AN EXAMINATION OF A FIRM’S USE OF A SHORT TERM SUCCESSION PLAN USING AN INTERIM CEO TO FACILITATE CEO TURNOVER

By Joan DiSalvio

A dissertation submitted to the Graduate School-Newark

Rutgers, The State University of New Jersey

in partial fulfillment of requirements for the degree of Doctor of Philosophy

Graduate Program in Management

Written under the direction of Professor Elizabeth A. Gordon

and approved by

___________________________________

___________________________________

___________________________________

___________________________________

Newark, New Jersey

May, 2011
ABSTRACT OF THE DISSERTATION

An Examination of a Firm’s Use of a Short Term Succession Plan using an Interim CEO to Facilitate CEO Turnover

By Joan DiSalvio

Dissertation director: Elizabeth A. Gordon

This study examines a firm’s use of a short term succession plan using an Interim Chief Executive Officer (ICEO) to facilitate CEO turnover. NYSE requirements and prior research support the use of permanent successors and the NYSE demands firms have a short term succession plan. The results of this study provide evidence on the costs and benefits of using an interim ICEO as part of a short term succession plan versus naming a permanent successor. I find that firms who replace a CEO using an interim CEO as part of a short term succession plan experience large negative abnormal returns at the departure announcement, whether the CEO departure is voluntary or involuntary. Subsequently, after an involuntary departure, I find the use of interim CEOs is associated with large positive abnormal returns at the announcement of the eventual permanent successor, whether that successor is an insider or outsider. The net effect (initial negative plus the subsequent positive reaction) associated with the use of an interim CEO who replaces a CEO who leaves involuntarily is ironically a less negative outcome than if a firm chooses an immediate successor. However, if the CEO departs voluntarily, the shareholders are heavily penalized when an interim CEO is used as part of a short term succession plan. This is contrary to prior CEO literature which finds no abnormal returns upon replacement of a departing CEO who leaves voluntarily. I find that firms use
interim CEOs as part of a short term succession plan at a rate of 11% of all turnovers between 2000 and 2005. I find the mean tenure of an interim CEO, and duration of the short term succession plan, is 201 days, which could allow timely replacement and careful assessment of a replacement. I also describe the characteristics of interim CEOs and identify the governance characteristics of firms who use them.
Acknowledgement and Dedication

I would like to thank my dissertation committee, especially my dissertation chairperson Betsy Gordon, for all of their hard work and time in guiding me through the dissertation writing process. I appreciate all that you have done for me by providing comments, reading my paper countless times, and offering words of advice and encouragement.

I dedicate this paper to my three wonderful children, Daniel, Stephen, and Julia, ages 13, 11, and 7, when I entered the PhD program, for their support and love throughout my course studies, comprehensive exam, and dissertation writing. Perseverance, hard work, friendship, the kindness of others, a little imagination, and creativity has gone a long way.

I also dedicate this paper to my dearest friends, Rosalind Seneca, who never stopped encouraging me, and cheering me forward; Ann Stachenfeld, who stood by me with undoubting enthusiasm; and to my sister Anne Berardi, for her kindness and caring support.
# Table of Contents

Abstract ii
Acknowledgements and Dedication iv
Table of Contents iii
Introduction 2

Main Body

- Related Literature and Hypotheses 9
- Data and Methodology 17
- Results 29
- Conclusion 39

References xix
Tables v
Appendices xxiv
Curriculum Vitae lxi
1. Introduction

The purpose of this study is to examine the use a short term succession plan\(^1\) utilizing an interim CEO (ICEO)\(^2\). Although there are numerous empirical studies which analyze CEO turnover events when there is a permanent CEO replacement ready, there is no prior empirical work that directly investigates or controls for the use of ICEOs as part of a short term succession plan\(^3\). This paper describes possible motives for why firms use ICEOs as part of a short term succession plan rather than naming a permanent successor, provides evidence about the market’s reaction to the incoming CEO separately from the reaction to the departure of the outgoing CEO, analyzes the characteristics of the ICEO, and the governance characteristics of firms who use them.

Succession planning is widely considered a characteristic of good corporate governance\(^4\). Previous research has investigated the shareholder wealth effect of outside versus inside CEO succession and the associated costs of voluntary and involuntary departures. This study extends prior literature on CEO turnover by identifying the shareholder wealth effects of having no named successor at the time a CEO departs, and utilizing a short term succession plan using an ICEO. When a short term succession plan is used, there are two distinct CEO turnover events: 1) CEO departs, and an ICEO takes

---

\(^{1}\) A short term succession plan is defined as the planned temporary replacement of a CEO in the event of an emergency such as death or sudden departure. A permanent succession is not utilized because a replacement may not be available for a variety of unanticipated reasons such as accounting scandal, ethical scandal, death, illness, etc.

\(^{2}\) An ICEO is a temporary replacement for a CEO who has resigned voluntarily or involuntarily. ICEOs are identified in the firm’s press release as a temporary replacement for the departing CEO. However, the tenure of an ICEO ranges from less than one week, to over one year.

\(^{3}\) To the author’s knowledge, there is no other research that specifically focuses on the use of ICEOs.

\(^{4}\) NYSE require that listed firms have a succession plan as part of their corporate governance requirements. Consider General Electric’s Jack Welch priority to develop management as a key to organizational success.

over, and 2) subsequently, the ICEO departs and a permanent successor takes over. This paper measures the shareholder wealth effect due to additional information uncertainty associated with not knowing the future leader and strategy at the time of the initial CEO departure. Second, this paper measures the shareholder wealth effect at the time the information uncertainty is resolved: when the eventual permanent successor is announced.

According to agency theory, the board is responsible for protecting the shareholder’s interest. Firms plan for the departure of the CEO by developing potential successors in order to maintain a competent source of continuous leadership. There is a constant tension between the desire for change and the desire to maintain continuity in a firm through continuous leadership. By developing potential successors, shareholder interest is protected when there is a change by reducing CEO transition costs, i.e. golden parachutes, loss of investor confidence, disruption in corporate culture, and reduced share price. In a survey conducted by Stanford University’s Rock Center for Corporate Governance, 70% of firms reported that they have a short term succession plan. CEO change is inevitable yet some firms execute a short term succession plan using an ICEO

---

6 Information uncertainty is defined as the precision or quality of an investment signal. Low (high) quality signals create high (low) uncertainty. (Francis, LaFond, Olssen, Schipper 2007). When no successor is named and there is a void in leadership, there is low information quality with regard to the firm's strategy, and incoming CEO ability to lead the firm toward profitability. Francis et al. (2007) state, “investors require time to resolve the greater information uncertainty for these stocks. Specifically, as information uncertainty diminishes, so too does the abnormal return. Zhang (2006) states,” By “information uncertainty”, I mean ambiguity with respect to the implications of new information for a firm's value, which potentially stems from two sources: the volatility of a firm's underlying fundamentals and poor information.”

7 “Increasingly assertive corporate directors are ousting more chief executives. But it's harder than ever to say goodbye to a CEO without a big check” (Wall Street Journal October 30, 2006). Consider also the case of Bank of America in September 2009 when Ken Lewis departed during a critical period while they were struggling with TARP issues and the questions surrounding Merrill Lynch.

and others name a permanent successor when a CEO departs under less than ideal conditions. For example, in 2004 when McDonalds’ James Cantalupo died shortly after he was named CEO, his successor Charlie Bell was immediately named to replace him. Within one month of his ascension, Charlie Bell became critically ill and was immediately replaced by his successor Jim Skinner. No interim replacement was used. What makes this case different from others who opt for an ICEO in their replacement strategy?

In addition to requiring a firm have in place a succession plan\(^9\), the NYSE instituted a requirement that boards should have “policies regarding succession in the event of an emergency or the retirement of the CEO.”\(^{10}\) This listing requirement is intended to improve corporate governance; however there is no prior empirical evidence on the effects on shareholder wealth of short term succession plans versus naming a permanent successor. Prior empirical research on CEO turnover does not examine ICEOs although they comprise approximately 11% of all CEO turnover events between the years 2000-2005\(^{11}\), and have a mean tenure of 201 days.

Moreover, the SEC has taken a position in its staff bulletin that CEO succession planning is an integral part of board governance and is important in order to avoid adverse affects that a vacancy in leadership would create. The SEC bulletin states that succession planning is not an employment issue and now believes it is a risk management issue that must be managed by the board of directors\(^{12}\). Databases constructed for prior

---

\(^9\) “Succession planning should include policies and principles for CEO selection and performance review.” NYSE Listed Company Manual, Section 303A09.

\(^{10}\) New York Stock Exchange Listed Company Manual, Section 303A.09.

\(^{11}\) The only references to ICEOs pertain to their exclusion from the sample of CEO turnover under study, to the author’s best knowledge.

CEO turnover studies simply exclude ICEO turnover events\(^\text{13}\). This study provides evidence about the potential costs and benefits to shareholders of using ICEOs who are currently an integral part of succession planning and corporate governance.

Understanding the costs and benefits of a firm’s use of ICEOs to facilitate transition to the new CEO has practical implications for establishing an orderly procedure for relay succession that maximizes and enhances shareholder wealth. It addresses the cost to shareholders of not preparing a successor and evaluates empirically whether it is a potential weakness in corporate governance.

In the case where an ICEO is used, there is no permanent leader named to replace the departing CEO, and the board needs time to select a new CEO\(^\text{14}\). The transition causes information uncertainty and this uncertainty has a potential cost to shareholders. Consider Moody’s and Standard and Poor’s inclusion of succession planning factors in their credit ratings. Moody’s utilizes “Key Man Risk” to measure and rate bank financial strength.\(^\text{15}\) The transition without leadership is of low information quality because it does not provide information about the firm’s strategy, and incoming CEO ability to lead the firm toward profitability. There is a degree of uncertainty regarding the future strategic direction and the CEO’s ability after a CEO turnover (Clayton Hartzell Rosenberg 2005). Low information quality is correlated with high information uncertainty. High information uncertainty is associated with lower abnormal returns, which is the cost

\(^{13}\) Core, Guay, Verrecchia (2003) report, “Consistent with Sloan (1993) and Baber et al. (1998), we require that the CEO serve for a full year in the current year, and for a full year in the year prior” in order to be included in the study. The exclusion of ICEOs is typical of research on CEO turnover. These studies also inadvertently may have included ICEOs who have stayed longer than one year or who remain permanently.

\(^{14}\) Without an available heir apparent the best choice to ensure a smoother transition is to use an ICEO. “These days nominating committees are hiring their own search firms-and even sometimes rejecting the CEOs choice to fill vacancies on the board of directors.” (Business Week, April 25, 2005).

\(^{15}\) http://tcbblogs.org/governance/2010/02/18/investors-sec-concerned-about-ceo-succession-planning/.
associated with using an ICEO as part of a short term succession plan. The selection of a replacement is crucial to the turnover process, especially after a period of poor performance, scandal, or crisis in the life of a firm. Subsequently, the eventual replacement with a permanent successor reduces information uncertainty and creates a positive reaction to the initial crisis. If the negative reaction to the high information uncertainty outweighs the positive reaction to the replacement, then the cost does not outweigh the benefit.

Specifically, this study examines the current body of prior CEO turnover studies related to 1) firm performance 2) predecessor and successor CEO characteristics, and 3) board governance characteristics. A large body of research provides evidence that poor firm performance increases the probability of non-routine CEO turnover16. Predecessor and successor age, CEO experience, and whether they are hired from the outside or inside the firm are analyzed to address whether these characteristics play a role as a motivation or a consequence of using an ICEO. Board composition, independence, CEO/COB duality are analyzed to assess governance characteristics that potentially affect whether a firm uses an ICEO.

I contribute to the empirical literature on CEO turnover by measuring the costs and benefits of utilizing a short term succession plan using an ICEO. Furthermore, I provide evidence about the governance characteristics of the firms that choose to utilize an ICEO to facilitate CEO change and the characteristics of typical ICEO for the first time in the empirical literature.

I examine 933 non-interim and 112 ICEO firms during the period 2000 to 2005. Standard event study methodology is used to evaluate the market reaction to 1) voluntary and involuntary departures, and 2) inside and outside successions in firms that use an ICEO versus firms who do not. As in prior empirical work on CEO turnover,\(^\text{17}\) this paper measures prior financial performance using annual industry adjusted ROA for the three year period prior to the CEO turnover event. I also measure the three year period following the turnover to measure the post-turnover effect of employing an ICEO. The financial performance of ICEO firms is then compared to the prior financial performance of non-interim firms.

Governance characteristics are measured to assess the strength of the board to protect shareholder interest in the face of a CEO turnover. The 1) number of active CEOs, 2) the proportion of outside, inside, and gray directors, 3) founder status and 4) dual title chairmanship are measured. Characteristics of 1) predecessor (departing) 2) successor, and 2) ICEOs are described including age, and prior CEO experience to determine whether there is an association between the use of ICEOs and the age of the departing CEO. CEO characteristics and governance characteristics are obtained from *DowJones Factiva* by reading approximately 9500 news articles, the Corporate Yellow Book Quarterly Reports, Board Analyst, assorted DEF14A proxy statements and SEC Form 8Ks.

Results show when the departing CEO leaves involuntarily, initially, firms who use a short term succession plan using an ICEO experience large, negative cumulative average abnormal returns (CAAR= -7.37%) as opposed to firms who do not use a short

\(^{17}\) Denis and Denis (1995) argue that firms who experience forced turnover have a markedly reduced ROA before turnover, but firms who have normal retirements do not. Coughlan and Schmidt (1985), Warner, Watts, and Wruck (1988) show similar declines in firm performance prior to turnover events.
term succession plan (CAAR= -1.68%) to replace their CEO. Subsequently, an inside (outside) replacement is named\textsuperscript{18} to replace the ICEO and these firms experience large, positive abnormal returns (CAAR= 6.5% (5.60%)) at the announcement of the successor to the ICEO. Hence, the overall result of using a short term succession plan using an ICEO after an involuntary departure with an inside (outside) replacement is net effect favorable (CAAR= -.87% (-1.77%)) over using a named successor after an involuntary departure (CAAR= -1.27% (-2.41%)).

Firms who use an ICEO after an involuntary departure have less negative cumulative average abnormal returns and their shareholders are better protected than firms who do not use an ICEO after an involuntary departure of the CEO. Hiring an ICEO benefits shareholders by providing an immediate response and reassures shareholders by employing an experienced ICEO, but there is a short term cost of the uncertainty until a replacement is named.

In stark contrast, when the departing CEO leaves voluntarily, shareholders are penalized heavily when the firm employs a short term succession plan using an ICEO (CAAR = -4.24%) as opposed to having a named successor (no significant CAAR) at the time of the CEO departure. Results indicate that it is costly to replace a departing CEO who leaves voluntarily with an ICEO as part of a short term succession plan.

The results of corporate governance characteristic comparisons between non-interim and ICEO firms show that boards that choose outside candidates to replace the CEO are composed of a greater proportion of outside to inside members. While a greater number of outsiders increases board independence it is traditionally a source of new CEO

\textsuperscript{18}201 days is the mean tenure of an ICEO.
successors. The presence of inside directors is significantly less in firms who use ICEOs. While the use of an ICEO in the turnover process allows for an orderly succession when no successor is named, this study provides empirical data on the cost of having a short term successor versus a permanent successor.

The data reveal that ICEOs are outside board members with industry experience, who are older than both the incumbent CEO and the successor CEO. Approximately seventy-one percent of ICEOs are outside board members, lead director, or chairman of the board, and sixty-six percent are former CEOs. Approximately forty-seven percent of ICEOs also hold the title of chairman of the board during the period of ICEO tenure, while approximately thirteen percent are founders of the firm. Since ICEOs have no lead time to begin their tenure, their prior experience and familiarity with the company as a board member allows them to begin leading immediately.

The results of this study are of interest to boards of directors, shareholders, the NYSE, and the SEC by providing an empirical measure of the shareholder wealth effect of using an interim versus a permanent successor. In addition, knowing the characteristics of ICEOs may assist boards of directors in the appropriate planning and selection of an ICEO who can reassure investors after a sudden CEO resignation.

The remainder of the paper is structured as follows. Section II describes related literature and hypotheses, and Section III data and methodology. Section IV continues with results and Section V concludes.

II. Related Literature and Hypotheses

19 (Hermalin Weisbach 1988)
This section describes prior empirical studies on CEO turnover that test the market reaction to voluntary and involuntary turnover, inside and outside succession. Based on these prior empirical findings related to CEO turnover that do not utilize an ICEO, I develop testable hypotheses related to the use of ICEOs.

Stock Returns

In response to a need for improved corporate governance, NYSE requirements state that firms should have in place a succession plan, as well as “policies regarding succession in the event of an emergency or the retirement of the CEO. However, the cost of executing this short term plan has not been measured.

The SEC responded in September 2009 to demands from shareholders when Whole Foods and Bank of America were asked to include details of its succession plan in it’s proxy statement and refused. The SEC wrote in its staff bulletin that succession planning is an integral part of the corporate governance and is an important responsibility of the board of directors in mitigating risk caused by a lack of a succession plan. The bulletin states:

“One of the board's key functions is to provide for succession planning so that the company is not adversely affected due to a vacancy in leadership. Recent events have underscored the importance of this board function to the governance of the corporation. We now recognize that CEO succession planning raises a significant policy issue regarding the governance of the corporation that transcends the day-to-day business matter of managing the workforce. As such, we have reviewed our
position on CEO succession planning proposals and have determined to
modify our treatment of such proposals. Going forward, we will take the
view that a company generally may not rely on Rule 14a-8(i)(7) to exclude
a proposal that focuses on CEO succession planning.”

There is a degree of uncertainty regarding the future strategic direction and the
CEO’s ability after a CEO turnover (Clayton Hartzell Rosenberg 2005). When a firm
uses a short term succession plan, that uncertainty is not resolved until the permanent
successor is eventually announced. Increased uncertainty has a cost to shareholders in the
form of reduced share price. Information uncertainty is defined as the precision or
quality of an investment signal. Low (high) quality signals create high (low) uncertainty.
(Francis, LaFond, Olssen, Schipper 2007).

A solid succession plan can signal to the market that the firm has planned for firm
leadership and continuity in the decision-making process (Borokovich, et al 2006, Vancil,
1987; Zajac, 1990). When no successor is named when a CEO departs, there is low
information quality with regard to the firm’s strategy, and incoming CEO ability to lead
the firm toward profitability. Borokovich et al (2006) state, “changes in management can
signal changes in future corporate decisions, possibly through the reversal of past errors
or the establishment of new policies that reflect the different views and abilities of new”.
Francis et al. (2007) state, “investors require time to resolve the greater information
uncertainty for these stocks. Specifically, as information uncertainty diminishes, so too
ambiguity with respect to the implications of new information for a firm's value, which

---

potentially stems from two sources: the volatility of a firm's underlying fundamentals and poor information.”

Prior empirical research reports evidence that there is no significant share price reaction to voluntary CEO turnover (Parrino 2001) and negative share price reaction at the announcement of an involuntary CEO turnover. When returns are separated between outside and inside successors, negative returns are more pronounced for outside successors after an involuntary turnover (Huson Malatesta Parrino 2004).

In order to determine whether the stock price of firms who employ short term succession plans using ICEOs are negatively affected, I test stock price reaction using standard event study methodology. Firms replace CEOs in order to achieve improvements in firm performance and maximize shareholder wealth (Huson Malatesta Parrino 2004). Testable hypotheses are presented that evaluate whether replacing a CEO using an ICEO improves shareholder wealth. In order to measure the cost of using a short term succession plan I develop the following hypotheses.

\textit{H1a: Firms that use a short term succession plan experience negative CAARs when the departing CEO leaves voluntarily}

\textit{H1b: Firms that use a short term succession plan experience negative CAARs when the departing CEO leaves involuntarily}

\textit{H1c: Firms that use a short term succession plan experience greater negative CAARs for outside successors than for insider successors}

\textit{H1d: Firms that use a short term succession plan experience positive CAARS at the announcement of the ICEO departure/successor arrival.}
Post turnover performance of firms who use short term plans

Denis and Denis (1995) measure large improvements in post-turnover performance (as well as significant declines in pre-turnover performance). I measure firm performance three years post-turnover to determine whether firms who use ICEOs achieve improvements in performance comparable to the non-interim firms.

I hypothesize that firms who employ ICEOs have selected a strategic change and taken the time to choose a successor. Consistent with H2, I hypothesize the successor to an ICEO is an outsider and previous research reports that firms seeking a change in strategic plan choose outside successors. This strategic change allows the board of directors to improve firm performance by a shift in strategy. Therefore, I expect performance to improve over their pre-turnover levels. This improvement would be consistent with firms who do not employ an ICEO, based on prior empirical research. Therefore, I present the following hypotheses:

\[ H2: \text{Firms that utilize ICEOs as part of a short term succession plan experience improved post turnover performance measured by ROA years 1 through 3} \]

In order to determine whether a specific set of board governance and firm characteristics are associated with the firms who choose a short term succession plan, I test the following characteristics using a logistic regression. I assess the likelihood of using an ICEO as part of a short term succession plan based on the following board governance characteristics: dual title of the departing CEO, proportion of inside to
outside directors, founder status of the departing CEO and number of active CEOs on the board. The NYSE requires a short term as well as a long term succession plan as part of good corporate governance. Since a succession strategy is a component of corporate governance, the related governance characteristics are measured to determine whether their presence increases the odds of using a short term succession plan. The related hypotheses H4, and H5 are further explained below.

**Predecessor CEOs with Dual Role – Chairman of the Board (COB) and CEO**

Dual leadership CEOs have more power and control, and previous empirical results suggest they would be less likely to be replaced suddenly due to a forced turnover. Moreover, dual leaders also have more power to control their own successor, and are more likely to have selected a ready successor, and less likely to utilize an ICEO. This study examines if there is an association between the existence of a dual CEO/Chairman leadership structure and the decision to select of an ICEO to facilitate a CEO turnover. For these reasons, an ICEO is less likely to be used when the incumbent CEO is also the Chairman of the Board.

Goyal and Park (2002) provide evidence that dual position CEO and Chairman of the Board leaders are less likely to be replaced following poor firm performance. They find that the firms who do not have dual position CEO and COB are more likely to replace poorly performing CEOs. Jensen (1983) argues that the separation of the CEO and chairman positions makes for a more effective board. It allows for the board to perform their key role: to remove poorly performing management leadership when internal controls fail. Fama and Jensen (1983) suggest concentrating power and decision
control to one individual reduces the board’s monitoring effectiveness. I posit that firms with dual role CEO and Chairman will not utilize ICEOs to assist in the transition to a successor because a ready replacement is more likely cultivated, and the dual role CEO is less likely to be replaced abruptly by the Board of Directors. Therefore, I present the following hypothesis:

\[ H3: \text{Firms with dual role Chairman of the Board and CEO predecessor CEOs are less likely to use ICEOs to assist in the transition to a successor CEO.} \]

Outside Directors and Their Influence on Hiring an ICEO

Borokhovich et al. (1996) maintain that outside directors are more likely to replace a fired CEO with an executive from outside the firm. The reason proposed is that outside directors consider a broader range of CEO candidates than inside directors. Hermalin and Weisbach (1988) argue that boards are more likely to hire outside directors after poor firm performance. Weisbach (1988) argues that inside directors are less effective monitors because it is costly to challenge the CEO because their own careers will suffer.

Prior studies on CEO turnover provide evidence that the presence of inside directors aids in the smooth turnover and selection of new CEOs. Empirical research has found that firms are more likely to assign the role of director to a potential succession candidate. This implies that firms who do not have a recently hired inside director may utilize other means to hire a candidate in the event a CEO turnover (Hermalin 2005)(Hermalin Weisbach 1988). ICEOs may be used when the firm has not prepared for a potential succession, as evidenced by the smaller number of inside directors. Prior
literature has not examined the relationship between the number of inside directors and the use of an ICEO to facilitate CEO turnover.

Hermalin and Weisbach (1988) argue that firms add inside directors when the CEO nears retirement in order to groom the successor CEO. Hermalin and Weisbach (1988) hypothesize that the director is being groomed to become the new CEO and the board is using the time to learn about the director’s abilities before hiring him as the new leader. Relay succession that is well planned minimizes the inevitable disruption during a leadership transition (Vancil 1987) (Zajac 1990) (Shen Cannella 2002). Unanticipated and poorly managed successions have a negative impact on shareholder wealth (Beatty Zajac (1987), Worrell Davidson (1987)). Therefore, an interim succession may be required in the case where an inside director has not been groomed as a potential replacement. I posit that firms who utilize an ICEO are more likely to have a larger percentage of outside directors on their boards.

Therefore, I present the following hypothesis:

\[ H4: \text{The number of inside to outside directors in firms that utilize an ICEO is greater in firms who do not use an ICEO.} \]

Using an ICEO and it’s Relation to Age

In firms where the predecessor is below retirement age there would not be a ready replacement for a CEO who leaves abruptly. CEOs who are older may be more likely to have had enough time and experience to have succession plans in place. Hence, it is posited that firms with a younger CEO are less likely to develop a successor because he is
expected to continue in his role as CEO for a long period, presumably until retirement. Therefore, I present the following hypothesis:

\[ H5: \text{Firms use ICEOs to replace younger CEOs} \]

\textit{Using an ICEO to Appoint an Outside Successor}

I hypothesize that firms who use ICEOs will utilize the ICEO to search for an outside successor. The outside successor provides the board an opportunity to change the strategy followed by the departing CEO. In addition, the departing CEO may have groomed his replacement, who now is no longer viewed by the board as an acceptable successor. Therefore, I present the following hypothesis:

\[ H6: \text{Firms that use ICEOs employ a higher number of outside successors} \]

\textbf{III Data and Methodology}

In this section, I describe the 1) sample selection procedures; 2) define the variables used in the empirical analysis and; discuss the 3) event study methodology which measures market reaction to interim and non-ICEO turnover 4) accounting performance measured by ROA 5) binary logistic regression model which associates specific variables with the likelihood of using an ICEO as part of a short term succession plan.

\textit{Sample Selection and Selected Descriptive Statistics}
Table 1 reports summary statistics of the number of ICEO facilitated turnover and non-interim CEO turnover for the sample. Over the six year period from 2000 to 2005\textsuperscript{21}, mean ICEO facilitated turnover is 10.72\%, or 112 out of the 1,045 sample of CEO turnover, and ranges from a low of 7.74\% in 2003, to a high of 13.21\% in 2005. This rate is comparable with the overall rate of CEO turnover cited in previous empirical literature\textsuperscript{22}.

CEO turnover data is obtained from Standard and Poor’s *Execucomp* database and consists of those firms who report a CEO change, the Corporate Yellow Book Quarterly Report (2000-2005), DowJones *Factiva*, DEF14A proxy statements and SEC Form 8K filings, and company websites for the years 2000 to 2005. Compustat/CRSP merged database is used as the source for firm’s financial data and industry classifications, and stock return data is obtained from the Compustat/CRSP merged database. Board Analyst and Audit Analytics are used to obtain board characteristics.

For each CEO change, the news article from Dow Jones Factiva database is used to identify the announcement date of the turnover, the reason for turnover, and name of the predecessor, interim and successor CEOs. The information about the characteristics of the CEO, such as age, title, chairman status, founder status, whether an insider or outsider replacement, industry experience, former CEO experience, and whether the interim is made permanent, is also obtained from the approximately 9,500 news articles. The data is verified in the DEF 14A proxy statements, SEC Form 8K, and company website.

\textsuperscript{21} The study looks at the time period beginning in 2000 to make the manual lookup required more tractable and completed in 2005 to allow for three years of post-CEO turnover results.

\textsuperscript{22} The unconditional turnover rates are cited as 10.3 percent in Leone and Lui (2010) Fee and Hadlock (2004).
Table 2 presents selected descriptive sample statistics. Firm size is measured by market value of equity\(^{23}\) and shows firms that use interim CEOs have a market value of equity 51% that of the non-interim firms and the difference is statistically significant at the .05 level. Firms classified as non-interim also have greater total assets (p<.05) than firms who use ICEOs. Net sales are equivalent between CEO and non-interim CEO firms\(^{24}\).

\textbf{Involuntary versus Voluntary Turnover Classification}

Table 3 presents the number of voluntary versus involuntary CEO turnover events. Voluntary (involuntary) turnover accounts for 68.2% (31.8%) of the non-interim departures, versus 38.4% (61.6%) of the CEO turnovers. Huson, Parrino, and Starks (2001) report voluntary (involuntary) turnover of 76.6% (23.4%) of the non-interim CEO assisted turnover\(^{25}\). Clayton, et al (2006) found involuntary departures comprise 17% of their sample, whereas Parrino (1997) found 13%, and Denis and Denis (1995) found 13.6% of their samples were composed of involuntary turnover. The rate of involuntary turnover in this study is higher because the rate of CEO turnover is higher in more recent years. All comparable studies use data ending in 1995.

The departures are classified as involuntary or voluntary according to methods used by Farrell and Whidbee (2003). Each turnover is classified as involuntary or

\begin{footnotesize}
\begin{enumerate}
\item[23] Share price multiplied by number of common shares outstanding
\item[24] The appendix contains other descriptive statistics such as exchange listing and industry distribution of interim and non-interim CEO firms.
\item[25] Weisbach (1988), Weisbach (1995), Engel et al (2003) report the principal reason given for voluntary resignations is retirement, followed by personal reasons, normal succession procedure, illness, performance, policy or personality disagreements, taking a prestigious position elsewhere, takeover, scandal, company policy to retire at 65 merger, and no reason given. In contrast, the most common reasons for a firm to use an CEO are: dismissal based on “mutual agreement with the board”, a legal or ethical scandal, or resigned because of poor performance.
\end{enumerate}
\end{footnotesize}
voluntary using information from press announcements in the Dow Jones *Factiva* database. Firms do not reliably report the true reasons for departure (Weisbach, 1988; Warner Watts Wruck 1988, Denis and Denis 1995 DeFond Park 1999) therefore the following classification is utilized. The turnover is categorized as voluntary if the reason for departure stated in the *Factiva* article is normal management succession, death, illness, or CEOs departure for a prestigious position elsewhere. Prior studies (Weisbach (1988), Warner et al (1988), DeFond and Park (1999)) suggest that retirement is used by the firm as a euphemism for a firing. Therefore, the turnover is considered voluntary in the case of retirement only if the stated reason in the *Factiva* article is retirement and the announcement was made at least six months prior to leaving the firm and the CEO is older than 60 years of age (Huson Parrino Starks 2001; Parrino 1997).

A turnover is classified as involuntary if the Factiva article suggests the CEO was forced to leave his position because of poor performance, policy differences, control change, legal, ethical, or other scandal, mutual agreement with the board, at the board’s request, strategy change needed by board, resigned with poor performance, or if no reason is given.

*Interim CEO Characteristics and Classification*

The identification of ICEOs required multiple data sources and hand collection of data. The sources used to identify ICEOs were: Standard and Poor’s *Execucomp* database,

---

26 Press announcements were found using a search criteria “company name, departing CEO last name, incoming CEO last name” from January 1 through December 31 of the suspected turnover event year. Approximately 9 articles were reviewed per firm to determine reason for departure (as well as other CEO characteristics not available in Compustat, Execucomp, Board Analyst, Corporate Library, or Audit Analytics).

27 See legend- Table 3.
and DowJones Factiva. An CEO is identified by the firm as a temporary replacement for the outgoing CEO and is hired with the intention that he will be replaced within an indeterminate and brief period of time. Therefore, it is possible that the CEO tenure is less than one year, greater than one year, or the CEO is made permanent. Execucomp does not distinguish which CEOs are considered temporary, and does not provide information if an CEO is made permanent.

Hence, the identification of CEOs was performed in stages. An initial sample of CEOs was collected by identifying CEOs with tenure of less than one year in the Execucomp database. Next, the firm’s press release from DowJones Factiva was examined to verify the firm identifies the CEOs as an CEO. Based on this criterion, firms were eliminated from the sample. Lastly, each press release was examined for non-interim CEOs and in some cases it was determined that they were CEOs.

Inside/Outside Succession Classification

A turnover is classified as outside if the incoming CEO did not join the firm before the turnover announcement date. It is considered outside related if there was a previous director or employment relationship. All other successions are considered inside successions. Previous academic studies report outsiders as executives who have joined the firm within one year or less, but this classification is not relevant within a study of succession utilizing CEOs, where the replacement CEO under study has tenure of less than one year by definition.

---

28 Consider the case of Bristol-Myers Squibb’s permanent appointment of James Cornelius in April 2007 after he was named CEO in September 2006. Peter Dolan was dismissed (but not fired for cause) as CEO by the Board of Directors because of his secret dealings with Apotex, maker of a generic form of Bristol-Myers’ Plavix.

Corporate Governance Characteristics

The following governance data is collected: 1) number of outside, inside, outside related, total directors; 2) number of active CEOs on the board; 3) dual title CEO Chairman of the Board (COB) and; 3) whether the departing CEO is a founder.

Director information is obtained from Board Analyst.\(^{30}\) CEO/COB duality and founder status data were obtained by reviewing *Factiva* news articles. Directors are classified according to the method used by Board Analyst, and Weisbach (1988) and Hermalin Weisbach (1988), as either outside, inside or outside related (gray). Board Analyst classifies directors as: 1) outside if they are fully independent and do not work for the firm or have had a significant relationship with the firm; 2) inside if they are employed as an executive and work full time with the company, and; 3) outside related (gray) if they have or have had a significant relationship with the company.

Stock Returns

Cumulative average abnormal returns are measured using 3 day (-1 to +1), 5 day (-2 to +2) and 7 day (-5 to +5) windows around the turnover event.\(^{31}\) The data source used to calculate returns is the merged COMPUSTAT/CRSP database. Stock performance is evaluated using standard event study methodology to analyze the stock price reaction following the methods used in Denis and Denis (1995) and Warner Watts Wruck (1988). The estimation period for market model parameters is 252 days prior to

\(^{30}\) Director information is gathered for the years 2001 thru 2005. The available Board Analyst database did not contain occurrences prior to 2001.

\(^{31}\) Returns are also evaluated using a 21 day window and are presented in the appendix as a sensitivity analysis.
announcement. A firm is dropped from the study if fewer than 15 days of data are available for estimation.

Figure 1 shows the sixteen succession outcomes of CEO departure and CEO succession for both interim and noninterim firms. Each node in figure 1 represents a separate event study relating to hypotheses 1a, 1b, 1c, 1d. The CAAR results are reported for each node. Nodes (1) through (8) show the events related to an involuntary departure of the CEO. Nodes (5) through (8) show the events related to an ICEO assisted succession, whereas, nodes (2) through (4) show events related to a permanent successor.

Node (2) and (6) represents the combined effect, without differentiation as to the successor origin as outside or inside. Nodes (3), (4), (7), and (8) separate the results between inside successors and outside successors.

Nodes (9) through (16) show the events associated with the involuntary departure of the CEO similar to (1) through (8), for a total of 16 distinct outcome combinations.

Figure 1 shows two main types of CEO departure event dates: 1) CEO departure and a permanent CEO successor is announced on the same date\(^3\)\(^2\) 2) CEO departure and ICEO is announced on i) one event date; and, ii) the ICEO departure and the permanent CEO successor is announced on a second event date. There are always two distinct announcement dates with a departure of a CEO using a short term succession plan using an ICEO.

For noninterim firms, in the first time period, \(t_1\), the CEO departs and his permanent successor succeeds contemporaneously. For ICEO firms, the CEO departs

---
\(^3\)\(^2\) In some instances, such as in the case of a voluntary retirement over the age of sixty, there are two separate event dates: one for the departure announcement date of the CEO and a second for the announcement of the successor CEO.
and the interim successor succeeds contemporaneously. Subsequently, in the second time period, $t_2$, the permanent successor succeeds the ICEO.

For short term succession plans using an ICEO, CAARs are measured at the 1) CEO departure announcement/ICEO announcement date and the 2) ICEO departure announcement/permanent CEO successor announcement date. For non-interim CEO turnover, CAARs are measured at the announcement of the departing CEO/announcement of the permanent successor.\(^{33}\)

In summary, the event studies test the share price reaction to the uncertainty of having no named successor, depending on whether the departing CEO leaves voluntarily or involuntarily and the successor is an insider or an outsider.

\textit{Accounting Returns}

To measure accounting performance differences for interim and noninterim firms, and for voluntary and involuntary departures, return on assets is calculated. Firm performance is measured using change in industry-adjusted earnings before interest, tax and minority interest, deflated by beginning assets (ROA)\(^{34}\) to control for size (Barber Lyon 1996). Earnings before interest and taxes is used to prevent changes in capital structure or tax treatments from affecting the earnings measures of performance (Weisbach 1988).

To control for industry effects, the median industry earnings change is computed for all firms with the same two-digit SIC code as the test firm and subtracted from the industry adjusted earnings change for the firm (Weisbach 1988). DeFond and Park

\(^{33}\)ibid
\(^{34}\)Compustat Data item #13 divided by data item #6.
(1999) show that industry-adjusted earnings factor more strongly into turnover decisions for firms in less concentrated industries. The change in industry-adjusted level of accounting performance shows the trend in accounting performance relative to other firms in the same industry (Huson Parrino Starks 2001). Firm performance is measured during three periods; 1) three years before the turnover (t-1 through t-3), 2) the turnover year (t=0), and 3) three years post-turnover (t+1 through t+3).35

Logistic Regression Model

A binary regression model is used to assess whether the presence of specific corporate governance, firm performance, firm, and CEO characteristics increase the odds that a firm will employ a short term succession plan using an ICEO. The dependent variable is defined as INTERIMCEO and is equal to 1 if an ICEO was used, and equal to 0 if the succession did not involve an ICEO (non-interim). The model is presented below.

\[
INTERIMCEO = b_0 + b_1 \Delta ROA \text{LAGGED T-1} + b_2 \text{PREDAGE} + b_3 \text{PREDFOUNDER} \\
+ b_4 \text{PREDDUALCHAIR} + b_5 \text{ACTIVECEOS} + \\
+ b_6 \text{INSIDER/OUTSIDERON BOARD} + b_7 \text{FORCED} + \\
+ b_8 \text{DEBTTOASSETS} + b_9 \text{MKT VALUE} \\
+ b_{10} \text{INDUSTRY} + e
\]  

(1)

where:

35 Return on Equity (ROE) (Compustat data item #13) deflated by common equity (Compustat data item #60) and Tobin’s Q is calculated as a sensitivity analysis. An approximation of Tobin’s Q was calculated using \([\text{data 181 (Total Liabilities)} + \text{data 10 (preferred stock liquidating value)} + \text{data 199 x data 25 (Market Value of Common Equity)}] / \text{data 6 (book value of total assets)}\) (Chung Pruitt 1994). Results are consistent with industry adjusted ROA and are presented in the appendix.
The independent variables used to calculate an odds ratio that a short term succession plan using an ICEO is employed are categorized by 1) firm performance ($\Delta ROA \text{ LAGGED } T-1$) 2) firm characteristics (INDUSTRY, DEBTTOASSETS, and MKTVALUE), 3) CEO characteristics (PREDAGE, FORCED), and 4) corporate governance characteristics (PREDFOUNDER, INSIDER/OUTSIDERONBOARD, ACTIVECEOS, PREDDUALCHAIR).

Firm performance is measured by changes in return on assets lagged from year one to year zero ($\Delta ROA \text{ LAGGED } T-1$). A large body of research provides evidence that
poor firm performance increases the probability of non-routine CEO turnover\textsuperscript{36}. It is possible that the results are driven by a spurious correlation with firm performance. Pre-turnover ROA is tested to determine if there is deteriorating performance. The results of the ROA analysis one year preceding the turnover are used in the logistic regression to determine what role performance plays in determining whether an ICEO will be used.

Denis and Denis (1995) argue that firms who experience a forced CEO turnover have a markedly reduced industry-adjusted ROA before the turnover event, while firms that experience normal CEO turnovers (retirements do not experience poor prior financial performance) do not. Based on stock market returns, Coughlan and Schmidt (1985) report that there is a 21.3\% probability of turnover in the lowest 1\% firms when ranked by stock returns versus 3.1\% in the highest 1\% while Warner, Watts, and Wruck (1988) report a 12.8\% probability of turnover in the lowest decile of firms when ranked by stock returns, versus 8.6\% in the highest decile. Prior studies (Weisbach (1988); Murphy Zimmerman (1993), Coughlan Schmidt (1985) Denis Denis (1995)), report poor performance precedes CEO turnover.

Firm characteristics are included for the following reasons: 1) market value of equity ($MKTVALUE$) to control for firm size; 2) industry ($INDUSTRY$) to control for industry effects of forced turnover, and; 2) leverage ($DEBTTOASSETS$) to control for risk.

CEO characteristics included in the regression are 1) predecessor age ($PREDAGE$), to determine the association between age of the departing CEO and the use of an ICEO; and 2) ($FORCED$), whether the use of ICEO is associated with involuntary

or voluntary turnover. Governance characteristics that may be associated with the likelihood of using an ICEO included are: 1) predecessor’s status as a founder of the firm (*PREDFOUNDER*) to evaluate the role of founders, consistent with prior literature reporting they are more entrenched\(^{37}\), and the likelihood of using an ICEO; 2) predecessor’s status as dual COB/CEO (*PREDDUALCHAIR*), who may be more likely to have a permanent successor rather than use an ICEO; and 3) the number of active CEOs on the board (*ACTIVECEOS*), who may influence the decision to enact a short term succession plan and use an ICEO; and 4) the proportion of inside to outside directors on the board (*INSIDER/OUTSIDERONBOARD*), where a lack of insiders may restrict the available successors, or the excess of outsiders may influence the firm to remove the CEO abruptly.

Consistent with previous research, I expect the coefficient \(\beta_1\) \(\Delta ROA\ LAGGED\ T-1\) to be mixed: negative for forced CEO turnover where there is a higher likelihood that a successor is named due to the sudden nature of the turnover, and because it is preceded by declining performance, while positive or neutral for voluntary turnover because voluntary turnover is not correlated with performance, whether interim or noninterim turnover. I expect the coefficient \(\beta_2\) on *MKT\ VALUE* to be negative (-) and significant, because smaller firms may not have a large pool of successors from which to choose. I expect the coefficient \(\beta_4\) on *DEBT\ TO\ ASSETS* to be positive (+) as a result of higher risk in firms experiencing turnover, whether interim or noninterim. I expect the coefficient \(\beta_5\) on *PREDAGE* to be positive (+) and significant consistent with hypothesis 5 that younger CEOs may not have developed a successor. I expect the coefficient \(\beta_6\) on *PREDFOUNDER* and *PREDDUALCHAIR* to be negative (-) consistent with prior

\(^{37}\) Palia et al 2008)(, Leone Lui 2010)
literature that founders and dual chairman/CEO are more entrenched and less likely to experience turnover, whether interim or noninterim. I expect the coefficient on $\text{FORCED} \beta_8$ to be positive (+) and significant, consistent with the Hermelin (2005) that involuntary departures are less likely to have permanent successors ready. I expect the coefficient on $\text{ACTIVECEOS} \beta_9$ to be positive (+) consistent with the current literature that a greater number of active CEOs will be associated with greater management oversight. I expect the coefficient $\beta_{10}$ on $\text{INSIDER/OUTSIDERSON BOARD}$ to negative (-) and significant consistent with hypothesis 4 that there are a smaller number of insiders on boards from which to choose a potential successor.

**IV. Results**

*Stock Returns*

Figure 1 shows the sixteen succession outcomes of CEO departure and CEO succession for both interim and noninterim firms. Each node represents a separate event study. The CAAR results are reported for each node. Nodes (1) through (8) show the possible events related to an involuntary departure of the CEO. Nodes (5) through (8) show the events related to an involuntary ICEO assisted succession, and nodes (2) through (4) show events related to an involuntary permanent successor.

Nodes (3), (4), (7), and (8) separate the results between inside successors and outside successors and node (2) and (6) represents the combined effect, without differentiation as to the successor origin.

Nodes (9) through (16) show the events associated with the involuntary departure of the CEO for a total of 16 distinct outcome combinations.
Table 4 represents a summary of the 16 separate event studies and reports results of hypotheses 1a, 1b, 1c, 1d.\(^{38}\) For short term succession plans using an ICEO, CAARs are measured at the 1) CEO departure announcement/ICEO announcement date and the 2) ICEO departure announcement/permanent CEO successor announcement date. For non-interim CEO turnover, CAARs are measured at the announcement date of the departing CEO/announcement date of the permanent successor.\(^{39}\)

Abnormal returns are calculated for both: 1) firms who use a short term succession plan using an ICEO and; 2) firms who use a permanent successor (non-interim CEO) under each of the following conditions: firms whose departing CEO leave \(i\) voluntarily versus \(ii\) involuntarily, and; whether the departing CEO is replaced by \(iii\) an insider versus \(iv\) an outsider.

**Interim CEO Voluntary and Involuntary Departure Results**

Consistent with hypothesis 1a and 1b, firms that use an ICEO as part of a short term succession plan experience significant and large negative cumulative average abnormal returns at the announcement date of the departing CEO who leaves involuntarily (voluntarily) \((\text{CAAR} = -7.37\% \ (-4.24\%))\), significant at the .001 level. Subsequently, at the second announcement date, when the ICEO departs \(^{40}\) and the successor CEO is announced, after an involuntary (voluntary) turnover, \(\text{CAARs} = +5.78\%\) significant at the .001 level (no sig CAAR for voluntary). This result is consistent with H1d for involuntary departure but inconsistent with H1d for voluntary departure.

\(^{38}\) Appendix tables 1 through 20 provide detailed results of each separate turnover event.

\(^{39}\) ibid

\(^{40}\) An ICEO has a mean tenure equal to 201 days. Therefore the second announcement date can be as short as 14 days from the original announcement date when the CEO departs, over one year after the CEO departs, or a mean of 201 days after the original announcement date when the CEO departs.
Furthermore, contrary to hypothesis 1c, positing higher returns for outside successes, additional analysis shows that after an involuntary departure, abnormal returns are highest when the successor is an insider (CAAR = +6.50%), and positive but slightly lower for an outside successor at (CAAR= +5.60%). There are no significant CAARs after a voluntary departure at the second announcement date when the successor is named and the ICEO departs.

The net effect (initial negative reaction plus subsequent positive reaction) after an involuntary departure CEO followed by an ICEO as part of a short term succession plan when the replacement is an insider (outsider) is a CAAR = -.87% (-1.77).

The net effect (initial negative reaction plus subsequent positive reaction) after a voluntary departure CEO followed by an ICEO as part of a short term succession plan is a large negative cumulative average abnormal return of -4.24%, significant at the .001 level. However, notably, although there is a large negative CAAR at the first announcement date, there is no significant subsequent positive or negative reaction when a successor is eventually named at the second announcement date when the successor is named and ICEO departs.

**Noninterim CEO Voluntary and Involuntary Departure Results**

Table 4 reports, and consistent with previous empirical research, at the announcement of the departure of a non-interim CEO who leaves voluntarily there are no significant CAARs. However, when a non-interim CEO leaves involuntarily, consistent with previous empirical research, there are small negative cumulative average abnormal returns of -1.68%, significant at the .001 level. Results are again further separated for involuntary departure by whether the non-interim successor is an insider or an outsider. If
the non-interim CEO is replaced by an outsider (insider) negative cumulative average abnormal returns are larger -2.41% (-1.27%) and are significant at the .05 level (.10).

In summary, results show that firms who use an ICEO as part of a short term succession after an involuntary outside (inside) departure have 1.54 (0.5) higher significant abnormal returns and their shareholders are better protected than firms who do not use an ICEO after an involuntary departure of the CEO. Contrary to expectation, event study results provide evidence that using an ICEO as part of a short term succession plan results in a smaller negative reaction over using a named successor in the case of an involuntary dismissal, as Table 4 reports, and Figure 1 shows. After a voluntary departure, CAARs are large and negative for firms using an ICEO, whereas firms using a noninterim CEO have no negative significant returns.

Investors remain uncertain about the future CEO and his ability and firm strategy after a departure using a short term succession plan, and this lack of information creates a large negative abnormal return at the time the ICEO is named and a large positive abnormal return when the uncertainty is resolved when a permanent successor is later named. This is consistent with the results found in Francis et al. (2007) that returns will revert to low uncertainty levels once the uncertainty is resolved.\(^\text{41}\)

However, when the departing CEO leaves voluntarily, shareholders are penalized when the firm employs an ICEO as part of a short term succession as opposed to having a

\(^{41}\) Information uncertainty is defined as the precision or quality of an investment signal. Low (high) quality signals create high (low) uncertainty. (Francis, LaFond, Olssen, Schipper 2007). When no successor is named and there is a void in leadership, there is low information quality with regard to the firm’s strategy, and incoming CEO ability to lead the firm toward profitability. Francis et al. (2007) state, “investors require time to resolve the greater information uncertainty for these stocks. Specifically, as information uncertainty diminishes, so too does the abnormal return. Zhang (2006) states, “By "information uncertainty", I mean ambiguity with respect to the implications of new information for a firm's value, which potentially stems from two sources: the volatility of a firm's underlying fundamentals and poor information.”
named successor at the time of the CEO departure. The signal in this case contains higher quality information when a CEO departs voluntarily. Investors interpret the departure coupled with the short term succession using an ICEO as a signal that the CEO has an unfavorable outlook for the company, exposing his insider knowledge about the firm (Penman 1985) (Givoly Palmon 1985) (Allen Ramaan 1990).

**ROA**

Table 5 reports results for firm performance three years prior to the turnover event (t-3 to t-1), the year of the turnover event (t=0) and three years post turnover (t+1 to t+3) using ROA, ROE, and Tobin’s Q. The results are partitioned between voluntary and involuntary CEO turnover. The differences in mean ROA are compared between interim and noninterim CEO firms for each of the years before and after the turnover, for voluntary turnover and for involuntary turnover. ROA measures the differences in firm performance associated with the use of short term succession plans using an ICEO versus noninterim successions.

Table 5 shows deteriorating performance prior to involuntary departure for both interim and noninterim CEO turnover, consistent with previous empirical research. However, the difference in deterioration in ROA in year t-1 only is significant (p=0.050) between interim and noninterim firms.

Post turnover, firm performance improves for both interim and noninterim firms, however the difference in ROA improvement in year t+2 only is significant (p=0.000).

---

42 Results for ROE and Tobin’s Q were similar therefore they are presented in the appendix. Change in ROA is also presented in the appendix.
43 All firms experienced turnover, and deteriorating performance has been reported in previous studies prior to CEO turnover.
This result is consistent with hypothesis 2, that firm performance is expected to improve post turnover.

Prior to voluntary turnover and contrary to prior empirical research\textsuperscript{44}, performance deteriorates for CEO firms, and not for noninterim turnover firms. The difference in ROA between voluntary CEO departure for interim and noninterim firms is significant in years $t-2$, $t-1$, $t=0$, $t+2$ ($p < .05$). The differences in performance are consistent with CAARs for voluntary departure of the CEO firms. Declining firm performance prior to a voluntary CEO departure in firms that use a short term succession plan suggests the departure is a strong information signal and is perceived by investors that the departing CEO has additional information about the negative earnings potential of the firm.

Table 5 results show that firm performance is significantly different between firms who use a short term succession plan prior to CEO departure and those firms who use a permanent successor. This difference is in contrast to prior literature that shows performance does not decline prior to a voluntary turnover. The decline in firm performance is not significantly different, except in year $t-1$ and $t+2$, between interim and noninterim CEO firms. A short term succession plan using an CEO is associated with declining performance for voluntary CEO dismissal.

\textit{Logistic Regression}

Table 6 reports logistic regression results examining the likelihood that a firm utilizes an ICEO based on the proportion of inside to outside directors, the age of the departing CEO, whether the CEO departed voluntarily or involuntarily, whether the predecessor was a founder, or held a dual title. Overall, the model is able provide a odds ratio of .157 greater that the dependent variable ICEO will be used, based on the independent variables included in the model, and is significant at the .05 level (p value =0.000). Whether the CEO left voluntarily (FORCED), the proportion of inside to outside directors (INSIDER/OUTSIDERONBOARD), the age of the predecessor (PREDAGE) and whether the predecessor has a dual title (PREDDUALCHAIR) are predictive and significant at the .05 level. This result supports hypothesis 3, 4 and 5. The pseudo R$^2$ is .266, and explains the degree to which the independent variables are associated with the dependent variable in predicting the use of a short term succession plan using an ICEO. The model predicts correctly whether an ICEO and permanent CEO will be used 87.8% overall.

Table 6 reports that 2.893 times more firms without dual title CEOs will use an ICEO as part of a short term succession plan. Table 6 also shows that firms who use ICEOs have predecessor CEOs whose age is .963 that of non-interim firms; and the proportion of inside to outside directors is .20 smaller. ROA lagged one year, founder status, the level of risk; market size and industry were not significant or predictive.

Firms with younger CEOs may not have had sufficient time to develop a successor so it is more likely that the firm will need to execute a short-term succession plan using an ICEO rather than name an immediate permanent successor, who may not be ready or available, consistent with hypothesis 5.
The proportion of inside to outside directors is lower in firms that use an ICEO, and prior empirical research has shown that inside directors are a source of CEO candidates, while the greater number of outside directors is more apt to be independent and remove poorly performing CEOs. Dual title CEOs are less likely to be replaced by ICEOs due to entrenchment and may have the power to select and groom a successor.

**Governance Characteristics**

Table 7 and table 8, panels A., B and C present results of governance characteristics for interim and non interim turnover firms. Table 7 reports the number of inside directors is significantly less (at the .05 level) for firms choosing an ICEO as a short term successor, whether the departing CEO leaves voluntarily or involuntarily. However, the number of outside directors, and total directors is significantly less in firms after a voluntary departure for firms who use an ICEO as part of a short term succession plan. In contrast, the difference between the number of outside directors and total directors is not significant between interim and noninterim firms for involuntary turnover.

Results show that the composition of the board of directors is associated with the use of a short term succession plan using an ICEO and outside dominated boards tend to utilize this form of succession with greater frequency. The results show that ICEO firms do not have the same proportion of inside directors as non-interim CEO firms. The increased independence of outside directors may result in a greater number of involuntary turnovers that require a short term succession plan. In addition, the paucity of inside directors, frequently a source of successors, is associated with the increased propensity to utilize a short term plan. Firms utilize inside directors as a mechanism for grooming a
successor CEO. The greater number of inside directors provides evidence that firms with more inside directors are less likely to utilize ICEOs to facilitate turnover. The inside directors are potential successor candidates.

Results of table 7 show that the number of active CEOs is not associated with the use of an ICEO as part of a short term succession plan. The mean (median) number of active CEOs on the board of directors for interim firms is 2.77 (3.00) as opposed to 2.19 (2.00) for non-interim CEO facilitated turnover. These results support hypothesis 4.

Table 8 reports in support of hypothesis 3 that firms who utilize ICEOs are not as likely to replace CEOs who have dual title CEO/COB status. Seventy-seven percent of the non-interim CEO turnover is composed of dual title CEO/COB, whereas 39% of the CEOs who precede an ICEO possess dual title status. Dual status CEO/COB have 1) more power and control to groom a successor candidate and 2) are less likely to be removed abruptly from office. Therefore, ICEOs are less likely to be used in firms with dual status CEO/COB. This is consistent with results in the logistic regression.45

In Table 8 Panel C results show ICEOs are equally likely to be used after a founder CEO has departed than in non-interim firms. There is no statistical significance between the number of founders who precede a turnover that is part of a short term succession plan.

Predecessor Age

A motivation associated with the use of an ICEO is predecessor age. Results support hypothesis 5 that predecessors to ICEOs are younger. Table 9 and Figure 1 show

---
45 Table 8 also shows, however that the dual title status is more frequent for successors after an ICEO, but the difference is not significant.
that predecessors to CEOs have average age of 54 as opposed to predecessors to non-interim CEO firms who have average age of 59 years and the difference is significant (p=0.000). Results indicate that age is associated with the use of a short term succession plan using an ICEO and that firms who have younger CEOs do not have a permanent successor immediately available.

**Using an Interim CEO to Appoint an Outside Successor**

Table 10 panels A and B confirm hypothesis 6 that firms who use ICEOs as part of a short term succession plan are more likely to choose outside successors (p=0.00). Panel A reports the interaction between the successor outcome (inside or outside) and whether a firm uses an ICEO, given involuntary or voluntary dismissal. Results show that outside successors are more likely to be appointed after a firm uses a short term succession plan. Panel B reports additional evidence that firms are more likely to select an outside successor when an ICEO is used (p=.000) whether or not the departing CEO left voluntarily or involuntarily.

The evidence suggests that short term succession plans are used because an inside successor is not available. In order to search for an outside successor, the firm must conduct a search when the departing CEO has left without 6 months notice, as in the case with a standard resignation due to retirement. The average search time for a successor is the length of time or tenure of an ICEO.

**Interim CEO Tenure**
Table 11 provides preliminary evidence that ICEOs have a mean (median) tenure of 201(175) days. A sign of good corporate governance is the board’s ability to replace the outgoing CEO with an adequate successor. A short term succession plan using an ICEO allows the board time needed to find an adequate successor. This result suggests that firms are unwilling or unable to retain the predecessor CEO, and are lacking an adequate immediate replacement while an extensive, time consuming search is underway for a successor CEO. They opt instead for utilizing an ICEO and a short term succession plan.

V. Conclusion

The purpose of this study is to examine the use a short term succession plan utilizing an ICEO. The results of this study provide evidence of the share price reaction using an ICEO as part of a short term succession plan as opposed to naming a permanent successor. This paper presents an analysis of the characteristics of the ICEO, and the governance characteristics of firms who use them.

When the departing CEO leaves involuntarily, and a short term succession plan is used, the firm experiences greater negative cumulative average abnormal returns than firms who do not use a short term succession plan. However, subsequently when the permanent replacement is announced, these firms experience large, positive abnormal returns. Hence, the overall result of using an ICEO as part of a short term succession plan after an involuntary departure is net effect favorable over using a named successor after an involuntary departure.
In contrast, when the departing CEO leaves voluntarily, shareholders are penalized when the firm employs an ICEO as part of a short term succession plan over having a named successor at the time of the CEO departure. This is in contrast to numerous prior empirical studies on CEO turnover that report no negative reaction at the time of a voluntary CEO departure. It is costly to replace a departing CEO who leaves voluntarily and is replaced by an ICEO as part of a short term succession plan because the signal is interpreted by the market as negative, and rather than information uncertainty, the market interprets the abandonment of the firm by the CEO as information negative, and no later recovery is made in share price when the successor is named.

Hiring an ICEO benefits shareholders by providing an immediate but temporary response to a change in leadership and reassures shareholders by employing an experienced ICEO who is generally an outside director. There is a short term cost. Without a named successor, investors remain uncertain about the future CEO’s ability and firm strategy and this lack of information creates a large negative abnormal return at the time the ICEO is named, and a large positive abnormal return when the uncertainty is resolved when a permanent successor is later named.

The results of corporate governance characteristic comparisons between non-interim and ICEO firms show that boards that choose outside candidates to replace the CEO are composed of a greater proportion of outside to inside members. While a greater number of outsiders increase board independence, it is traditionally a source of new CEO successors.
Additionally, ICEOs are outside board members with industry experience, who are older than both the incumbent CEO and the successor CEO. A majority of ICEOs are outside board members, lead director, or chairman of the board, and greater than half are former CEOs. Since ICEOs have no lead time to begin their tenure, their prior experience and familiarity with the company as a board member allows them to begin leading immediately.

Permanent successors to ICEOs are generally outsiders with industry experience, and it takes an average 201 days to find a permanent successor.

Logistic regression results report that when the departing CEO is younger there is an increased odds of using an ICEO. Younger CEOs who depart, and board of directors within these firms, may not have the time to develop a successor.
Curriculum Vitae

Joan DiSalvio
Born: September 1, 1961, Jersey City, New Jersey

Education
2004-2011 Rutgers University, MBA, PhD in Accounting
2003 Columbia University School of Continuing Education
1985-1988 Stevens Institute of Technology, MS, Management-Information Systems Management
1979-1983 Rutgers University, BA Business Administration-Accounting concentration, BA Spanish

Academic Experience
8/2010-present Fairleigh Dickinson University
Assistant Professor of Accounting
9/2008-8/2010 St. John’s University
Instructor of Accounting
9/2007-5/2010 Rutgers University, Adjunct Instructor, Teaching Assistant, Graduate Assistant
1994-2005 Drew University
Adjunct Instructor of Accounting
1991-1995 Kean University, Adjunct Instructor of Accounting
May 1994 American Institute of Certified Public Accountants (AICPA), Grader, may 1994 CPA Exam, Auditing Essay Section

Non-Academic Work Experience
1984-1994 AT&T
Senior Internal Auditor, Business Analyst
1983-1984 CIT Group
Financial Analyst