CEO's temporal orientation : the contexts of CEO retirement and CEO succession

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**CEO'S TEMPORAL ORIENTATION:
THE CONTEXTS OF CEO RETIREMENT AND
CEO SUCCESSION**

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**CEO'S TEMPORAL ORIENTATION:
THE CONTEXTS OF CEO RETIREMENT AND CEO
SUCCESSION**

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SUMMARY

Issues related to time horizon have received increasing attention due to the perceived reluctance of executives to engage in long horizon investments. Temporal orientation is the relative importance of the issues in short versus long time horizon that individuals pay attention to. Although temporal orientation is instrumental to firm survival, there are still limited theoretical frameworks that explore temporal orientation of firms' executives. Due to the limited attention on the antecedents of temporal orientation, especially at the individual level, this thesis examines temporal orientation of the CEOs by using content analysis of CEOs' letters to shareholders.

I first examine CEOs' temporal orientation in the context of CEO retirement. I propose that retiring CEOs become more short-term oriented as they are more motivated to engage in opportunistic behaviors towards opportunities with shorter term payoff. By incorporating prospect theory with agency theory, I also examine different components of major CEOs' incentives, including cash compensation, stock options and equity ownership, as boundary conditions that can alter retiring CEOs' temporal orientation. In particular, prospect theory helps to modify agency theory's assumptions to consider compensation risk associated with different elements of stock-based incentives. I test the hypotheses on a sample of firms listed in the S&P 500 index from 2009 to 2013, and the findings support the theoretical arguments.

I further examine CEOs' temporal orientation in the context of CEO succession. By drawing on impression management theory, I propose that relay successors are more short-term oriented than nonrelay inside successors and outside successors. Moreover, I examine several boundary conditions that

further accentuate or attenuate the extent that the relay successor is motivated to engage in impression management and thus become more short-term oriented. These boundary conditions include performance below historical and social aspirations and narcissistic personality of the successors. In addition, narcissistic personality of relay successors is expected to influence how they interpret performance below two different types of aspirations, which in turn impact their temporal orientation. I test these hypotheses on a sample of CEO successions covering the years 2008-2016 of firms listed in the S&P 500 index. The results largely support these theoretical arguments.

Overall, my research contributes to our understanding on the antecedents of temporal orientation at the individual level of analysis. In the context of CEO retirement, this study draws on prospect theory to highlight consistent prediction as well as contradiction between agency theory and prospect theory. This resolves inconsistent findings regarding the roles of stock-based compensation in influencing temporal orientation. By examining the roles of CEO compensation in more fine-grained elements, the results offer insights for implementing appropriate compensation plans for the CEOs approaching retirement. In the context of CEO succession, this study highlights different impacts of performance below historical and social aspirations on CEO's temporal orientation, where the CEO's personality also plays an important role. An important practical implication is to encourage the board of directors to pay more attention in monitoring the relay successor's short-term decisions that may be detrimental to the firm.

CHAPTER 1

REVIEW OF TEMPORAL ORIENTATION

Introduction

Issues related to time horizon have received more attention from researchers and practitioners in the past couple of decades. This is due to the perceived reluctance of organizations to engage in long horizon investments, even when long horizon investments offer promising future returns (e.g., Porter, 1992; Souder & Bromiley, 2012; Vuori & Huy, 2016; Zaheer, Albert, & Zaheer, 2000). Ideally, executives should engage in strategic actions that secure both long-term value as well as short-term results in order for firms to survive (Merchant, 1990; Porter, 1992; Van der Stede, 2000). However, managers with short-term orientation may favor actions that lead to the short term effectiveness even though they may trade off the long term value. Some managers are found to overvalue immediate outcomes relative to delayed outcomes (Lavery, 1996; Marginson & McAulay, 2008). This managerial short-term focus can result in underinvestment in research and development (R&D), new training programs, and capital investment (e.g., Brochet, Loumiot, & Serafeim, 2015; Drucker, 1993; Mueller & Reardon, 1993; Zaheer et al., 2000). For example, recent surveys show that in order to achieve quarterly targets, 55% of executives and directors would delay a new project although it would sacrifice some value (Barton, Bailey, & Zoffer, 2016). Several public figures and regulatory committees have argued that too much focus on short run performance has also resulted in the severity of the Great Recession (Geithner, 2009; Gigler, Kanodia, Sapra, & Venugopalan, 2014). Consequently,

shareholders with extended horizons and other key stakeholders, including employees, customers and the economy as a whole, are more concerned about the need for executives with a longer temporal orientation in order to create firm value.

Although it is widely recognized that temporal orientation is important to the firm and influential towards the economy, there are still limited theoretical frameworks that explore this phenomenon. In particular, temporal orientation of managers plays an important role in determining firm actions related to time horizon as managers are key decision makers within a firm. Temporal orientation will be discussed in more details below.

Temporal Orientation

Temporal orientation is defined as a “future time perspective” that captures variation across individuals “in terms of the relative cognitive dominance of the near versus distant future” (Das, 1987: 203). Temporal orientation is the relative importance of the issues in short versus long time horizon that individuals pay attention to. That is, individuals can have short-term or long-term orientation towards future issues. For example, an individual is short-term oriented if he or she gives more importance to short-term issues or outcomes, while a long-term oriented individual focuses more on issues associated with outcomes in the long run. Some psychology and sociology literatures suggest that time can differ across individuals, which vary due to different circumstances such as cultures (Bluedorn & Denhardt, 1988; Bluedorn & Standifer, 2006). Such individual differences in temporal orientation will influence how managers as key decision makers make decisions regarding

future issues or investment opportunities with benefits in the short versus long run. Similarly, Das (1987: 203) argued that “an individual’s general view of the nature of future time could potentially constrain choices about such time-related factors as planning cycles or planning horizons.” For example, temporal orientation is modeled as managers’ attribute with clear planning implications for their firms (Das, 1987, 1991).

In addition to varying temporal orientation across individuals, temporal orientation is also malleable within an individual over time. For instance, individuals may adjust their temporal orientation according to the environments or situations as they reflect on the task environment conditions, socialization contexts, and significant events in life (Holman & Silver, 1998; Holman & Zimbardo, 2009; Shipp, Edwards, & Lambert, 2009; Trope & Liberman, 2003). This situational perspective has also been employed by several strategy literatures to examine temporal orientation which depends on situational characteristics (Das, 1987; Nadkarni & Chen, 2014; Nadkarni, Chen, & Chen, 2016; Ocasio, 1997; Yadav, Prabhu, & Chandy, 2007).

I focus on temporal orientation because temporal considerations of the future are fundamental in determining a strategic orientation of the firm (Venkatraman, 1989). As temporal orientation refers to the mind-set about time attributed to individuals, it is important to examine a planning actor’s perspective of the future time dimension (Das, 1987). Previous literature suggests that executives’ view of time acts as a temporal filter that they use to evaluate decision situations and form the basis for their strategic actions (Ancona, Goodman, Lawrence, & Tushman, 2001; Crossan, Cunha, Vera, &

Cunha, 2005). Specifically, as a CEO is an important decision maker within the firm, the CEO's temporal orientation matters considerably.

Temporal orientation is a relevant construct for examining the CEOs' relative importance of the issues in short versus long time horizon that they pay attention to. Examining temporal orientation is essential because previous studies have found evidence of substantive negative consequences arising from short-term orientation (e.g., Brochet et al., 2015; Bushee, 1998; Dechow & Sloan, 1991). For instance, Bushee's (1998) results show that managers are more likely to reduce R&D investments to manage earnings when firms are predominantly owned by transient institutions. Dechow and Sloan (1991) also find that CEOs decrease R&D expenditures when they are in their final years. In another study by Brochet and colleagues (2015), short-term orientation is found to be associated with less firms' investments in R&D and advertising activities. These are examples of short-termism, which emphasizes short-term focus at the expense of longer run (Reilly, Souder, & Ranucci, 2016). Specifically, short-termism is defined as "decisions and outcomes that pursue a course of action that is best for the short-term but suboptimal over the long run" (Lavery, 1996: 826). Accounting and finance literatures similarly define short-termism as "a tendency to take actions that maximize reported short-term earnings and stock prices at the expense of long-term corporate performance" (Brochet et al., 2015: 1123). This can result in suboptimal intertemporal tradeoff (Lavery, 1996). Some scholars suggest that short-termism becomes an agency problem because managers still choose to emphasize on short-term targets to increase their own benefits even though they may realize that they are foregoing valuable long-term opportunities (Jensen & Murphy, 1990;

Marginson & McAulay, 2008; Walsh & Seward, 1990). Therefore, the main essence of the problem arising from short-termism is that actions taken in the short term also damage the long-term effectiveness and value of the firm (Lavery, 1996; Van der Stede, 2000).

Although many past studies have examined the consequences of short-term orientation, little is known about what drives an individual's temporal orientation to focus on future issues in the short-term or the long-term. One factor that can impact temporal orientation is an individual's temporal myopia, which Levinthal and March (1993: 101) describe as "the tendency to ignore the long run." Extant literatures normally employ temporal myopia to reflect a narrow view of temporal choices, internal capabilities, and external strategies and environmental conditions (Levinthal & March, 1993; Levitt, 1960; Miller, 1993). Some scholars suggest that it is the inability and the lack of awareness inherent in temporal myopia that limits how individuals perceive future opportunities (Lant, Milliken, & Batra, 1992; Marginson & McAulay, 2008). Cognitive limitations of individuals cause them to underestimate the ultimate value of future investments associated with uncertainty (Chi & Fan, 1997). Specifically, it is because of bounded rationality that limits the alternatives managers consider (March & Simon, 1958), which results in sequential attention (Cyert & March, 1963). Consequently, managers need to allocate attention between current and future considerations due to their cognitive limits (Levinthal & March, 1993).

Temporal orientation, which is the focus of individuals on future issues in short or long time horizon, is a broader and a more neutral concept than short-termism and temporal myopia. Due to the limited attention of past studies

on the antecedents of temporal orientation, especially at the individual level, my thesis will examine the factors that drive a CEO to be short-term or long-term oriented towards future issues. Before offering hypotheses to examine the antecedents of CEOs' temporal orientation in the following chapters, I will first review the most dominant theoretical perspective, which is agency theory, as well as other theoretical perspectives that address different aspects of time-related constructs. These theoretical perspectives include attention-based view, behavioral decision theories, i.e., the behavioral theory of the firm and prospect theory, and behavioral agency theory as an integration of agency theory and prospect theory. I will also review some empirical findings from previous studies that draw on these theoretical perspectives. Thereafter, limitations of prior research on time horizon constructs will be discussed.

The Most Dominant Theoretical Perspective for Time Horizon Constructs

Agency Theory

Agency theory is considered the most dominant theory that addresses issues related to time horizon. Time horizon is one of the major tensions within agency theory such that the short- and long-term interests of agents and principals can diverge (Reilly et al., 2016). Two problems that can occur in agency relationships include the conflicting goals between the principal and agent, where the principal cannot verify that the agent has behaved appropriately, as well as the problem of risk sharing which arises from their different attitudes toward risk (Eisenhardt, 1989). In particular, there is an agency conflict between agents (i.e. managers) and principals (i.e. shareholders) regarding their risk preferences because shareholders can diversify risk through

their ownership portfolio, thus they are risk neutral. Conversely, managerial agents are more risk averse than shareholders because they cannot diversify their employment risk. Another source of conflict between agents and principals arises from the shorter decision horizons of agents, which are limited to their expected tenure with the firm while a firm's lifespan can be much longer (Jensen & Smith, 1985). With conflicting interests concerning different risk preferences and decision horizons, the main concern is that the principal and the agent may prefer different actions that they can realize benefits in different time horizon.

Agency theory addresses the opportunism aspect of issues related to time horizon. Managers can opportunistically direct the firm's investment policy to incorporate their self-interests, which incur costs to the firm's owners whenever managers' interests are different from owners' interests. Hence, suboptimal investment decisions can arise due to their conflicts of interests because managers overly focus on investments with short run benefits (Eisenhardt, 1989; Jensen & Meckling, 1976). Managers' emphasis on short-term results while foregoing good long-term opportunities is a result of an opportunistic behavior because managers may know better but act with a short-term mind-set anyway (Marginson & McAulay, 2008).

Opportunistic behaviors of managers contribute to their short-term orientation because they have multiple motivations to allocate resources disproportionately towards opportunities with benefits in shorter term. One reason that managers may overly focus on short-term performance is the preference to increase their wealth, when it is tied to short-term performance but not the outcomes in longer term (Finkelstein & Hambrick, 1989). Another

reason is that managers seek to maximize their career value by focusing on shorter term opportunities (Thakor, 1990). As the value of long horizon investments takes longer to be realized, managers are more concerned about being dismissed for poor performance during the short period (Narayanan, 1985; Reichelstein, 2000). Therefore, a firm's risk-neutral owners with optimal investment horizons for the firm need to minimize agency costs, such as by granting managers appropriate stock options to align managers' interests with the long-term interests of owners (Jensen & Murphy, 1990; Westphal & Zajac, 1994).

Main Findings

Previous studies have applied agency theory to examine issues related to time horizon (e.g., Chen, Cheng, Lo, & Wang, 2015b; Gopalan, Milbourn, Song, & Thakor, 2014; Souder & Shaver, 2010). Specifically, managers utilize short-term performance as an indicator to owners and investors that "the firms' assets are being managed to maximum value" (Laverty, 1996: 834) because investors lack complete information regarding the firms' long-term strategies. For example, managers have to trade-off between meeting earnings targets and maintaining R&D investment (Bushee, 1998). Brochet et al. (2015) also find that short-term disclosure horizon in conference calls is positively associated with accruals and real earnings management as managers are pressured to meet short-term capital-market related goals. Conversely, when there is less pressure to maintain favorable short-term performance, Chen and colleagues (2015b) find that firms with CEO contractual protection are less likely to engage in short-termism by reducing R&D expenditures than firms without such protection. This is because CEO employment contract can protect CEOs from

short-term performance swings and downside risk. The roles of corporate governance mechanisms in monitoring opportunistic behaviors of managers regarding meeting short-term earnings goals have also been examined, including the effectiveness of the board of directors (e.g., Chen et al., 2015b; Gonzalez & André, 2014), and the level of dedicated and transient institutional ownership (e.g., Bushee, 1998, 2001; Callen & Fang, 2013; Wahal & McConnell, 2000). For instance, Bushee's (1998) results show that when firms are predominantly owned by transient institutions, the likelihood that managers reduce R&D investments to manage earnings significantly increases.

Some studies have also drawn on agency theory to examine the mechanisms employed by owners to align managers' interests with their own (e.g., Banker, Huang, & Natarajan, 2011; Dechow & Sloan, 1991; Edmans, Fang, & Lewellen, 2017; Gopalan et al., 2014; Holden & Lundstrum, 2009; Souder & Shaver, 2010). In particular, agency theory proposes that stock-based incentives can increase long-term investment as it aligns managers' interest with the interest of a firm's owners more closely. For instance, Souder and Shaver (2010) find that when firms' managers have higher levels of unexercisable stock options, long horizon investments increase. This is because they can only benefit from unexercisable options in the future. Gopalan and colleagues (2014) also demonstrate that longer CEO pay duration of restricted stock and stock options is negatively related to the extent of managerial manipulation of short-term performance through earnings-increasing accruals. However, when Souder and Bromiley (2012) examine the association between

grants of stock-based incentives and the asset durability¹ of investments, contrary to the common expectation of agency theory, they find that stock-based compensation actually reduces asset durability.

Altogether, these studies demonstrate that opportunistic behaviors of managers can influence their decisions towards investments with different time horizon in order to maximize their own benefits. At the same time, owners also employ different mechanisms including corporate governance and compensation structure to monitor and reduce managerial opportunism towards improving only short-term performance.

Other Theoretical Perspectives for Time Horizon Constructs

Attention-Based View

Attention-based view addresses the need for decision makers to devote attention to pressing demands, which result in different focus on issues in short versus long time horizon. This is because their bounded rationality and limited attentional capacity prevent them from giving full attention to all issues (Cyert & March, 1963; March & Simon, 1958). Ocasio suggests that “what decision-makers do depends on what issues and answers they focus their attention on” (1997: 188). Given their selective focus of attention, decision-makers can only attend to a limited number of issues and answers in any particular situation, which will also influence their choices and actions (Simon, 1947). Moreover, Ocasio proposes that characteristics of the players can influence attention, and “the most critical players in attention regulation are typically the CEO and the top management group” (1997: 197). The upper-echelons view (Hambrick &

¹ Asset durability, which refers to “the expected useful life of a firm’s equipment” (Souder & Bromiley, 2012: 552), has been used as a proxy for a firm’s temporal orientation.

Mason, 1984), with bounded rationality as its foundation (Cyert & March, 1963), also argues that managers are confronted with ambiguous and complex information which is a lot more than they can comprehend. Furthermore, executives' characteristics, such as values, experiences, and backgrounds, affect their perception and interpretation, as well as the intensity of information seeking (Aguilar, 1967; Daft & Weick, 1984). Temporal orientation of decision makers can influence how they devote their attention to issues in short versus long time horizon, which determine how they selectively recognize and evaluate different strategic decisions.

Main Findings

Attention-based view framework has been used in several studies to explain how managers need to allocate attention between short- and long-term issues. Previous studies have examined the roles of accounting-based measures in bringing short-term performance to managers' attention, as well as distorting their attention by overweighting the short run (Chow, Kato, & Merchant, 1996; Marginson & McAulay, 2008; Merchant, 1990; Van der Stede, 2000). For example, Marginson and McAulay (2008) argue that the importance of accounting information, as one of the possible communication channels, impacts the amount of attention and thus behaviors of decision makers, which can lead to short-termism. This is possibly because accounting-based performance measures can capture information over a shorter period, "before the long-term consequences from making short-term decisions becomes apparent" (Johnson & Kaplan, 1987: 203). Nevertheless, little support is found for Marginson and McAulay's (2008) argument. In contrast, Abernethy, Bouwens, and Van Lent (2013) argue that not all accounting measures lead

decision makers to focus attention only on the short run as they find that some accounting return measures (e.g., return on investment and residual income) are more related to a longer-term focus. This is because these accounting returns can better align managers' strategic choices with the firm's long-term interest by implicitly or explicitly incorporating the firm's cost of capital.

Some related studies have also drawn on the attention-based view framework to examine temporal attention, which refers to CEO temporal focus on past, present, and future (Nadkarni & Chen, 2014; Yadav et al., 2007). The difference between temporal attention and temporal orientation is that temporal attention refers to the temporal focus on past, present, and future while temporal orientation is the focus on future issues in short versus long time horizon (Das, 1987). For example, Yadav et al. (2007) examine CEO future focus and find that it is positively associated with higher rates of both detection and deployment of new product introduction (NPI). Nadkarni and Chen (2014) extended the study by Yadav et al. (2007) to examine CEO temporal focus on past, present, and future in interaction with environmental dynamism in predicting a company's rate of NPI. They find that in stable environments, the rate of NPI is higher in firms led by CEOs with high past focus, high present focus, and low future focus. In dynamic environments, the rate of NPI is higher in firms led by CEOs with low past focus, high present focus, and high future focus. Overall, these studies suggest the need for decision makers to allocate attention to specific issues related to different time horizon according to their characteristics due to their bounded rationality and limited attentional capacity.

Behavioral Decision Theories: The Behavioral Theory of the Firm and Prospect Theory

The literatures in behavioral decision theories, including the behavioral theory of the firm and prospect theory, provide explanations of how managers resolve the tension between different requirements for short- and long-run survival by incorporating uncertainty and risk-related behaviors. In particular, managers have to make decisions under uncertainty. Uncertainty is defined as the difficulty in predicting the future due to incomplete knowledge (Beckman, Haunschild, & Phillips, 2004). Decision makers underestimate the value of future investments in distant time, which is normally associated with long horizon (Chi & Fan, 1997). Moreover, managers solve current issues instead of investing in long-term strategies as they emphasize short-run feedback more than long-run uncertain events (Cyert & March, 1963). This is because people have a strong preference for immediate results over delayed payoffs, and future rewards are discounted at very high rates (Loewenstein & Prelec, 1992). In particular, uncertainty is inevitably related to the issue of time since “time and uncertainty are typically correlated with one another in the real world,” and because “anything that is delayed is almost by definition uncertain” (Prelec & Loewenstein, 1991: 784). Thus, a decision maker perceives longer time horizon to be associated with greater uncertainty and possibly higher risk due to an absence of information (Galbraith, 1973; Weick, 1995).

In addition, behavioral decision theories incorporate risk-related behaviors in explaining how managers make decisions between short- and long-run investments. The behavioral theory of the firm suggests that risk-taking preferences of organizations are shaped by comparing their performance to

aspiration levels. Similarly, prospect theory predicts how individuals make decisions involving risk, and reference point impacts the interpretation of the outcomes by individuals (Kahneman & Tversky, 1979). For instance, individuals may frame the same outcome as a gain or a loss depending on the reference point that they use (Bazerman, 1984). Moreover, individuals are predicted to choose the option with the highest value. Research also suggests that gain frames result in more risk-averse behavior, while loss frames result in more risk-seeking behavior based on the value function (Holmes, Bromiley, Devers, Holcomb, & McGuire, 2011).

While the behavioral theory of the firm and prospect theory offer many similar explanations, some differences between two theories exist (Holmes et al., 2011). One difference is the level of analysis, with the behavioral theory of the firm describing the behavior of organizations and prospect theory describing individual behavior. Another main difference is related to how the reference point in prospect theory and the aspiration level in the behavioral theory of the firm are established. Specifically, the behavioral theory of the firm offers a detailed description of the sources of aspiration levels of the firm, which can reflect the firm's aspiration levels, prior performance, preferences of stakeholders, or social aspiration levels with other comparable firms (Cyert & March, 1963). This results in a number of proxies for aspiration levels that researchers employ. In contrast, prospect theory is seen as lacking "a satisfactory theory of how reference [points] are established and, for that matter, good empirical ways of estimating them directly" (Luce, 1996: 192). As reference points in prospect theory are the status quo (Kahneman, 2003), framing manipulations are used to impose reference points (Kahneman, 1992).

Furthermore, behavioral decision theories argue that bounded rationality, reflecting human limitations in accessing, processing, and utilizing information (e.g., Simon, 1957), influences decision-making processes (Cyert & March, 1963; March & Simon, 1958). Certain decision biases can arise due to cognitive limitations of decision makers, where they will use their heuristics as fast solutions to inform their decision making (Tversky & Kahneman, 1974). Hence, managers sometimes rely on their heuristics when examining several different investment opportunities with varying levels of returns, horizon, risk, and other aspects, which guide them to emphasize short horizon investments as a satisficing approach (Simon, 1947). An example of a behavioral theory of the firm routine is the choice of investment horizon, which is less likely to change significantly in established firms (Souder & Bromiley, 2012).

Main Findings

Previous studies that have applied the behavioral theory of the firm to examine time-related constructs are still limited. In one study, Souder and Shaver (2010) argue that low performers will engage in investments with higher risk and shorter horizon as they are less concerned about experiencing losses than high performers. This also offers them a higher probability to catch up to high performers quickly as compared with long horizon investments. In another study, Souder and Bromiley (2012) find that performance relative to aspirations, which is critical to the framing of managerial decision making, positively influences asset durability of a firm's capital expenditures. This is because performance relative to aspirations impacts the firm's resources for investments in longer duration assets.

Relative to the application of the behavioral theory of the firm, even fewer studies have applied prospect theory to directly examine time horizon constructs. A study by Chrisman and Patel (2012) draws on the behavioral agency perspective and myopic loss aversion, which is a derivative of prospect theory, to examine family firms' long-term orientation by using investments in R&D. According to the behavioral agency model's suggestion that family owners and managers tend to be loss averse and avoid perceived threats to their socioemotional wealth, the authors find that family firms invest less in R&D than nonfamily firms. However, when performance falls below aspirations, Chrisman and Patel (2012) demonstrate that the increase in R&D investments is significantly greater in family firms than in nonfamily firms as the framing of the effects of R&D investments on the ability to achieve family goals shifts to a loss perspective.

In general, by examining time horizon constructs with behavioral decision theories, these studies demonstrate that the framing of managerial decision making and performance relative to aspiration levels can influence the extent that managers engage in short- or long-term investments with varying risk level.

Integration of Theories – Behavioral Agency Theory

Some studies examined issues related to time horizon from behavioral agency perspective (Wiseman & Gomez-Mejia, 1998), which combines prospect theory with agency theory. Both theories are considered complimentary. First, agency theory proposes that managers behave opportunistically. To limit managerial opportunistic behaviors, incentive

alignment mechanisms are required which impose costs upon shareholders. Second, prospect theory helps predict individual decision making regarding uncertain future outcomes of their personal wealth. In particular, behavioral agency research helps explain the relation of incentive mechanisms to agent risk taking, enhancing the conception of risk. The theory also suggests that opportunistic managers use their heuristics when selecting strategic options, which impact their personal wealth through equity incentives tied to the firm's stock price and performance (e.g., Devers, McNamara, Wiseman, & Arrfelt, 2008; Larraza-Kintana, Wiseman, Gomez-Mejia, & Welbourne, 2007; Martin, Gomez-Mejia, & Wiseman, 2013).

Managers' strategic decisions under uncertainty could impact the value of firm-specific wealth which also influences managers' personal wealth, thus representing a mixed gamble (Martin et al., 2013). Specifically, when agents make strategic decisions in an uncertain context, both positive and negative outcomes to their personal wealth are possible. Agents value these outcomes with different weights such that they give higher weight to the possibility of losses than to the same amounts of gain, reflecting "loss aversion" (Tversky & Kahneman, 1991). Due to their loss aversion, agents are more concerned about protecting current personal wealth than in gaining additional future wealth (Kahneman & Tversky, 1979; Wiseman & Gomez-Mejia, 1998).

Main Findings

The studies that have applied behavioral agency perspective to examine time-related constructs are still limited. In addition to the study by Chrisman and Patel (2012) which draws on the behavioral agency perspective and myopic loss aversion, another example is the study by Martin, Wiseman, and

Gomez-Mejia (2015). They examine how two decision heuristics of CEOs which are associated with stock options interact with available slack to influence firm temporal orientation when investing in assets with different life spans. They find that CEO current wealth leads to longer temporal orientation, as reflected by longer asset durability, and high value of CEO current wealth substitutes for the positive influence of slack on temporal orientation. Conversely, CEO prospective wealth results in shorter temporal orientation so that they can realize the gain sooner, and CEO prospective wealth accentuates the positive influence of slack on temporal orientation. Overall, these studies suggest that opportunistic managers' decision heuristics and the framing of decision making can influence their strategic choices regarding temporal orientation.

Summary of Theoretical Perspectives

Previous studies have examined constructs related to time horizon with several theoretical perspectives, including agency theory, attention-based view, behavioral decision theories, i.e., the behavioral theory of the firm and prospect theory, and behavioral agency theory. Among these theories, agency theory is the most dominant theory which has been applied by most previous studies to examine time horizon constructs, especially in accounting and finance literatures. These studies have applied agency theory to topics such as the role of managerial opportunism, the monitoring role of corporate governance, and the incentive mechanisms employed by owners to align managers' interests with their own, such as stock-based compensation, in influencing managerial decisions with different time horizon.

Attention-based view framework has been applied by some studies to examine how managers need to allocate attention between short- and long-term issues, such as the roles of different accounting-based measures in bringing short-term or long-term performance to managers' attention. In addition, managers may focus their attention to issues according to their temporal attention, which is CEO temporal focus on past, present, and future. Although temporal attention is different from temporal orientation, which refers to the relative importance of future issues in short versus long time horizon (Das, 1987), these studies suggest that decision makers' attention to specific issues related to different time horizon influences how they evaluate and engage in different strategic choices.

Relative to the studies that examine time-related constructs with agency theory and attention-based view, the number of studies that has applied the behavioral theory of the firm, prospect theory, and behavioral agency perspective is still somewhat limited. Nevertheless, previous studies that examine time horizon constructs with behavioral decision theories and behavioral agency perspective emphasize how the framing of managerial decision making and performance relative to aspiration levels can influence the managers' strategic choices regarding temporal orientation with varying risk level. Moreover, as suggested by behavioral agency perspective, managers are concerned about their strategic choices regarding temporal orientation as these investments can impact their personal wealth through equity incentives tied to firm performance.

Limitations of Prior Research on Time Horizon Constructs

Scholars have examined constructs related to time horizon from multiple perspectives, ranging from accounting (Abernethy et al., 2013; Brochet et al., 2015; Bushee, 1998), finance (Gopalan et al., 2014; Lerner, Sorensen, & Stroemberg, 2011), and management literatures (Marginson & McAulay, 2008; Souder & Bromiley, 2012). Furthermore, several theoretical perspectives have been applied by previous studies, including agency theory, attention-based view, behavioral decision theories, i.e., the behavioral theory of the firm and prospect theory, and behavioral agency theory. However, there are some limitations of prior research concerning theoretical findings and measurements of time horizon constructs.

One limitation is related to the theoretical findings from reviewing the main theoretical perspectives employed by previous studies. Agency theory is the most dominant theoretical perspective which has been applied by most previous studies to examine time horizon constructs, especially in accounting and finance literatures. However, the findings from applying agency theory to examine the incentive mechanisms employed to align managers' with owners' interests show that there are still some inconsistent findings regarding whether stock-based compensation such as options promotes long-term investment. For example, in one study, Cheng (2004) shows a positive association between changes in stock option compensation and changes in R&D expenditures when executives are approaching terminal year. However, in another study by Souder and Bromiley (2012), they find that stock-based compensation actually reduces asset durability, which is contrary to the common expectation. Specifically, Souder and Bromiley (2012: 563) conclude that it is "interesting that we cannot

find evidence supporting one of the conceptual tenets justifying stock grants.” This failure to find the expected effect of stock-based incentives, which are suggested by agency theory as effective mechanisms for aligning managers’ and shareholders’ interests (Eisenhardt, 1989), has called into question regarding the roles of stock-based incentives. Souder and Bromiley (2012: 563) similarly state that “our empirical results raise new doubts about the ability of stock-based compensation to induce longer-term investments.” Consequently, it is essential to further examine the roles of CEO compensation in influencing temporal orientation in more fine-grained elements by incorporating different theoretical perspectives as well. For example, different elements of stock-based compensation may have different impacts on the CEO’s temporal orientation.

Among the theoretical perspectives employed by previous studies, the behavioral theory of the firm, prospect theory, and behavioral agency perspective should be applied in more future studies to gain a better understanding of time horizon constructs. In particular, the lack of studies that has applied prospect theory to directly examine time horizon constructs is probably because recent studies have mainly examined temporal orientation at the firm-level of analysis (Martin et al., 2015; Souder & Bromiley, 2012), whereas prospect theory describes individual behavior. Further understanding can be enhanced by integrating multiple theoretical perspectives to examine time horizon constructs. In addition, depending on the context of study and the level of analysis, there are still opportunities to incorporate different theoretical perspectives beyond several main theories to examine constructs related to time horizon.

Table 1 provides a summary of the theoretical perspectives, as well as the limitations of prior studies and the opportunities to examine time horizon constructs.

Another limitation is related to the measurements of time horizon constructs. Previous studies mainly use outcome measures to proxy for time horizon constructs. Although Das (1987) defines temporal orientation at the individual level of analysis, there are still limited studies on individual temporal orientation. Recent research has mainly studied temporal orientation at the firm-level of analysis (Martin et al., 2015; Souder & Bromiley, 2012). Using outcome measures, such as R&D expenditures (Bushee, 1998) or asset durability (Martin et al., 2015; Souder & Bromiley, 2012), can only capture time horizon constructs at the firm-level. These studies view temporal orientation at the firm-level as a general collective preference of the firm, such as in accordance to the preferences of managers and historical patterns of the firm, to describe a firm-specific investment plan (Bower, 1970; Maritan, 2001). Nevertheless, a collective preference of a firm regarding temporal orientation as measured using proxies by previous studies, such as asset durability (Martin et al., 2015; Souder & Bromiley, 2012), may differ from the individual temporal orientation of the firm's CEO, who is the key decision maker within the firm. Therefore, individual temporal orientation deserves more attention because temporal orientation is considered a characteristic of a decision maker that differs across individuals and is malleable over time (Bluedorn & Denhardt, 1988; Bluedorn & Standifer, 2006; Das, 1987).

Table 1. Theoretical Perspectives for Time Horizon Constructs

Theories	Summary	Limitations/Opportunities
Agency Theory e.g., Chen, Cheng, Lo, & Wang (2015); Souder & Bromiley (2012)	Opportunistic behaviors of managers can influence their decisions towards investments with different time horizon to maximize their own benefits. Owners also employ different mechanisms including corporate governance and compensation structure to monitor and reduce managerial opportunism towards improving only short-term performance.	<ul style="list-style-type: none"> • Inconsistent findings regarding whether stock-based compensation, which is one of the incentive mechanisms employed to align managers' with owners' interests, promotes long-term investments. • The roles of CEO compensation should be examined in more fine-grained elements by incorporating different theoretical perspectives.
Attention-Based View e.g., Abernethy, Bouwens, & Van Lent (2013); Marginson & McAulay (2008)	The need for decision makers to allocate attention to specific issues related to different time horizon according to their characteristics is due to their bounded rationality and limited attentional capacity.	<ul style="list-style-type: none"> • How different accounting measures, as the possible communication channels, impact decision makers' attention to short- or long-term issues should be further examined.
Behavioral Decision Theories (The Behavioral Theory of the Firm and Prospect Theory) e.g., Souder & Bromiley (2012); Souder & Shaver (2010)	The framing of managerial decision making and performance relative to aspiration levels can influence the extent that managers engage in short- or long-term investments with varying risk level.	<ul style="list-style-type: none"> • Limited studies have applied the behavioral theory of the firm. • Very few studies have applied prospect theory to directly examine time horizon constructs because recent studies have mainly examined temporal orientation at the firm-level of analysis.
Behavioral Agency Theory e.g., Chrisman & Patel (2012); Martin, Wiseman, & Gomez-Mejia (2015)	Opportunistic managers' decision heuristics and the framing of decision making can influence their strategic choices regarding temporal orientation.	<ul style="list-style-type: none"> • Limited studies have applied behavioral agency theory to examine the roles of heuristics in influencing temporal orientation.

In addition, the use of different types of outcome measures as proxies for time horizon constructs is also inconsistent in previous studies. For example, some researchers measure short-termism by examining earnings management (Abarbanell & Bernard, 2000; Call, Chen, Miao, & Tong, 2014; Gopalan et al., 2014), while others examine short-termism by using a proxy such as the change in R&D expenditures (Bushee, 1998; Chen et al., 2015b; Dechow & Sloan, 1991). Moreover, some studies utilize information regarding firms' investments in short versus long horizon (Souder & Shaver, 2010) or use patents citations to proxy for long-run investments (Lerner et al., 2011). Hence, previous studies from different streams of research use various outcome measures to proxy for time horizon constructs. This leads to the difficulty in comparing results from various studies and different outcome measures may not correctly capture time horizon constructs.

Although previous studies have found evidence of substantive negative consequences arising from short-term orientation, there is still limited attention of prior research on the antecedents of temporal orientation, especially at the individual level. As a CEO is the most important top executive and the key decision maker within the firm, my thesis will examine the factors that drive a CEO to be short-term or long-term oriented towards future issues. In addition to examining the antecedents of CEOs' temporal orientation, I aim to open the black box of measuring individual temporal orientation in this study. In particular, temporal orientation of CEOs will be examined by using content analysis of CEOs' letters to shareholders. I will incorporate different theoretical perspectives, which received limited attention in previous research, and also examine several boundary conditions that can alter the CEO's temporal

orientation to extend the applicability of different theoretical perspectives and contribute to prior research on temporal orientation. For example, regarding the inconsistent findings from applying agency theory to examine the incentive mechanisms employed to align managers' with owners' interests, I will apply prospect theory to provide further explanations of the incentive mechanisms' influence on temporal orientation. Prospect theory helps to modify agency theory's assumptions to consider compensation risk associated with different elements of stock-based compensation as they are directly linked to the firm's stock price and performance (Gomez-Mejia, Welbourne, & Wiseman, 2000; Wiseman & Gomez-Mejia, 1998). Moreover, as temporal orientation can vary across individuals as well as change overtime, temporal orientation of CEOs may also vary during their career depending on different circumstances. To contribute to prior research on temporal orientation, I will focus on temporal orientation of the CEOs in the contexts of retirement and succession in the following chapters.

CHAPTER 2

**CEO APPROACHING RETIREMENT AND TEMPORAL
ORIENTATION**

Temporal orientation is the relative importance of the issues in short versus long time horizon that individuals pay attention to. To examine individual temporal orientation which received limited attention in prior research, temporal orientation of CEOs will be focused on. A CEO is the most important top executive and the key decision maker within the firm whose temporal orientation matters considerably. In particular, as temporal orientation can vary across individuals as well as change overtime, I will first examine temporal orientation of CEOs approaching retirement in this chapter. CEO retirement provides an appropriate setting as the problem of managerial opportunism is expected to be more severe for retiring CEOs due to their much shorter decision horizons when compared with other CEOs. This setting also allows this study to examine several incentive mechanisms including stock-based compensation, which is suggested by agency theory to align managers' with owners' interests. Specifically, I will draw on prospect theory to highlight consistent prediction as well as contradiction between agency theory and prospect theory to resolve inconsistent findings regarding the roles of CEOs' incentives in influencing temporal orientation of CEOs approaching retirement. The different components of managerial incentives as boundary conditions will be examined in the next chapter.

CEO Approaching Retirement

CEOs approaching retirement have shorter career horizon. Their shorter career horizon can influence their decision-making process involving time horizon investments. In particular, when CEOs are retiring, a horizon problem can arise, i.e., the manager leaving the firm is less motivated to act in the firm's best interest as compared to the manager with longer career horizon (Cheng, 2004; Dechow & Sloan, 1991). Career horizon concerns of CEOs near retirement mainly stem from their behaviors towards long-term investment horizon and risky investments. Studies from various disciplines have examined the behaviors of CEOs approaching retirement (Cheng, 2004; Dechow & Sloan, 1991; Kalyta, 2009; Kang, 2016; Matta & Beamish, 2008). Accounting and finance literatures, adopting economics-based approaches mainly based on agency theory, have argued that retiring CEOs may decrease long-term-oriented strategic investments as they are less likely to receive long-term benefits from these investments (Cheng, 2004; Dechow & Sloan, 1991; Murphy & Zimmerman, 1993). Some management literatures also find that CEOs approaching retirement in large U.S. firms reduce investments in corporate social responsibility (CSR) as a form of long-term investment (Kang, 2016).

In addition to researchers' attention on retiring CEOs' behaviors towards long-term investment horizon, another stream of literatures has examined retiring CEOs' behaviors towards making risky decisions (Matta & Beamish, 2008; Zajac & Westphal, 1996). In particular, CEOs approaching retirement become increasingly risk averse towards investments that may diminish firm performance in the short term even though they may benefit the firm in the long term. Several explanations for their risk-averse behaviors when

making strategic decisions are due to managerial opportunism as suggested by agency theory. For example, retiring CEOs want to inflate their retirement earnings-based compensation (Antia, Pantzalis, & Park, 2010; Dechow & Sloan, 1991), or enhance their postretirement opportunities (Brickley, Linck, & Coles, 1999; Hitt & Tyler, 1991). Another explanation for risk-averse behaviors of retiring CEOs is that they want to preserve “a legacy of success” (Matta & Beamish, 2008: 638).

CEO Approaching Retirement and Short-Term Orientation

Temporal orientation is the relative importance of future issues in short versus long time horizon that individuals pay attention to (Das, 1987). Individual differences in temporal orientation among key decision makers influence how they make decisions regarding issues or investment opportunities in the short versus long run such that individuals can have short-term or long-term orientation towards future issues. In addition, temporal orientation is malleable within an individual over time. For example, individuals may adjust their temporal orientation according to the environments or situations. Similarly, temporal orientation of CEOs may change during their career. CEOs approaching retirement have shorter career horizon, which can lead to a horizon problem and influence their decision-making process involving time horizon investments. Specifically, I propose that retiring CEOs have more incentives to behave opportunistically towards short-term opportunities with faster paybacks to maximize their own benefits during their shorter career horizon. The conventional wisdom regarding short-term orientation is that it is associated with negative outcomes. For example, previous studies have found substantive

negative consequences arising from short-term orientation (e.g., Brochet et al., 2015; Bushee, 1998; Dechow & Sloan, 1991). In this study, I will examine the opportunistic behaviors of retiring CEOs, which drive them to become short-term oriented towards future opportunities by drawing on agency theory. In this case, short-term orientation has a negative connotation as a result of the CEOs' opportunistic behaviors.

Opportunistic behaviors of managers contribute to their short-term orientation because they have multiple motivations to allocate resources disproportionately towards opportunities with benefits in shorter term. For example, managers with compensation tied to short-term performance but not the outcomes in longer term may be motivated to overly focus on short-term performance (Finkelstein & Hambrick, 1989). Moreover, as the value of long-term investments takes longer to be realized and these investments often require risky or ambiguous strategic moves, managers may be concerned about meeting observable short-term performance targets or dismissal for poor performance (Narayanan, 1985; Reichelstein, 2000). Since managers overly emphasize investments with short-term benefits, suboptimal investment decisions can arise due to the conflicts of interest between managers and owners (Eisenhardt, 1989; Jensen & Meckling, 1976).

The problem of managerial opportunism is expected to be more severe when managers are approaching retirement. Specifically, retiring CEOs, as key decision makers within firms, can opportunistically direct the firms' investment policy to incorporate their self-interests to maximize benefits during their shorter career horizon. Agency theory can help explain the opportunistic behaviors of CEOs near retirement towards short-term investment decisions. As

CEOs act as agents for principals, two problems that can arise in agency relationships include the conflicting goals between agents and principals, as well as the problem of risk sharing due to different attitudes towards risk (Eisenhardt, 1989). Conflicting interests and different risk preferences between principals and agents lead them to prefer different actions. Furthermore, another source of conflict between agents and principals is the shorter decision horizons of agents (Jensen & Smith, 1985). Managers' decision horizons are limited to their expected tenure with the firm, while a firm's lifespan can be much longer. All together, retiring CEOs are more likely to have conflicting interests and different risk preferences from the principals of their firms.

Past studies find that CEOs engage in opportunistic behaviors as they approach retirement due to several reasons. First, CEOs approaching retirement engage in opportunistic behaviors such as selecting investments that offer relatively faster paybacks to maximize personal wealth from favorable firm performance due to their limited remaining time as CEOs (e.g., Antia et al., 2010; Cassell, Huang, & Sanchez, 2013; Dechow & Sloan, 1991). Hence, they are more likely to be short-term oriented and put less weight on firms' benefits occurring after their employment time horizon. As a result, some good long-term investments that can increase firm value in the future may be avoided due to managerial horizon problem. For instance, some studies demonstrate that retiring CEOs are motivated to cut discretionary expenditures, such as R&D and advertising expenditures, to enhance firms' accounting earnings and their bonuses (Butler & Newman, 1989; Dechow & Sloan, 1991). Cassell et al. (2013) also find that in comparison to other CEOs, CEOs near retirement engage in opportunistic terminal-year forecasting behavior with more

optimistically biased forecasts of future earnings. This is because retiring CEOs are motivated to increase stock prices of their firms during the period before their retirement. Moreover, Kalyta (2009) shows that CEOs approaching retirement are motivated to increase their retirement plan benefits. These CEOs are found to make investments with lower net present values but higher current earnings in the final years before their retirement when their supplemental executive retirement plan, a form of post retirement salary, is contingent on firm performance in preretirement years.

Second, retiring CEOs behave opportunistically because they are risk averse such that they are motivated to enhance their reputation (Hitt & Tyler, 1991; Wiersema & Bantel, 1992) and improve their opportunities after retirement (Brickley et al., 1999; Davidson, Xie, Xu, & Ning, 2007) by maintaining favorable firm performance as perceptions of their skills and reputations are often based on their firms' success. Older CEOs are more risk averse and overemphasize their career stability and security (Hitt & Tyler, 1991; Wiersema & Bantel, 1992). An increasing risk aversion of CEOs near retirement also stems from their willingness to maintain a legacy of success such that they are less likely to take actions that put firm performance at risk. The possible decline in short-term firm performance from risky investments can damage CEOs' reputations during their last years of employment, especially when they only have a limited time to reverse the damage (Antia et al., 2010; Gao, 2010; Naveen, 2006). For example, when companies underperform or go bankrupt, their CEOs are perceived as incompetent (Eckbo & Thorburn, 2003). Moreover, CEOs also try to preserve their reputations so that they can extend their careers beyond retirement through directorship positions (Brickley et al.,

1999). Thus, a decline in firm performance can threaten the CEOs' reputations and limit their postretirement opportunities such as consulting positions or board appointments.

Long horizon investments can be seen as more risky with uncertain outcomes, and the benefits from these investments may not be realized before the CEOs' retirement. Consequently, retiring CEOs with shorter career horizon have more incentives to behave opportunistically by investing in short-term opportunities with faster paybacks. Therefore, CEOs approaching retirement are more likely to incorporate their self-interests by directing firms' investment policy towards short-term opportunities, thus they become more short-term oriented.

Hypothesis 1: CEO approaching retirement is positively associated with short-term orientation.

CHAPTER 3

BOUNDARY CONDITIONS

The Moderating Roles of CEO Compensation

CEOs approaching retirement have more incentives to engage in opportunistic behaviors towards opportunities with shorter term payoff horizons to improve firm performance, thus maximizing their personal wealth. Firm-level conditions that also determine CEOs' personal wealth are in the forms of CEOs' incentives, which can influence retiring CEOs' temporal orientation. Some previous studies examined the impact of CEO compensation on organizational outcomes by aggregating different elements of CEO incentive packages into a single incentive measure (i.e., pay mix) (e.g., Bloom & Milkovich, 1998; Siegel & Hambrick, 2005; Tosi & Greckhamer, 2004). However, some studies find that CEOs perceive individual compensation components to be associated with distinct risk properties, which can differently influence their behaviors (Devers et al., 2008; Sanders, 2001). Important insights can be gained by developing a theoretical explanation on how different components of incentives further impact retiring CEOs' temporal orientation, especially as they have shorter career horizon.

Different components of CEOs' incentives, including CEO compensation and equity ownership, are expected to act as boundary conditions that provide additional motivation for retiring CEOs to alter their temporal orientation. Two key components of CEO compensation are cash compensation, which comprises of base salary and cash bonus awards, and equity-based compensation such as stock options (Craighead, Magnan, & Thorne, 2004; Cyert, Kang, & Kumar, 2002). Both components of CEO

compensation, especially cash compensation and the exercisability of stock options, and CEO equity ownership are expected to influence strategic decisions of retiring CEOs with different extents due to their short expected tenure within the firm. In the next section, I will argue how different components of CEOs' incentives further accentuate or attenuate short-term orientation of the retiring CEOs by drawing on agency theory and prospect theory.

Agency Theory

Agency theory explains the opportunistic behaviors of CEOs near retirement towards short-term investment decisions. In agency relationships where CEOs act as agents for principals, two problems can arise (Eisenhardt, 1989). The first problem is the conflicting goals between agents (i.e. managers) and principals (i.e. shareholders). This can arise from the shorter decision horizons of agents, which are limited to their expected tenure with the firm while a firm's lifespan can be much longer (Jensen & Smith, 1985). The second problem is related to their risk preferences due to different attitudes towards risk. This is because shareholders can diversify risk through ownership portfolio that they own, thus they are risk neutral. Conversely, managerial agents are more risk averse than shareholders as managers cannot diversify their employment risk. With conflicting interests concerning different risk preferences and decision horizons, the main concern is that the principal and the agent may prefer different actions that they can realize benefits in different time horizon. As a result, agency scholars suggest the use of stock-based incentives to align managers' and shareholders' interests by reducing managerial

opportunism and discouraging risk aversion because these incentives tie pay to firm outcomes (e.g., Certo, Daily, Cannella, & Dalton, 2003; Eisenhardt, 1989; Westphal & Zajac, 1994). For example, Hall and Liebman suggest that “The most direct solution to [the] agency problem is to align the incentives of executives with the interests of shareholders by granting (or selling) stock and stock options to the CEO” (1998: 656). This is because when incentive pay is tied to firm outcomes, executives are motivated to increase future firm performance to realize benefits and profitability through equity ownership, while they share the losses if firm performance declines (Jensen & Murphy, 1990).

Prospect Theory

Prospect theory offers further insight into executives’ perceptions of compensation risk by providing the rationale to question the benefit of stock-based incentives in aligning managers’ and shareholders’ interests as suggested by agency theory. That is, due to the uncertainty regarding their future wealth enhancement, stock-based incentives represent compensation risk for executives as these incentives are directly linked to the firm’s stock price and performance (Gomez-Mejia et al., 2000; Wiseman & Gomez-Mejia, 1998). Prospect theory predicts how individuals make decisions involving risk, and reference point impacts the interpretation of the outcomes by individuals (Kahneman & Tversky, 1979). For instance, depending on the reference point that individuals use, they may frame the same outcome as a gain or a loss (Bazerman, 1984). Based on the value function, gain frames result in more risk-averse behavior, while loss frames result in more risk-seeking behavior

(Holmes et al., 2011). Moreover, individuals are predicted to select the option with the highest value, where the value function is steeper in the direction of losses as compared to gains around the reference point. Specifically, prospect theory suggests that individuals are loss averse such that they prefer to protect their current personal wealth than to gain additional wealth. In addition, when individuals experience losses, they are more willing to take actions to stop losses and regain position even though they have to sacrifice the interests of others (Kahneman & Tversky, 1979; Wiseman & Gomez-Mejia, 1998).

In summary, as stock-based incentives represent compensation risk for executives, prospect theory helps provide the insight regarding executives' loss aversion of the endowed value of their existing wealth. Therefore, the different nature of various forms of stock-based incentives may have diverse influence on executives' risk preferences, some of which may not be as intended by principals to align executives' and shareholders' interests according to agency theory. Specifically, I draw on prospect theory to highlight consistent prediction as well as contradiction between agency theory and prospect theory to resolve inconsistent findings regarding the roles of CEOs' compensation in influencing short-term orientation of CEOs approaching retirement.

Consistency across Agency Theory and Prospect Theory

Cash Compensation

CEOs approaching retirement have more incentives to behave opportunistically to maximize their personal wealth. The proportion of cash compensation is expected to impact the retiring CEOs' temporal orientation towards opportunities with shorter term payoff horizons. Cash compensation,

comprising executives' base salary and cash bonus awards, is considered a significant proportion of an executive's pay package (Huson, Tian, Wiedman, & Wier, 2011). Base salary is a fixed part of executives' compensation, while cash bonus awards are payments for achievement of short-term performance targets. Nevertheless, previous study shows that cash bonus awards are usually covary with base salary (Larraza-Kintana et al., 2007). As both base salary and cash bonus awards are normally tied to performance targets of one year or less, they are considered short-term compensation for executives (Balkin, Markman, & Gomez-Mejia, 2000).

Cash compensation is perceived as more consistent and relatively assured than incentive-based compensation, which is subject to other factors such as firm performance (Gomez-Mejia & Wiseman, 1997). Agency theory and prospect theory provide consistent arguments regarding the role of cash compensation in influencing retiring CEOs' short-term orientation. Agency theory suggests that as incentive pay links compensation to firm outcomes, incentive pay is expected to discourage risk aversion and motivate managers to pursue actions that maximize firm performance. Prospect theory suggests that based on the value function, gain frames result in more risk-averse behavior, while loss frames result in more risk-seeking behavior. In contrast to incentive pay which is subject to firm performance, cash compensation is more consistent such that managers may perceive cash compensation as relatively assured (Gomez-Mejia & Wiseman, 1997). As a result, some scholars have argued that high proportions of cash compensation may lead managers to focus less on stakeholders' interests, and invest more in opportunities with less risky average returns instead of high-risk, high-return investments (Hill & Snell, 1989;

Larcker, 1983). For example, some studies associate CEO's cash compensation with the level of CEO's risk aversion (Berger, Ofek, & Yermack, 1997; Coles, Daniel, & Naveen, 2006). That is, CEOs have less motivation to pursue more risky actions that may result in higher returns when their total compensation comprises high proportion of base salary and cash bonus awards. This gives rise to the suggestion that executive compensation should be linked to stock performance so that CEOs are more motivated to invest in strategic options with higher risk that further increase shareholder return (Jensen & Meckling, 1976; Jensen & Murphy, 1990; Tosi, Katz, & Gomez-Mejia, 1997).

CEOs approaching retirement are expected to engage in opportunistic behaviors to improve short-term firm performance as well as their own benefits. With high proportion of cash compensation which is relatively guaranteed, retiring CEOs with shorter career horizon become more risk-averse. Specifically, they are less motivated to pursue risky actions that may result in uncertain outcomes to future firm performance, while continue to focus more on improving short-term performance to enhance their benefits. Hence, a high proportion of cash compensation is expected to accentuate the retiring CEOs' opportunistic behaviors and risk aversion by focusing more on short-term opportunities with certain paybacks to increase their wealth, and less on uncertain long-term performance.

Hypothesis 2: Higher proportion of cash to total compensation will strengthen the positive association between CEO approaching retirement and short-term orientation.

In-the-Money Unexercisable Stock Options

CEOs approaching retirement are expected to behave opportunistically for their own benefits by becoming more short-term oriented on future opportunities. Boundary conditions that may accentuate or attenuate retiring CEOs' opportunistic behaviors are when these CEOs hold stock options. I focus on stock options because CEOs approaching retirement only have a couple of years left in their firms; therefore, the values of their in-the-money unexercisable and in-the-money exercisable stock options within this short period can play important roles in their strategic decisions. Specifically, as the benefits of stock options are contingent on the value of firm stock, the purpose of stock options is to share incremental wealth accumulation of the firms with managers (Murphy, 1999). Stock options are therefore expected to act as a governance mechanism that promotes longer term investments as the executive's wealth will increase if the stock price increases (Hoskisson, Hitt, & Hill, 1993; Porter, 1992; Zahra, Neubaum, & Huse, 2000). For example, Cheng (2004) shows a positive association between changes in option compensation and changes in R&D expenditures when executives might exhibit myopic behavior, such as when they are approaching terminal year. The author then suggested that stock option is the best way to motivate executives to take actions that promote long-term performance such as R&D investments. However, the study by Cheng (2004) does not distinguish between unexercisable and exercisable options, and does not take into account the behavioral perspectives of executives towards risks.

A stock option is a contract in which managers are granted the right to purchase a specific number of shares at a predetermined price within a set

future period. Normally, managers are granted stock options which do not expire for about 10 years (Heath, Huddart, & Lang, 1999). However, managers cannot exercise stock options for at least one year after they are granted i.e., options are unexercisable (Hall & Murphy, 2002). When the option becomes exercisable and in-the-money, i.e., the current stock price of the firm underlying the stock option is higher than the exercise price, a manager has the discretion to realize gains by cashing it in at any time until they expire. The gain from the option is the difference between the exercise price of the option and the current market price of the firm's stock. Since the values of stock options are linked to firm performance, stock options frequently received attention in encouraging appropriate risk taking levels by managers because of the potential for greater returns from greater risk (Devers et al., 2008; Sanders & Hambrick, 2007; Wiseman & Gomez-Mejia, 1998).

As unexercisable and exercisable options are different in nature and can have different influences on managerial decisions (Devers et al., 2008; Souder & Bromiley, 2012; Souder & Shaver, 2010), I will first examine the extent that in-the-money unexercisable stock options of retiring CEOs impact their opportunistic behaviors towards short-term opportunities. A manager with an unexercisable option can only benefit from an increase in stock price after this option becomes exercisable (Bebchuk & Fried, 2004). Specifically, unexercisable options are inaccessible promises of future wealth, which depend on the future of the granting firm's underlying stock.

Agency theory and prospect theory provide consistent arguments regarding the role of unexercisable options in influencing retiring CEOs' short-term orientation. Agency theory suggests that stock-based incentives help align

managers' and shareholders' interests by reducing managerial opportunism and discouraging risk aversion because these incentives tie pay to firm outcomes. Prospect theory suggests that individuals' perceptions of their personal wealth include the value endowed from assets that they currently own (Kahneman, Knetsch, & Thaler, 1991; Miller & Shapira, 2004; Thaler & Johnson, 1990). Moreover, individuals are loss averse such that they prefer to protect their current personal wealth than to gain additional future wealth (Kahneman & Tversky, 1979; Wiseman & Gomez-Mejia, 1998). Since unexercisable options are not yet accessible and depend on the underlying stock in the future, CEOs are not expected to endow the accumulated value from unexercisable options as parts of their personal wealth (Devers, Wiseman, & Holmes, 2007; Larraza-Kintana et al., 2007). Furthermore, previous studies find that individuals normally perceive future outcomes at a significantly lower value than outcomes that can be accessed immediately (Rothbard, 1990; Shelley & Omer, 1996). As the potential value of unexercisable options cannot be realized immediately, CEOs will perceive the value of unexercisable options which can only be accessed in the future as being much lower than the value of a comparable amount of exercisable options which can be accessed immediately.

Consistent with arguments from agency theory and prospect theory, the high value of unexercisable options that retiring CEOs hold is expected to reduce the extent that these CEOs engage in opportunistic behaviors towards investments with short-term benefits. CEOs approaching retirement only have a short timeframe remaining in their firms to influence firms' strategic decisions. As unexercisable options depend on the underlying stock in the future, retiring CEOs may be more motivated to invest in opportunities that can increase firm

performance in the longer term when they hold a high value of unexercisable options. Some studies suggest that longer term strategies can outperform a series of short-term strategies (Marginson & McAulay, 2008; Mueller & Reardon, 1993; Walsh & Seward, 1990), with lower opportunity costs that may correspond to a short-term strategic action. Investing in longer term strategies can be expected to enhance the firm's underlying stock in the future, which in turn allows the retiring CEOs to realize higher benefits from unexercisable stock options.

When retiring CEOs hold unexercisable options, they are less likely to heavily endow their personal wealth with the accumulated value of unexercisable stock options. Moreover, retiring CEOs are less likely to behave opportunistically towards short-term opportunities while they are more motivated to engage in longer term investments that can increase future stock price to realize higher benefits from unexercisable options. Hence, retiring CEOs holding high value of in-the-money unexercisable options will be less short-term oriented towards investments that only improve the current stock price.

Hypothesis 3: Higher proportion of in-the-money unexercisable stock options to total compensation will weaken the positive association between CEO approaching retirement and short-term orientation.

Contradiction between Agency Theory and Prospect Theory

In-the-Money Exercisable Stock Options

Even though stock-based compensation, such as stock options, is intended by many firms to align senior managers' with owners' interests as

suggested by agency theory (e.g., Hall & Murphy, 2002; Westphal & Zajac, 1994), this prescription does not adequately take into account executives' perceptions of compensation risk. Specifically, stock-based incentives can represent compensation risk for executives as these incentives are directly linked to the firm's stock price and performance (Gomez-Mejia et al., 2000; Wiseman & Gomez-Mejia, 1998). Moreover, the exercisability of stock options can have different impacts on managers with shorter career horizon. As unexercisable and exercisable options are different in nature, I will also draw on prospect theory to examine how exercisable stock options influence opportunistic behaviors of retiring CEOs towards short-term opportunities, which contradicts agency theory's suggestion.

The value of in-the-money exercisable stock options that retiring CEOs hold is expected to impact the extent that these CEOs behave opportunistically for their own benefits by becoming more short-term oriented. Prospect theory offers additional insight into executives' perceptions of compensation risk, predicting that individuals' choices in decisions involving risk and reference point determine individuals' interpretation of the outcomes (Kahneman & Tversky, 1979). Moreover, individuals are predicted to select the alternative that has the highest value. Based on the value function, gain frames result in more risk-averse behavior, while loss frames result in more risk-seeking behavior (Holmes et al., 2011). For example, Devers et al. (2007) examined the prices of stock options assigned by managers as a proxy for subjective values. In particular, gain frames occur when stock prices rise, while loss frames occur when stock prices decline. As stock price volatility is assumed to reflect the risk of the underlying stock (Sharpe, 1964), Devers et al. (2007) show that when

stock prices are declining, managers are risk seeking by assigning a premium for stock price volatility, but they are risk averse by discounting for volatility when stock prices are rising. Hence, this finding suggests that managers become risk seeking in loss frames while they become risk averse in gain frames when they hold exercisable stock options.

Furthermore, prospect theory suggests that individuals are loss averse such that they prefer to protect their current personal wealth than to gain additional future wealth (Kahneman & Tversky, 1979; Wiseman & Gomez-Mejia, 1998). In particular, individuals' perceptions of their personal wealth include the value endowed from assets that they currently own (Kahneman et al., 1991; Miller & Shapira, 2004; Thaler & Johnson, 1990). An example is when executives hold exercisable options, where they endow and perceive the potential accumulated value of in-the-money exercisable options as their personal wealth (Wiseman & Gomez-Mejia, 1998). Due to their loss aversion, individuals prevent loss by avoiding risk in perceived gain contexts, while seeking risk in perceived loss contexts (Kahneman & Tversky, 1979). Similarly, with high levels of accumulated value of in-the-money exercisable stock options, executives are more concerned about protecting their personal wealth by reducing strategic risk and potential threats to this accumulated value (Devers et al., 2008).

Managerial time frames used to evaluate decisions can also influence the level of risks that decision makers are willing to accept. Prospect theory indicates that when decision makers are closer to the evaluation of their choices, they tend to avoid risk. Specifically, decision makers tend to act in a short-term manner when an assessment of the outcome of a choice is

approaching as opposed to when outcomes can be deferred such that they have higher ability to consider the various facets of a decision and take more risks (Kahneman & Lovallo, 1993). Similarly, myopic loss aversion, a derivative of prospect theory, also recognizes that the time horizons used to evaluate decisions can affect how investment choices are framed. Myopic loss aversion is based on two concepts: loss aversion, and mental accounting. In particular, mental accounting refers to the approach individuals use to frame and evaluate outcomes, i.e., whether the decisions' impacts are considered over a longer or shorter period of time. Myopic loss aversion assumes that individuals are loss averse, and problem framing greatly depends on the length of time over which they assess the asset's performance. If decision makers use aggregation rules that lead them to appraise their investment options over a longer time frame, they are willing to accept greater risks (Loewenstein & Thaler, 1989; Thaler, Tversky, Kahneman, & Schwartz, 1997). Following these arguments, as retiring CEOs have a limited time to influence the firms' outcomes as the CEOs of the firms, their shorter career horizon can also impact the level of risks that they are willing to accept when they hold in-the-money exercisable stock options.

Moreover, managerial risk preference can further influence the timing of option exercises. As managers with exercisable options can immediately realize benefits when stock price increases (Bebchuk & Fried, 2004), highly risk-averse managers are more likely to lock in gains by exercising options when they benefit from an increase in short-term stock price (Hall & Murphy, 2002). Hence, risk-averse managers with in-the-money exercisable options may focus more attention on the current stock price and become more motivated to increase short horizon investments that they believe will raise the current stock

price immediately. Conversely, they are likely to avoid long horizon activities with immediate costs and delayed benefits that may cause stock price to fall.

The influence of holding exercisable options on executives' temporal orientation can also depend on their career horizon, which impacts time frames used to evaluate investment decisions. Specifically, risk aversion of executives holding in-the-money exercisable options becomes more salient for CEOs approaching retirement. In accordance with prospect theory and myopic loss aversion, CEOs approaching retirement tend to act in a short-term manner as they only have a short time frame remaining in their firms to make strategic decisions that may increase the value of their exercisable options. They are also less likely to accept risks towards actions that may reduce stock prices and threaten their personal wealth. In particular, these CEOs tend to be especially risk-averse and avoid risky choices that could endanger realized gains from the accumulated value of in-the-money exercisable stock options when they can immediately benefit from stock prices gain. For instance, Matta and Beamish (2008) show that high values of exercisable options which are in-the-money further accentuate the career horizon problem involving risk aversion of CEOs near retirement by reducing the likelihood of risky international acquisitions. Conversely, when CEOs have long career horizons, high values of exercisable options which are in-the-money encourage these CEOs to engage in international acquisitions. Therefore, when retiring CEOs hold high value of in-the-money exercisable options, the opportunistic behaviors and risk aversion of these CEOs are likely to be more pronounced towards short-term oriented strategic decisions.

Hypothesis 4: Higher proportion of in-the-money exercisable stock options to total compensation will strengthen the positive association between CEO approaching retirement and short-term orientation.

CEO Equity Ownership

CEOs approaching retirement have more incentives to behave opportunistically towards opportunities with shorter term payoff horizons to improve firm performance, thus maximizing their personal wealth. In addition to cash compensation and stock options, CEOs receive compensation in the form of equity ownership, which can also impact their personal wealth and thus influence retiring CEOs' temporal orientation. As CEOs approaching retirement only have a short time left in their firms, their accumulated wealth from holding equity ownership can play important roles in their strategic decisions towards investments with short or long time horizon. Although agency theory suggests that equity ownership should be used to align senior managers' with shareholders' interests (e.g., Hall & Murphy, 2002; Westphal & Zajac, 1994), this suggestion does not adequately take into account executives' perceptions of compensation risk as these incentives are directly linked to the firm's stock price and performance. Equity-based pay can be subject to more risks that also impact the level of benefits that CEOs receive because they are subject to uncontrollable factors such as market conditions (Garen, 1994). Moreover, retiring CEOs have shorter career horizon to influence strategic decisions that may increase or decrease stock price of their firms, thus impacting their personal wealth.

Prospect theory provides reasons to question the benefit of stock-based incentives in aligning managers' and shareholders' interests as suggested by agency theory because prospect theory also considers executives' perceptions of downside risk associated with their equity holdings. According to prospect theory, downside risk can lead to strong preferences for risk aversion of decision makers when they have something to lose (Kahneman & Tversky, 1979; Sanders, 2001; Wiseman & Gomez-Mejia, 1998). CEOs consider their equity ownership as their real wealth because their stocks are available for the CEOs to sell and realize the proceeds immediately. Especially when CEOs have high equity ownership, they are more likely to reduce the riskiness of their stock portfolio as their wealth becomes more dependent on the firms' stock prices (e.g., Amihud & Lev, 1981; Wright, Ferris, Sarin, & Awasthi, 1996). Due to the downside risk associated with their equity ownership when firm share prices decrease, CEOs have the value of their wealth from equity holdings to lose and thus become more risk-averse (Sanders, 2001).

Moreover, prospect theory suggests that individuals are loss averse such that they prefer to protect their current personal wealth rather than risk this wealth to pursue new gains. That is, losses weigh more than equivalent gains such that losses result in more distress and greater responses from individuals (Kahneman & Tversky, 1979; Kahneman, Wakker, & Sarin, 1997). When CEOs hold greater amount of equity ownership, they are expected to be more loss averse as their wealth becomes more dependent on the stock performance of their firms. This is also because CEOs have relatively less diversified holdings as compared to shareholders (Fox & Gunn, 1997). Consequently, loss-averse CEOs emphasize the downside risk associated with their equity holdings

by focusing on probabilities that their wealth from equity ownership falls below a target value of returns (Miller & Reuer, 1996). Therefore, CEOs with high equity ownership are less motivated to engage in risky investments that may result in long-term benefits as such investments may reduce current stock price and put their current wealth at risk.

In addition to the effect of executives' loss aversion, their "subjective valuation" is also influenced by their endowment of the accumulated value from equity-based compensation as part of their personal wealth (Devers et al., 2007; Kahneman et al., 1991; Miller & Shapira, 2004; Wiseman & Gomez-Mejia, 1998). The concept of endowment suggests that individuals value what they already own more than what they could own, where it is more difficult to give up what they own than to pay to acquire it (Thaler & Johnson, 1990). When CEOs hold equity ownership, their stocks are available for the CEOs to sell and realize the proceeds, thus CEOs instantly endow their stock holdings into their current wealth (Wiseman & Gomez-Mejia, 1998). Although CEOs with equity ownership can benefit when stock prices increase along with shareholders, they also experience immediate losses in their current wealth when stock prices decrease. As a result, in contrast to the intended alignment of managers' and shareholders' interests from equity ownership as suggested by agency theory, previous studies find that CEOs with high equity holdings become more risk-averse and are less willing to engage in risk taking that will reduce the value of their stock holdings (May, 1995; Sanders, 2001; Wright, Kroll, Lado, & Van Ness, 2002).

Loss aversion of executives holding high equity ownership becomes more salient for CEOs approaching retirement. With a short time frame

remaining in their firms to make strategic decisions that impact the value of their stocks, retiring CEOs with high equity ownership are expected to focus more on investments with short-term benefits to increase short-term future stock prices. In particular, due to their high reliance on equity ownership and the instant endowment of these equity holdings into their wealth, retiring CEOs with short career horizon become less motivated to engage in actions that may reduce short-term stock prices and threaten their current personal wealth. Consequently, retiring CEOs with high equity ownership are more likely to become conservative and thus less likely to engage in long-term investments that may reduce the value of their stocks in the short-term, although these investments may benefit the firm and shareholders in the long run. That is, retiring CEOs' opportunistic behaviors and risk aversion are likely to be more pronounced towards strategic decisions with short-term benefits.

Hypothesis 5: Higher CEO equity ownership will strengthen the positive association between CEO approaching retirement and short-term orientation.

Figure 1. Summary of Hypotheses on CEO Approaching Retirement and Temporal Orientation

CHAPTER 4

METHODS

Sample

To test the hypotheses, I collected data covering the years 2009-2013 for all firms as listed in the 2009 *Standard & Poor's 500* index (S&P 500). S&P 500 companies are appropriate for this study as many CEOs' letters to shareholders of these companies are publicly available. This sample also includes companies from various industries which increase the generalizability of the results. I collected the panel data for all available firm-year observations using several sources, including the company's annual reports and proxy statements from company websites, and COMPUSTAT's Fundamental Annual, COMPUSTAT's ExecuComp, Institutional Shareholder Services - Directors, Thompson Reuters' Institutional (13F) Holdings, and LexisNexis Academic databases. I excluded observations from the final sample if information was incomplete. Moreover, the years in which outside CEO succession occurred were excluded because the compensation information of these outside CEOs in the prior year were not available. After combining all databases and removing observations with missing data in the variables, there are 1,386 firm-year observations remaining for 312 firms.

Measures

Dependent variable. I measured *CEO's temporal orientation* through the use of content analysis. Specifically, I used content analysis of CEOs' letters to shareholders to determine attention patterns relating to the emphasis on short-term and long-term of the CEOs. Using content analysis is suitable for

measuring attention as the words that individuals use reflect the cognitive categories through which individuals apply to allocate their attention, which is consistent with the Sapir-Whorf hypothesis (Sapir, 1944; Whorf, 1956). Specifically, “words that are frequently used are cognitively central and reflect what is most on the user’s mind; words that are used infrequently or not at all are at the cognitive peripheral, perhaps even representing uncomfortable or alien concepts” (Cho & Hambrick, 2006: 459).

Content analysis utilizes a number of procedures to organize or categorize communications (Weber, 1990). Moreover, it refers to any methodology that seeks to recognize certain characteristics within texts in order to create valid inferences (Krippendorff, 1980). The use of content analysis suggests that language reflects writers’ understandings as well as their cognitive processes (Holsti, 1968; Huff, 1990). Similarly, D’Aveni and MacMillan (1990: 639) stated that “content analysis of written communications is useful for reconstructing perceptions and beliefs of their authors.” Therefore, content analysis enables researchers to determine characteristics of a decision maker through the statements that he or she makes. Employing content analysis to gather data from commonly used and publicly available narrative texts, such as companies’ letters to shareholders, has been encouraged as this method results in higher reliability and replicability (Finkelstein & Hambrick, 1996). As a result, content analysis facilitates considerable possibility of gaining key insights into the cognitive processes and characteristics of top executives because it is widely agreed that these executives are closely involved in the preparation of letters to shareholders (Barr, Stimpert, & Huff, 1992; Duriau, Reger, & Pfarrer, 2007). Previous studies mostly employ content analysis by

drawing from the letter to shareholders which is publicly available in listed companies' annual reports. The validity of analyzing these letters has been directly verified by several studies with positive results (e.g., D'Aveni & MacMillan, 1990; Gamache, McNamara, Mannor, & Johnson, 2015; Osborne, Stubbart, & Ramaprasad, 2001). The letters to shareholders can reflect main initiatives, concerns, and views of senior executives even though these letters may have multiple purposes or involve professional writers (Abrahamson & Hambrick, 1997).

Even though content analysis can be qualitative such as by constructing cognitive maps (Barr et al., 1992), I employed the quantitative approach based on frequency counts of sentences appearing in each company's letters to shareholders (e.g., Abrahamson & Hambrick, 1997; Cho & Hambrick, 2006; Kabanoff & Brown, 2008). The frequent appearance of specific words or phrase lists determines what categories or contexts as represented by these words or phrase lists actors find important (Cho & Hambrick, 2006; Duriau et al., 2007). As Osborne et al. (2001: 238, 240) stated, "Variations in theme content or frequency [in a letter to shareholders] may reflect changes in leadership perspectives and highlight observable shifts in subsequent performance. ... [They] represent outward manifestations of company intentions."

Some prior management studies have measured time horizon constructs such as temporal attention and temporal depth by using content analysis (e.g., Nadkarni & Chen, 2014; Nadkarni et al., 2016). As these time horizon constructs examined in prior studies have different definitions, the measurements are also distinct from temporal orientation which will be examined in this study. For example, Nadkarni and Chen (2014) measure CEO

temporal attention, referring to the temporal focus on past, present, and future, by using key words that reflect past focus (e.g., “was,” “had,” “did”), present focus (e.g., “is,” “are,” “does”), and future focus (e.g., “will,” “may,” “going to”) from the Linguistic Inquiry and Word Count text analysis program. However, temporal attention is different from temporal orientation, which is the focus on future issues in short versus long time horizon (Das, 1987). I focus on temporal orientation because temporal considerations of the future are fundamental in determining a strategic orientation of the firm (Venkatraman, 1989). In another study, Nadkarni and colleagues (2016) examine past temporal depth and future temporal depth, which refer to the temporal distance into the past and the future. They measure past temporal depth and future temporal depth as composite measures by averaging the longest, median, and shortest time span cited in the documents. However, many sentences in the letters to shareholders do not explicitly specify the date or year, but are stated in ranges. Examples of the ranges of time span include “in the years ahead,” “long-term,” “next several years,” “in the coming months,” and “later this year.” Consequently, the content analysis method used by Nadkarni and colleagues (2016), i.e., averaging the time span cited in the documents, cannot capture these types of sentences.

To measure temporal orientation in this study, I followed a deductive process where theory guides the coding scheme (Potter & Levine-Donnerstein, 1999). First, I developed the dictionary of words and phrase lists associated with sentences related to short or long time horizon which are consistent with previous literature that examined time horizon (e.g., Brochet et al., 2015). Short horizon refers to the period of one year or less. By specifying the cut-off time

for short horizon to be one year or less, my content analysis method can capture the ranges of time span and thus overcome the disadvantages of content analysis method that use the exact time span cited in documents. Examples of key words referring to short horizon include short-term and short-run, while key words referring to long horizon are such as long-term and long-run. After the indicator word and phrase list is finalized based on literature review which is independent of companies' documents, I conducted the coding pretest before coding the sample of the letters to shareholders (e.g., Porac, Wade, & Pollock, 1999). In addition to only identifying the indicator words and phrases within the letters to shareholders to measure time horizon constructs as employed by previous studies, I also identified the applicability or supporting context of the sentences surrounding these words and phrases related to short or long horizon. This can better determine that the sentences refer to the future context and then classify these sentences into short or long horizon to capture the CEOs' temporal orientation towards short- or long-term future issues.

I conducted content analysis of letters to shareholders for each company for every year in the timeframe of 2009 to 2013 to count how frequently the sentences related to short or long time horizon appear. Sentences that refer to current fiscal year and before were excluded. Each sentence that refers to future fiscal year(s) was coded as either short- or long-term given the context. Some examples of short-term and long-term sentences in the CEO's letters to shareholders are presented in Table 2. In the case that the sentence clearly refers to both short-term and long-term contexts, this sentence will be counted as both short-term and long-term. An example sentence is from McKesson Corporation 2012 CEO's letter to shareholders, which is "We are working closely with our

customers in all markets to help them prepare for *near-term* requirements and to position them for *long-term* success in a world of evolving payment models, greater consumer empowerment and increased pressure to improve quality and efficiency.” After determining sentences related to short or long time horizon, *CEO’s short-term orientation* was then measured by the total number of sentences related to short-term information disclosed in the letter to shareholders divided by the total number of sentences related to both short-term and long-term information disclosed in the same period. Using the proportion of sentences related to short-term information divided by the total number of short-term and long-term sentences can provide information about the CEOs’ relative focus on short-term future issues. The interrater reliability for determining sentences related to short or long time horizon was 0.87.

Table 2. Examples of Short-Term and Long-Term Sentences in Content Analysis

CEO's letter to shareholders	Short-term sentences	Long-term sentences
Jabil Circuit 2009	We believe our financial performance will improve in <i>fiscal 2010</i> , provided the broader economic environment continues to improve as well.	The secular trends in this field are favorable and “Clean Tech” could become a more meaningful part of our business in the <i>years ahead</i> .
Legg Mason 2010	<i>Fiscal year 2011</i> growth initiatives will include a greater focus on distribution and international growth, the pursuit of additional lift-out and bolt-on transactions, and the expansion of capital available to seed products.	Legg Mason is making strong progress in delivering results to our clients and our shareholders, but we are not resting here—we know that there is more work to be done as we continue to evolve and adapt our business for <i>long-term</i> success.
Sempra Energy 2011	SDG&E's Sunrise Powerlink transmission line is due to be completed <i>later this year</i> and, subject to regulatory approval, construction will start on a major new substation in southern San Diego County.	Over <i>the next several years</i> , we anticipate exceeding this payout range, while maintaining a robust growth rate compared with the utility sector.
Philip Morris International 2012	We remain hopeful that these numerous flaws will be addressed over <i>the coming months</i> to ensure that the EU implements a regulatory framework for tobacco products in Europe that is fair, science-based and effective in reducing the harm caused by smoking and avoiding a surge in illicit trade.	On the environmental front we continued to make great strides and remain on track to achieve our targets for <i>2015 and beyond</i> .
Darden Restaurants 2013	As a result, we are tempering check average growth in <i>fiscal 2014</i> because we think that is necessary to support traffic growth in the <i>near term</i> .	And, we are continuing to invest in commercializing lobster aquaculture because such a breakthrough can help preserve Red Lobster's ability to provide guests with price-accessible offerings for <i>years to come</i> .

Independent variable. CEOs' opportunistic behaviors towards short-term opportunities are expected to be most pronounced during their last two years of tenure with the firms due to higher evaluation pressure from the CEO labor market (Brickley et al., 1999; Evans, Nagarajan, & Schloetzer, 2010). Similar to prior studies (e.g., Dechow & Sloan, 1991; Kang, 2016), *CEO approaching retirement* was measured as a dichotomous variable, which was assigned 1's to indicate the year of retirement and the year before the retirement year and 0's to other years. I searched for company news to determine the final two years before retirement.

Moderating variables. *CEO cash compensation* includes the sum of CEO's base salary and annual cash bonus awards (e.g., Cheng, 2004; Devers et al., 2008) divided by the CEO's total compensation. *CEO unexercisable stock options* are the proportion of the CEO's in-the-money unexercisable stock options divided by the CEO's total compensation. Similarly, *CEO exercisable stock options* equal the proportion of the CEO's in-the-money exercisable stock options divided by the CEO's total compensation. CEO's total compensation is the sum of salary, bonus, total value of restricted stock granted, total value of stock options granted, and other long-term incentive payouts. Using the proportion of different types of CEO compensation instead of the absolute dollar amount can provide information about how different forms of CEO compensation are prioritized (e.g., Souder & Bromiley, 2012).

CEO equity ownership was measured by the percentage of shares of stock held by the CEO (e.g., Porac et al., 1999).

I obtained all compensation data from COMPUSTAT's Execucomp database. I adopted a one-year lag structure for these compensation variables to examine the impacts on CEOs' temporal orientation.

Control variables. First, I controlled for financial variables that may influence CEO's temporal orientation. To control for the heterogeneity across industries, I used two-digit Standard Industrial Classification (SIC) average to compute industry-adjusted measures for financial variables. I also followed a common practice to minimize effects of outliers by winsorizing the variables at a five-percent level in each tail, where all data below the 5th percentile were set to the 5th percentile, and data above the 95th percentile were set to the 95th percentile (Greene, 2003). I adopted a one-year lag structure for all control variables. First, I controlled for *firm size*, measured as the log of total assets. *Firm performance* was measured as return-on-equity (ROE). Moreover, I controlled for *recovery slack* (measured by selling, general and administrative expense divided by total sales) to capture the extent to which a firm has slack resources which can be deployed for new investments and strategic initiatives (Bourgeois, 1981; March & Simon, 1958). Because recovery slack can have immediate impact on a firm's operations, constraints on slack resources can influence the CEO to focus more on short-term issues. To control for the possibility that debt structure affects CEO's temporal orientation, I included *debt-to-equity ratio* (measured by total liabilities divided by stockholders' equity) to control for financial leverage. Moreover, I controlled for the potential threat rigidity due to the proximity to financial distress by including Altman's Z score, the standard control for *bankruptcy risk* (Miller & Chen, 2004). When bankruptcy risk is higher, CEOs may focus more on short-term issues.

Several corporate governance and CEO individual-level variables that may influence CEO's temporal orientation are also controlled for. I controlled for *institutional ownership* by using the proportion of shares that institutional investors hold divided by the total number of shares outstanding as institutional investors are significant monitors. *Percentage of outside directors* was measured by the number of nonexecutive directors divided by the total number of directors on the board (e.g., Wang, Zhao, & Chen, 2017). *Outside directors' ownership* was calculated as the percentage of shares held by outside directors. As outside directors are usually under less control of the CEO, they can also act as monitors of the CEO's strategic actions in short- or long-term. *CEO tenure* was measured by the number of years an executive had served as the focal company's CEO (e.g., Henderson, Miller, & Hambrick, 2006; Zhang & Rajagopalan, 2010), which can impact the extent that the CEO focuses on short- or long-term issues. *CEO duality* was measured by a dummy variable equal to 1 if the CEO was also the board chairman and 0 otherwise. Duality may influence the discretion of CEOs to engage in strategic decisions according to their temporal orientation. Finally, *female CEO* was measured by a dummy variable equal to 1 if the CEO was female and 0 otherwise.

Four dummy variables, *year 2009*, *year 2010*, *year 2011* and *year 2012*, were also included to control for year effects since the observations were drawn from five years. Year 2013 was assigned as the reference year.

Correction for Endogeneity and Data Analyses

This study attempted to address the self-selection problem in the context of CEO retirement (e.g., Kang, 2016). The self-selection problem may occur

because the explanatory variable, CEO approaching retirement, is not a random treatment variable. This may lead to an endogeneity problem due to the self-selection of CEO retirement timing by sample firms, such as requiring the CEOs to retire at a certain age due to unobservable reasons, or the self-selection of CEO retirement timing by the CEOs themselves, such as choosing to retire at a certain age due to unobservable reasons. Similar to prior research (e.g., Kang, 2016), I included a number of procedures to address this self-selection problem. First, several time-varying variables which may be associated with CEO approaching retirement and temporal orientation were controlled for in the empirical models, such as firm size, firm performance and recover slack. I also included many control variables to avoid omitted variables. Second, an applied Heckman correction method was utilized (Hamilton & Nickerson, 2003; Shaver, 1998). This method can account for unobservable differences between CEOs who choose or are required to retire at a certain age and CEOs who have not yet retired. I estimated the likelihood of CEO retirement by including the following possible predictors in the prior year in the first-stage probit model: firm size, firm performance, firm financial leverage, CEO tenure, CEO age, and CEO compensation structure (cash compensation and equity ownership). Industry dummy variables and year dummy variables were also included to control for industry and year effects.

The results from the first-stage probit model are reported in Table 3. CEO tenure ($\beta = 0.038$, $p\text{-value} < 0.001$) and CEO age ($\beta = 0.075$, $p\text{-value} < 0.001$) are positively associated with the likelihood of CEO retirement. CEO equity ownership is negatively associated with the likelihood of CEO retirement ($\beta = -0.177$, $p\text{-value} < 0.001$). The Inverse Mills ratios were

calculated from the first-stage probit estimation, which were included in the second-stage regression to serve as a control of self-selection.

I tested the hypotheses using firm fixed-effects models with robust estimates (Hoechle, 2007). Fixed-effects models produce unbiased regression coefficients as they control for firm-specific and time-specific heterogeneity (Greene, 2003). Moreover, to reduce the impact of multicollinearity, centered variables are used to generate all multiplicative terms (Aiken & West, 1991).

Table 3. First-Stage Probit Model

	CEO retirement
Firm size	-0.028 (0.029)
Firm performance	0.029 (0.026)
Debt-to-equity ratio	-0.003 (0.002)
CEO tenure	0.038*** (0.009)
CEO age	0.075*** (0.009)
CEO cash compensation	0.362 (0.230)
CEO equity ownership	-0.177*** (0.039)
Constant	-9.309*** (0.562)
Industry dummies	Included
Year dummies	Included
Pseudo R-squared	0.153
Wald X Squared	841.99***

Values in parentheses are robust standard errors. There are 1,386 firm-year observations.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed statistics tests)

CHAPTER 5

RESULTS

Table 4 reports the descriptive statistics of, and correlations among, the variables used in the analysis except year dummies. The descriptive statistics before centering are reported. The mean variance inflation factor (VIF) of all variables (including the interaction terms) is 1.45. The VIF values for the variables in the regression models ranged between 1.04 and 2.27, indicating that multicollinearity is not an issue in the models (Cohen, Cohen, West, & Aiken, 2003).

Insert Table 4 about here

Table 5 reports the regression results. Model 1 in Table 5 includes only the control variables, Model 2 adds the main effect of the independent variable, while Model 3 the moderating effects. I tested the hypotheses based on the full Model 3, the most complete model specification ($R^2 = 0.034$, $p\text{-value} < 0.001$). Note that in models predicting temporal orientation, a low R^2 is quite common (e.g., Martin et al., 2015; Souder & Bromiley, 2012). For example, R^2 in the models in Martin and colleagues' (2015) study range from 0.067 to 0.072, while R^2 in the model in Souder and Bromiley's (2012) study is 0.128.

Among the control variables, Model 3 shows that when firms have higher recovery slack resources to be deployed, CEOs become less short-term oriented, as indicated by the negative significant effect of recovery slack ($\beta = -0.004$, $p\text{-value} < 0.05$). Moreover, Model 3 shows that female CEOs are more short-term oriented as indicated by the positive significant effect ($\beta = 0.116$, $p\text{-value} < 0.01$), possibly due to more pressure to deliver performance. Some

control variables in Model 3 do not have significant impacts on CEOs' short-term orientation. For example, some prior studies find that compensation elements such as stock-based compensation have direct impacts on firms' temporal orientation (e.g., Souder & Bromiley, 2012; Souder & Shaver, 2010). In another study, Bushee (1998) finds that the level of institutional ownership impacts the extent that firms reduce R&D expenditures to meet short-term earnings goals. These studies measure temporal orientation by using firm outcomes as proxies, including asset durability, the types of investments, or R&D expenditures. However, a firm's temporal orientation may differ from the individual temporal orientation of the firm's CEO. In particular, temporal orientation is considered a characteristic of a decision maker that differs across individuals and is malleable over time. As a result, some control variables may not have the same significant impact on the CEO's temporal orientation, which is measured using the content analysis of CEO's letter to shareholders. This suggests that differences exist between a CEO's temporal orientation and a firm's temporal orientation because many other factors such as different types of expenditures or investments can impact the firm's temporal orientation.

The result in Model 3 supports Hypothesis 1, which I draw on agency theory to posit that CEO approaching retirement is more likely to be short-term oriented ($\beta = 0.050$, $p\text{-value} < 0.01$). Furthermore, Hypothesis 2 posits that short-term orientation of retiring CEOs will be accentuated when the proportion of their cash compensation is high. I tested this hypothesis by including the interaction between CEO approaching retirement and CEO cash compensation. The coefficient of the interaction term is positive and marginally significant ($\beta = 0.098$, $p\text{-value} < 0.10$), suggesting that when the proportion of their cash

compensation is high, retiring CEOs become more short-term oriented. The interaction plot in Figure 2 also confirms this relationship. There is a stronger, positive association between CEO approaching retirement and CEO's short-term orientation when the proportion of their cash compensation is high (to one standard deviation above the mean) than when the proportion of their cash compensation is low (to one standard deviation below the mean).

Drawing on prospect theory to examine the influences of stock-based compensation, Hypothesis 3 posits that CEOs approaching retirement are expected to be less short-term oriented when the proportion of their in-the-money unexercisable stock options is high, which is consistent with the argument from agency theory. In support of Hypothesis 3, the coefficient of the interaction term between CEO approaching retirement and CEO unexercisable stock options is negative and significant ($\beta = -0.027$, $p\text{-value} < 0.05$). The interaction plot in Figure 3 shows a cross-over interaction effect, thus indicating a visible and substantial effect that aligns with the hypothesis. Specifically, when the proportion of their unexercisable stock options is high (to one standard deviation above the mean), retiring CEOs become less short-term oriented. In contrast, retiring CEOs become more short-term oriented when the proportion of their unexercisable stock options is low (to one standard deviation below the mean).

I further draw on prospect theory which contradicts agency theory's argument regarding stock-based compensation to examine the moderating roles of exercisable stock options and equity ownership on retiring CEOs' short-term orientation. Hypothesis 4 posits that retiring CEOs are expected to be more short-term oriented when the proportion of their in-the-money exercisable stock

options is high. The coefficient of the interaction term between CEO approaching retirement and CEO exercisable stock options is positive and significant ($\beta = 0.005$, $p\text{-value} < 0.05$), thus supporting this hypothesis. The interaction plot in Figure 4 confirms this relationship. There is a stronger, positive association between CEO approaching retirement and CEO's short-term orientation when the proportion of their in-the-money exercisable stock options is high (to one standard deviation above the mean) than when the proportion of their in-the-money exercisable stock options is low (to one standard deviation below the mean). Similarly, Hypothesis 5 posits that high equity ownership strengthens retiring CEOs' focus towards short-term issues. In support of this hypothesis, the coefficient of the interaction term between CEO approaching retirement and equity ownership is positive and significant ($\beta = 0.013$, $p\text{-value} < 0.05$). The interaction plot in Figure 5 also confirms this hypothesis, showing a stronger, positive association between CEO approaching retirement and CEO's short-term orientation when their equity ownership is high (to one standard deviation above the mean) than when their equity ownership is low (to one standard deviation below the mean).

 Insert Table 5 about here

Figure 2. Interaction of Cash Compensation and CEO Approaching Retirement

Figure 3. Interaction of Unexercisable Stock Options and CEO Approaching Retirement

Figure 4. Interaction of Exercisable Stock Options and CEO Approaching Retirement

Figure 5. Interaction of Equity Ownership and CEO Approaching Retirement

Robustness Checks

I further confirmed the consistency of the findings through a number of additional robustness checks. First, I tried including additional variables, which are firm age and institutional ownership, in the first-stage probit model. The Inverse Mills ratios calculated from the first-stage probit estimation are included as a control in the second-stage regression models. All hypotheses still remain supported in the second-stage regression.

Moreover, I tried using alternative measures in the second-stage regression. First, I used alternative measures of firm performance, using return on assets, return on sales, and Tobin Q instead of ROE. The conclusions did not change. Second, I used alternative measures of recovery slack, which are accounts receivable divided by total sales, and inventory divided by total sales. I also used available slack (measured by current assets divided by current liabilities) instead of recovery slack. The results remain largely the same. Third, instead of controlling for the percentage of outside directors and outside directors' ownership separately, I controlled for board vigilance by using the sum of the standardized value of these two variables. The results remain supported. Finally, I ran an additional analysis by including the interaction term between CEO restricted stocks and CEO approaching retirement in the final model used to test the hypotheses to examine whether restricted stocks impact retiring CEOs' short-term orientation. The interaction term between CEO restricted stocks and CEO approaching retirement does not have a significant influence on CEO's short-term orientation. In all these cases, all hypotheses still remain supported.

As additional analyses, I examined whether retiring CEOs holding high equity ownership become more short-term oriented towards strategic decisions with short-term benefits. Specifically, I compared the change in equity ownership one year after the retirement and one year before the retirement of these CEOs. The equity ownership information after CEOs' retirement is available only for those retired CEOs who stayed on board as directors. The mean value of the change in these CEOs' number of shares owned one year after the retirement compared to the retiring year is more negative (mean = -360,681 shares) than the mean value of the change in the number of shares owned in the retiring year compared to one year before the retirement (mean = -45,199 shares). A difference in t-test is marginally significant (p -value < 0.10) for the change in equity ownership after the retirement compared to before the retirement, suggesting that these CEOs have sold more of their equity holdings after their retirement. This is consistent with Hypothesis 5 that retiring CEOs with high equity ownership become more short-term oriented.

DISCUSSION

The findings of this study contribute to our understanding on the antecedents of temporal orientation at the individual level of analysis. Issues related to time horizon have received more attention from researchers and practitioners in the past couple of decades. Recent surveys show that 65% of executives and directors reported to feel increasing short-term pressure over the past five years, and 55% of them would delay a new project in order to achieve quarterly targets (Barton et al., 2016). Temporal orientation of executives, especially the CEOs, plays an important role in determining firms' strategic actions related to time horizon as they are key decision makers within the firms. Furthermore, since their strategic decisions can significantly impact firm outcomes and long-term competitive advantage (Barker & Mueller, 2002; Dechow & Sloan, 1991; Kang, 2016), retiring CEOs' temporal orientation regarding future issues is important for shareholders. By examining temporal orientation of CEOs approaching retirement and how different elements of CEOs' incentives further influence their short-term orientation, this study provides several theoretical and practical implications.

First, due to the limited attention on individual temporal orientation in prior research, this study examines temporal orientation of the CEOs in S&P 500 firms through content analysis. Although Das (1987) defines temporal orientation at the individual level of analysis, prior research has mainly studied temporal orientation at the firm-level of analysis (Martin et al., 2015; Souder & Bromiley, 2012). Using outcome measures, such as R&D expenditures (Bushee, 1998; Chen et al., 2015b) or asset durability (Martin et al., 2015; Souder & Bromiley, 2012), as proxies can only capture time horizon constructs

at the firm-level. This may differ from the individual temporal orientation of the firm's CEO. Specifically, I open the black box of measuring CEOs' temporal orientation by using content analysis of CEOs' letters to shareholders to determine attention patterns relating to CEOs' emphasis on short-term and long-term horizon.

Second, I examine the influences of CEOs' incentives in more fine-grained elements in altering short-term orientation of retiring CEOs. In line with the arguments, different elements of major CEOs' incentives have distinct impacts on retiring CEOs' focus towards short-term issues. In particular, the accumulated value and the exercisability of stock options also result in different outcomes. For example, high proportion of unexercisable stock options attenuates retiring CEOs' short-term orientation. In contrast, retiring CEOs are found to be more short-term oriented when the proportion of their in-the-money exercisable stock options is high. Similar to the effect of exercisable stock options, when retiring CEOs hold high equity ownership, they endow the value of their shares immediately. Moreover, they seek to protect this value by focusing on investments with short-term benefits. Finally, I find that high proportion of cash compensation also accentuates retiring CEOs' focus towards short-term. By demonstrating how different forms of CEOs' incentives exhibit inconsistent influences on short-term orientation of retiring CEOs, this study supports the argument by Devers and colleagues (2008) that combining different forms of compensation into coarse measures like *equity*-based pay may not distinguish their unique effects.

Finally, while agency theory has been applied by most previous studies to examine time horizon constructs, especially in accounting and finance

literatures, this study draws on prospect theory to highlight consistent prediction as well as contradiction between agency theory and prospect theory. This resolves inconsistent findings regarding the roles of stock-based compensation in influencing temporal orientation. For example, contrary to the expectation that stock-based incentives promote long-term investment, Souder and Bromiley (2012) find that stock-based compensation actually reduces asset durability. Stock-based incentives are suggested by agency theory as effective mechanisms for aligning managers' and shareholders' interests (Eisenhardt, 1989). Drawing on prospect theory to provide further explanations of stock-based compensation, high proportion of unexercisable stock options is found to attenuate retiring CEOs' short-term focus, which is consistent with agency theory. However, contrary to agency theory's suggestion, high in-the-money exercisable stock options and equity ownership are found to accentuate short-term orientation of retiring CEOs. Specifically, prospect theory helps to modify agency theory's assumptions to consider compensation risk associated with different elements of stock-based incentives as they are directly linked to the firm's stock price and performance (Gomez-Mejia et al., 2000; Wiseman & Gomez-Mejia, 1998). By extending the applicability of prospect theory to the issue of individual temporal orientation, which has received limited attention in previous studies, this study contributes to existing research in both theory and practice.

Implications for Practice

An important practical implication from this study is to encourage the board of directors to reexamine how incentives for CEOs approaching

retirement should be configured. The results of this study also inform shareholders about the consequences of the executives' pay elements that they can approve or reject. As a high proportion of cash compensation can encourage retiring CEOs to be more short-term oriented towards future opportunities, the use of cash compensation should be limited. Moreover, the findings emphasize the paradoxical nature of retiring CEOs' accumulated holdings in equity-based incentives, where compensation committee members should also consider their career horizon and the time to retirement. Although equity-based incentives have been suggested to align managers' with shareholders' interests and thus used extensively in CEO pay packages, the findings show that exercisable stock options and equity ownership can actually accentuate retiring CEOs' short-term orientation. Thus, the implementation of various elements of equity-based incentives for CEOs approaching retirement should be appropriately designed as they can have different influences on the CEOs' intertemporal choices. For example, a precise scheduling of vesting period and expiration of options granted to the CEOs should suit their various career horizons within the firm and the time to retirement. Specifically, more unexercisable stock options should be granted to the CEOs near their retirement and the period that the options remain unexercisable should be longer, even after the CEOs have already retired. Furthermore, the firms should increase the period that the CEOs are allowed to exercise their stock options after they retire to be longer. This is to ensure that the CEOs can still benefit from the increased value of their stock options from long-term strategic decisions that the CEOs make before their retirement.

In conclusion, this study contributes to our understanding on the antecedents of temporal orientation at the individual level of analysis and executive compensation literature. By drawing from agency theory and prospect theory perspectives, I examine temporal orientation of CEOs approaching retirement and how different elements of CEOs' incentives further influence their short-term orientation. The results offer insights for implementing appropriate compensation plans for the CEOs, especially in the last few years of their tenure before the time to retirement.

CHAPTER 6

RELAY CEO SUCCESSION AND TEMPORAL ORIENTATION

A CEO is the most important top executive and the key decision maker within the firm. Moreover, CEOs' view of time acts as a temporal filter that they use to evaluate decision situations and form the basis for their strategic actions (Ancona et al., 2001; Crossan et al., 2005). As temporal orientation can vary across individuals as well as change overtime, temporal orientation of CEOs may also vary according to different circumstances. Due to the limited attention of prior research on the antecedents of temporal orientation, especially at the individual level, this chapter will focus on temporal orientation of CEOs in the context of CEO succession. In particular, temporal orientation of new CEOs can vary depending on the type of CEO succession. Furthermore, CEO succession provides an appropriate setting as it allows this study to examine individual temporal orientation of new CEOs by drawing on different theoretical perspectives, which received limited attention in previous research. Specifically, in this chapter, I will draw on impression management theory to examine the possibility that a relay successor is more short-term oriented than other types of successors. Furthermore, several boundary conditions that further accentuate or attenuate the extent that the relay successor is motivated to engage in impression management and thus become more short-term oriented will be examined in the next chapter by drawing on the behavioral theory of the firm and upper echelons theory.

CEO Succession

CEOs are top decision makers who influence and are ultimately responsible for firm strategy (Finkelstein, Hambrick, & Cannella, 2009). CEOs' perspectives play important roles in guiding firms' strategic directions. Due to the importance of CEOs, CEO succession can be considered the most pervasive type of management change that impacts both internal and external stakeholders of the firms. In particular, managerial succession represents a leadership transition that may precede the realignment of a firm's strategy and structure with its changing environment (Miller & Friesen, 1980; Pfeffer & Salancik, 1978).

CEO succession has been examined as a driver of strategic change as a CEO's disposition can impact a firm's strategic change initiatives (Datta, Rajagopalan, & Zhang, 2003; Zhang & Rajagopalan, 2004). Through CEO succession events, boards of directors have the opportunity to select new CEOs with skills and mindsets required to lead firms in directions which are suitable in the current environments. In contrast, incumbent CEOs are more likely to become 'stale in the saddle' (Miller, 1991) and become detached from emergent opportunities and threats in the shifting environment. For example, several studies have examined CEO tenure as a main antecedent of strategic changes (Miller, 1991; Miller & Shamsie, 2001). Firms with long-tenured CEOs are more likely to continue their existing strategic directions because they have narrower perspectives and become less open minded (Hambrick & Fukutomi, 1991). Therefore, major strategic changes are found to occur after a new CEO is appointed (Bigley & Wiersema, 2002; Westphal & Fredrickson,

2001), while the likelihood of strategic changes declines as CEO tenure increases (Hambrick & Fukutomi, 1991; Miller & Shamsie, 2001).

One of the important drivers for strategic changes by new CEOs is the cognitive difference between the successor and the incumbent (Hutzschenreuter, Kleindienst, & Greger, 2012). Incumbent and successor have different cognitive perspectives in decision making since their experiences and knowledge differ, especially with an external successor. Incumbent CEOs are also more averse to strategic change due to their cognitive commitment to prior strategic actions and success formulas that allow them to successfully lead the firms in the past (Barker & Duhaime, 1997; Datta et al., 2003; Hambrick, Geletkanycz, & Fredrickson, 1993). Furthermore, longer tenured incumbent CEOs are more likely to adhere to the status quo (Finkelstein & Hambrick, 1990; Hambrick et al., 1993). When incumbent CEOs are less likely to deviate their decisions from current directions, there is a decrease in the fit between firm strategy and structure, especially when there is a change in external environment (Miller, 1991). In contrast, new CEOs have lower levels of cognitive commitment to existing strategies, so they engage more in strategic change to realign the firms' strategies. In addition, the scope of information search between a new CEO and an incumbent CEO can also be different. After a new CEO is appointed, he or she is initially more open to external information. Subsequently, the same CEO may narrow the scope of information search as he or she remains in the position longer.

Moreover, some scholars have also examined whether an incoming CEO's knowledge, perspectives, experience, skills, and demographic backgrounds can induce organizational change and enable the firm to

strategically adapt to the shifting environment (e.g., Barr et al., 1992; Helmich & Brown, 1972; Tushman, Virany, & Romanelli, 1985). This is because CEOs' decisions are also subject to their personal preferences, cognitive limits, and bias (Cyert & March, 1963; March & Simon, 1958). For example, after a new CEO takes office, a CEO's "paradigm" (Hambrick & Fukutomi, 1991: 723) is developed, which tends to be strengthened with increasing CEO tenure.

Relay CEO Succession

Extant studies on CEO succession have mainly distinguished between two types of CEO succession, i.e., inside and outside. However, the distinction between inside and outside succession ignores the differences between two types of inside successions, i.e., relay and nonrelay. Specifically, while a new CEO comes from within a firm in both relay and nonrelay successions, a crucial difference is that relay succession occurs when a new CEO has been his or her predecessor's heir apparent. The selection and grooming process in relay succession provides opportunities for learning, which may have distinct influence on the relay successor's preferences and hence the firm's strategic actions as compared to other types of successors.

In relay succession, an heir apparent to a CEO is selected before the actual succession event, where the incumbent CEO works with and grooms the heir apparent for the leadership role (Vancil, 1987). The selection and grooming process in relay succession is considered the most formal succession process used in organizations (Vancil, 1987). A relay CEO succession offers opportunities for organizational learning and adaptation such that an heir can learn CEO-position-specific skills and a firm can also learn about the heir's

abilities (Vancil, 1987; Zhang & Rajagopalan, 2004). First, in the selection phase, the firm evaluates various candidates' qualifications to choose whether to designate one of candidates as the heir apparent for the CEO position. Second, during the grooming phase, the firm determines whether to promote the heir apparent as the new CEO. The grooming phase can be considered as a learning and adaptation process for the heir and the firm. In particular, the heir has the opportunity to learn and perform some tasks of the incumbent CEO, thus developing leadership skills and acquiring specific knowledge for the CEO position (Vancil, 1987). At the same time, the firm can evaluate whether the heir's capabilities match the CEO position and then decide whether or not to promote the heir as the new CEO. Therefore, in a relay succession, the possibility of mismatch between capabilities of a new CEO and a firm is expected to be lower than in other types of succession due to the opportunities for learning and adaptation during the selection and grooming process (Vancil, 1987; Zhang & Rajagopalan, 2004). For example, Zhang and Rajagopalan (2004) found that relay successions resulted in better post-succession firm performance as compared to other types of succession.

There is an increasing importance of relay succession as the most formal succession process used in organizations (Vancil, 1987). Furthermore, a research stream has focused on examining the relationships between the presence of a separate chief operating officer (COO)/president, who is an heir apparent, and their tenure outcomes or firm performance consequences (e.g., Hambrick & Cannella, 2004; Marcel, 2009; Zhang, 2006). Nevertheless, limited studies on CEO succession have empirically examined the consequences of relay succession after an heir apparent is appointed relative to

other succession types (e.g., Shen & Cannella, 2003; Zhang & Rajagopalan, 2004). In particular, the selection and grooming process in relay succession may influence the temporal orientation of new CEOs towards opportunities in the short- vs. long-term. A relay successor may be more short-term oriented than other types of successors as he or she feels more pressure to prove his or her ability within a short period of time, resulting in the preference for opportunities with faster paybacks. Hence, this study contributes to the existing stream of literatures on CEO succession by examining whether relay succession impacts new CEOs' short-term orientation more strongly as compared to other types of CEO successors. By examining whether relay CEO succession influences a new CEO's temporal orientation in this chapter, I further explore the antecedents and the black box of individual temporal orientation. Moreover, I will explore several boundary conditions that may further influence the emphasis of relay successors on short-term orientation in the following chapter.

Relay CEO Succession and Short-Term Orientation

The CEO, who is the principal leader and the most important decision maker within the firm, is responsible for making decisions and determining the firm's strategic choices (Child, 1972). As decision makers of the firms, CEOs' attributes affect their decisions and firms' actions by filtering how they interpret strategic situations and evaluate strategic response options (Finkelstein & Hambrick, 1996). Because CEOs face limitations in their information processing capabilities (Simon, 1947), they have to selectively attend to specific issues according to their preferences and thereby forgo others (Ocasio, 1997). For example, previous studies show that CEOs' characteristics impact

their strategic decision processes (Peterson, Smith, Martorana, & Owens, 2003). CEOs' characteristics also impact their strategic actions (Carpenter, Sanders, & Gregersen, 2001; Miller & Toulouse, 1986), where the impact can depend on CEOs' temporal orientation. As new CEOs' temporal orientation can influence their actions, it is important to examine temporal orientation of relay successors because relay succession is considered the most formal succession process used in organizations (Vancil, 1987).

Temporal orientation is the relative importance of future issues in short versus long time horizon that individuals pay attention to (Das, 1987). Individual differences in temporal orientation among key decision makers influence how they make decisions regarding issues or investment opportunities in the short versus long run. In particular, as Das (1987) suggests that temporal orientation varies across individuals, each new CEO may have different orientation towards short- or long-term issues. I propose that a relay successor may be more short-term oriented than other types of successors as he or she faces higher expectations and pressures from stakeholders to prove his or her ability within a short period of time. This is because the relay successor possesses more knowledge specific to the CEO position from the grooming process. The conventional wisdom regarding short-term orientation is that it is associated with negative outcomes. For example, previous studies have found substantive negative consequences arising from short-term orientation (e.g., Brochet et al., 2015; Bushee, 1998; Dechow & Sloan, 1991). In this study, I will examine how the succession type impacts the extent that new CEOs become short-term oriented towards future opportunities by drawing on impression management theory. In this case, short-term orientation also has a

negative connotation, which is the result of relay successors' motivation to engage in impression management to prove their abilities to the board and stakeholders within a short period of time.

Newly appointed CEOs usually have to adjust to their new role in the firm and to learn to work with the board members, other top executives, and other stakeholders (Vancil, 1987). Consequently, the board of directors tends to allow for a learning period of new CEOs so that they can familiarize themselves with the CEO position despite of whether they are inside or outside successors (Finkelstein et al., 2009). However, relay successors have already been groomed by the incumbent CEOs and received on-the-job training to learn and familiarize themselves with the CEO position before they become new CEOs of the firms. As a result of the grooming phase, relay successors are expected to possess more firm-specific knowledge and specific tasks required for the CEO position than other types of successors (Vancil, 1987). Moreover, relay successors have opportunities to meet various key stakeholders during the grooming phase and learn how to work with them (Cannella & Lubatkin, 1993; Vancil, 1987). In contrast, new CEOs from outside successions have less firm-specific and industry-specific knowledge, and they also have to focus on managing relationships with other top executives and key stakeholders during their early tenure. Compared with new outside CEOs, new CEOs from nonrelay successions are more familiar with the firms' operations. However, the tasks of other top executives are significantly different from those of CEO position (Zhang & Rajagopalan, 2004), so nonrelay successors still have less knowledge and experiences specific to the CEO position than relay successors.

New CEOs are evaluated closely by board members and other stakeholders because they have not proved themselves in the new position (Vancil, 1987), which they are still at risk of being dismissed. In particular, after a new CEO is appointed, there is still an ongoing evaluation process that lasts for a few years after the succession. The position of new CEOs will not be secure until they can convincingly prove their abilities by meeting the boards' and stakeholders' expectations (Shen, 2003). For example, Shen and Cannella (2002) found that new CEOs face higher risk of being dismissed during the first five years after appointment in their study of CEO dismissals among large U.S. firms. As a result, new CEOs are increasingly pressured by stakeholders to perform shortly after they are appointed (Wiersema, 2002). Since relay successors have already received more training than other types of successors and possessed more knowledge specific to the CEO position, as well as firm- and industry-specific knowledge, stakeholders, particularly the board of directors, will have higher expectations of the relay successors to immediately deliver favorable performance. This is also because the relay successors were specifically selected by the board to be the heirs apparent in the first place.

Due to higher pressures and expectations by the board and other stakeholders to deliver favorable performance shortly after they are appointed, relay successors are expected to be more motivated to engage in impression management to prove their ability than other types of successors. Drawing on impression management theory (e.g., Leary & Kowalski, 1990; Tedeschi & Melburg, 1984), relay successors are expected to be more short-term oriented towards opportunities with faster paybacks to improve immediate performance as a means of impression management. Specifically, Elsbach, Sutton, and

Principe (1998) suggest that organizational impression management refers to any action performed with the intention to influence an audience's perception of the organization. By engaging in impression management, corporate executives actively manage informational environment of the firm with the means that they expect to favorably influence the impressions of their targeted audience (Puffer & Weintrop, 1991; Westphal & Graebner, 2010). Previous research has used impression management to explain outcomes in several contexts, such as executive compensation (Porac et al., 1999; Zajac & Westphal, 1995). Moreover, impression management theory is particularly relevant in the context of CEO succession (Chen, Luo, Tang, & Tong, 2015a; Graffin, Carpenter, & Boivie, 2011). This is because a CEO succession event is characterized as an uncertain condition for stakeholders to evaluate the ability of new CEOs (Graffin et al., 2011). For instance, Chen and colleagues (2015a) found that an interim CEO is more likely to engage in impression management with the use of earnings management.

Specifically, the two-component model of impression management includes "impression motivation," which is the extent to which individuals are motivated to control how others see them; and "impression construction," which is the specific impressions that individuals seek to build (Leary & Kowalski, 1990). In this context, relay successors' motivation to engage in impression management to immediately demonstrate their ability and deliver favorable performance due to higher expectations from the board and stakeholders matches the impression motivation component of this model. Subsequently, after the motivation is in place, relay successors engage in impression construction, which is the second component of Leary and

Kowalski's (1990) model. Particularly, relay successors create a favorable impression on key audiences by becoming more short-term oriented towards opportunities with immediate returns, while focusing less on longer-term strategic actions. As a means of impression management, relay successors focus on existing firms' strategies to make sure that these strategies meet observable short-term performance targets, which are often monitored by the board and key stakeholders. Another reason that relay successors are expected to focus on the existing firms' strategies is because they were probably involved in formulating these strategies when they were the heir apparent.

Although a relay successor is often appointed when firm performance is good, a continuing strong performance after the appointment will strengthen the stakeholders' confidence in the firm's succession plan and the new CEO (Shen & Cannella, 2003). Especially in the early phase after the appointment, a new CEO needs to meet or exceed the expectations of the board and powerful stakeholders, after which the new CEO can develop other sources of power (Shen, 2003). Stakeholders typically evaluate CEO quality through indicators such as accounting or stock market outcomes of the firms (Finkelstein et al., 2009; Kesner & Sebor, 1994). This is because the board of directors, especially when mostly populated with outside directors, has limited capability to directly examine the CEO's decision making and implementing processes (Baysinger & Hoskisson, 1990), leading them to rely more on firms' outcomes to assess the CEOs' performance (Eisenhardt, 1989). When CEOs fail to meet financial expectations, this usually results in a decrease in confidence of financial markets (Graham, Harvey, & Rajgopal, 2005), and the CEOs may risk being dismissed (Wiersema & Zhang, 2011). Consequently, relay successors

become more short-term oriented and focus on existing firms' strategies to make sure that these strategies meet observable short-term performance targets as a means of impression management.

Previous research assumes that outside successors are more likely to be appointed when firm performance is poor or when strategic change is intended (Brady & Helmich, 1984; Zajac, 1990), requiring outside CEOs to have a "going-in-mandate for change" (Finkelstein et al., 2009: 201). However, new outside CEOs may have higher chance of initiating and implementing inappropriate strategic change in their early tenure (Gabarro, 1987; Kotter, 1982). For example, Shen and Cannella (2002) find that outside succession is negatively associated with post-succession firm performance. New outside successors are more likely to have longer-term orientation to engage in longer-term strategic actions due to several reasons. First, relative to inside successors, outside successors possess a more limited knowledge of the new firms' resources and constraints (Greiner, Cummings, & Bhambri, 2003). This results in more difficulties for outside successors to engage in suitable types of strategic change (Shen & Cannella, 2002). Consequently, new outside successors need to spend time developing necessary skills and knowledge of the firm's internal resources and capabilities first, before they can spend time on longer-term strategic actions which reflect their longer-term orientation later on.

Second, new outside CEOs are required to manage internal conflicts and build relationships with other senior executives and the board of directors during the important organizational changes following an outside succession. In their new firms, outside successors are usually confronted with the challenge of

gaining senior executives' support (Friedman & Saul, 1991), who have normally been selected by the prior CEO. Furthermore, these senior executives are usually resistant to the outside successors' significant strategic changes (Wiersema, 1995). For instance, research found that top executives' turnover or their resistance to the new outside CEO reduces the CEO's change initiatives in early post-succession period (Karaevli, 2007). In addition, when a new outside CEO and board members have a less positive relationship, it is more difficult for the CEO to receive advice from the board (Westphal, 1999), and to acquire firm-specific knowledge within a short period of time (Hillman & Dalziel, 2003; Shen, 2003). For example, Zhu and Shen (2016) suggest that a less positive relationship between a new outside CEO and the board can lead to negative consequences such as CEO turnover and lower firm performance. From these reasons, new outside successors need to spend the first one or two years after their appointments to develop firm-specific knowledge and skills as well as to gain support from other senior executives before they can engage in longer-term strategic actions.

Relative to outside successors, nonrelay successors are expected to possess more firm-specific knowledge as they have been executives at the firm for a longer period before their appointments. However, the knowledge and skills required for the CEO position are significantly different from those required for other senior executive positions (Kesner & Sebor, 1994), which focus on narrower functional domains. Consequently, nonrelay successors need to spend time learning about the tasks required for the CEO position. For outside succession, even though the successors may have been CEOs at other firms, their prior experiences may not be applicable because of the idiosyncratic

difference between firms. Therefore, outside successors also need to spend time developing necessary knowledge and familiarizing themselves with the new firms' environment after the appointments. In addition, relative to relay successors, both nonrelay and outside successors may face more problems of garnering support from the firms' top management team and need to manage relationships with key stakeholders in a post-succession period (Greiner et al., 2003). Consequently, both new nonrelay and outside successors need to spend more time developing relationships with top management team and key stakeholders, as well as acquiring necessary skills and knowledge early after their appointments, after which they can focus on developing longer-term strategic actions later on. For example, Zhang and Rajagopalan (2004) do not find a significant difference between outside successions and nonrelay successions in terms of post-succession firm performance, including under the condition of poor pre-succession performance.

In summary, since relay successors are expected to possess more knowledge specific to the CEO position as well as firm- and industry-specific knowledge than other successors, stakeholders, particularly the board of directors, will have higher expectations of the relay successors' performance. As a result, the relay successors are expected to be more motivated to immediately demonstrate their ability by delivering favorable performance, such as meeting observable short-term performance targets, as a means of impression management. This in turn leads the relay successors to be more short-term oriented than other types of CEO successors after they are appointed as new CEOs.

Hypothesis 1: Relay CEO succession is more positively associated with a new CEO's short-term orientation than outside and nonrelay CEO successions.

CHAPTER 7

BOUNDARY CONDITIONS

Individual differences in temporal orientation can influence their decision making regarding future issues in the short versus long run. As temporal orientation varies across individuals, each new CEO may have different orientation towards short- or long-term investments. In the last chapter, I propose that a relay successor is expected to be more short-term oriented than other types of successors. This is because CEO successors who are heirs apparent have been groomed by the incumbent CEOs and received on-the-job training before they become new CEOs of the firms. Hence, board members and stakeholders have a higher expectation for the relay successor to immediately deliver favorable performance as he or she possesses more firm-specific and industry-specific knowledge from the grooming process than other types of successors. The relay successor is thus expected to engage in impression management to create a positive impression on key stakeholders by focusing on opportunities with faster paybacks to demonstrate his or her ability within a short period of time.

In this chapter, I will examine boundary conditions that further influence a relay successor's short-term orientation. First, as the board's expectations of the relay successor's performance can impact the extent that he or she engages in impression management by focusing on short-term opportunities, I will examine the factors that can impact the board's expectations. In particular, board members may use different aspiration levels, including historical and social aspirations, to evaluate the performance

outcomes. The behavioral theory of the firm suggests that performance becomes unambiguous once the performance has been interpreted by comparing with an aspiration level. Decision makers such as managers and board members cannot use all available information to evaluate performance due to bounded rationality (e.g., Simon, 1957). Therefore, they simplify the process by setting aspiration levels that reflect organizational goals and also serve as a benchmark (Cyert & March, 1963). The type of aspiration level used for evaluation may have different impacts on the board's expectations and pressures on the relay successor's performance, which in turn influence the relay successor's temporal orientation.

Second, I will examine the factor which impacts the extent that the relay successor is motivated to engage in impression management to demonstrate his or her ability to the board and other stakeholders. Specifically, the personality of the relay successor is expected to influence his or her motivation to engage in impression management by focusing on opportunities with faster paybacks. When the relay successor has high self-confidence in his or her ability, he or she is expected to be less motivated to engage in impression management. According to upper echelons theory (Hambrick & Mason, 1984), managers' background characteristics impact their cognitive bases and values, and hence their strategic choices. CEOs' attributes can influence the nature of their strategic decision making. As narcissistic CEOs have high confidence in their abilities, I will examine how narcissistic personality influences a relay successor's need for impression management, which in turn impacts his or her temporal orientation. Moreover, narcissistic personality is also expected to impact the extent that the relay successor pays attention to short-term

performance indicator as an impression management tactic, as well as to firm performance below historical and social aspiration levels. These boundary conditions will be discussed in the sections below.

The Moderating Roles of Performance below Aspirations

As board members are in the position to evaluate the relay successor, the board's expectations of the relay successor's performance can influence the extent that he or she needs to engage in impression management by focusing on short-term opportunities. The board's expectations can change depending on the performance outcomes of their firm. To interpret the performance outcomes, board members may compare the firm's current performance with different aspirations, including the firm's performance history and with the performance of a reference group of firms (Cyert & March, 1963). The behavioral theory of the firm assumes that firm performance becomes unambiguous once the performance has been interpreted by comparing with an aspiration level. Bounded rationality of decision makers, reflecting human limitations in accessing, processing, and utilizing information (e.g., Simon, 1957), influences decision-making processes (Cyert & March, 1963; March & Simon, 1958). Decision makers such as managers and board members cannot use all available information to evaluate performance. Therefore, they simplify the process by setting aspiration levels that reflect organizational goals and serve as a benchmark (Cyert & March, 1963). As decision makers have limited attention (Ocasio, 1997), they attempt to improve firm performance only when performance decreases below aspiration levels. To reverse the decline and

improve future performance, decision makers initiate a search for solutions, referred to as “problemistic” search (Greve, 1998, 2003b).

Aspiration levels, which serve as a benchmark for evaluating firm performance, can emerge from two different sources of performance feedback (Cyert & March, 1963; Gavetti, Greve, Levinthal, & Ocasio, 2012). First, historical aspiration levels are based on comparing a firm’s current performance with its performance history. Historical aspirations are accessible and applicable as they reflect a firm’s own performance history as well as capabilities and resources (Greve, 2003a). A second source of performance feedback is social aspiration, which allows benchmarking with competitors through observed performance outcomes (Fiegenbaum & Thomas, 1995). Social aspiration levels enable the firm’s current performance to be compared with the performance of a reference group of firms.

The type of aspiration level, whether historical or social, used by the board members to evaluate firm performance can influence the board’s expectations and pressures on relay successors with different magnitude. Decision makers shift their attention between historical and social aspiration levels (Bromiley & Harris, 2014; Washburn & Bromiley, 2012), which are derived from distinct sources of performance feedback and are associated with different underlying cognitive and organizational processes. As decision makers may filter distinct aspiration levels through different cognitive and organizational processes, this can result in different interpretations and responses. Moreover, findings from previous studies suggest that the influences of historical and social aspiration levels are not always aligned (e.g., Audia & Greve, 2006; Harris & Bromiley, 2007; Kim, Finkelstein, & Halebian, 2015).

Hence, decision makers' responses to performance feedback might differ according to the type of aspiration level used for evaluation (Harris & Bromiley, 2007). I will examine the extent that each aspiration level used by the board of directors influences the relay successor's temporal orientation in the next sections.

Historical Aspirations

Performance below historical aspirations can influence the board's expectations of the relay successor's performance, which in turn impact his or her need for impression management and thus temporal orientation. The board of directors pays attention to performance below historical aspirations due to a few reasons. First, one of the main responsibilities of the board to shareholders is to monitor and assess management performance (Zald, 1969). As firm performance is one of the important indicators that most shareholders focus on, board members also use firm performance to evaluate management effectiveness because managerial tasks can be ambiguous (Walsh & Seward, 1990). Second, firm performance can impact board members' reputations (Fama, 1980). The reputations of board members of firms with high performance can be improved; conversely, their reputations are negatively impacted when firm performance is poor. In particular, board members are concerned about negative reputational costs because significant negative reputational costs can accumulate to board members of firms that are performing poorly (Srinivasan, 2005). Thus, board members are also motivated to monitor management due to their self-interests to protect their reputations as well as future earnings (Fama & Jensen, 1983).

Since the board needs to prevent financial losses for shareholders and protect their reputations, firm performance below aspiration levels can impact the board's expectations of the relay successor's performance, which in turn influence the relay successor's need for impression management. Corporate boards can influence or contradict top executives' decision making under some circumstances (Dalton, Daily, Ellstrand, & Johnson, 1998). Especially when firm performance falls below aspirations, the board's role in organizational decision making becomes even more important. This is because declining performance leads board members to increase their monitoring and pressures on managers, while managers also need to seek advice from their boards (McDonald & Westphal, 2003; Tuggle, Sirmon, Reutzel, & Bierman, 2010). In addition, declining performance results in greater pressures on the boards from stakeholders to reverse the performance decline (Tuggle et al., 2010). Consequently, board members also exert their pressures on the relay successor to improve firm performance.

As historical aspirations are derived from a firm's own performance history, they are more accessible and closely reflect the managerial capabilities and resources that may also determine future firm performance. Moreover, managers can closely interpret historical performance outcomes to identify factors contributing to the performance as managers have access to private knowledge that resides within the firm (Menon & Pfeffer, 2003). Thus, historical aspiration level is a relatively credible benchmark of how well a firm could perform given resources and capabilities that managers have access to (Greve, 2003a). Performance below historical aspiration levels can be

interpreted by board members that managers were unable to achieve what they should have been able to.

When firm performance is below historical aspiration, board members are expected to increase their monitoring and pressure on the relay successor to improve firm performance. The board will have higher expectations on the relay successor's performance because he or she already has more firm-specific and industry-specific knowledge, as well as knowledge and experiences specific to the CEO position from the grooming process. This in turn influences the relay successor to be even more motivated to engage in impression management by focusing on improving short-term firm performance.

Hypothesis 2: Performance below historical aspiration moderates the association between relay CEO succession and a new CEO's short-term orientation such that the positive association will be strengthened.

Social Aspirations

In addition to historical aspirations, the board's expectations of the relay successor's performance can also be impacted by declining firm performance below social aspirations. Firms normally set their own performance goals by benchmarking with the performance of a reference group (Fiegenbaum & Thomas, 1995). Social aspiration levels allow managers to evaluate the effectiveness of their firms' strategies by comparing firm performance with the performance of other comparable firms taking on similar strategic actions, such as competitors (Fiegenbaum, Hart, & Schendel, 1996). Stakeholders will expect the firm to perform at least on par with other comparable firms in the reference group. Therefore, social aspiration levels facilitate decision makers to evaluate

how well the firm should perform as compared with other firms. For example, some studies suggest that managers should first attend to social aspiration levels as the baseline performance level before they focus on other performance benchmarks (Audia & Brion, 2007; Washburn & Bromiley, 2012).

Board members are expected to face greater pressures from stakeholders when firms perform below social aspiration as compared with their competitors because they are not performing as well as they should. Below-average performance may be interpreted by stakeholders that the decline is driven internally within the focal firm, and less likely driven from external environments. Stakeholders are likely to anticipate the firms to perform better than the competitors' average in the future. As social aspirations should be seen as the baseline performance level, board members in turn exert stronger pressures on the relay successor to immediately improve firm performance when performance declines below social aspiration.

In addition to higher expectations from the board, the relay successor also has more difficulties in identifying ways to improve performance in the future as the causes of the firm's poor performance are more ambiguous when performance is assessed using social aspirations. Although the social aspiration level is a useful performance benchmark, it is more ambiguous than the historical aspiration level because other firms' information on the underlying factors contributing to the observed outcomes is normally unavailable or incomplete (Baum & Ingram, 2002). This is because other firms' information is usually private knowledge available only to those firms' insiders (Kim & Miner, 2007; Menon & Pfeffer, 2003). There may also be potential sources of biases and error in other firms' performance that managers observe (Bazerman

& Moore, 2008), such as the effects of tacit knowledge or intangible assets which are hard to identify. Moreover, it is more difficult to observe the longitudinal pattern of other firms' performance, which may better reflect the underlying factors contributing to the observed outcomes than only focusing on other firms' recent performance.

As a result of higher pressures from the board when the firm performs below social aspiration, coupled with more difficulties in identifying ways to improve firm performance, the relay successor will be more motivated to engage in impression management by improving short-term performance. Therefore, when firm performance falls below social aspiration level, the relay successor will be more short-term oriented.

Hypothesis 3: Performance below social aspiration moderates the association between relay CEO succession and a new CEO's short-term orientation such that the positive association will be strengthened.

The Moderating Role of CEO Narcissism

The board of directors expects the relay successor to deliver favorable performance and demonstrate his or her ability. Consequently, the relay successor is expected to be more motivated to engage in impression management to prove his or her ability by focusing on short-term opportunities. However, the extent that the relay successor is motivated to engage in impression management can also be influenced by his or her specific personality, thus impacting the relay successor's temporal orientation. Prior psychological research suggests that personalities impact individuals' information processing and decisions. Drawing from upper echelons theory,

firms' outcomes are predicted by background characteristics and personalities of managers (Hambrick & Mason, 1984). Previous research also suggests that personality attributes influence CEOs' strategic preferences due to how they notice, interpret, and respond to environmental issues (Chatterjee & Hambrick, 2007; Hiller & Hambrick, 2005). Consequently, the relay successor's personality can impact the need to manage impression of the board in order to prove his or her ability.

Narcissism is a key personality that can influence the extent that a relay successor needs to engage in impression management, which in turn impacts his or her temporal orientation, due to its unique characteristic. Although a relay successor is motivated to engage in impression management to demonstrate his or her ability, a relay successor who already has high self-confidence may pay less attention to the board's impression. Because narcissistic CEOs have high confidence in their abilities (Campbell, Goodie, & Foster, 2004; Judge, LePine, & Rich, 2006), narcissistic personality can influence the relay successor's motivation to engage in impression management. Specifically, narcissism refers to the degree to which an individual has an inflated self-view and seeks to have that self-view continuously reinforced (Campbell, 1999; Emmons, 1987). Previous studies treated narcissism as a personality disorder; however, recent studies have commonly conceptualized narcissism as a personality dimension that anyone can display (Campbell, 1999; Carlson, Vazire, & Oltmanns, 2011; Raskin & Terry, 1988). Similar to other personality dimensions, an individual's degree of narcissistic personality is relatively fixed and enduring but also inclined to some changes due to experiences and surrounding environment (Campbell,

Foster, & Finkel, 2002). Narcissism can also manifest in varying degrees along a continuum. More recently, narcissism has been identified as a fundamental personality dimension that can influence CEOs' strategic decisions (Chatterjee & Hambrick, 2007, 2011; Gerstner, Koenig, Enders, & Hambrick, 2013; Petrenko, Aime, Ridge, & Hill, 2016).

Narcissism is a unique personality that is expected to be influential towards CEOs' preferences and firms' outcomes due to its multifaceted characteristic that is characterized by several primary factors (Judge et al., 2006; Raskin & Terry, 1988; Watson & Biderman, 1993). In particular, Emmons (1987) identified four factors of narcissism and labeled them (1) Exploitativeness/Entitlement (e.g. I insist upon getting the respect that is due to me); (2) Leadership/Authority (e.g. I like to be the center of attention); (3) Superiority/Arrogance (e.g. I am better than others); and (4) Self-absorption/Self-admiration (e.g. I am preoccupied with how extraordinary and special I am) in a factor analysis of the Narcissistic Personality Inventory.

For example, due to narcissists' strong sense of superiority/arrogance factor (Emmons, 1987), they have high confidence in their abilities and intelligence (Campbell et al., 2004; Judge et al., 2006). Moreover, because of their leadership/authority and self-absorption/self-admiration factors, narcissistic individuals seek attention and applause as well as being the center of attention (Buss & Chiodo, 1991). Previous studies also found that narcissistic CEOs are more likely to engage in bold actions that attract attention, such as large acquisitions (Chatterjee & Hambrick, 2007) and an adoption of technological discontinuities (Gerstner et al., 2013). In addition, from a motivational standpoint, narcissists constantly need "narcissistic supply"

(Kernberg, 1975) as a fuel for reaffirmation of their own personal image. Narcissistic supply can be generated from narcissists, such as exhibitionism and diminishment of other individuals (Bogart, Benotsch, & Pavlovic, 2004), and by receiving attention and praise (Wallace & Baumeister, 2002).

Due to narcissistic CEOs' need for attention, they are more responsive to social praise and admiration from external audiences while less responsive to objective performance indicators than other CEOs (Chatterjee & Hambrick, 2011; Gerstner et al., 2013). Hence, objective performance feedback does not impact narcissists' confidence about their future performance (Campbell et al., 2004). Instead, narcissists have high self-confidence and rate themselves more highly on areas including intelligence, creativity, and leadership skills (Judge et al., 2006). Moreover, narcissists are approach-oriented where they actively seek rewarding opportunities in their external environments (Finkel et al., 2006) while paying less attention on avoidance behaviors that mitigate possibilities of losses, demonstrating a "myopic focus on reward" (Lakey, Rose, Campbell, & Goodie, 2008).

Relay CEO successors may be more short-term oriented than other types of successors as they face more pressures to engage in impression management. This is because they have been groomed and received on-the-job training from incumbent CEOs. Thus, board members and key stakeholders may have higher expectations of their performance as compared to other types of successors. To convey a positive impression of their capabilities, relay successors become short-term oriented towards investments with immediate returns as long horizon investments often require risky or ambiguous strategic moves with uncertain returns. However, relay successors with narcissistic

personality can be less responsive to objective performance indicators than other CEOs while more responsive to social praise and attention from audiences (Chatterjee & Hambrick, 2011; Gerstner et al., 2013). Furthermore, due to their strong sense of superiority (Emmons, 1987) and high confidence in their abilities (Judge et al., 2006), narcissistic relay successors are less likely to be concerned about the need to demonstrate their abilities through focusing on opportunities with immediate returns as a means of impression management. Conversely, as they seek attention and applause, narcissistic relay successors are expected to focus more on long-term opportunities which are highly visible and can garner attention from various stakeholders, such as shareholders and media. Therefore, relay successors with narcissistic personality are expected to be less concerned about demonstrating their abilities to the board and stakeholders by engaging in impression management. This is expected to result in less short-term orientation of the relay successor with narcissistic personality.

Hypothesis 4: CEO narcissism moderates the association between relay CEO succession and a new CEO's short-term orientation such that the positive association will be weakened when CEO narcissism is high.

The Moderating Roles of Performance below Aspirations and CEO Narcissism

The board's expectations of the relay successor's performance can impact the extent that he or she is motivated to engage in impression management, which in turn influence the relay successor's temporal orientation. Different types of aspiration levels used for evaluation may have different impacts on the board's expectations and pressures on the relay successor, as

well as the extent that the successor engages in impression management. Decision makers may have different interpretations and responses depending on which aspiration level they use because historical and social aspiration levels arise from distinct sources of performance information. Furthermore, decision makers shift their attention between historical and social aspiration levels (Bromiley & Harris, 2014; Washburn & Bromiley, 2012), and filter distinct aspiration levels through different cognitive and organizational processes. Hence, decision makers' responses to performance feedback might differ according to the type of aspiration level used for evaluation (Harris & Bromiley, 2007). Nevertheless, findings from previous studies are inconsistent. Some studies suggest that the influences of historical and social aspiration levels are not always aligned (e.g., Audia & Greve, 2006; Harris & Bromiley, 2007; Kim et al., 2015), while other studies did not specify the different behavioral consequences of using historical and social aspirations (e.g., Baum, Rowley, Shipilov, & Chuang, 2005; Greve, 1998; Iyer & Miller, 2008). I propose that how CEOs as decision makers pay attention and respond to different types of aspiration levels may also depend on their personality. Specifically, I will examine how relay successors with narcissistic personality interpret these two types of performance feedback, which in turn impact their temporal orientation.

Historical aspirations are more accessible and applicable as they reflect a firm's own performance history as well as capabilities and resources (Greve, 2003a). Thus, historical aspiration level is a relatively credible predictor of how well they could perform (Greve, 2003a). While social aspirations allow benchmarking with competitors through observed performance outcomes

(Fiegenbaum & Thomas, 1995), they are more ambiguous than historical aspirations. This is because other firms' information is normally unavailable or incomplete (Baum & Ingram, 2002), or private knowledge available only to those firms' insiders (Kim & Miner, 2007; Menon & Pfeffer, 2003). As social aspiration level is an ambiguous performance benchmark, social comparisons offer limited information about how the firms' capabilities compare to those of other firms, or how the firms' capabilities match their own current performance (Kim et al., 2015). Therefore, CEOs have more difficulties in identifying ways to improve performance in the future. Consequently, the CEOs as decision makers may pay less attention to social aspirations because they are perceived as more ambiguous and less applicable than historical aspirations.

Although some CEOs may pay less attention to social aspirations, the personality of the CEOs may also influence how they pay attention and respond to different types of aspiration levels. According to upper echelons theory (Hambrick & Mason, 1984), managers' background characteristics and personality attributes can impact their cognitive bases and values, and hence their strategic choices. As proposed in Hypothesis 4, narcissistic personality is expected to decrease the extent that the relay successor is motivated to engage in impression management by focusing on short-term performance indicator. This is because narcissistic CEOs are less responsive to objective performance indicators than other CEOs while more responsive to social praise and admiration from external audiences (Chatterjee & Hambrick, 2011). Moreover, they are less likely to be concerned about the need to demonstrate their abilities due to their strong sense of superiority (Emmons, 1987) and high confidence in their abilities (Campbell et al., 2004). As decision makers may have different

interpretations and responses depending on which aspiration level they use, narcissistic personality is expected to influence how relay successors interpret and respond to firm performance below historical and social aspiration levels.

While narcissistic relay successors are expected to be less motivated to engage in impression management, they expect to receive attention and admiration from stakeholders and media for improving firm performance that falls below historical and social aspiration levels. Firm performance below historical and social aspirations can also influence the board of directors' pressures on the relay successor to improve performance. Although social aspiration is associated with more ambiguity and difficulties in identifying ways to improve firm performance for some CEOs, narcissistic relay successors will be even more motivated to immediately improve performance as they have high self-confidence in their abilities. Therefore, I expect a stronger moderating effect of firm performance below historical as well as social aspiration levels when the relay successor has narcissistic personality, resulting in more short-term orientation of the relay successor.

Hypothesis 5: The more narcissistic the CEO, the more performance below historical aspiration will strengthen the positive association between relay CEO succession and a new CEO's short-term orientation.

Hypothesis 6: The more narcissistic the CEO, the more performance below social aspiration will strengthen the positive association between relay CEO succession and a new CEO's short-term orientation.

As historical and social aspiration levels arise from distinct sources of performance information, narcissistic personality of relay successors may

influence how they interpret and respond to different types of aspiration level. Specifically, narcissistic relay successors expect to receive attention and admiration from stakeholders and media for improving firm performance that falls below historical and social aspiration levels. Nevertheless, the level of attention and admiration that narcissistic relay successors expect to receive can be different for improving firm performance that falls below social aspiration as compared with historical aspiration. As social aspiration levels enable the firm's current performance to be compared with the performance of a reference group of firms, such as competitors, the firm's outcomes are more visible to external audiences. When firm performance is below social aspiration, narcissistic relay successors are expected to be more concerned about immediately improving firm performance. This is because when firm performance is improved such that it performs better than competitors, narcissistic relay successors can receive more attention and admiration from audiences, including stakeholders and media. Conversely, as narcissistic CEOs are less responsive to objective performance indicators than other CEOs, relay successors with narcissistic personality are expected to be less concerned about demonstrating their abilities to the board and stakeholders by immediately improving firm performance that falls below historical aspiration. Therefore, firm performance below social aspiration is expected to have a stronger moderating effect than firm performance below historical aspiration when the relay successor has narcissistic personality, resulting in more short-term orientation of the relay successor.

Hypothesis 7: The more narcissistic the CEO, the more performance below social aspiration will strengthen the positive association between relay CEO succession and a new CEO's short-term orientation, with a stronger effect than when performance is below historical aspiration.

Figure 6. Summary of Hypotheses on Relay CEO Succession and Temporal Orientation

CHAPTER 8

METHODS

Sample

The sample is based on all CEO successions covering the years 2008-2016 for all firms listed on S&P 500 index. S&P 500 companies are appropriate for this study as many CEOs' letters to shareholders of these companies are publicly available. This sample also includes companies from various industries which increase the generalizability of the results. I collected the data for all available CEO successions using several sources, including the company's annual reports and proxy statements from company websites, and COMPUSTAT's Fundamental Annual, COMPUSTAT's ExecuComp, Institutional Shareholder Services - Directors, Thompson Reuters' Institutional (13F) Holdings, and LexisNexis Academic databases. I excluded observations from the final sample if information was incomplete. After combining all databases and removing observations with missing data in the variables, there are 212 observations remaining.

Measures

Dependent variable. I measured *CEO's temporal orientation* through the use of content analysis. Specifically, I used content analysis of CEOs' letters to shareholders to determine attention patterns relating to the emphasis on short-term and long-term of the CEOs. Using content analysis is suitable for measuring attention as the words that individuals use reflect the cognitive categories through which individuals use to allocate their attention, which is consistent with the Sapir-Whorf hypothesis (Sapir, 1944; Whorf, 1956).

Specifically, “words that are frequently used are cognitively central and reflect what is most on the user’s mind; words that are used infrequently or not at all are at the cognitive peripheral, perhaps even representing uncomfortable or alien concepts” (Cho & Hambrick, 2006: 459).

Content analysis utilizes a number of procedures to organize or categorize communications (Weber, 1990). Moreover, it can be described as any methodology that seeks to recognize certain characteristics within texts in order to create valid inferences (Krippendorff, 1980). The use of content analysis suggests that language reflects writers’ understandings as well as their cognitive processes (Holsti, 1968; Huff, 1990). Similarly, D’Aveni and MacMillan (1990: 639) stated that “content analysis of written communications is useful for reconstructing perceptions and beliefs of their authors.” Therefore, content analysis enables researchers to determine characteristics of a decision maker through the statements that he or she makes. Employing content analysis to gather data from commonly used and publicly available narrative texts, such as companies’ letters to shareholders, has been encouraged as this method results in higher reliability and replicability (Finkelstein & Hambrick, 1996). As a result, content analysis facilitates considerable possibility of gaining key insights into the cognitive processes and characteristics of top executives because it is widely agreed that these executives are closely involved in the preparation of letters to shareholders (Barr et al., 1992; Duriau et al., 2007). Previous studies mostly employ content analysis by drawing from the letter to shareholders which is publicly available in listed companies’ annual reports. The validity of analyzing these letters has been directly verified by several studies with positive results (e.g., D’Aveni & MacMillan, 1990; Gamache et al.,

2015; Osborne et al., 2001). The letters to shareholders can reflect main initiatives, concerns, and views of senior executives even though these letters may have multiple purposes or involve professional writers (Abrahamson & Hambrick, 1997).

Even though content analysis can be qualitative such as by constructing cognitive maps (Barr et al., 1992), I employed the quantitative approach based on frequency counts of sentences appearing in each company's letters to shareholders (e.g., Abrahamson & Hambrick, 1997; Cho & Hambrick, 2006; Kabanoff & Brown, 2008). The frequent appearance of specific words or phrase lists determines what categories or contexts as represented by these words or phrase lists actors find important (Cho & Hambrick, 2006; Duriau et al., 2007). As Osborne et al. (2001: 238, 240) stated, "Variations in theme content or frequency [in a letter to shareholders] may reflect changes in leadership perspectives and highlight observable shifts in subsequent performance. ... [They] represent outward manifestations of company intentions."

Some prior management studies have measured time horizon constructs such as temporal attention and temporal depth by using content analysis (e.g., Nadkarni & Chen, 2014; Nadkarni et al., 2016). As these time horizon constructs examined in prior studies have different definitions, the measurements are also distinct from temporal orientation which will be examined in this study. For example, Nadkarni and Chen (2014) measure CEO temporal attention, referring to the temporal focus on past, present, and future, by using key words that reflect past focus (e.g., "was," "had," "did"), present focus (e.g., "is," "are," "does"), and future focus (e.g., "will," "may," "going to") from the Linguistic Inquiry and Word Count text analysis program.

However, temporal attention is different from temporal orientation, which is the focus on future issues in short versus long time horizon (Das, 1987). I focus on temporal orientation because temporal considerations of the future are fundamental in determining a strategic orientation of the firm (Venkatraman, 1989). In another study, Nadkarni and colleagues (2016) examine past temporal depth and future temporal depth, which refer to the temporal distance into the past and the future. They measure past temporal depth and future temporal depth as composite measures by averaging the longest, median, and shortest time span cited in the documents. However, many sentences in the letters to shareholders do not explicitly specify the date or year, but are stated in ranges. Examples of the ranges of time span include “in the years ahead,” “long-term,” “next several years,” “in the coming months,” and “later this year.” Consequently, the content analysis method used by Nadkarni and colleagues (2016), i.e., averaging the time span cited in the documents, cannot capture these types of sentences.

To measure temporal orientation in this study, I followed a deductive process where theory guides the coding scheme (Potter & Levine-Donnerstein, 1999). First, I developed the dictionary of words and phrase lists associated with sentences related to short or long time horizon which are consistent with previous literature that examined time horizon (e.g., Brochet et al., 2015). Short horizon refers to the period of one year or less. By specifying the cut-off time for short horizon to be one year or less, my content analysis method can capture the ranges of time span and thus overcome the disadvantages of content analysis method that use the exact time span cited in documents. Examples of key words referring to short horizon include short-term and short-run, while

key words referring to long horizon are such as long-term and long-run. After the indicator word and phrase list is finalized based on literature review which is independent of companies' documents, I conducted the coding pretest before coding the sample of the letters to shareholders (e.g., Porac et al., 1999). In addition to only identifying the indicator words and phrases within the letters to shareholders to measure time horizon constructs as employed by previous studies, I also identified the applicability or supporting context of the sentences surrounding these words and phrases related to short or long horizon. This can better determine that the sentences refer to the future context and then classify these sentences into short or long horizon to capture the CEOs' temporal orientation towards short- or long-term future issues.

I conducted content analysis of letters to shareholders for each company where CEO succession occurred for every year in the timeframe of 2008 to 2016 to count how frequently the sentences related to short or long time horizon appear. Sentences that refer to current fiscal year and before were excluded. Each sentence that refers to future fiscal year(s) was coded as either short- or long-term given the context. In the case that the sentence clearly refers to both short-term and long-term contexts, this sentence will be counted as both short-term and long-term. An example sentence is from Philip Morris International 2013 CEO's letter to shareholders, which is "Consequently, we have announced our decision to accelerate the launch of our Platform 1 product with pilot city tests in 2014 and a national launch in 2015." After determining sentences related to short or long time horizon, *CEO's short-term orientation* was then measured by the total number of sentences related to short-term information disclosed in the letter to shareholders divided by the total number of sentences

related to both short-term and long-term information disclosed in the same period. Using the proportion of sentences related to short-term information divided by the total number of short-term and long-term sentences can provide information about the CEOs' relative focus on short-term future issues. The interrater reliability for determining sentences related to short or long time horizon was 0.87.

Independent variable. CEO successions were classified into three categories (Zhang & Rajagopalan, 2004). First, a relay CEO succession was classified when the new CEO was the heir apparent to the predecessor CEO and had been an executive with at least two years tenure at the given firm at the time of succession. Specifically, a new CEO was identified as the heir apparent if he or she held the title of president or COO or both at the given firm before he or she became the CEO. This operational definition of the heir apparent is consistent with prior literatures (Bigley & Wiersema, 2002; Zhang & Rajagopalan, 2004). Second, a succession was classified as a nonrelay inside succession when the new CEO was not the heir apparent but had been an executive with at least two years tenure at the given firm at the time of succession. Finally, an outside succession was classified when the new CEO had been with the given firm with less than two years of tenure at the time of succession (Shen & Cannella, 2002).

Among the 212 CEO successions, there were 116 relay successions, 54 nonrelay inside successions, and 42 outside successions. *Relay succession* was measured by a dummy variable equal to 1 for relay succession and 0 otherwise. *Outside succession* was also measured by a dummy variable equal to 1 for

outside succession and 0 otherwise. Nonrelay inside succession was the reference group.

Moderating variables. Firm performance was measured using a traditional accounting measure of returns: return on assets (ROA). Among prior research on aspiration levels, ROA is the most commonly used measure (Shinkle, 2012). Furthermore, ROA is usually available for managers and shareholders as it can be easily calculated from financial statements. Aspiration levels, which serve as a benchmark for evaluating firm performance, can emerge from two different sources of performance feedback determined by historical aspiration levels or by social aspiration levels (Cyert & March, 1963).

Historical aspiration level was generated by employing the classic recursive measure, which is an exponentially weighted previous performance and previous aspiration levels to establish current aspirations (Audia & Greve, 2006; Greve, 1998; Kuusela, Keil, & Maula, 2017; Lant et al., 1992). The formula used to generate historical aspiration is as follows:

$$A_t = \alpha P_{t-1} + (1 - \alpha)A_{t-1}$$

In this formula, A_t is the aspiration level at time t , P_{t-1} is the firm performance at time $t-1$, and the coefficient *alpha* denotes the relative importance of the previous aspiration level in comparison with the actual recent performance in the aspiration level updating process. Larger values of *alpha* specify more rapid updating of the historical aspiration levels based on actual recent performance. I ran the analyses repeatedly with different values of *alpha* in the increment of 0.1. This study's reported results are based on a large value of *alpha* ($\alpha = 0.9$), which are also robust for different values of *alpha*, such as 0.5 and 0.2. When calculating performance relative to historical aspiration,

there are two possible scenarios - performance below historical aspiration and performance above historical aspiration. Performance below historical aspiration variable was calculated as performance minus historical aspiration level when firm performance is below historical aspiration level, and it was set to 0 when performance is above historical aspiration level. Performance above historical aspiration variable was calculated as performance minus historical aspiration level when firm performance is above historical aspiration level, and it was set to 0 when performance is below historical aspiration level. *Performance below historical aspiration* was used in the analysis as the moderating variable, which I used the absolute value of the difference between current performance and historical aspiration. Using the absolute value eases the interpretation of the results to indicate the magnitude of performance shortfalls (e.g., Kuusela et al., 2017). *Performance above historical aspiration* was included in the models as a control variable (e.g., Desai, 2016; Kuusela et al., 2017).

To compute performance relative to social aspiration, I calculated the difference between the performance of the focal firm and *social aspiration level*, which is the average performance of firms in the same industry (Audia & Greve, 2006; Greve, 1998; Shimizu, 2007). Specifically, the average performance was identified based on four-digit SIC codes. There are two possible scenarios - performance below social aspiration and performance above social aspiration. Performance below social aspiration variable was calculated as performance minus social aspiration level when firm performance is below social aspiration level, and it was set to 0 when performance is above social aspiration level. Performance above social aspiration variable was

calculated as performance minus social aspiration level when firm performance is above social aspiration level, and it was set to 0 when performance is below social aspiration level. *Performance below social aspiration* was used in the analysis as the moderating variable, which I used the absolute value of the difference between current performance and social aspiration. *Performance above social aspiration* was also included in the models as a control variable (e.g., Desai, 2016; Kuusela et al., 2017).

I measured *CEO narcissism* using several indicators to compute CEO narcissism scores (Chatterjee & Hambrick, 2011; Zhu & Chen, 2015). Four indicators of CEO narcissism are the following.

Prominence in the CEO's photograph in the company's annual report was collected on a 5-point scale by coding as 1 point if the annual report did not include a photograph of the CEO; 2 points if the annual report contained photographs of the CEO with one or more executives and the photos occupied less than half a page; 3 points if photographs of the CEO with one or more executives occupied more than half a page; 4 points if the CEO was photographed alone and the photo was smaller than half a page; and 5 points if the CEO was photographed alone and the photo was larger than half a page (Zhu & Chen, 2015). As CEOs typically control the content of annual reports (Chatterjee & Hambrick, 2007, 2011), more narcissistic CEOs are expected to emphasize the importance of their leadership by having more prominent photos of themselves in annual reports. Annual reports were obtained from company websites.

Prominence of the CEO in company press releases was calculated as the average number of times the CEO was mentioned by name in each

company press release. Specifically, I calculated this measure by dividing the total number of times that the CEO's name was mentioned by the total number of words (in thousands) in all the company's press releases during the same year. Because CEOs also regularly control and review the content of company press releases (Chatterjee & Hambrick, 2007), more narcissistic CEOs are expected to have their name mentioned more in company press releases to demonstrate their authority and importance. This measure was highly skewed, thus I used its logarithm value in the analysis. Press releases were obtained from LexisNexis Academic.

CEO's relative cash pay was calculated as the CEO's cash compensation (salary and bonus) divided by cash compensation of the second-highest-paid executive. Finally, *CEO's relative non-cash pay* was calculated as the sum of the CEO's non-cash compensation (deferred income, stock grants, and stock options) divided by non-cash compensation of the second-highest-paid executive. Chatterjee and Hambrick (2007) suggest that CEOs also have control over the compensation of other executives. Therefore, to indicate his or her superior value than other top executives in the firm, more narcissistic CEOs may try to receive much higher compensation than the second-highest-paid executive. Because these two measures were highly skewed, their logarithm values were used in the analysis. Compensation data were obtained from COMPUSTAT's ExecuComp dataset.

The primary measure of CEO narcissism for each CEO was calculated as the simple mean, after standardization, of the four indicators (Chatterjee & Hambrick, 2011).

Control variables. First, I controlled for financial variables that may influence CEO's temporal orientation. Furthermore, to control for the heterogeneity across industries, I used two-digit SIC average to compute industry-adjusted measures for financial variables. I adopted a one-year lag structure for financial variables. I also followed common practice to minimize effects of outliers by winsorizing the variables at a five-percent level in each tail, where all data below the 5th percentile were set to the 5th percentile, and data above the 95th percentile were set to the 95th percentile (Greene, 2003). First, I controlled for *firm size*, measured as the log of total assets. *Firm performance* was measured as ROA. Moreover, I controlled for *recovery slack* (measured by selling, general and administrative expense divided by total sales) to capture the extent to which a firm has slack resources which can be deployed to fund new investments and strategic initiatives (Bourgeois, 1981; March & Simon, 1958). Because recovery slack can have immediate impact on a firm's operations, constraints on slack resources can influence the CEO to focus more on short-term issues.

Second, several corporate governance and CEO individual-level variables were controlled for. I controlled for *institutional ownership* by using the proportion of shares that institutional investors hold divided by the total number of shares outstanding as institutional investors are significant monitors. Moreover, I controlled for whether prior CEO was retained as a board chair by assigning a dummy variable equal to 1 if prior CEO was retained and 0 otherwise (*prior CEO as board chair*). The retention of the prior CEO on the board can impact the extent that the relay successor needs to manage the impression of board members, especially the prior CEO. Finally, *female CEO*

was measured by a dummy variable equal to 1 if the CEO was female and 0 otherwise.

As this study examines firm performance below historical and social aspiration levels, I also controlled for *performance above historical aspiration* and *performance above social aspiration* as explained above to take into account their impacts (e.g., Desai, 2016; Kuusela et al., 2017).

Industry dummy variables were included to control for industry effects. Moreover, year dummy variables, *year 2009* to *year 2016*, were also included to control for year effects since the observations were drawn from nine years. Year 2008 was assigned as the reference year.

Correction for Endogeneity and Data Analyses

I attempted to address the self-selection and endogeneity problem in this study. The self-selection problem may occur because CEO succession is not a random treatment variable. For example, some studies found that CEO succession is more likely to occur when firms are not performing well (Fredrickson, Hambrick, & Baumrin, 1988; Wiersema & Zhang, 2011). This may lead to an endogeneity problem which may bias this study's analyses on different types of CEO succession (Shaver, 1998). I included a number of procedures to address the self-selection and endogeneity problem. Several time-varying variables and time-invariant characteristics which may be associated with CEO succession and temporal orientation were controlled for in the empirical models. Furthermore, similar to the study by Zhang and Qu (2016), the Heckman two-stage estimation procedure (Heckman, 1979) was employed. First, all firm-year observations ($n = 1,908$) in this study period of 2008-2016

for the sample firms were pooled together. These firm-year observations were included regardless of whether a CEO succession occurred in the firm-year observation or not in order to predict the likelihood of experiencing a CEO succession. Second, similar to previous studies (e.g., Cannella & Shen, 2001; Zhang, 2008; Zhang & Qu, 2016), I estimated the likelihood of CEO succession by including the following possible predictors in the prior year in the first-stage probit model: firm size, firm age, firm performance, firm financial leverage, institutional ownership, CEO tenure, CEO age, and CEO compensation structure (cash compensation and equity ownership). In the observations where CEO successions occur, CEO variables refer to the information of the predecessor CEO. Industry dummy variables and year dummy variables were also included to control for industry and year effects.

Prior CEO age was included as the instrument variable in the selection equation (first stage) to correct for potential sample-selection bias (e.g., Zhang & Qu, 2016). According to Heckman (1979), the instrument variable should be correlated only with the outcome in the first stage, which is the likelihood of CEO succession in this case. However, this instrument variable should not be correlated with the outcome in the second stage. Prior CEO age likely affects the likelihood of a firm experiencing CEO succession, but is unlikely to influence the successor's temporal orientation. I ran an additional analysis by including prior CEO age in the final model used to test the hypotheses. Prior CEO age is not significantly associated with the successor's temporal orientation ($\beta = -0.003$, n.s.), hence confirming that this instrument variable is not associated with the outcome in the second stage. Moreover, the correlation

between prior CEO age and the successor's temporal orientation is not significant ($r = -0.046$, n.s.).

The results from the first-stage probit model predicting the likelihood of CEO succession are reported in Table 6. CEO tenure ($\beta = 0.083$, p -value < 0.001) and CEO age ($\beta = 0.034$, p -value < 0.01) are positively associated with the likelihood of CEO succession. CEO equity ownership is found to be negatively associated with the likelihood of experiencing CEO succession ($\beta = -0.111$, p -value < 0.05). The Inverse Mills ratios were calculated from the first-stage probit estimation, which were included in the second-stage regression to serve as a control of self-selection.

I tested the hypotheses on new CEOs' temporal orientation using ordinary least squares (OLS) regression analyses.

Table 6. First-Stage Probit Model

	CEO succession
Firm size	-0.017 (0.046)
Firm age	0.001 (0.002)
Firm performance	-0.458 (0.571)
Debt-to-equity ratio	0.001 (0.001)
Institutional ownership	-0.274 (0.216)
CEO tenure	0.083*** (0.012)
CEO age	0.034** (0.012)
CEO cash compensation	-0.084 (0.091)
CEO equity ownership	-0.111* (0.055)
Constant	-6.054 (12.613)
Industry dummies	Included
Year dummies	Included
Pseudo R-squared	0.121
Wald X Squared	155.86***

Values in parentheses are robust standard errors. There are 1,908 firm-year observations.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed statistics tests)

CHAPTER 9

RESULTS

Table 7 reports the descriptive statistics of, and correlations among, the variables used in the analysis except year dummies. The descriptive statistics before centering are reported.

Insert Table 7 about here

Table 8 presents the results of OLS regression analyses on new CEOs' temporal orientation. Four models were estimated. Model 1 included only the control variables, and Model 2 also included the main effects of relay succession and outside succession. In Model 3, I added all two-way interactions of the moderating variables simultaneously. Finally, Model 4 included all moderating variables as well as the three-way interactions simultaneously. I test all hypotheses based on the results of Model 4, the most complete model specification ($R^2 = 0.343$, $p\text{-value} < 0.001$). To reduce the impact of multicollinearity problem, centered variables are used to generate all multiplicative terms (Aiken & West, 1991). The mean VIF of all variables (including all interaction terms) is 11.02. This number is higher because the model includes several two-way interaction terms as well as three-way interaction terms.

Hypothesis 1 posits that relay succession is more likely to be short-term oriented than other types of CEO succession. The coefficient of relay succession in Model 4 is positive and significant ($\beta = 0.115$, $p\text{-value} < 0.001$) and there is a significant difference between the coefficients of relay succession

and outside succession ($F = 7.72$, $p\text{-value} < 0.001$), thus supporting Hypothesis 1.

Hypothesis 2 proposes that when firm performance is below historical aspiration, the positive association between relay CEO succession and a new CEO's short-term orientation will be stronger. The coefficient of the interaction term between relay succession and performance below historical aspiration is positive and significant ($\beta = 2.671$, $p\text{-value} < 0.05$). Furthermore, the difference between the coefficients for the interaction of performance below historical aspiration with relay succession and with outside succession is significant ($F = 3.04$, $p\text{-value} < 0.05$). These results support Hypothesis 2. Figure 7 confirms this relationship. When performance below historical aspiration is high (to one standard deviation above the mean), there is a stronger, positive association between relay CEO succession and a new CEO's short-term orientation than when performance below historical aspiration is low (to one standard deviation below the mean).

Hypothesis 3 examines the moderating effect of performance below social aspiration. The coefficient of the interaction term between relay succession and performance below social aspiration is positive and significant ($\beta = 6.762$, $p\text{-value} < 0.001$). Moreover, the difference between the coefficients for the interaction of performance below social aspiration with relay succession and with outside succession is significant ($F = 7.39$, $p\text{-value} < 0.001$). These results strongly support the hypothesis that relay successors are more motivated to engage in impression management and thus become more short-term oriented when performance is below social aspiration. The interaction plot in Figure 8 confirms this relationship. There is a stronger, positive association

between relay CEO succession and a new CEO's short-term orientation when performance below social aspiration is high (to one standard deviation above the mean) than when performance below social aspiration is low (to one standard deviation below the mean).

Hypothesis 4 proposes that relay successors are expected to be less short-term oriented when CEO narcissism is high. However, this hypothesis was not supported as the coefficient of the interaction term between relay succession and CEO narcissism is not significant ($\beta = 0.112$, n.s.).

Hypotheses 5 to 7 further examine three-way interactions of relay CEO succession, performance below historical and social aspiration levels, as well as CEO narcissism. The positive interaction effect between relay succession and performance below historical aspiration becomes significantly more positive the more narcissistic the CEO ($\beta = 3.583$, $p\text{-value} < 0.05$). The difference between the coefficients for the three-way interaction of performance below historical aspiration and CEO narcissism with relay succession and with outside succession is marginally significant ($F = 2.25$, $p\text{-value} < 0.10$). These results provide support for Hypothesis 5. The interaction plot in Figure 9 also confirms this relationship. There is a strong, positive association between relay CEO succession and a new CEO's short-term orientation when the performance below historical aspiration is high (to one standard deviation above the mean) and CEO narcissism is high (to one standard deviation above the mean).

Similarly, consistent with Hypothesis 6, the positive interaction effect between relay succession and performance below social aspiration becomes significantly more positive the more narcissistic the CEO ($\beta = 26.397$, $p\text{-value} < 0.001$). Moreover, the difference between the coefficients for the three-way

interaction of performance below social aspiration and CEO narcissism with relay succession and with outside succession is significant ($F = 5.79$, $p\text{-value} < 0.01$). The interaction plot in Figure 10 confirms this relationship. The positive association between relay CEO succession and a new CEO's short-term orientation is stronger when the performance below social aspiration is high (to one standard deviation above the mean) and CEO narcissism is high (to one standard deviation above the mean).

Finally, Hypothesis 7 proposes that performance below social aspiration is expected to have a stronger moderating effect than performance below historical aspiration the more narcissistic the CEO, resulting in more short-term orientation of the relay successor. This hypothesis is also strongly supported ($F = 9.47$, $p\text{-value} < 0.01$).

Furthermore, the results did not show the difference in the effects on short-term orientation of outside successors and nonrelay inside successors ($\beta = 0.041$, n.s.). However, outside successors become more short-term oriented than nonrelay inside successors when the performance below social aspiration is high ($\beta = 8.616$, $p\text{-value} < 0.01$) and when their narcissistic personality is high ($\beta = 0.341$, $p\text{-value} < 0.001$). Moreover, outside successors become more short-term oriented than nonrelay inside successors when both the performance below social aspiration and CEO narcissism are high ($\beta = 27.027$, $p\text{-value} < 0.01$).

 Insert Table 8 about here

Figure 7. Interaction of Performance below Historical Aspiration and Relay CEO Succession

Figure 8. Interaction of Performance below Social Aspiration and Relay CEO Succession

Figure 9. Interaction of CEO Narcissism, Performance below Historical Aspiration and Relay CEO Succession

Figure 10. Interaction of CEO Narcissism, Performance below Social Aspiration and Relay CEO Succession

Robustness Checks

I further confirmed the consistency of the findings through a number of additional robustness checks. In the first-stage regression, I tried including transient ownership and dedicated ownership instead of total institutional ownership. All hypotheses still remain supported in the second-stage regression.

Moreover, I tried using alternative measures in the second-stage regression. First, I tried alternative measures of firm performance, using return on equity, return on sales, and Tobin Q instead of ROA. The conclusions did not change. Next, I used different measures of slack resources, which are accounts receivable divided by total sales, and inventory divided by total sales. I also used available slack (measured by current assets divided by current liabilities) instead of recovery slack. The conclusions remain supported. Finally, I used different values of alpha in the increment of 0.1 to compute historical aspiration levels, such as 0.5 and 0.2, instead of 0.9. In all these cases, the results remain largely the same.

As additional robustness checks, I tried replacing some control variables with alternative measures in the models. First, I replaced a governance variable with board vigilance, which is the sum of the standardized value of the percentage of outside directors and outside directors' ownership. As outside directors are usually under less control of the CEO, they can act as monitors of the CEO's strategic actions in short- or long-term. Second, I replaced a CEO individual-level variable with CEO age, which may influence the CEOs' focus on opportunities with short- or long-term benefits. After replacing these control variables with alternative measures in the models, the results remain supported.

DISCUSSION

The findings of this study contribute to our understanding on the antecedents of temporal orientation at the individual level of analysis. Issues related to time horizon have received more attention from researchers and practitioners in the past couple of decades. Temporal orientation of the CEOs plays an important role in determining firms' strategic actions related to time horizon as they are key decision makers within the firms. By examining temporal orientation of relay CEO succession and how different boundary conditions further influence their short-term orientation, this study provides several theoretical and practical implications to research on upper echelons and CEO succession.

First, due to the limited attention on individual temporal orientation in prior research, this study examines temporal orientation of new CEOs in S&P 500 firms through content analysis. Although Das (1987) defines temporal orientation at the individual level of analysis, prior research has mainly studied temporal orientation at the firm level of analysis (Martin et al., 2015; Souder & Bromiley, 2012). Temporal orientation at the firm level may differ from the individual temporal orientation of the firm's CEO. Specifically, I measured CEOs' temporal orientation by using content analysis of CEOs' letters to shareholders to determine attention patterns relating to new CEOs' emphasis on short-term and long-term horizon. By examining different types of CEO succession and a new CEO's temporal orientation, I further explore the antecedents and the black box of individual temporal orientation.

Second, this study contributes to the existing stream of literatures on CEO succession by examining whether relay succession impacts new CEOs'

short-term orientation more strongly as compared to other types of CEO successors. Some studies have examined the relationships between the presence of a separate COO or president and their tenure outcomes or firm performance consequences (e.g., Hambrick & Cannella, 2004; Marcel, 2009; Zhang, 2006). However, there are still limited studies that differentiate between relay and nonrelay inside successions, and examine the consequences of relay succession after an heir apparent is appointed relative to other succession types (e.g., Shen & Cannella, 2003; Zhang & Rajagopalan, 2004). This study distinguished and empirically examined three types of CEO succession, i.e., relay succession, nonrelay inside succession, and outside succession, to provide a better understanding of the consequences of relay succession. The results show that relay successors are more short-term oriented than other types of successors. These findings thus suggest that the relay successor may feel more pressure due to having more learning opportunities during the grooming process before assuming the CEO position. This results in the need for the relay successor to prove his or her ability within a short period of time and thus become more short-term oriented.

Third, I examine several boundary conditions that further influence a relay successor's temporal orientation towards short- or long-term issues. Different aspiration levels, including historical and social aspirations, may be used by board members to evaluate the performance outcomes. The type of aspiration level used for evaluation may have different impacts on the board's expectations and pressures on the relay successor's performance, which in turn influence his or her temporal orientation. The results show that the relay successor is more likely to focus on improving short-term firm performance

when firm performance is below historical aspiration, as well as when it is below social aspiration. Performance below aspiration levels is expected to increase the the board's importance in organizational decision making. In particular, boards likely increase their monitoring and pressure on managers, while managers also simultaneously seek advice from their boards (McDonald & Westphal, 2003; Tuggle et al., 2010). Moreover, board members are expected to face greater pressures from stakeholders when firms perform below social aspiration as compared with their competitors because they are not performing as well as they should. Because the relay successor has more firm-specific and industry-specific knowledge, as well as knowledge and experiences specific to the CEO position from the grooming process, the board will have higher expectations on the relay successor's performance. This in turn influences the relay successor to be more motivated to engage in impression management and focus more on short-term opportunities.

Moreover, this study contributes to our understanding on CEO succession and temporal orientation by also considering narcissism, which is an important personality of many CEOs. Examining how CEO narcissism impacts temporal orientation of new CEOs contribute to our understanding from psychological perspective. This is because narcissism has become one of the most important personalities from decades of psychology research which is found to influence CEOs' confidence and need for attention (Campbell & Miller, 2011; Emmons, 1987; Judge et al., 2006). Contrary to the expectation, I did not find a support that relay successors with narcissistic personality are likely to be less concerned about demonstrating their abilities through achieving objective firm performance in the short run. Although narcissistic relay

successors are confident about their abilities, they are concerned about receiving attention and admiration from audiences. The supports from three-way interactions in Hypotheses 5 and 6 are in line with this explanation, suggesting that narcissistic relay successors are concerned about receiving more attention and admiration to prove that they can immediately improve firm performance.

Finally, the results from three-way interactions show that CEO narcissism further influences short-term orientation of relay successors when firm performance falls below historical and social aspirations, with stronger effect of social aspiration as compared to historical aspiration. As decision makers may filter distinct aspiration levels through different cognitive and organizational processes, this can result in different interpretations and responses. While some studies did not specify the different behavioral consequences of using historical and social aspirations (e.g., Baum et al., 2005; Greve, 1998; Iyer & Miller, 2008), this study shows that how CEOs as decision makers pay attention and respond to different types of aspiration levels also depend on their personality. Since historical and social aspiration levels arise from distinct sources of performance information, narcissistic personality of relay successors can influence how they interpret and respond to different types of aspiration level. Specifically, the result shows that narcissistic relay successors become even more short-term oriented when firm performance falls below social aspiration as compared to historical aspiration. Although social aspiration is associated with more ambiguity and difficulties in identifying ways to improve firm performance for some CEOs (Baum & Ingram, 2002), narcissistic relay successors will be even more motivated to immediately

improve performance as they have high self-confidence in their abilities. The level of attention and admiration that narcissistic relay successors expect to receive can be different for improving firm performance that falls below social aspiration as compared to historical aspiration. As social aspiration levels enable the firm's current performance to be compared with the performance of a reference group of firms, such as competitors, the firm's outcomes are more visible to external audiences. When firm performance is below social aspiration, narcissistic relay successors are more concerned about immediately improving firm performance. This is because when firm performance is improved such that it performs better than competitors, narcissistic relay successors can receive more attention and admiration from audiences. Therefore, this study highlights different impacts of performance below historical and social aspirations on CEO's temporal orientation. A CEO's personality also determines whether historical or social aspirations impact temporal orientation in different ways.

Although some may possibly expect outside successors to be more short-term oriented than inside successors, the results show that temporal orientation did not differ for nonrelay inside successors and outside successors. This is possibly because new outside successors need to spend their early tenure to develop firm-specific knowledge and skills before they can engage in longer-term strategic actions. Nonrelay successors also need to spend time learning about the tasks required for the CEO position after their appointments. Moreover, relative to relay successors, both nonrelay and outside successors need to manage relationships with key stakeholders and top management team early in a post-succession period (Greiner et al., 2003). For example, Zhang and

Rajagopalan (2004) do not find a significant difference between outside successions and nonrelay successions in terms of post-succession firm performance.

While the results show that temporal orientation did not differ for nonrelay successors and outside successors, outside successors become more short-term oriented than nonrelay successors under some boundary conditions. These boundary conditions include when performance below social aspiration is high or when CEO narcissism is high, as well as when both performance below social aspiration and CEO narcissism are high. This is possibly because of greater pressures from stakeholders for outside successors to immediately improve firm performance when firms perform below social aspiration as compared with their competitors. In addition, narcissistic outside successors may be more motivated to immediately improve firm performance after being appointed as new CEOs to gain attention and admiration from the board and stakeholders.

Implications for Practice

An important practical implication from this study is to encourage the board of directors to pay more attention in monitoring the relay successor's short-term decisions that may be detrimental to the firm. The results of this study show that a relay successor is more motivated to engage in impression management than other types of successors due to having more learning opportunities during the grooming process. Consequently, the relay successor becomes more short-term oriented to prove his or her ability to the board of directors and other stakeholders within a short period of time by focusing on

short-term opportunities. Moreover, the relay successor is more likely to focus on improving short-term firm performance when firm performance is below historical aspiration, as well as when it is below social aspiration. Especially when the relay successor has narcissistic personality, he or she tends to focus more on short-term opportunities when firm performance falls below aspirations due to the need for attention and admiration, which may be detrimental to the firm's long-term performance.

In conclusion, this paper contributes to our understanding on temporal orientation at the individual level of analysis. This study also contributes to the literatures on upper echelons and CEO succession by examining temporal orientation of relay CEO succession and showing that relay successors are more short-term oriented than other types of successors. Due to the limited studies that differentiate between relay and nonrelay inside successions, this study contributes to our understanding on the consequences of relay succession after an heir apparent is appointed. Moreover, performance below historical and social aspirations and narcissistic personality can further influence relay successors' short-term orientation. In particular, the results from three-way interactions show a stronger effect of social aspiration as compared to historical aspiration in further influencing relay successors' short-term orientation when CEO narcissism is high. This study therefore highlights the importance of CEO's personality and contributes to our understanding on CEO succession and temporal orientation from psychological perspective.

CHAPTER 10

CONCLUSION

Limitations and Future Research

There are some limitations of this thesis. The first limitation is that I only examine temporal orientation of the CEO, rather than the top management team, because the CEO is considered the most important decision maker within the firm. This is also because I collect temporal orientation data from the firms' letters to shareholders, which are usually written and signed by the CEO. Hence, temporal orientation of other top executives than the CEO cannot be captured.

The second limitation is related to the sample of this thesis, which only examines temporal orientation of CEOs in relatively large U.S. firms listed on S&P 500 index. Future studies may extend this study to examine CEOs' temporal orientation in different contexts, such as small firms or family-owned firms, or firms operating in other countries. Furthermore, while this thesis focuses on CEOs approaching retirement and CEO succession as antecedents, future studies may consider other contexts or individual differences of the CEOs towards their focus on short- vs long-term issues, which may vary due to their different needs and purposes.

In the CEO retirement context, I examine major components of CEOs' incentives, including cash compensation, stock options, and equity ownership, as boundary conditions that influence retiring CEOs' temporal orientation. Nevertheless, other types of CEOs' incentives, such as performance-vested stock compensation, may impact retiring CEOs' temporal orientation.

Moreover, this study does not categorize in-the-money stock options according to just-in-the-money or otherwise. Although this study does not directly examine whether other remaining types of retiring CEOs' incentives impact their temporal orientation due to data constraints, future studies can further examine the influence of these incentives.

In the CEO succession context, I focus on CEO narcissism as an individual difference of a new CEO that can have unique effects on his or her temporal orientation. Narcissistic personality has become one of the most important and controversial personality dimensions which has been conceptually and empirically shown that it is distinct from other personality dimensions (Campbell & Miller, 2011; Paulhus & Williams, 2002). Nevertheless, it may not be the only personality dimension of the CEOs that can influence their temporal orientation. While this study does not directly study whether other personalities of the CEOs influence their temporal orientation due to data constraints, future studies can consider other personality dimensions to better understand their impacts on CEOs' temporal orientation.

Similar to most prior research on CEO succession, this study classified different types of CEO succession by relying on archival data. For instance, I identified heir apparent status in relay succession when new CEOs previously held the title of president or COO or both at the given firm before he or she became the CEO (Bigley & Wiersema, 2002; Zhang & Rajagopalan, 2004). Future studies may be able to identify heirs apparent without these formal titles when using survey data or field studies. Moreover, future studies can further classify outside successions in a more finer-grained manner (e.g., Zhang & Rajagopalan, 2003). For example, different backgrounds of outside successors,

such as their previous roles as CEOs, presidents or COOs, may impact their need to learn and familiarize themselves to the new CEO position, which can influence their temporal orientation towards short- or long-term issues. In addition, this study argues that relay successors become more short-term oriented by focusing more on improving immediate performance as a means of impression management. Futures studies can consider other impression management techniques that new CEOs employ in order to prove their abilities to the board and other stakeholders.

This thesis also raises some potential issues for future research. Future studies can apply the measure of individual temporal orientation to examine its influence on firm strategies and outcomes. Temporal orientation of the firm's CEO, who is the key decision maker within the firm, is expected to be influential towards firm's strategic actions. This is because executives' view of time acts as a temporal filter that they use to evaluate decision situations and determine their strategic actions (Ancona et al., 2001; Crossan et al., 2005). For example, one important strategic action of a firm is engaging in CSR activities. CSR is found to significantly influence firms' long-term financial performance (e.g., Lev, Petrovits, & Radhakrishnan, 2010; Waddock & Graves, 1997). Previous research found that time plays an important role in CSR decisions (e.g., Slawinski & Bansal, 2015; Wang & Bansal, 2012). Consequently, CEOs' short-term orientation may explain why some CEOs are likely to refrain from investing in CSR activities, which are perceived as long-term investments by previous studies (e.g., Brammer & Millington, 2008; Kang, 2016; Mahoney & Thorn, 2006). The preliminary result of the univariate regression shows that

short-term oriented CEOs are less likely to invest in CSR activities ($\beta = -1.078$, $p\text{-value} < 0.01$).

In addition, scholars drawing on different perspectives may extend this study and apply the measure of individual temporal orientation to examine CEOs' temporal orientation in their future studies. For example, the comparative institutional analysis perspective examines two different types of systems, which are an arm-length system and a relational system. Firms operating in an arm-length system are likely to have short-term and transactional relationships with their partners, while firms operating in a relational system tend to have long-term relationships (Ahmadjian, 2016; Whitley, 2001). Future research in the comparative institutional analysis literature may examine how the system in which the firm operates influences the temporal orientation of the CEO and thus the firm's strategic actions.

Conclusion

There has been an increasing attention to issues related to time horizon from researchers and practitioners in the past couple of decades. This is due to the perceived reluctance of organizations to engage in long horizon investments, even when long horizon investments can offer promising future returns (e.g., Porter, 1992; Souder & Bromiley, 2012; Vuori & Huy, 2016; Zaheer et al., 2000). Even though it is widely recognized that temporal orientation is instrumental to firm survival and influential towards the economy, there are still limited theoretical frameworks that explore this phenomenon. Temporal orientation is defined as a "future time perspective" that captures variation across individuals "in terms of the relative cognitive dominance of the

near versus distant future” (Das, 1987: 203). Although Das (1987) defines temporal orientation at the individual level of analysis, recent studies have mainly examined temporal orientation at the firm-level of analysis (Martin et al., 2015; Souder & Bromiley, 2012). In particular, temporal orientation of CEOs plays an important role in determining their strategic actions related to time horizon as CEOs are key decision makers within the firms. Due to the limited attention on the antecedents of temporal orientation, especially at the individual level, this thesis opens the black box of measuring individual temporal orientation. Specifically, this thesis contributes to our understanding on temporal orientation at the individual level of analysis by using content analysis of CEOs’ letters to shareholders to examine CEOs’ temporal orientation in the contexts of CEO retirement and CEO succession.

I first examine CEOs’ temporal orientation in the context of CEO retirement. This study draws on agency theory and prospect theory perspectives to examine temporal orientation of CEOs approaching retirement and how different elements of CEOs’ incentives further influence their short-term orientation. Specifically, different elements of major CEOs’ incentives have distinct impacts on retiring CEOs’ focus towards short-term issues. High proportion of cash compensation is found to accentuate retiring CEOs’ focus towards short-term. Drawing on prospect theory to provide further explanations of stock-based compensation, high proportion of unexercisable stock options is found to attenuate retiring CEOs’ short-term focus, which is consistent with agency theory. However, contrary to agency theory’s suggestion that stock-based incentives encourage long-term investment, high in-the-money exercisable stock options and equity ownership are found to accentuate short-

term orientation of retiring CEOs. In particular, prospect theory helps to modify agency theory's assumptions to consider compensation risk associated with different elements of stock-based incentives. Therefore, by examining the roles of CEO compensation in more fine-grained elements, the results offer insights for implementing appropriate compensation plans for the CEOs such as a precise scheduling of vesting period and expiration of options granted, especially in the last few years of their tenure before the time to retirement.

I further examine CEOs' temporal orientation in the context of CEO succession. This study incorporates and extends the applicability of different theoretical perspectives, including impression management theory, the behavioral theory of the firm, and upper echelons theory, to the issue of individual temporal orientation, which has received limited attention in previous studies. By examining temporal orientation of relay CEO succession and showing that relay successors are more short-term oriented than other types of successors, this study contributes to the literatures on upper echelons and CEO succession. Due to the limited studies that differentiate between relay and nonrelay inside successions, this study also contributes to our understanding on the consequences of relay succession after an heir apparent is appointed. Moreover, performance below historical and social aspirations and narcissistic personality are found to further influence relay successors' short-term orientation. Finally, the results from three-way interactions show a stronger effect of social aspiration as compared to historical aspiration in further influencing relay successors' short-term orientation when CEO narcissism is high. This study therefore highlights the importance of CEO's personality and

contributes to our understanding on CEO succession and temporal orientation from psychological perspective.

Temporal considerations of the future are fundamental in determining a strategic orientation of the firm (Venkatraman, 1989). As temporal orientation refers to the mind-set about time attributed to individuals (Das, 1987), executives' view of time acts as a temporal filter that they use to evaluate decision situations and determine their strategic actions (Ancona et al., 2001; Crossan et al., 2005). In order for firms to survive, firms' executives should find the right balance and take actions that secure both long-term value as well as short-term results (Merchant, 1990; Porter, 1992; Van der Stede, 2000), which is an interesting avenue for future research.

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Table 4. Descriptive Statistics and Correlations^a

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 CEO's Short-Term Orientation	0.62	0.21																
2 Firm size	3.50	1.52	-0.07**															
3 Firm performance	0.09	1.92	0.03	0.00														
4 Recovery slack	-3.01	4.90	0.08**	-0.10**	0.12**													
5 Debt-to-equity ratio	-3.67	26.40	0.04	-0.03	0.39**	0.33**												
6 Bankruptcy risk	44.01	190.07	0.02	0.10**	-0.07**	-0.08**	-0.07**											
7 Institutional ownership	0.80	0.13	0.09**	-0.16**	-0.02	0.04	-0.08**	-0.02										
8 Percentage of outside directors	0.81	0.12	0.02	0.00	0.04	-0.02	0.10**	-0.05	-0.08**									
9 Outside directors' ownership	1.00	2.26	0.04	-0.14**	-0.02	0.07**	-0.08**	-0.01	-0.07**	0.05								
10 CEO tenure	6.62	6.05	0.06*	-0.03	0.04	0.06*	0.00	0.03	0.00	-0.02	0.03							
11 CEO duality	0.60	0.49	-0.01	0.07**	0.02	-0.01	0.02	0.05*	-0.05	0.04	-0.16**	0.24**						
12 Female CEO	0.03	0.16	0.01	0.04	0.01	0.00	0.02	0.00	-0.02	-0.04	-0.03	-0.08**	0.01					
13 CEO cash compensation	0.21	0.19	0.02	-0.03	-0.04	0.03	-0.03	0.09**	0.04	-0.11**	0.06*	-0.03	-0.08**	-0.01				
14 CEO unexercisable stock options	0.52	2.74	0.02	0.04	0.03	0.01	0.01	0.00	0.02	0.03	-0.01	-0.01	-0.01	0.12**	-0.05			
15 CEO exercisable stock options	1.17	2.79	0.00	0.01	0.03	-0.05	-0.03	0.01	0.07*	-0.01	0.04	0.19**	0.07**	-0.05*	-0.07**	0.08**		
16 CEO equity ownership	0.78	2.28	0.04	-0.06*	0.00	0.07**	-0.02	-0.02	-0.04	-0.01	0.09**	0.54**	0.08**	-0.05*	0.05	0.00	0.06*	
17 CEO approaching retirement	0.19	0.39	0.09**	0.03	0.01	-0.01	-0.01	0.00	-0.03	0.01	0.00	0.12**	0.03	-0.04	0.01	-0.04	0.01	-0.02

^a Means and standard deviations are reported in the original metric. There are 1,386 firm-year observations with 312 unique firms.

* $p < 0.05$, ** $p < 0.01$

Table 5. Regression Models on CEO's Short-Term Orientation

Independent Variables	CEO's Short-Term Orientation		
	Model 1	Model 2	Model 3
Firm size	0.007 (0.015)	0.006 (0.015)	0.001 (0.015)
Firm performance	0.003 (0.003)	0.003 (0.003)	0.004 (0.003)
Recovery slack	-0.003* (0.002)	-0.004* (0.002)	-0.004* (0.002)
Debt-to-equity ratio	0.001+ (0.000)	0.001+ (0.000)	0.001+ (0.000)
Bankruptcy risk	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Institutional ownership	-0.038 (0.140)	-0.040 (0.140)	-0.056 (0.141)
Percentage of outside directors	0.065 (0.077)	0.064 (0.075)	0.068 (0.075)
Outside directors' ownership	0.006 (0.008)	0.005 (0.008)	0.005 (0.008)
CEO tenure	-0.002 (0.004)	-0.004 (0.004)	-0.005 (0.004)
CEO duality	0.014 (0.018)	0.011 (0.018)	0.013 (0.018)
Female CEO	0.105* (0.045)	0.115* (0.046)	0.116** (0.044)
CEO cash compensation	-0.018 (0.048)	-0.012 (0.048)	-0.035 (0.051)
CEO unexercisable stock options	0.000 (0.002)	0.000 (0.002)	0.000 (0.002)
CEO exercisable stock options	-0.003 (0.002)	-0.003 (0.002)	-0.003 (0.002)
CEO equity ownership	0.015 (0.012)	0.014 (0.012)	0.014 (0.013)
CEO approaching retirement		0.050** (0.019)	0.050** (0.019)
CEO approaching retirement x CEO cash compensation			0.098+ (0.069)
CEO approaching retirement x CEO unexercisable stock options			-0.027* (0.016)
CEO approaching retirement x CEO exercisable stock options			0.005* (0.003)
CEO approaching retirement x CEO equity ownership			0.013* (0.006)
Inverse Mills ratio	-0.014 (0.040)	0.004 (0.039)	0.009 (0.039)
Constant	0.560** (0.159)	0.541** (0.155)	0.565*** (0.157)
Year dummies	Included	Included	Included
Firm fixed effects	Yes	Yes	Yes
Observations	1,386	1,386	1,386
R-squared	0.021	0.028	0.034
R-squared change		0.007**	0.006*
F	1.20	1.54+	2.33***

Values in parentheses are robust standard errors. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 7. Descriptive Statistics and Correlations^a

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13
1 CEO's short-term orientation	0.637	0.20													
2 Firm size	9.532	1.46	-0.01												
3 Firm performance	3.271	9.13	-0.04	0.06											
4 Recovery slack	-3.185	4.81	0.06	0.00	-0.09										
5 Institutional ownership	0.761	0.15	0.10	-0.37**	-0.08	-0.01									
6 Prior CEO as board chair	0.423	0.49	0.14*	-0.09	0.12	-0.01	0.03								
7 Female CEO	0.052	0.22	0.00	0.03	0.12	0.06	-0.04	0.00							
8 Performance above historical aspiration	0.012	0.03	-0.01	-0.15*	-0.05	0.01	0.07	-0.06	-0.01						
9 Performance above social aspiration	1.384	4.30	-0.06	-0.01	0.10	-0.27**	-0.11	0.02	0.00	-0.04					
10 Performance below historical aspiration	0.015	0.03	0.05	0.00	-0.05	-0.06	0.03	-0.07	0.01	-0.21**	0.07				
11 Performance below social aspiration	0.005	0.02	0.00	0.13	-0.06	0.10	-0.13*	-0.09	-0.04	-0.08	-0.09	0.36**			
12 CEO narcissism	0.001	0.43	-0.07	0.08	0.00	-0.01	-0.08	-0.22**	0.03	0.07	0.03	-0.02	-0.01		
13 Outside succession	0.221	0.42	-0.10	-0.07	-0.05	-0.04	0.12	-0.22**	0.00	0.12*	0.06	0.08	0.07	0.14*	
14 Relay succession	0.521	0.50	0.23**	-0.01	0.03	0.00	0.07	0.37**	-0.08	-0.05	0.02	-0.08	-0.13*	-0.14*	-0.56*

^a Means and standard deviations are reported in the original metric. There are 212 firm-year observations.

* $p < 0.05$, ** $p < 0.01$

Table 8. Regression Models on CEO's Short-Term Orientation

Independent Variables	CEO's Short-Term Orientation			
	Model 1	Model 2	Model 3	Model 4
Firm size	0.016 (0.013)	0.015 (0.013)	0.017 (0.012)	0.018 (0.012)
Firm performance	-0.002 (0.002)	-0.002 (0.002)	-0.002 (0.002)	-0.002 (0.002)
Recovery slack	0.000 (0.004)	0.000 (0.004)	0.000 (0.003)	0.001 (0.003)
Institutional ownership	0.107 (0.130)	0.092 (0.126)	0.061 (0.124)	0.073 (0.123)
Prior CEO as board chair	0.070* (0.029)	0.043 (0.030)	0.025 (0.030)	0.024 (0.031)
Female CEO	-0.001 (0.050)	0.015 (0.051)	0.023 (0.047)	0.013 (0.049)
Performance above historical aspiration	-0.035 (0.521)	-0.104 (0.575)	-0.131 (0.545)	-0.057 (0.574)
Performance above social aspiration	0.002 (0.004)	0.002 (0.004)	0.002 (0.004)	0.001 (0.004)
Performance below historical aspiration	0.481 (0.318)	0.450 (0.294)	-0.355 (0.840)	-0.856 (0.881)
Performance below social aspiration	-0.865 (0.831)	-0.778 (0.806)	-3.172** (1.083)	-7.865*** (1.812)
CEO narcissism	-0.004 (0.035)	-0.003 (0.035)	-0.068 (0.078)	-0.188* (0.078)
Outside succession		0.020 (0.046)	0.014 (0.045)	0.041 (0.045)
Relay succession		0.089** (0.035)	0.088** (0.034)	0.115*** (0.033)
CEO narcissism x Performance below historical aspiration			0.965 (0.817)	-1.667 (1.419)
CEO narcissism x Performance below social aspiration			0.997 (0.971)	-25.393** (7.783)
Outside succession x Performance below historical aspiration			-0.394 (1.151)	-0.472 (2.058)
Outside succession x Performance below social aspiration			4.032** (1.422)	8.616** (2.768)
Outside succession x CEO narcissism			0.219* (0.094)	0.341*** (0.094)
Outside succession x Performance below historical aspiration x CEO narcissism				3.391 (2.586)
Outside succession x Performance below social aspiration x CEO narcissism				27.027** (9.447)
Relay succession x Performance below historical aspiration			1.743* (1.043)	2.671* (1.153)
Relay succession x Performance below social aspiration			1.923+ (1.201)	6.762*** (1.875)
Relay succession x CEO narcissism			-0.008 (0.090)	0.112 (0.088)
Relay succession x Performance below historical aspiration x CEO narcissism				3.583* (1.721)
Relay succession x Performance below social aspiration x CEO narcissism				26.397*** (7.776)
Inverse Mills ratio	0.020 (0.034)	0.039 (0.034)	0.018 (0.035)	0.014 (0.037)
Constant	0.416+ (0.233)	0.346 (0.223)	0.468* (0.219)	0.465* (0.219)
Industry dummies	Included	Included	Included	Included
Year dummies	Included	Included	Included	Included
Observations	212	212	212	212
R-squared	0.225	0.255	0.324	0.343
R-squared change		0.030*	0.069***	0.019*
F	2.64***	2.66***	10.64***	16.08***

Values in parentheses are robust standard errors. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$