed, given the specific influence that conference calls and the language firms use in them may have on firm outcomes, firms are likely to tread lightly in giving executives additional responsibility on conference calls unless they are using this as skill development and planning to foresee this individual taking over as CEO when succession occurs. Thus, when an individual

executive is given significant additional responsibility, it may be indicative that they are being considered as the potential CEO successor. As such, I theorize the following:

> *H3: An increase in an individual executive's participation on quarterly conference calls is positively associated with the likelihood of that individual being named the CEO successor.*

CHAPTER 8

IMPLICATIONS OF EARNINGS CALL PARTICIPATION

Prior Experience on Calls and Analyst Evaluations

In addition to executive participation on quarterly earnings calls being a signal that may be correlated with the aforementioned CEO succession plan details, I also theorize that this executive experience may impact post CEO succession outcomes. If participation on conference calls is indeed useful at helping developing corporate communication skills, as I theorized, then it follows that there should be implications for newly appointed CEOs who participated in quarterly earnings calls before being appointed CEO when. Specifically, in this chapter, I will argue that newly appointed CEOs who participated in quarterly earnings calls prior to becoming CEO may have stronger corporate communication skills and thus may influence analysts' reactions to their appointments. Further, I posit that newly appointed CEOs should be able to better influence analysts' evaluations of their firms following quarterly earnings calls, at least in the early stages of their tenure—meaning their first two years—when it is hard to evaluate these individuals on anything other than heuristics given that their firm's performance during this time is largely related to decisions made by their predecessors (Graffin, Boivie, & Carpenter, 2013).

Reaction to CEO appointments

Because CEOs have such a great impact on firm performance and the direction of the firm (Quigley & Hambrick, 2015), research suggests that analysts are likely to react to the appointment of a new CEO, much like the stock market and other stakeholders react to these

appointments (Lee & James, 2007). In particular, research suggests that analysts' may react to CEO appointments by altering their earnings forecasts (Gomulya & Boeker, 2014). These forecasts represent what analysts view as the earnings potential of the firm, which incorporates a number of factors, including analysts' perceptions of the quality of the CEO and their ability to lead the firm to strong earnings performance (Brauer & Wiersema, 2018).

Because research indicates that analysts' earnings estimates are impacted by a number of factors, including perceptions of the CEOs' quality, I theorize that these forecasts issued following CEO succession announcements will be impacted by extent of the newly appointed CEO's experience on conference calls prior to becoming CEO. Again, I theorize that this experience is an indicator or whether a CEO has developed and enhanced their corporate communication skills. Analysts may view corporate communication skills as an asset to a firm, as this type of skill holds "a prominent place as proximal predictors of leader effectiveness" (Hoffman et al., 2011: 352). As, such they may believe that CEOs with this experience will be more effective. Further, corporate communication skills are thought to be associated with higher quality relationships (McCall & Lombardo, 1983), which "enhances the ability to influence organizational constituents" (Hoffman et al., 2011: 352).

Prior experience on quarterly earnings calls may also influence analysts due to the familiarity analysts have with these individuals. Research in social psychology on the familiarity principle supports this notion (Zajonc, 1968, 2001). The familiarity principle suggests that people tend to like things more when they are familiar with them. For example, people tend to develop a greater liking for foods, the more they are exposed to them (Pliner, 1982). People also increasingly find other individuals more pleasing, the more they interact with them (Reis, Maniaci, Caprariello, Eastwick, & Finkel, 2011). Building on this principle, analysts may react

more positively to new CEOs the more they have interacted with them before. Indeed, these CEOs may have developed some rapport with analyst through their participation on prior quarterly earnings calls, which may positively influence analysts' evaluations in terms of their earnings estimates. Taken together, I hypothesize that analysts will react more positively to CEO succession announcements, the greater the extent of CEOs prior participation on conference calls.

> *H4: The greater the extent of a newly appointed CEO's participation on quarterly earnings calls prior to becoming CEO, the more positive the changes in analyst forecast estimates following the CEO succession announcement.*

Analyst Recommendations

In addition to experience on quarterly conference calls prior to becoming CEO impacting analysts' reactions to the CEO succession announcement, I also argue that this experience will impact a CEO's ability to influence analysts' evaluations to firm's conference calls and the associated earnings announcements. Arguably the most commonly studied indicator of an analyst's evaluation of a firm is the recommendation an analyst has on a firm's stock. Analysts provide recommendations on a five-point scale—strong sell, sell, hold, buy, and strong buy (Wiersema & Zhang, 2011). A strong sell represents the least favorable recommendation whereas a strong buy represents the most favorable recommendation. These recommendations are important as they have been shown to positively influence demand for a firm's stock (Stickel, 1992), capital costs (Useem, 1996), and CEO dismissal (Wiersema & Zhang, 2011).

More importantly though, changes in these recommendations are of critical importance and are most appropriate for gauging an analyst's evaluation of a firm. Changes in recommendations are arguably critical as they are reflective of analyst reactions to new information rather a recommendation that was issued in a prior period (Busenbark et al., 2017b;

Westphal & Clement, 2008). As such, there are positive abnormal stock market reactions to upgraded recommendations (Barber, Lehavy, McNichols, & Trueman, 2001) and negative abnormal stock market reactions to downgraded recommendations (Westphal & Clement, 2008).

The corporate communications skills that a CEO may develop and enhance by being on conference calls prior to becoming a CEO may help influence changes in the recommendations that occur following quarterly earnings calls. As prior research indicates, analysts are indeed susceptible to influence by the CEO (Brauer & Wiersema, 2018), and I theorize they will also be influenced by a CEOs corporate communication skills as indicated by the extent of prior earnings call participation. CEOs with corporate communication skills may be able to paint the firm in a better light and present a consistent and coherent message. Analysts may also view corporate communication skills as an asset to a firm, as this type of skills "hold a prominent place as proximal predictors of leader effectiveness" (Hoffman et al., 2011: 352). Further, corporate communication skills are thought to be associated with higher quality relationships (McCall & Lombardo, 1983), which "enhances the ability to influence organizational constituents" (Hoffman et al., 2011: 352).

With this in mind, I postulate that CEOs who have developed and enhanced their corporate communication skills by participating in conference calls prior to becoming CEO should be able to better influence analysts in subsequent conference calls in the early stages of their CEO tenure and thus should experience more upgrades following quarterly earnings calls. Put differently, once these individuals become CEOs, their performance on calls I theorize should be better and more persuasive. As such, I formally hypothesize the following.

> *H5a: The extent of a newly appointed CEO's participation on quarterly earning calls prior to becoming CEO will be positively associated with the number of upgrades following their firm's quarterly earnings calls in the early stages of their CEO tenure.*

Tone of Analyst Reports

The tone of analyst reports is another indicator of analyst evaluations that I believe CEOs with prior experience on quarterly earnings calls may be effective at influencing. While much prior research focuses on summary statistics of analysts' evaluations of firms, such as the aforementioned earnings estimates and analyst recommendations, "the culmination of their efforts are the research reports distributed to investors" (Huang et al., 2017: 1). Specifically, the culmination of analysts efforts is the detailed, textual analysis analysts provide of the company, which according to a study by Huang, Zang, and Zheng (2014: 2152) was on average 7.7 pages and covered "a wide range of topics, such as the company's recent financial performance, business strategies, competitive position within the industry, risk exposure, and the effectiveness of its management."

The detailed analyses in analyst reports, and more specifically the tone of these analyses, are of great significance to investors. Indeed, investors perceive this analysis as "the most important research output in an analyst report because it contains analysts' research ideas useful for investors to form their own investment decisions" (Huang et al., 2014: 2152). The millions of dollars spent annually on the full reports further supports this notion; investors could subscribe to just databases that provide summary outputs. The tone of this section is of great importance because "conditional on earnings forecasts and stock recommendations, the market reacts positively to the textual tone of initiation reports" (Asquith, Mikhail, & Au, 2005; Huang et al., 2014: 2154; Twedt & Rees, 2012). Huang et al. (2014: 2153) find that "a one standard deviation increase in the favorableness of the textual opinion measure results in an additional two-day abnormal return of 41 basis points."

While the tone of the analyst reports clearly has important implications, scholars are

unsure about what influences the tone of analysts' reports. Given that analysts are subject to cognitive biases (Brauer & Wiersema, 2018), much like with the prior hypotheses, I argue that they are influenced by a CEO's corporate communication skills as indicated by prior experience on conference calls prior to becoming CEO. Indeed, researchers note that analyst content in these reports draws a great deal on information provided in the conference calls, with around 69% of an analysts' discussion in these reports focuses on topics discussed in conference calls subsequent to annual earnings (Huang et al., 2017). Thus it follows that in writing this section, they may be influenced by the corporate communication skills of the CEOs who may be better able to paint their firms in the best light and who may have developed a rapport with analysts. Thus, I hypothesize:

> *H5b: The extent of a newly appointed CEO's participation on quarterly earning calls prior to becoming CEO will be positively associated will the tone of analyst reports issued following their firm's quarterly earnings calls in the early stages of their CEO tenure.*

CHAPTER 9

METHODS

To create the sample, I began with the 712 firms that were part of the S&P 500 at any point between 2005 and 2014. I focused on S&P 500 organizations because they are closely scrutinized given that they are some of the largest and most widely owned companies in the US. As a result, there is a great deal of public information about these firm's CEO successions. Having this information is critical to coding the succession variables for this study. These firms are also widely covered by financial analysts, which is necessary for the analyst related outcomes.

From this set of firms, I used ExecuComp to further narrow my sample to the firms that had CEO successions between the aforementioned timeframe. Following prior research (Hubbard et al., 2017; Shen & Cannella, 2002), I searched news articles in the year around the succession so that I could exclude instances where the succession occurred due to CEO death, CEO health issues, mergers or acquisitions, or corporate restructuring. I also removed successions where the CEO successor was an interim CEO (Graffin et al., 2013). This resulted in 484 successions that serve as the sample for this study.

The data for this study comes from a number of traditional strategy databases. I used BoardEx along with firm's Def 14-A proxy statements to assess characteristics of the executives and boards of directors in this study. Conference calls were gathered from the Seeking Alpha website as well as from Thomson One (Pan, McNamara, Lee, Haleblian, & Devers, 2017).

Analyst related variables were primarily gathered from I/B/E/S, although analyst reports were gathered from Thomson One's InvestText database. Other financial controls and executive characteristics were gathered from Compustat and Execucomp.

Since my theoretical predictions represent five different partitions of data, the data was structured in five different ways. The data for the first hypothesis consists of a cross-section of the CEO successions, so the empirical estimation is at the CEO-succession level. The data for the second hypothesis consists of a stacked panel structure by quarter that models the duration until the CEO succession announcement. The quarters begin with the first quarter of 2005 or in cases where an individual was not yet CEO, the quarters begin with the first quarter of their tenure as CEO. The estimation here is thus at the CEO-quarter level.

The data for the third hypothesis is also a stacked panel structure by quarter; however, it is composed of all the executives that appeared on the calls from the firms that had CEO successions during 2005-2014. Specifically, executives are included in the sample once they first appear on a call until the CEO succession announcement occurs. The analysis is at the executive-quarter level. The data for the fourth hypothesis is a cross-section of all the CEO successors that took over during this time period, so the empirical estimation is at the CEO-succession announcement level. Finally, the data for hypotheses 5a and 5b is a panel that examines newly appointed CEOs that took the reins between 2005 and 2014. In particular, this data is structured by quarter, such that I look at their first two years as CEO (so eight quarters maximum), which is considered the early stages of a CEO's tenure (Graffin et al., 2013).

Methodology for Hypothesis 1

Dependent Variable. Traditionally, inside succession was measured as a binary variable coded as 1 when an executive was promoted to CEO from within the span of the predecessor and

0 when they were not employed by the company within the predecessor's span (e.g., Dalton & Kesner, 1983; Dalton & Kesner, 1985). This measurement, however, has been challenged because it does not seem to capture "the degree to which a CEO or candidate has the characteristics typified by outsider or insider definitions" (Nyberg, 2017: 322) or received some on the job training and skill development many CEOs receive before promotion (Cannella & Lubatkin, 1993; Harris & Helfat, 1997). As such, I follow recent research and measure *Inside Succession* as a binary variable coded as 1 when the executive promoted to CEO was employed by the firm for at least two years before being promoted to CEO and 0 when the executive promoted to CEO was employed by the firm less than two years before being promoted to CEO or was hired from outside the firm (Graffin et al., 2011; Zhang, 2008).

Independent Variables. As the presentation portion of the call is typically prepared in advance in collaboration with the firm's investor relations team (Frankel, Johnson, & Skinner, 1999; Skinner, 2003), participation on this portion of the call does not seem to capture the development and enhancement of corporate communication skills that I am attempting to capture. In contrast, the more extemporaneous nature of the Q&A session (Matsumoto et al., 2011), appears to indicate the corporate communications skills I am theorizing about. As such, here and with each of the independent variables in this study, I focus on the Q&A portion of the calls.

Executive participation on conference calls was measured two ways. *Executive Participation 1* is the average number of executives other than the CEO and the investor relations representative—who is unlikely to be promoted to CEO (Laskin, 2009)—that participated in the Q&A portion of the quarterly earnings calls in the three years prior to the CEO succession announcement (so maximum 12 prior quarterly conference calls). *Executive*

Participation 2 is the average number of words spoken by the executives other than the CEO and the investor relations representative that participated in the Q&A portion of the quarterly earnings calls in the three years prior to the CEO succession announcement (so maximum 12 quarterly conference calls). In instances where there were no words spoken by other executives, this variable took on the value of 0. Specifically, I logged this variable due to its skewed nature (adding 1 to each value to account for the fact that you cannot log 0).

Controls. I controlled for a number of executive, firm, and industry-level factors that might serve as alternative explanations. At the executive level, I controlled for *Outgoing CEO Duality* with a binary variable where 1 indicates that the outgoing CEO held the position of chairman of the board and 0 means they did not (Krause & Semadeni, 2014). *Outgoing CEO Tenure* I controlled for with the logged number of years the outgoing CEO served as CEO of the firm. *Outgoing CEO Pay* I controlled for with ExecuComp's tdc1 measure. This measure includes salary, bonuses, restricted stock grants, options granted (valued by the Black–Scholes model), long-term incentive payouts, and all other types of cash compensation paid in a given year. To prevent any extreme values from biasing the results, I used the natural log of the outgoing CEO's last year tdc1 value (Graffin et al., 2013). As there are notable differences for male and female CEOs (Cook & Glass, 2014), I controlled for *Outgoing CEO Gender* with a dummy variable where 1 is equal to female CEO. Further, I assessed *Outgoing CEO Awards* with a binary variable where 1 indicates the outgoing CEO had won any CEO awards in the prior five years and 0 means they did not (Wade et al., 2006). I controlled for the logged total *Outgoing CEO Words* in the Q&A portion of the previous three years of conference calls spoken by the CEO to account for differences in the amount of words spoken at the firm level in the conference calls.

At the firm level, I assessed whether a firm had a Chief Human Resource Officer (CHRO). Research indicates CHROs are essential to CEO succession and skill development (Schepker et al., 2017). Specifically, drawing on the listing of executives in firms' DEF14A proxy statements, I created a binary variable *CHRO* where 1 indicates they had a CHRO or equivalent—most often a Vice President of Human Resources—and 0 signifies they did not. Because CEO dismissal represents a unique type of dismissal and lowers the likelihood of an insider being promoted to CEO (Finkelstein et al., 2009), I controlled for whether the prior CEO was dismissed (Graffin et al., 2011). Specifically, I applied the Shen and Cannella (2002) criteria and created a dummy variable *Outgoing CEO Dismissed*, which is coded as 1 when the outgoing CEO was less than 65 and did not remain on the board and 0 otherwise.

Whether a firm has appointed an heir apparent is a noted indicator of inside succession (Cannella & Shen, 2001). With this mind, I control for whether a firm appears to have an *Heir Apparent* with a dummy variable equal to 1 when there is an individual who is the only person in the firm holding the position of president or COO or both and is at least five years younger than the CEO and 0 when there is not (Cannella & Shen, 2001; Vancil, 1987). The age aspect is important to account for because boards would ideally like CEOs to serve for five to ten years and if the individual is older than the current CEO, it is unlikely that individual is likely to become CEO (Cannella & Shen, 2001; Vancil, 1987). To account for governance mechanisms known to influence succession, I also account for *Board Size* (number of board members) and *Insider Percentage* (number of inside members divided by total number of board members).

Firms are less likely to promote an insider when the firm is performing poorly (Zhang & Rajagopalan, 2004), as such I controlled for two different forms of firm performance: Return on Assets *(ROA)* (net income over total assets) and *Tobin's Q* (approximated as ratio of market to

book value). *Firm Size* has also been shown to be related to succession (Ang et al., 2003), so I controlled for firm size with logged total assets (Chen, Crossland, & Luo, 2015; Tang, Qian, Chen, & Shen, 2015). Finally, I included *year fixed effects* and *industry fixed effects*—industry classification was based on 10 digit Fama French industry codes (Fama & French, 1997)—to account for unobserved heterogeneity across different time periods and business domains.

Estimation Technique. To test Hypothesis 1, I followed prior research on CEO succession and used logistic regression to predict the likelihood of inside succession (Boeker & Goodstein, 1993; Cannella & Lubatkin, 1993; Datta & Guthrie, 1994). Logistic regression is appropriate here as the outcome variable for this cross-sectional analysis is binary—it is either classified as an inside succession or outside succession. Furthermore, I used robust standard errors to help deal with heteroscedasticity (Hardin & Hilbe, 2003).

Methodology for Hypothesis 2

Dependent Variable. When modeling an event, and specifically the duration until an event, the duration is inherently binary; the phenomenon is either "on" or "off" (Box-Steffensmeier & Jones, 2004). As such, to model the time until CEO succession, I created a stacked panel structure by quarter for each CEO. *Duration Until Succession* is coded as 0 in the periods where the CEO succession announcements did not occur and 1 in the periods where CEO succession announcements did occur.

Independent Variable. *Change in CEO Participation* is measured as the difference between the number of words spoken in the Q&A portion of the quarter's call less the number of words spoken in the Q&A portion of the prior quarter's call. I ultimately standardized this variable in the empirical estimation to ease interpretation; however, I report the unstandardized version in Table 3, which contains the descriptive statistics and correlations for Hypothesis 2.

Controls. The controls for Hypothesis 2 are largely the same as for Hypothesis 1; however, given that the data for Hypothesis 2 is structured by quarter, many of the controls have a slightly different operationalization. As such, I describe each of the controls in detail again to reflect these differences. At the executive level, I controlled for *Outgoing CEO Duality* with a binary variable indicating whether the outgoing CEO held the position of chairman of the board during the quarter (Krause & Semadeni, 2014). *Outgoing CEO Tenure* I controlled for with the logged number of days between when the outgoing CEO became CEO of the firm and the start of the current quarter. *Outgoing CEO Pay* I controlled for with ExecuComp's tdc1 measure. As this variable is available on a yearly basis, I used the natural log of the outgoing CEO's prior year's tdc1 value and logged it to prevent any extreme values from biasing the results (Graffin et al., 2013). I controlled for *Outgoing CEO Gender* with a dummy variable where 1 is equal to female CEO. Further, I assessed *Outgoing CEO Awards* with a binary variable indicating whether the outgoing CEO had won any CEO awards in the prior five years (Wade et al., 2006). To account for the fact that change in CEO participation might be due to shorter conference calls, I controlled for *Change in Executive Participation* with the change in the number of executive words—again excluding the CEO and investor relations representative—in the calls from one quarter to the next. I standardized this variable in the models to ease interpretation, but report the unstandardized version in the descriptives and correlations in Table 3.

At the firm level, I again included whether a firm had a CHRO or equivalent with a dummy variable where 1 indicates they do and 0 means they do not. As I gathered this data from firm's annual DEF14A proxy statements, this variable takes the same value for all four quarters in a given year. As noted earlier, an heir apparent is a noted indicator of inside succession, but it also likely related to the time until succession (Cannella & Shen, 2001). With this mind, I again

controlled for whether a firm appears to have an *Heir Apparent* with a dummy variable that captures whether there is an individual who is the only person in the firm holding the position of president or COO or both and is at least five years younger than the CEO (Cannella & Shen, 2001; Vancil, 1987). Similar to the CHRO variable, as I coded whether a firm had an heir apparent based on proxy statements, this variable takes the same value for all quarters in a given year.

To account for governance mechanisms known to influence succession, I accounted for *Board Size* (number of board members) and *Insider Percentage* (number of inside members divided by total number of board members). These values are also reported on a yearly basis and are the same for all quarters in a given year. Firms performance is a critical factor that influences CEO succession (Zhang & Rajagopalan, 2004) and thus may be a key determinant of the duration until a succession announcement. As such, I controlled for two different forms of firm performance: Return on assets *(ROA)* (quarterly net income over quarterly total assets) and *Tobin's Q* (approximated as ratio of market to book value in a given quarter). *Firm Size* has also been shown to be related to succession (Ang et al., 2003), so I controlled for firm size with logged quarterly total assets (Chen et al., 2015; Tang et al., 2015). Finally, I included *industry fixed effects*—industry classification was based on 10 digit Fama French industry codes (Fama & French, 1997)—to account for unobserved heterogeneity across different business domains. Time related controls were not included since time was being modeled.

Estimation Technique. Hypothesis 2 is focused on the duration until a CEO succession announcement occurs. As this hypothesis is focused on the duration until an event—CEO succession announcement—occurs, I used event history analysis (Box-Steffensmeier & Jones, 2004). Event history analysis is appropriate when the variation in the duration of time until an

event occurs varies systematically with a set of predictors (Singer & Willett, 2003). This is the case here as I theorize the time until the CEO succession announcement occurs is related to the aforementioned variables. More specifically, I used a Cox proportional hazard model (Cox, 1972) to estimate the duration until CEO succession announcements. Cox models, have been described as "unequivocally the best all-around method for estimating regression models with continuous-time data" (Allison, 1984: 35). I again also used robust standard errors.

Methodology for Hypothesis 3

Dependent Variable. Like with the duration until succession variable**,** to assess whether an executive was appointed CEO, I created a binary variable. Specifically, I created a stacked panel structure in which this variable—*CEO appointment*—is coded as 0 in every quarter in which a given executive is not promoted to CEO and 1 in the quarter in which they are promoted to CEO. This is assuming a given executive is promoted to CEO, which for most executives in the sample does not occur, and thus this variable always takes a value of 0 for these individuals.

Independent Variable. To measure change in individual executive participation on the quarterly earnings call, I used a change measure similar to the change in CEO participation measure. Specifically, this variable—*Change in Individual Exec Participation*—is equal to the number of words spoken by a given executive in the Q&A portion of the current quarter's call less the number of words spoken in the Q&A portion of the call in the prior quarter by the same executive. I excluded CEOs and investor relations representatives in the creation of this variable. I ultimately standardized this variable in the empirical estimation to ease interpretation; however, I report the unstandardized version in Table 5, which contains the descriptive statistics and correlations for Hypothesis 3.

Controls. The controls I included in testing Hypothesis 3 are very similar to the ones

used in testing Hypothesis 2. While the data for Hypothesis 3 is also structured by quarter, the focus here is at the individual executive level, and so some of the controls again have a slightly different operationalization. As such, I once more describe each of the controls to reflect these differences.

I controlled for a number of executive level factors. *Outgoing CEO Duality, Outgoing CEO Tenure, Outgoing CEO Pay, Outgoing CEO Gender,* and *Outgoing CEO Awards* were accounted for in the same way as in the prior hypothesis. In testing this hypothesis, I also added controls that attempt to capture aspects related to the individual executives. I controlled for *Executive Gender* with a binary variable where 1 indicates a female executive and 0 indicates males. Researchers often make assessments about the nature of an executives work based on their job position. With this in mind, I attempted to account for *Executive Functional Background* based on a coding of the job titles provided in the quarterly conference calls. Specifically, I classified job titles into four functional backgrounds (Carpenter & Wade, 2002): *Finance, Marketing, R&D,* and *Other*. Finance includes titles such as CFOs, controllers, accountants, treasurers; marketing includes titles such as CMO, sales executive, product manager, and advertising executive. R&D captured all engineering and research and development positions. Finally, other was the omitted category, and included general administration roles, operations, law, and other titles that could not be classified into one of the other categories.

Further, I controlled for whether an individual executive had been named the heir apparent. If they were, it is likely they will be named CEO. I accounted for this by creating a dummy variable—*Exec is Heir Apparent*—that captured whether a given executive was the only person in the firm holding the position of president or COO or both and was at least five years

younger than the CEO (Cannella & Shen, 2001; Vancil, 1987). Finally, to account for the fact that change in an executive's participation might be due to shorter conference calls, I controlled for *Change in CEO Participation* with the logged change in the number of CEO words in the calls from one quarter to the next. I standardized this variable in the models to ease interpretation, but report the unstandardized version in the descriptives and correlations in Table 5.

At the firm level, *CHRO, Board Size*, *Insider Percentage*, *ROA, Tobin's Q,* and Firm Size were also operationalized as in testing Hypothesis 2. I also again included *industry fixed effects* based on 10 digit Fama French industry codes (Fama & French, 1997)—to account for unobserved heterogeneity across industries.

Estimation Technique. Hypothesis 3 is focused on the likelihood of an individual executive member being promoted to CEO. As this hypothesis is also focused on the likelihood of an event occurring, I again used a Cox proportional hazard model to test this hypothesis. Much like how Cox models are used to predict the likelihood of CEO dismissal (Boivie, Graffin, Oliver, & Withers, 2016; Wasserman, 2003; Wowak, Hambrick, & Henderson, 2011), here I used a Cox model to predict the likelihood of the event—appointment to CEO occurring. This is appropriate because I theorize that the risk of the an executive being appointed CEO is associated with a set of predictors (Singer & Willett, 2003).

Methodology for Hypothesis 4

Dependent Variable. *Change in Earnings Estimates* was operationalized as the difference between the earnings per share (EPS) forecast made by analysts following the CEO succession announcement and the last EPS forecast made before the announcement (Gomulya & Boeker, 2014; Palmrose, Richardson, & Scholz, 2004). Analysts issue EPS forecasts on a

monthly basis, and so, following Gomulya and Boeker (2014), I drop observations in which the duration between these two dates is greater than two months (63 days), as these changes likely do not capture analysts' reactions to the CEO succession announcements. I winsorized this variable at the one and 99th percentiles to account for a few outliers. Results remain the same, however, with the non-winsorized version.

Independent Variables. I assessed prior experience on conference calls in two ways. First, I created a count variable—*Prior Call Experience 1*—equal to the number of quarterly earnings calls the newly appointed CEO participated in during the Q&A portion in the three years prior to being announced as the new CEO. This includes participation at the focal firm they were appointed CEO of, as well participation on conference calls of other S&P 1500 firms (this is the set of firms for which conference calls are readily available) where they were previously employed during that time. I logged this variable as it was skewed. Second, I created a variable—*Prior Call Experience 2*—equal to the number of words spoken by the newly appointed CEO in the Q&A portion of quarterly earnings call in the three years prior to being announced as the new CEO. I again logged this variable due to its skewed nature and utilized the firm calls as well as the calls of other firms where they were employed.

Controls. For this hypothesis, I controlled for a number of variables that might serve as alternative explanations. Many of these variables are the same as for the prior hypotheses, although here they are operationalized slightly differently given the cross-sectional analysis focusing on analyst reactions to CEO succession announcements. At the executive level, I controlled for *Outgoing CEO Duality* with a binary variable where 1 indicates that the outgoing CEO held the position of chairman of the board and 0 indicates they did not (Krause & Semadeni, 2014). *Outgoing CEO Tenure* I controlled for with the logged number of years the

outgoing CEO served as CEO of the firm up until the CEO succession announcement. *Outgoing CEO Pay* I controlled for with the outgoing CEO's last year tdc1 value (Graffin et al., 2013). I controlled for *Outgoing CEO Gender* with a dummy variable where 1 is equal to female CEO (Cook & Glass, 2014). I also included the gender of the newly appointed CEO with the variable *New CEO Gender.* Further, I assessed *Outgoing CEO Awards* with a binary variable indicating whether the outgoing CEO had won any CEO awards in the prior five years (Wade et al., 2006).

Because CEO dismissal represents a unique type of dismissal and stakeholders tend to react to this (Finkelstein et al., 2009), I controlled for whether the prior CEO was dismissed (Graffin et al., 2011). Specifically, I applied the Shen and Cannella (2002) criteria and created a dummy variable indicating *Outgoing CEO Dismissed*, which is coded as when the outgoing CEO was less than 65 and did not remain on the board. I also coded *Insider* based on whether the newly appointed CEO was an inside successor using the operationalization for the dependent variable from Hypothesis 1. Whether a firm appoints an heir apparent is important to the financial community (Cannella & Shen, 2001), so I controlled for whether the new CEO was the heir apparent at the company they were appointed CEO at with a dummy variable. Specifically, *New CEO Was Heir* was coded 1 if the new CEO was the only individual in the firm holding the position of president or COO or both before the CEO succession announcement and was at least five years younger than the outgoing CEO.

To account for governance mechanisms, I accounted for *Board Size* (number of board members) and *Insider Percentage* (number of inside members divided by total number of board members) based on data from the year prior to the succession announcements. Analysts are sensitive to firm performance (Zhang & Rajagopalan, 2004), and so, I again controlled for two different forms of firm performance: *Return on Assets* (net income over total assets) and *Tobin's*

Q (approximated as ratio of market to book value) for the year prior to the succession announcement. *Firm Size* has also been shown to be related to succession (Ang et al., 2003), so I controlled for firm size with logged total assets (Chen et al., 2015; Tang et al., 2015).

In regard to analysts, these analysts exhibit herding behavior in their recommendations (Trueman, 1994; Welch, 2000); I thus controlled for two factors to address this. *Analyst Dispersion* is measured as the standard deviation of the EPS estimates prior to the CEO appointment (Busenbark et al., 2017a; Jegadeesh & Kim, 2009). *Analyst Following* is measured as the number of analysts following the firm prior the CEO appointment. I winsorized both of these two variables at the one and 99th percentiles to account for a few outliers. Results remain the same, however, with the non-winsorized versions. Finally, I included *year fixed effects* and *industry fixed effects*—industry classification was based on 10 digit Fama French industry codes (Fama & French, 1997)—to account for unobserved heterogeneity across different time periods and business domains.

Estimation Technique. To test Hypothesis 4, I used ordinary least squares regression (Greene, 2003). This standard regression approach is appropriate here as the outcome variable is continuous and the data is cross-sectional. Furthermore, I used robust standard errors to help account for heteroscedasticity.

Methodology for Hypothesis 5a and 5b

Dependent Variables. *Upgraded Recommendations*—the dependent variable for Hypothesis 5a—is measured as the count of the number of upgraded recommendations within the month window (31 days) following the quarterly earnings call (e.g., Busenbark et al., 2017b; Westphal & Clement, 2008). The reason for this time frame is that analyst recommendations are updated monthly in the IBES database. Further, as Huang et al. (2017: 1) et al. notes “an

overwhelming number of sell-side analyst research reports," and thus changes in recommendations," are issued immediately following quarterly earnings calls, "because only timely reactions to these events can offer the analyst clients an informational advantage in trading."

Tone of Reports—the dependent variable for Hypothesis 5b—examines the tone of analyst reports issued within the three days around the quarterly earnings calls (day of call through two days after) (Huang et al., 2017). Specifically, since I am interested in the reactions of analysts in aggregate, I combined the reports together (Huang et al., 2017). I then analyzed these reports using LIWC (Language Inquiry Word Count, www.liwc.net), a computer-aided text analysis program (Pennebaker, Booth, & Francis, 2007). Research suggests that general linguistic algorithms like those included in LIWC that examine positive and negative tone can provide noisy measures when assessing financially oriented passages (Loughran & McDonald, 2011). As such, I used Loughran and McDonald (2011)'s finance-oriented dictionaries to calculate the positive and negative components of the reports, which represents the number of positive and number of negative words in the articles. I then created a tone variable, which is calculated as the positive words less negative words, scaled by the total number of positive and negative words (Chen et al., 2018).

Independent Variables. My independent variables for the tests of Hypotheses 5a and 5b were the same as for Hypothesis 4. *Prior Call Experience 1* is equal to the logged number of quarterly earnings calls where the newly appointed CEO participated in the Q&A portion in the three years prior to being announced as the new CEO. *Prior Call Experience 2* is measured as the logged number of words spoken by the newly appointed CEO in the Q&A portion of quarterly earnings calls in the three years prior to being announced as the new CEO.

Controls. Like with the testing of the prior hypothesis, I again controlled for a number of factors that might serve as alternative explanations that influence analyst evaluations. Specifically, the controls I included in testing Hypothesis 5a and 5b are similar to the ones used in testing Hypothesis 4. While the data for Hypothesis 4 is a cross-sectional analysis, the data for these hypotheses are at the quarter level, and so some of the controls again have a slightly different operationalization. As such, I describe each of the controls to reflect these differences.

As there is little to evaluate CEOs on in the early stages of their tenure, firm stakeholders—like analysts—often evaluate new CEOs in comparison to their predecessors (Graffin et al., 2013). I therefore control for a number of factors related to the outgoing CEO. I controlled for *Outgoing CEO Duality* with a binary variable equal to 1 if the outgoing CEOs held the position of chairman of the board and 0 if they did not (Krause & Semadeni, 2014). *Outgoing CEO Tenure* I controlled for with the logged number of years the outgoing CEO served as CEO of the firm at the time of exit. *Outgoing CEO Pay* I controlled for with ExecuComp's tdc1 measure, and more specifically the amount the prior CEO made in the last year of their tenure as CEO. To prevent any extreme values from biasing the results, I used the natural log of this value (Graffin et al., 2013). As there are many differences for male and female CEOs, (Cook & Glass, 2014), I controlled for *Outgoing CEO Gender* with a dummy variable where 1 is equal to female CEO and 0 is a male. Further, I assessed *Outgoing CEO Awards* with a binary variable indicating whether the outgoing CEO had won any CEO awards in the prior five years (Wade et al., 2006). Because CEO dismissal represents a unique type of dismissal and stakeholders tend to react to this (Finkelstein et al., 2009), I controlled for whether the prior CEO was dismissed (Graffin et al., 2011). Specifically, I applied the Shen and Cannella (2002) criteria and created a dummy variable indicating *Outgoing CEO Dismissed*, which is coded as when the outgoing CEO was

less than 65 and did not remain on the board.

I also accounted for characteristics of the new CEOs that may influence analysts. I coded *Insider* based on whether the new CEO was an inside successor using the operationalization for the dependent variable from Hypothesis 1. Using the same coding for the outgoing CEO's gender, I controlled for the gender of the new CEO with the variable *New CEO Gender*. Whether a firm appoints an heir apparent is important to the financial community (Cannella & Shen, 2001). With this mind, I control for whether the new CEO was the heir apparent at the company before being named CEO with a dummy variable. Specifically, this variable—*New CEO Was Heir*—took the value of 1 if prior to the CEO appointment, they were the only individual in the firm holding the position of president or COO or both and were at least five years younger than the outgoing CEO.

To account for governance mechanisms, I accounted for *Board Size* (number of board members) and *Insider Percentage* (number of inside members divided by total number of board members). These values are reported on a yearly basis and are thus the same for all quarters in a given year. Analysts are sensitive to firm performance (Zhang & Rajagopalan, 2004), as such I controlled for two different forms of quarterly firm performance: *Return on Assets* (prior quarterly net income over prior quarter total assets) and *Tobin's Q* (approximated as ratio of market to book value for the prior quarter). *Firm Size* has also been shown to be related to succession (Ang et al., 2003), so I controlled for firm size with the logged total of the prior quarter's assets (Chen et al., 2015; Tang et al., 2015).

In regard to analysts, as mentioned earlier, analysts exhibit herding behavior in their recommendations (Trueman, 1994; Welch, 2000), and so, I controlled for two factors that assess this. *Analyst Dispersion* is measured as the standard deviation of the EPS estimates in the prior

quarter (Busenbark et al., 2017a; Jegadeesh & Kim, 2009). *Analyst Following* is measured as the number of analysts following the firm in the prior quarter. I winsorized both of these two variables at the 1st and 99th percentiles to account for a few outliers. Results remain the same, however, with the non-winsorized versions. Finally, I included *quarter fixed effects* and *industry fixed effects*—industry classification was based on 10 digit Fama French industry codes (Fama & French, 1997)—to account for unobserved heterogeneity across different time periods and business domains.

Estimation Technique. Hypothesis 5a examines whether CEO successors who experienced skill cultivation through participation in quarterly earning calls prior to becoming CEO will experience more upgrades following conference calls when they are CEO. As this outcome variable is a count variable that is overdispersed, I used negative binomial regression and also specified robust standard errors. Hypothesis 5b examines whether CEO successors who experienced skill cultivation through participation in quarterly earning calls prior to becoming CEO will experience more upgrades following conference calls when they are CEO. As the tenor of conference calls is a continuous variable, I used panel regression with random effects and robust standard errors. Based on recommendations to determine whether to use random or fixed effects based on theory rather than a Hausman test (Certo, Withers, & Semadeni, 2017), I utilized a random effects model because my theory focuses on how analysts will differ in their evaluations across CEOs.

CHAPTER 10

RESULTS

Table 1 contains the descriptive statistics and correlations for the variables used in testing Hypothesis 1. Of note in Table 1 is that the rate of inside successions in this sample is 69 percent. This seems consistent with recent estimates suggesting that outside successions are becoming more common (Tonello et al., 2018). Other succession related variables also seem to be similar to prior studies. In this sample, the CEO was coded as being dismissed in 20 percent of the successions, which is consistent with the "typical range of 10 to 20 percent" (Finkelstein et al., 2009: 168). The rate of firms having an heir apparent—31 percent in this study—also is in line with prior research (Zhang & Rajagopalan, 2003).

Although variance inflation factors (VIF) estimates arguably indicate more of an estimate of multi-collinearity than a definitive assessment, it is of interest to note that there did seem to be some potential multi-collinearity issues in the analyses for Hypothesis 1. In particular, VIFs for Outgoing CEO Pay, Firm Size, and Board Size were in excess of suggested thresholds of 10 (Cohen, Cohen, West, & Aiken, 2013). This is perhaps because both CEO pay and board size are related to firm size (Dalton, Daily, Johnson, & Ellstrand, 1999; Tosi, Werner, Katz, & Gomez-Mejia, 2000). If I remove Outgoing CEO Pay and Board Size from the models, results remain consistent. Similarly, VIFS for Outgoing CEO Words and Executive Participation 2 also exceeded recommended thresholds of 10 (Cohen et al., 2013). If I remove Outgoing CEO Words from the model, results again remain substantially the same.

Table 2 provides the results from the empirical estimation of Hypothesis 1, in which I predicted that the extent of executive participation on quarterly conference calls is positively associated with the likelihood of inside succession when CEO succession ultimately occurs. Column 1 of Table 2 illustrates the results when I assess the extent of executive participation based on the average number of executives on the calls in the prior three years before the succession—Executive Participation 1. Using this measure, I do not find statistical support for Hypothesis 1 ($B=0.01$; $p>0.10$).

Column 2 of Table 2 illustrates the results when I assess the extent of executive participation based on the amount of words spoken by executives other than the CEO and investor relations representative on the calls in the prior three years before the succession—Executive Participation 2. Results from using this measure, unlike the prior operationalization, are supportive of Hypothesis 1 ($B=0.16$; $p<0.05$). Given the nature of logistic regression, I recognize that this coefficient is not necessarily informative. As such, I followed prior research (e.g., Oliver, Krause, Busenbark, & Kalm, 2018) and interpreted the marginal effect of this variable on the outcome variable across different values when the covariates take their mean. The results from the model suggest a 62 percent likelihood of inside succession when Executive Participation 2 is one standard deviation below the mean, a 75 percent likelihood at the mean value, and an 85 percent likelihood one standard deviation above the mean.

In Table 3 are the descriptive statistics and correlations for the variables used in testing Hypothesis 2. I again tested for multi-collinearity, and the VIFS for the model tested were well below suggested thresholds of 10, with the model having average VIFs of 1.77. Table 4 contains the results of the Cox models used in testing Hypothesis 2. The values reported in Table 4 are

hazard ratios; hazard ratios indicate the risk that an event will occur at time t, given that it did not occur in the prior time period (Box-Steffensmeier & Jones, 2004). In other words, hazard ratios greater than 1 indicate that the variable increases the relative risk of a CEO succession announcement occurring, while values less than 1 indicate that the variable decreases the relative risk of a CEO succession announcement taking place.

The results of Model 1 in Table 4 are consistent with my theorizing regarding change in CEO participation (*hazard ratio* = 0.86, $p < 0.01$). Given that this variable is standardized, this coefficient can be interpreted as follows: a one standard deviation increase in the Change in CEO Participation variable is associated with a 14% lower relative risk of a CEO succession announcement occurring. Put differently, since Hypothesis 2 theorizes that decreases in CEO participation are associated with CEO succession occurring sooner, a one standard deviation decrease in CEO participation is associated with a 14% higher relative risk of CEO succession announcement occurring at time t given that it did not occur in the prior time period. I thus find statistical support consistent with Hypothesis 2.

Table 5 contains the correlations and descriptive statistics relevant to Hypothesis 3 where I theorized that changes in individual executive participation on conference calls would be positively associated with the likelihood of CEO appointment. Looking at the correlations, and as the results do play out, it seems clear that whether an executive is an heir apparent is a key predictor of an executive being appointed CEO. Tests for multi-collinearity illustrated that this is likely not an issue in the model, as VIFS for the model tested were again well below suggested thresholds of 10 (Cohen et al., 2003), with the model having average VIFs of 2.27. Table 6 contains the results of the Cox Model testing Hypothesis 3. The results of Model 1 in Table 6 do not provide statistical support for this hypothesis (*hazard ratio* = 1.06, $p > 0.10$).

Table 7 illustrates the descriptive statistics and correlations for Hypothesis 4. Of note in Table 7 is the fact that the mean EPS Change value is -0.02. This suggests that analysts tend to react slightly negatively (albeit close to 0) on average to CEO succession announcements in terms of their EPS estimates; looking at the standard deviation, however, shows that there is a some variation in this variable. Also of note with these models is that 26 percent of the newly appointed CEOs were the heir apparents. As reported in Table 1, 31 percent of the firms appeared to have heir apparents, so this suggests that about 5 percent of these individuals did not ultimately become CEO. This is consistent with the aforementioned research noting that not all heir apparents become CEOs and that sometimes an individual that appears to be an heir apparent is not necessarily one (Westphal & Zajac, 1998). Also of interest with the models for Hypothesis 4, is that multi-collinearity does not seem to be of great concern. VIFS for the models tested were well below suggested thresholds of 10, with both models having average VIFs of less than two.

Table 8 contains the findings of the models testing Hypothesis 4, where I predicted that the greater the extent of a newly appointed CEO's participation on quarterly earnings calls prior to becoming CEO, the more positive the changes in analyst forecast estimates following the CEO succession announcement. Column 1 of Table 8 illustrates the results when I assess prior call experience—*Prior Call Experience 1*— based on the logged number of quarterly earnings calls where the newly appointed CEO participated in the Q&A portion in the three years prior to being announced as the new CEO. Using this measure, I do not find statistical support for Hypothesis 4 ($B=-0.03$; $p>0.10$). The results in Column 2 of Table 8 show the results with the alternative measure of prior call experience—*Prior Call Experience 2*. This variable is equal to the logged number of words spoken by the newly appointed CEO in the Q&A portion of quarterly earnings

call in the three years prior to being announced as the new CEO. Again, with this measure I do not find statistical support for Hypothesis 4 (B=-0.01; p>0.10).

In Table 9 are the descriptive statistics and correlations for Hypothesis 5a and 5b. Of note in Table 9 is the fact that there are few recommendation changes—here upgrades—which is consistent with prior research (Busenbark et al., 2017a). The tone of the reports also seems to be on average slightly negative based on the operationalization used in this study. That seems logical given the small number of upgraded recommendations reported. Multi-collinearity does not seem to be of great concern for the models used in testing Hypotheses 5a and 5b. VIFS for the models tested were again below suggested thresholds of 10 (Cohen et al., 2013), with both models having average VIFs of less than two.

Hypothesis 5a predicted that the extent of a newly appointed CEO's participation on quarterly earning calls prior to becoming CEO will be positively associated with the number of upgrades following their firm's quarterly earnings calls in the early stages of their CEO tenure. As illustrated by the results in Table 10, the data statistically supports this hypothesis across the two measures used. The coefficient for *Prior Call Experience 1*— based on the logged number of quarterly earnings calls where the newly appointed CEO participated in the Q&A portion in the three years prior to being announced as the new CEO—provides statistical support for Hypothesis 5a (B=-0.22; p<0.05). As this model is a negative binomial model, this coefficient can be interpreted by exponentiating it. Each unit increase in this variable is associated with 0.80 more upgraded recommendations. I also found statistical support for this hypothesis with the other measure, *Prior Call Experience 2*, which is equal to the logged number of words spoken by the newly appointed CEO in the Q&A portion of quarterly earnings call in the three years prior to being announced as the new CEO (B=-0.06; p<0.05). Each unit increase in the logged number

of words is associated with 0.94 more upgraded recommendations.

Table 11 illustrates the results corresponding to Hypothesis 5b. With this hypothesis I theorized that the extent of a newly appointed CEO's participation on quarterly earning calls prior to becoming CEO will be positively associated will the tone of analyst reports issued following their firm's quarterly earnings calls in the early stages of their CEO tenure. Unfortunately, I did not find support for my theory across either of the two proposed measures. The coefficients for *Prior Call Experience 1* (B=0.00; p>0.10) *and Prior Call Experience 2* (B=-0.00; p>0.10) were both non-significant. Instead, here it seemed that little drove tenor of analyst reports other than firm performance.

TABLE 1

Correlations and Descriptive Statistics for H1

	Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Inside Succession	0.69	0.47																
2	Outgoing CEO Duality	0.65	0.48	0.09															
3	Outgoing CEO Tenure*	2.08	0.92	0.13	0.22														
4	Outgoing CEO Pay*	8.75	1.06	0.17	0.22	0.08													
5	Outgoing CEO Gender	0.01	0.10	-0.02	-0.06	-0.02	0.03												
6	Outgoing CEO Awards	0.23	0.42	0.18	0.07	0.07	0.17	0.09											
7	Outgoing CEO Words*	7.35	4.24	0.05	-0.07	-0.05	0.11	0.02	0.07										
8	CHRO	0.44	0.50	-0.13	-0.01	0.00	0.15	0.03	0.01	0.11									
9	Outgoing CEO dismissed	0.20	0.40	-0.17	-0.21	-0.19	0.01	0.05	-0.09	-0.02	-0.03								
10	Heir Apparent	0.31	0.46	0.29	0.14	0.13	0.05	0.02	0.06	-0.01	-0.05	-0.19							
11	Board Size	10.69	2.60	0.11	0.03	-0.09	0.19	-0.01	0.17	-0.01	-0.02	-0.01	0.01						
12	Insider Percentage	0.16	0.10	0.07	-0.10	0.07	-0.18	-0.05	-0.07	-0.19	-0.12	-0.02	0.01	-0.25					
13	ROA	0.05	0.10	0.12	0.04	0.04	0.07	0.05	0.13	-0.06	-0.02	-0.17	0.02	-0.05	0.08				
14	Tobin's Q	1.90	1.14	0.04	-0.03	0.18	-0.06	0.12	0.11	-0.04	0.03	-0.17	0.07	-0.23	0.14	0.42			
15	Firm Size*	9.43	1.49	0.12	0.12	-0.16	0.28	-0.01	0.26	0.04	0.05	0.10	-0.02	0.49	-0.31	-0.09	-0.41		
16	Executive Participation 1	1.77	1.32	0.06	0.01	0.04	0.04	-0.05	0.08	0.58	0.07	-0.06	0.01	0.06	-0.05	-0.06	-0.04	0.15	
17	Executive Participation 2*	7.86	3.95	0.14	0.00	0.02	0.11	-0.01	0.12	0.83	0.09	-0.06	0.02	0.03	-0.15	-0.03	0.00	0.16	0.70

Note. n = 457; $p<0.05$ when $r>|0.09|$

* denotes the variable is logged

TABLE 2

Results of Analyses for H1

Predictor Variables	Model 1	Model 2
Outgoing CEO Duality	-0.06	-0.13
	(0.29)	(0.30)
Outgoing CEO Tenure	0.22	0.19
	(0.18)	(0.19)
Outgoing CEO Pay	0.35**	0.37**
	(0.11)	(0.12)
Outgoing CEO Gender	-0.86	-0.81
	(0.95)	(0.98)
Outgoing CEO Awards	0.70+	0.74*
	(0.37)	(0.38)
Outgoing CEO Words	0.03	-0.10
	(0.04)	(0.07)
CHRO	-0.88***	-0.86**
	(0.27)	(0.27)
Outgoing CEO Dismissed	-0.51+	-0.51
	(0.31)	(0.31)
Heir Apparent	1.76***	1.78***
	(0.33)	(0.33)
Board Size	0.10+	0.11+
	(0.06)	(0.06)
Insider Percentage	4.44**	4.05**
	(1.52)	(1.49)
ROA	1.42	1.51
	(1.43)	(1.38)
Tobin's Q	0.04	-0.01
	(0.15)	(0.15)
Firm Size	0.21+	0.14
	(0.12)	(0.12)
Executive Participation 1	0.01	
	(0.12)	
Executive Participation 2		0.16*
		(0.07)
Constant	-6.88***	-6.36***
	(1.80)	(1.84)
Observations	457	457

Robust standard errors in parentheses. Industry and year dummies included.
Two-tailed tests. *** p<0.001, ** p<0.01, * p<0.05, + p<0.10

TABLE 3
Correlations and Descriptive Statistics for H2

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Duration Until Succession	0.07	0.25														
2 Outgoing CEO Duality	0.67	0.47	-0.01													
3 Outgoing CEO Tenure•	7.57	0.82	0.08	0.16												
4 Outgoing CEO Pay•	8.76	1.04	0.01	0.24	-0.04											
5 Outgoing CEO Gender	0.01	0.10	0.00	-0.06	-0.05	0.05										
6 Outgoing CEO Awards	0.23	0.42	0.00	0.05	0.17	0.13	0.09									
7 Change in Executive Participation	-3.61	912.35	0.00	0.00	0.00	0.01	0.00	0.00								
8 CHRO	0.49	0.50	-0.03	0.02	-0.06	0.14	0.05	0.02	0.00							
9 Heir Apparent	0.33	0.47	-0.01	0.07	0.19	-0.02	-0.01	0.12	0.00	-0.04						
10 Insider Percentage	0.09	0.09	0.04	-0.12	0.04	-0.07	-0.03	-0.02	0.01	-0.04	-0.02					
11 Board Size	10.60	2.74	0.01	-0.03	-0.12	0.16	0.01	0.05	0.01	0.02	-0.04	-0.16				
12 ROA	0.02	0.03	0.00	0.06	0.05	0.01	0.03	0.09	0.02	0.02	0.02	-0.04	-0.05			
13 Tobins Q	1.97	1.19	-0.02	-0.06	0.05	-0.05	0.07	0.12	-0.01	0.05	0.06	0.00	-0.19	0.30		
14 Firm Size•	9.33	1.43	0.03	0.16	-0.11	0.26	0.02	0.22	0.01	0.07	-0.04	-0.15	0.45	-0.07	-0.40	
15 Change in CEO Participation	-5.41	1019.91	-0.06	0.00	-0.02	0.00	0.00	0.00	-0.10	0.00	0.00	-0.01	0.00	-0.01	0.01	0.00

Note. n = 6,314; $p<0.05$ when $r>|0.03|$

• denotes the variable is logged

TABLE 4

Results of Analyses for H2

Predictor Variables	Model 1
Outgoing CEO Duality	1.40**
	(0.17)
Outgoing CEO Tenure	1.41***
	(0.12)
Outgoing CEO Pay	0.90**
	(0.04)
Outgoing CEO Gender	1.66
	(0.72)
Outgoing CEO Awards	0.86
	(0.11)
Change in Executive Participation	0.97
	(0.05)
CHRO	0.69**
	(0.08)
Heir Apparent	1.20
	(0.16)
Insider Percentage	0.06**
	(0.06)
Board Size	1.04*
	(0.02)
ROA	0.18
	(0.52)
Tobins Q	0.96
	(0.07)
Firm Size	1.05
	(0.05)
Change in CEO Participation	0.86**
	(0.04)
Observations	6,314

Robust standard errors in parentheses. Industry dummies included. Hazard ratios reported.

Two-tailed tests. *** p<0.001, ** p<0.01, * p<0.05, + p<0.10

Note: Change in participation predictors are standardized.

TABLE 5
Correlations and Descriptive Statistics for H3

	Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	CEO Appointment	0.01	0.09																			
2	Outgoing CEO Duality	0.72	0.45	-0.01																		
3	Outgoing CEO Tenure*	7.68	0.71	0.02	0.13																	
4	Outgoing CEO Pay*	8.83	0.99	0.00	0.23	-0.05																
5	Outgoing CEO Gender	0.01	0.07	0.01	-0.11	-0.01	0.02															
6	Outgoing CEO Awards	0.27	0.44	0.01	0.00	0.15	0.11	0.05														
7	Executive Gender	0.11	0.31	-0.02	0.04	0.03	-0.02	0.00	0.01													
8	Finance	0.30	0.46	-0.04	0.00	0.00	-0.02	0.04	0.07	0.03												
9	Marketing	0.02	0.14	-0.01	-0.01	-0.04	-0.02	-0.01	-0.02	0.00	-0.09											
10	R&D	0.04	0.21	-0.01	0.02	0.01	0.02	-0.02	-0.08	-0.06	-0.14	-0.03										
11	Other	0.64	0.48	0.05	0.00	0.01	0.01	-0.03	-0.03	0.00	-0.87	-0.19	-0.28									
12	Exec is Heir Apparent	0.03	0.18	0.16	0.01	0.01	-0.05	0.01	0.02	-0.06	-0.12	-0.03	-0.04	0.14								
13	Change in CEO Participation	-26.32	1079.63	-0.01	0.01	-0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00	-0.01	0.00							
14	CHRO	0.50	0.50	-0.01	0.03	-0.05	0.14	0.04	0.04	0.06	0.00	-0.03	0.01	0.01	-0.03	0.01						
15	Board Size	10.81	2.77	0.00	-0.03	-0.09	0.16	-0.02	0.06	-0.01	0.00	-0.03	0.05	-0.01	0.00	0.00	0.02					
16	Insider Percentage	0.08	0.08	0.00	-0.09	0.04	-0.06	-0.03	-0.01	0.01	-0.04	0.05	-0.01	0.02	-0.03	-0.02	-0.06	-0.19				
17	ROA	0.01	0.03	0.01	0.02	0.06	0.02	0.04	0.10	-0.01	0.01	-0.03	-0.04	0.01	0.01	-0.01	0.03	-0.06	-0.08			
18	Tobin's Q	1.82	1.10	0.01	-0.09	0.05	-0.07	0.13	0.12	0.01	0.02	0.01	-0.02	-0.01	0.03	0.01	0.09	-0.26	-0.06	0.30		
19	Firm Size*	9.64	1.46	-0.01	0.15	-0.14	0.26	-0.03	0.17	-0.03	0.07	-0.08	0.02	-0.05	-0.01	0.00	0.11	0.46	-0.13	-0.09	-0.42	
20	Change in Individual Exec Participation	14.36	539.10	0.01	0.00	-0.02	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.02	-0.10	-0.01	0.00	-0.01	0.01	0.01	-0.01

Note. n = 24,099; $p<0.05$ when $r>|0.01|$
* denotes the variable is logged

TABLE 6

Results of Analyses for H3

Predictor Variables	Model 1
Outgoing CEO Duality	1.22
	(0.24)
Outgoing CEO Tenure	1.18
	(0.17)
Outgoing CEO Pay	0.93
	(0.06)
Outgoing CEO Gender	16.86***
	(9.63)
Outgoing CEO Awards	1.04
	(0.22)
Executive Gender	0.58
	(0.20)
Finance	0.28***
	(0.09)
Marketing	0.36
	(0.27)
R&D	0.39
	(0.24)
Exec is Heir Apparent	15.95***
	(3.01)
Change in CEO Participation	0.99
	(0.08)
CHRO	0.49***
	(0.10)
Board Size	1.02
	(0.03)
Insider Percentage	0.00***
	(0.00)
ROA	0.00**
	(0.01)
Tobin's Q	0.99
	(0.09)
Firm Size	1.01
	(0.08)
Change in Individual Exec Participation	1.06
	(0.09)
Observations	24,099

Robust standard errors in parentheses. Industry dummies included. Hazard ratios reported.

Two-tailed tests. *** p<0.001, ** p<0.01, * p<0.05, + p<0.10

Note: Change in participation predictors are standardized.

TABLE 7

Correlations and Descriptive Statistics for H4

	Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Change in Earnings Estimates	-0.02	0.48																		
2	Outgoing CEO Duality	0.65	0.48	0.06																	
3	Outgoing CEO Tenure*	2.09	0.92	0.03	0.23																
4	Outgoing CEO Pay*	8.75	1.06	0.10	0.21	0.07															
5	Outgoing CEO Gender	0.01	0.10	0.02	-0.05	-0.02	0.03														
6	New CEO Gender	0.05	0.22	-0.05	0.03	-0.06	-0.02	0.07													
7	Outgoing CEO Awards	0.23	0.42	-0.01	0.06	0.08	0.16	0.09	-0.04												
8	Outgoing CEO Dismissed	0.19	0.40	-0.07	-0.21	-0.18	0.01	0.06	-0.04	-0.08											
9	Inside Succession	0.69	0.46	0.04	0.10	0.13	0.17	-0.02	0.03	0.19	-0.16										
10	New CEO Was Heir	0.26	0.44	0.07	0.14	0.10	0.05	0.03	-0.12	0.06	-0.19	0.34									
11	Board Size	10.70	2.59	0.05	0.02	-0.10	0.19	-0.01	0.05	0.16	-0.01	0.12	0.01								
12	Insider Percentage	0.16	0.10	0.00	-0.08	0.08	-0.18	-0.05	0.00	-0.05	-0.03	0.08	0.00	-0.24							
13	ROA	0.05	0.10	0.04	0.03	0.06	0.09	0.06	0.03	0.10	-0.15	0.13	0.04	-0.07	0.10						
14	Tobin's Q	1.90	1.14	0.01	-0.03	0.18	-0.06	0.12	-0.03	0.11	-0.17	0.03	0.05	-0.24	0.15	0.47					
15	Firm Size*	9.42	1.50	0.05	0.11	-0.16	0.28	-0.01	0.06	0.25	0.09	0.13	-0.01	0.49	-0.31	-0.11	-0.42				
16	Analyst Dispersion	0.12	0.22	-0.23	-0.05	-0.07	0.01	-0.04	-0.03	-0.06	0.11	-0.13	-0.06	0.02	-0.06	-0.17	-0.17	0.21			
17	Analyst Following	16.00	7.66	0.10	0.04	0.05	0.12	0.07	0.04	0.29	-0.11	0.10	0.15	0.03	-0.08	0.22	0.26	0.18	-0.07		
18	Prior Call Experience 1*	0.99	1.07	-0.05	0.10	0.07	0.03	-0.04	0.01	0.09	-0.10	0.33	0.19	0.00	0.01	0.02	-0.01	0.00	-0.07	-0.023	
19	Prior Call Experience 2*	4.24	4.28	-0.06	0.09	0.06	0.01	-0.04	0.00	0.09	-0.09	0.31	0.19	-0.03	-0.02	0.01	-0.02	0.00	-0.06	-0.017	0.954

Note. n = 452; $p<0.05$ when $r>|0.09|$

* denotes the variable is logged

TABLE 8

Results of Analyses for H4

Predictor Variables	Model 1	Model 2
Outgoing CEO Duality	0.02	0.02
	(0.06)	(0.06)
Outgoing CEO Tenure	0.01	0.01
	(0.02)	(0.02)
Outgoing CEO Pay	0.02	0.02
	(0.03)	(0.03)
Outgoing CEO Gender	0.09	0.09
	(0.08)	(0.08)
New CEO Gender	-0.15+	-0.15+
	(0.08)	(0.08)
Outgoing CEO Awards	-0.08	-0.08
	(0.05)	(0.05)
Outgoing CEO Dismissed	-0.11	-0.11
	(0.07)	(0.07)
Inside Succession	-0.01	-0.01
	(0.06)	(0.06)
New CEO Was Heir	0.03	0.04
	(0.04)	(0.04)
Board Size	0.00	-0.00
	(0.01)	(0.01)
Insider Percentage	0.18	0.17
	(0.26)	(0.26)
ROA	-0.18	-0.18
	(0.22)	(0.22)
Tobin's Q	0.00	0.00
	(0.04)	(0.04)
Firm Size	0.06	0.06
	(0.03)	(0.03)
Analyst Dispersion	-0.56	-0.56
	(0.35)	(0.35)
Analyst Following	-0.00	-0.00
	(0.00)	(0.00)
Prior Call Experience 1	-0.03	
	(0.02)	
Prior Call Experience 2		-0.01
		(0.00)
Constant	-0.65	-0.63
	(0.40)	(0.40)
Observations	454	454
R-squared	0.152	0.153

Robust standard errors in parentheses. Industry and year dummies included.

Two-tailed tests. *** p<0.001, ** p<0.01, * p<0.05, + p<0.10

TABLE 9

Correlations and Descriptive Statistics for H5a and H5b

	Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	18
1	Upgraded Recomendations	0.07	0.33																			
2	Tone of Reports	-0.15	0.16	0.02																		
3	Outgoing CEO Duality	0.67	0.47	-0.02	-0.05																	
4	Outgoing CEO Tenure*	2.10	0.57	0.01	0.04	0.30																
5	Outgoing CEO Pay*	8.82	0.93	-0.03	0.02	0.22	0.05															
6	Outgoing CEO Gender	0.01	0.10	0.02	0.02	-0.08	0.02	-0.01														
7	Outgoing CEO Awards	0.23	0.42	-0.01	0.02	0.04	0.11	0.12	0.10													
8	Outgoing CEO Dismissed	0.16	0.37	-0.01	-0.06	-0.23	-0.23	0.02	-0.04	-0.07												
9	Inside Succession	0.75	0.43	-0.01	0.06	0.15	0.25	0.08	0.06	0.18	-0.17											
10	New CEO Gender	0.06	0.23	-0.02	-0.02	0.11	-0.03	0.03	-0.02	0.01	-0.07	0.04										
11	New CEO Was Heir	0.30	0.46	0.02	0.08	0.11	0.17	-0.03	0.07	0.05	-0.18	0.33	-0.13									
12	Board Size	10.89	2.67	-0.01	-0.10	-0.01	-0.05	0.15	-0.03	0.15	0.01	0.12	0.05	-0.04								
13	Insider Percentage	0.11	0.08	-0.03	-0.03	-0.12	0.09	-0.09	0.05	-0.01	-0.11	0.04	0.01	0.00	-0.20							
14	ROA	0.01	0.03	0.02	0.33	0.00	0.04	-0.01	0.08	0.10	-0.09	0.11	0.03	0.04	-0.09	-0.01						
15	Tobin's Q	1.88	1.05	0.02	0.34	-0.07	0.07	-0.06	0.11	0.13	-0.13	0.02	0.01	0.04	-0.26	0.04	0.38					
16	Firm Size	9.60	1.47	-0.01	-0.21	0.15	-0.04	0.25	-0.05	0.24	0.12	0.16	0.07	-0.03	0.44	-0.12	-0.13	-0.42				
17	Analyst Following	15.93	6.82	0.04	0.09	-0.02	0.15	0.03	0.09	0.22	-0.04	0.00	0.00	0.15	0.03	0.02	0.12	0.18	0.19			
18	Analyst Dispersion	0.05	0.07	-0.01	-0.26	0.09	-0.02	0.03	-0.05	0.01	0.04	0.01	0.03	-0.04	0.05	0.01	-0.20	-0.24	0.26	-0.08		
19	Prior Call Experience 1*	1.07	1.07	-0.05	0.03	0.12	0.12	-0.06	-0.02	0.05	-0.12	0.26	-0.03	0.17	0.01	0.01	0.02	-0.06	0.01	-0.11	0.01	
20	Prior Call Experience 2*	4.57	4.27	-0.05	0.05	0.11	0.10	-0.06	-0.01	0.04	-0.11	0.25	-0.04	0.19	-0.01	0.01	0.02	-0.05	0.00	-0.09	0.01	0.95

Note. n = 2,321; $p<0.05$ when $r>|0.04|$

* denotes the variable is logged

TABLE 10

Results of Analyses for H5a

Predictor Variables	Model 1	Model 2
Outgoing CEO Duality	-0.40+	-0.40+
	(0.22)	(0.22)
Outgoing CEO Tenure	0.30+	0.29+
	(0.17)	(0.17)
Outgoing CEO Pay	-0.06	-0.06
	(0.08)	(0.08)
Outgoing CEO Gender	0.29	0.31
	(0.65)	(0.65)
Outgoing CEO Awards	-0.22	-0.23
	(0.25)	(0.25)
Outgoing CEO Dismissed	-0.22	-0.21
	(0.26)	(0.26)
Inside Succession	0.00	-0.00
	(0.23)	(0.23)
New CEO Gender	-0.44	-0.43
	(0.44)	(0.45)
New CEO Was Heir	0.05	0.06
	(0.22)	(0.22)
Board Size	-0.02	-0.02
	(0.04)	(0.04)
Insider Percentage	-1.45	-1.45
	(1.38)	(1.37)
ROA	3.35	3.30
	(2.92)	(2.91)
Tobin's Q	0.15	0.15
	(0.11)	(0.11)
Firm Size	0.11	0.11
	(0.09)	(0.09)
Analyst Following	0.01	0.01
	(0.02)	(0.02)
Analyst Dispersion	-1.08	-1.07
	(1.42)	(1.42)
Prior Call Experience 1	-0.22*	
	(0.09)	
Prior Call Experience 2		-0.06*
		(0.02)
Constant	-18.10***	-17.89
	(1.12)	0.00
Observations	2,321	2,321

Robust standard errors in parentheses. Industry and quarter dummies included.
Two-tailed tests. *** p<0.001, ** p<0.01, * p<0.05, + p<0.10

TABLE 11

Results of Analyses for H5b

Predictor Variables	Model 1	Model 2
Outgoing CEO Duality	-0.02	-0.02
	(0.02)	(0.02)
Outgoing CEO Pay	0.01	0.01
	(0.01)	(0.01)
Outgoing CEO Gender	-0.03	-0.03
	(0.05)	(0.05)
Outgoing CEO Awards	-0.00	-0.00
	(0.02)	(0.02)
Outgoing CEO Dismissed	0.01	0.01
	(0.02)	(0.02)
Inside Succession	-0.01	-0.01
	(0.02)	(0.02)
New CEO Gender	-0.01	-0.01
	(0.02)	(0.02)
New CEO Was Heir	0.03*	0.03*
	(0.02)	(0.02)
Board Size	-0.00	-0.00
	(0.00)	(0.00)
Insider Percentage	0.04	0.03
	(0.06)	(0.06)
ROA	0.91***	0.91***
	(0.17)	(0.17)
Tobin's Q	0.03***	0.03***
	(0.01)	(0.01)
Firm Size	-0.01	-0.01
	(0.01)	(0.01)
Analyst Following	-0.00+	-0.00+
	(0.00)	(0.00)
Analyst Dispersion	-0.11	-0.11
	(0.07)	(0.07)
Prior Call Experience 1	0.00	
	(0.01)	
Prior Call Experience 2		0.00
		(0.00)
Constant	-0.04	-0.04
	(0.10)	(0.10)
Observations	1,756	1,756

Robust standard errors in parentheses. Industry and quarter dummies included.

Two-tailed tests. *** p<0.001, ** p<0.01, * p<0.05, + p<0.10

CHAPTER 11

SUPPLEMENTAL ANALYSES

I conducted several supplemental analyses. These were intended to enhance the robustness of my findings, as well as to further probe unsupported hypotheses.

Addressing Sample Selection Bias. Given that my sample is only comprised of firms that experienced CEO successions, and thus my dependent variables are only available for firms that experienced CEO succession, sample selection bias is a potential concern (Certo, Busenbark, Woo, & Semadeni, 2016). With this in mind, I conducted a Heckman model (Heckman, 1979) to examine the robustness of my findings for the first hypothesis, where I found support for my theorizing. Specifically, in the first stage probit I predicted the likelihood of an S&P 500 firm having a CEO succession in a given year and then in the second stage examined the likelihood of inside succession. Following prior research, I found three exclusion restrictions that were related to the likelihood of succession, but were unrelated to inside succession: incumbent CEO age (Chen, 2015; Chen, Luo, Tang, & Tong, 2015; Zhang & Qu, 2016), incumbent CEO age squared (Harris & Helfat, 1997), and incumbent CEO founder status (Quigley & Hambrick, 2012).

Table 12 presents the results of the Heckman model. Specifically, Model 1 illustrates the first stage probit, which contains all of the independent variables from the primary analyses (except whether the CEO was dismissed, which only occurs when a CEO succession takes place) plus the three exclusion restrictions. Each of the exclusion restrictions was predictive of CEO succession. Model 2 includes the inverse mills ratio from the first stage. Sample selection bias does not appear to be of concern as the independent variable-Executive Participation 2- was not

predictive in the first stage (B=-0.02; p>0.10). As Certo et al. (2016: 2639) note "the independent variable of interest must be a significant predictor in the first stage of a model for sample selection bias to exist."

To my knowledge, scholars have not yet developed a procedure for using Heckman models with Cox models, which is why I did not conduct an additional model for my other supported hypothesis—Hypothesis 2. Similarly, I did not conduct a Heckman model for H5a, where I found support for one of my proposed independent variables, because this measure examines the amount of words spoken by a new CEO in the three years prior to being appointed CEO. This independent variable is only available when CEO succession occurs, and thus I cannot include this variable in the first stage probit, which is a requirement of Heckman models (Certo et al., 2016).

Given these limitations, I also followed prior research (Hubbard, Christensen, & Graffin, 2017; Oliver, Krause, Busenbark, & Kalm, 2018) and calculated the impact threshold of a confounding variable (ITCV) for my models (Frank, Maroulis, Duong, & Kelcey, 2013), which is indicative of the how much bias there would have to be to invalidate the results. According to this analysis, 10.42% of the estimate would have to be due to bias. Put differently, 48 cases (10.42% of the sample) would have to be replaced with cases for which there is an effect of 0 to invalidate the results. The ITCV is not supportive of Cox models that I am aware of, so I again did not use this to examine Hypothesis 2. I did, however, use the ITCV to examine Hypothesis 5a where my one measure was supported in the preliminary results. For this model, 22.63% of the estimate would have to be due to bias. In other words, 525 cases (10.42% of the sample) would have to be replaced with cases for which there is an effect of 0 to invalidate the results. It thus seems that there would have to be a great deal of bias to overturn the supported findings.

Further Probing Hypothesis 3. Based on my proposed measures, I did not find support for Hypothesis 3, which predicted that an increase in an individual executive's participation on quarterly conference calls is positively associated with the likelihood of that individual being named the CEO successor. Perhaps this non-finding is due to the fact that changes in participation on the calls are not as predictive for executives as they are for CEOs. Instead, the total amount of words spoken on a call in a given quarter by an executive might be predictive of the likelihood of an executive being appointed CEO. As such, I tested this possibility again using a Cox model and all the same variables as in the primary analyses. The standardized results using this measure indicate that words spoken by an executive in a given quarter are predictive of CEO appointment (hazard ratio=1.42; $p<0.01$). This hazard ratio indicates that a one standard deviation increase in words spoken is associated with a 42% higher relative risk of CEO appointment occurring at time t given that it did not occur in the prior time period.This finding, as compared to the main test, suggests that extensive participation on the calls is indicative of CEO appointment rather than just being on a call. I discuss the implications of this more in the discussion section.

Further Probing Hypothesis 4. Scholars have also operationalized changes in earnings per share based on percentage change rather than the actual difference. With this in mind, I investigated whether the hypothesis is supported using this alternative measure of the dependent variable. I again found no statistical support using either of the operationalizations of the independent variable using in the primary analysis. There is a possibility that analysts see the grooming on calls occurring as it is happening, and perhaps this is already prices in to estimates. As such when insiders with conference call experience are hired it may be a non-event, but when an insider is hired without conference call experience it may be a negative event. I tested this

possibility with a spline function test, but found that the coefficients were unrelated to change in earnings per share.

Further Probing Hypothesis 5a. There are often many instances in which the count of number of upgrades following an event is zero (Busenbark et al., 2017a). As this is the case in my study, I also tested this hypothesis with a zero-inflated negative binomial regression (Busenbark et al., 2017a). Results remain supported using this estimation technique. Similarly, I looked at the number of downgrades instead of the number of upgrades (Busenbark et al., 2017a). When using downgrades as the dependent variable, I found that neither version of my independent variable was predictive of downgrades. Instead, downgrades appeared to be primarily driven by firm performance.

Further Probing Hypothesis 5b. There are a number of operationalizations that are used to assess tenor. As such, I tried a few different measures—while still using the same Loughran and McDonald dictionary (Loughran & McDonald, 2011)— to see if I might find any support for my theorizing with these alternatives. Specifically, I tried positive words as a percentage of total affective words (positive and negative words) and as a percentage of total words. I also tried negative words as a percentage of total affective words (positive and negative words) and as a percentage of total words. I did not find support using any of these different measures. Instead, firm performance continued be the driving factor in all these models.

TABLE 12

Results of Heckman Analyses for H1

Predictor Variables	Model 1	Model 2
Outgoing CEO Duality	0.06	0.14
	(0.06)	(0.33)
Outgoing CEO Tenure	0.09*	0.46*
	(0.05)	(0.21)
Outgoing CEO Pay	-0.05*	0.30*
	(0.03)	(0.12)
Outgoing CEO Gender	-0.09	-0.43
	(0.22)	(1.00)
CHRO	0.17**	-0.84**
	(0.06)	(0.28)
Heir Apparent	0.01	1.78***
	(0.07)	(0.35)
Outgoing CEO Awards	-0.14+	0.46
	(0.07)	(0.37)
Board Size	0.03*	0.12*
	(0.01)	(0.06)
Insider Percentage	5.06***	5.82*
	(0.34)	(2.47)
Outgoing CEO Words	0.01	-0.10
	(0.01)	(0.08)
ROA	-0.92*	2.92
	(0.39)	(2.08)
Tobins Q	0.02	-0.14
	(0.03)	(0.17)
Firm Size	0.06*	0.17
	(0.03)	(0.13)
Outgoing CEO Dismissed		-0.51
		(0.33)
Age	0.18**	
	(0.05)	
Age Squared	-0.00*	
	(0.00)	
Founder	-0.60*	
	(0.25)	
IMR		0.23
		(0.54)
Executive Participation 2	-0.02	0.15+
	(0.01)	(0.08)
Constant	-8.59***	-6.90**
	(1.66)	(2.50)
Observations	4,493	450

Robust standard errors in parentheses. Industry and quarter dummies included.
Two-tailed tests. *** p<0.001, ** p<0.01, * p<0.05, + p<0.10

CHAPTER 12

DISCUSSION

Given the impact of CEO succession planning on future firm performance (Berns & Klarner, 2017; Favaro, 2015; Worrell & Davidson III, 1987), firm stakeholders have great interest in firms' succession plan details. Yet, because of concerns regarding disclosing these plans and incurring proprietary costs, firms are reluctant to disclose information in this regard (Finkelstein et al., 2009: 179; Wiersema, 1995). To advance theory, I integrate screening theory with research on grooming CEO successors and leadership development (Mumford et al., 2000c; Stiglitz, 1975; Weiss, 1995), and I argue that firm stakeholders can screen quarterly earnings calls for signals related to CEO succession plan outcomes. Specifically, I theorize that executive participation on calls, as well as changes in executive participation on these calls over time—will be correlated with whether the firm intends to promote an insider or outsider to CEO, when succession will occur, and who might take over. In addition, I also develop theory suggesting that newly appointed CEOs with conference call experience will receive more favorable reactions from analysts following quarterly earnings calls in the early stages of their tenure as well as to their appointment. The results of the primary analyses——as well as the various supplemental analyses—are generally supportive of my theorizing regarding CEO succession planning. They are less supportive, however, of my theorizing regarding analyst reactions.

Contributions

Stakeholder Understanding of Succession Planning. My theorizing and results challenge the consensus that stakeholders can not glean insights about firms CEO succession

plan details since they do not tend to disclose specifics of these plans. Specifically, I extend screening theory to the context of CEO succession planning and illustrate through my theory and analyses that stakeholders can screen firms quarterly earnings calls for signals related to their succession planning details. As a result, they might incorporate this information into their evaluations of firms.

Indeed, the results from my sample, illustrate that executive participation on the calls, as assessed by the number of words spoken by executives (not including the CEO and investor relations representative) on calls in the prior three years before the CEO succession is related to inside succession. There is an 85 percent likelihood of inside succession when executive participation is one standard deviation of the mean. On the other hand, executive participation on the calls, as assessed by average number of executives (not including the CEO and investor relations executive) on calls in the prior three years before the CEO succession is not predictive of inside succession. This finding is pertinent to stakeholders because it illustrates that above and beyond a firm having an heir apparent—a key control in the analyses—speaking on calls (not purely being on them) is related to the likelihood of appointing an insider. This is especially important for stakeholder's evaluations given the different outcomes associated with inside and outside successions, such as the more extreme performance associated with outsiders (Quigley, Hambrick, Misangyi, & Rizzi, Forthcoming).

I also contribute to research in this domain by developing theory about how stakeholders can screen firms for signals related to the timing of CEO succession. CEOs work with the board to plan out the timing of their exits (Berns & Klarner, 2017; Kesner & Sebora, 1994). Yet, to date, we have little understanding of when CEO succession is likely to occur. My theorizing and results suggest that a potential signal related to the timing of CEO succession is CEO's

decreasing participation on quarterly earnings calls. The findings of the analyses suggest that a one standard deviation decrease in CEO participation is associated with a 14% higher relative risk of CEO succession announcement occurring at time t given that it did not occur in the prior time period. External stakeholders might thus look to quarterly earnings calls, and specifically CEO participation, to try and glean when succession might occur.

I also theorized that stakeholders can examine changes in participation of individual executives on the calls to see who might be promoted to CEO. Unfortunately, my findings did not support my theorizing. Instead, it seemed that when it comes to predicting who specifically might take over as successor, little is more predictive than an individual being identified as an heir apparent. Given that only about 30% of firms have an heir apparent and that not all heir apparents are promoted to CEO (Cannella & Shen, 2001; Zhang & Rajagopalan, 2003), future research might examine if other aspects of these calls or other factors entirely might be related to who might be the CEO successor. The supplemental analysis where I found that number of words spoken by executives is predictive represents one step in this direction.

Grooming CEO Successors. This study also makes a contribution to research on CEO succession planning by developing theory regarding how firms go about grooming CEOs. Firms attempt to "help executives cultivate skills relevant to the CEO position" (Dragoni et al., 2011; Schepker et al., 2017: 5); however, research has largely lacked a theoretical explanation for how they go about this and what specific skills might be important. Building on research surrounding CEO grooming and leadership development, the theorizing behind the aforementioned findings suggested that firms attempt to develop CEO successor through participation on conference calls, specifically to help them cultivate strong corporate communication skills.

The results related to executive participation being related to inside succession and the

timing of succession seem to play this out. In fact, this research seems to highlight that it is actually speaking on the calls—rather than just being on the calls—that is relevant. In all of my hypotheses, including the ones looking at financial analysts reactions, the variables focused on the amount of words spoken (and changes in the words spoken) were more often significant. Additionally, while I did not find support for Hypothesis 3 in the primary analyses, I did find in the supplementary analyses that total words spoken by individual executives was associated with a 42% higher relative risk of CEO appointment occurring at time t given that it did not occur in the prior time period. This suggests that it is not just being on a call that is relevant to grooming but actually being involved in speaking on the calls. As such, stakeholders should be cognizant of who is speaking the most during these calls, as these individuals may be likely to become CEO.

Analyst Evaluations. This paper also contributes to research by building on a nascent body of research that has taken a behavior approach to financial analysts (Brauer & Wiersema, 2018) rather than the more traditional approach of viewing them as a key external control mechanism (Jensen & Meckling, 1976). I contribute to this behavioral approach by theorizing that analysts' assessments of firms appear to be influenced by previous interactions with executives on quarterly earnings calls, which companies I theorize use in the grooming process.

Indeed, I find that in the early stages of a CEO's tenure, when stakeholders do not have much to assess new CEOs on, analysts appear to be somewhat influenced by CEOs prior experience on conference calls. Following quarterly conference calls, analysts are more likely to issue upgrades to firms the greater the extent of a CEOs previous participation on quarterly conference calls prior to becoming CEO. This presents an interesting conundrum for firms. They might not want to expose potential CEO successors too much, given the costs of losing these

executives to other firms, but this experience prior to becoming CEO seems to be of value.

That said, while I did find that analysts were more likely to issue upgrades when newly appointed CEOs had significant prior conference call experience, I did not find that prior conference call experience influenced analyst reactions to the CEO succession announcement. Perhaps because of their exposure to firm executives on the conference calls, analysts are aware have a greater sense than other stakeholders in terms of who might take over as CEO successor, and so have already incorporated this into their estimates. This is consistent with much prior research that finds no abnormal returns associated with CEO succession (see Finkelstein et al., 2009 for a summary). I also did not find that prior conference call experience was related to the tone of analyst reports. Instead, the results seemed to play out that what drove these outcomes was firm performance. This seems to coincide with the more traditional role of analysts focused on economic indicators.

Limitations and Future Research

This study is not without limitations. First, like many CEOs succession studies, I was concerned with endogeneity. In the case of this study, I was concerned with sample selection-bias given that my sample is only composed of firms that experienced CEO succession. While these issues can never be ruled out completely, I employed Heckman in supplementary analyses to examine the robustness of the results and to help rule out sample selection bias driving the results. Thus this approach helped to alleviate these concerns in some regard (Certo, Busenbark, Woo, & Semadeni, 2016).

Second, while I theorized that executive participation on conference calls was related to grooming and skill development, like most archival research on CEOs, I was not able to directly test this mechanism. That said, during the course of this study, I was able to obtain quotes from

CEOs and directors of large public companies that were supportive of this logic. Future research might undertake qualitative studies to understand how firms go about grooming and CEO succession planning and explore the role of participation on conference calls further. One can imagine that there are many other ways that firms might go about developing CEO successors and the skills necessary to be CEO. For example, companies might have executives rotate through different executive roles, much like rotational programs among lower level employees.

Third, my study examined successions among S&P 500 firms. There is thus a possibility that there are important differences in studying CEO succession among different samples of companies. Indeed, smaller companies might not go about developing leaders by putting them on conference calls, since they are likely to be covered by fewer analysts and might not even have conference calls. Similarly, there is a possibility that the process discussed here is different in others parts of the world.

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