# (Version: June 1, 2009) Employee Director Career Outcomes: Prediction and Reaction ${ }^{1}$ 

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#### Abstract

This paper examines the career paths of 245 newly elected employee directors from 1997 to 2001 and estimates the role of employee board member characteristics on career outcome one, three, and five years after appointment. Career outcomes examined are succession to CEO, exit (departure or retirement), and retention on the board of directors in a non-CEO capacity. Given actual career outcomes and factors influencing career outcomes, this paper examines the abnormal returns associated with the announcement of an employee director appointment. We find employee director career outcomes differ largely with respect to titles held with CFO hurting and Vice Chairman and President titles helping succession. Looking at actual candidate outcomes, evidence reported suggests that market reactions are positive for succession, negative for departing, positive for non-succession outcomes. These findings indicate that markets recognize and embrace succession and non-succession candidates on a board as a source of value. However, predictive characteristics for career outcome provide weak insight into to market reactions.


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## 1. Introduction

Classical models of inside director service begin with the idea that an employee can be of service to the board (for examples see, Fama and Jensen (1983), Jensen and Meckling (1976), Morck et al. (1988), Mace (1986)). More recently, Raheja (2005) develops a model where all insiders strategically try to be of service to the board by divulging firm specific knowledge regarding the quality of proposed projects to outside directors in an attempt to gather their support for consideration as the next CEO. However, this model conflicts with succession

[^0]literature that suggests that some employees serve on the board for non-succession reasons. Evidence of non-succession roles for employee directors comes from succession literature that omits employee board members as potential successors because of their perceived nonsuccession role. For example, the heir apparent literature of Cannella and Shen (2001), identify characteristics that are indicative of a favored or likely successor and find that such designees are more likely to replace the CEO in the event of a CEO succession. ${ }^{2}$ While these two approaches are not mutually exclusive, two important points are revealed from the empirical record. First, not all intra-firm successors to the CEO are heirs apparent. Said differently, some of the nonheirs apparent are intra-firm successors to the CEO and thus are of interest. Second, if not all intra-firm directors leave after the occurrence of a succession event, then some of these directors either are potential new heirs apparent, or are serving in a non-succession related or advisory role. Thus, an interesting question is, when an appointment of a new director occurs, can we empirically identify their role as a new employee director. ${ }^{3}$

Another aspect of classical models is the role of managerial entrenchment and attendant costs versus board effectiveness and attendant benefits. For example, Rosenstein and Wyatt (1997) look at market reactions to inside director appointments to determine if insider ownership mitigates fears of managerial entrenchment through incentive alignment. ${ }^{4}$ As a control, Rosenstein and Wyatt include future CEO succession within three years to adjust for circumstances where insider ownership may not reflect the attendant benefits of a ready future

[^1]successor. Doing so, Rosenstein and Wyatt find that the market reaction to an insider appointment is significantly negative if the new employee director succeeds the CEO within the next three years. The authors attribute this result to confirmation that the current CEO is contemplating exit or that perpetuation of the current management team is likely. However, since board service comes in forms other than service as a ready successor, attendant costs and benefits of insiders serving the firm may differ significantly by appointee since the purpose of the appointment can vary. Therefore, if we can identify the purpose of an appointees' service, then it is plausible that service in a non-succession role should produce a positive reaction, owing to the positive benefits of advisory services. While an entrenchment like behavior of appointing insiders who are likely to depart should produce a negative reaction, owing to negative costs of compensation via board service rather than outright severance.

The purpose of this paper is to analyze new employee director characteristics to determine if new employee directors are likely successors to the CEO, likely to exit (depart or retire) from the board, or likely non-succession related board appointees, and to estimate and decompose the market reaction to the appointment of new employee directors that fall into these three categories.

This paper presents evidence that information about new employee directors at appointment is sufficient to estimate potential career outcomes for a new employee director in three and five years. The evidence shows that markets react to new employee director appointments based on actual career outcomes. When the outcome is succession or retention, markets react positively, while departure leads to negative reactions. The CEO succession result is inconsistent with prior literature. ${ }^{5}$ Also according to the evidence, the new employee director's title and shareholdings influence market reactions to appointments as do CEO and board characteristics. A particularly interesting result in this paper is evidence of a hierarchy of CEO successors that excludes CFOs. Vice Chairman appears to be a less favorable position to heir apparent status or holding heir apparent titles of chief operating officer or president. Serving with another title such as SVP, EVP, CAO, CTO, or Divisional CEO or Divisional COO are not

[^2]significant predictors of retention, succession, or exit. These results indicate that firms do try to communicate succession information implicitly via title even if not doing so explicitly (which may be inappropriate or unwise due to poaching opportunities for other firms and legal liabilities).

To our knowledge, there has not been an attempt to predict the career paths of new employee directors at the time of appointment or to classify inside directors at appointment beyond the status of heir apparent. ${ }^{6}$ Further, there has been limited examination of market reactions to the appointment of new employee directors based on actual outcomes and no examinations based on factor identified as useful in predicting outcomes. Therefore, a significant contribution of this paper is that it takes changes to management serving on the board of directors as a governance signal (using predictive factors or actual outcomes) and examines the reaction of the market to that signal. Such market reactions represent estimates of costs of entrenchment or benefits of effectiveness.

## 2. Literature \& Hypotheses

There are eight finance and management articles closely related to this paper specifically, the papers of Zajac and Westphal (1996), Parrino (1997), Rosenstein and Wyatt (1997), Cannella and Shen (2001), Zhang and Rajagopalan (2003), Hermalin and Weisbach (1988), Raheja (2005), and Shen and Cannella (2003). The last three are less similar in their research topic but are quite pertinent with respect to their findings regarding governance.

Our fundamental assumption is that markets react to corporate news and decisions and that such news and decisions reflect the governance of the firm. Further, given that the governance of the firm is the provenance of management and directors, then changes to management and the board of directors represent new positive, negative, or neutral information regarding governance. To establish what is likely positive information regarding governance, we first look to see what choices on average appear to occur. This approach assumes that on average firms, as a group, will make good decisions about governance. Specifically, for the

[^3]purpose of this study, we assume that firms identify and communicate (although perhaps not explicitly) the identity of successors and that firms maintain a balance between managerial and directorial influence.

### 2.1. Market Reaction to Appointment

Rosenstein and Wyatt (1997) present evidence that markets react to the appointment of new employee directors who serve as CEO within three years, which suggests that markets are also likely to react to non-succession related appointments based on career outcome. Given that Rosenstein and Wyatt (1997) find that markets react negatively to succession related appointments based on actual succession data, we should find that markets react negatively to likely CEO successors using actual outcomes or predictive factors. Since good governance may require boards to elevate employees with firm specific expertise to serving on the board of the firm, we expect markets to react positively to retention (non-CEO succession) related appointments. The opposite reaction should occur when the firm elevates employees to serving on the board of the firm prior to their anticipated retirement or departure as it suggests weak governance mechanisms when such an elevation is a reward for service, or is a short-term remedy to inadequacies of the board. Stated as hypotheses:

Hypothesis 1A: Markets react negatively to succession related appointments.
Hypothesis 1B: Markets react negatively to departure related appointments.
Hypothesis 1C: Markets react positively to retained non-succession related appointments.

### 2.2. Board \& CEO Power

Hermalin \& Weisbach (1988) estimate the number of departures and additions of insiders (current and former firm employees) and outsiders (non-employees of the firm) based on firm stock returns, market value of equity, tenure variables, and CEO succession variables. In doing so, Hermalin \& Weisbach find that a CEO age between 62 and 66 influences insider departures and additions, median tenure of insiders (and outsiders) influences departures amongst insiders (and outsiders), increases in the market value of equity increases the number of outsider departures and increases in the number of insider and outsider additions. In addition, Hermalin \& Weisbach find that the percentage of outsiders on the board influences the addition of insiders depending upon the level of insiders, with reduction (or addition) of insiders following when too
many (or too few) insiders are serving on the board. Hermalin \& Weisbach also document that the percentage of insiders (outsiders) is influential in the number of insider (outsider) departures. Therefore, independence measures serve as indicators of monitoring effectiveness, of credibility regarding potentially controversial decisions, or of potential for board turnover.

Raheja (2005) builds a theoretical model of the board of directors based on competition in order to predict empirical outcomes with regard to board structure and appointment behavior. In the model, a CEO can propose either a good or a bad project. If the project is bad and insiders reveal the project quality to outside directors, the quality of the information will influence succession. Since verification of project quality comes at a cost to outside directors, a theoretical implication is that insiders who generate poor signal's regarding project quality are costly to outside directors and are hence undesirable board members. We argue that this suggests experience characteristics may influence retention and exit if experience proxies for ability to accurately signal project quality. In addition, since signaling about project quality may require an employee to counter the wishes of the CEO, their boss, it is important to note that board power and CEO power will play a role in the employee's perception of costs associated with signaling project quality. Thus, we also argue, that this suggests that board power and CEO power influence retention and exit as well.

Zajac and Westphal (1996) focus on variables that influence similarity of a new CEO to a previous CEO or to the board of directors. In terms of similarity to the old CEO, Zajac and Westphal find differences occur due to the new CEO being an outsider, the position of CEO is split from the Chairman position, and the board percentage of outsiders is high. Whereas stock returns and ROA reduce differences between a new CEO and an old CEO. Interestingly, the same results also hold for the new CEO's similarity to the board of directors.

From these works by Hermalin and Weisbach (1988), Zajac and Westphal (1996), and Raheja (2005) we see evidence and arguments that CEO and board characteristics associated with power and independence are important to the employee appointment process and are likely to influence new employee director career outcomes post-appointment. Specifically, Zajac and Westphal's (1996) findings on the effects of CEO duality on future CEO similarity suggest that CEO power will decreases departures. Hermalin and Weisbach's (1988) findings regarding board power (outsiders and board independence), as a counterbalance to CEO power, should increase retention of non-successors since, if boards
are independent and put an insider on the board, then keeping the insider on the board (for firm specific expertise or other reasons) can be consistent with good governance objectives. This also is consistent with the Raheja (2005) model. Logically extending the previous argument, board power must reduce departures. Another dimension of the power-balancing act of a firm is board size. On this topic, Hermalin and Weisbach's (1988) find that increasing board size reduces retention (and increases departures). Summarizing:

> Hypothesis 2A: CEO power (duality, CEO tenure, or CEO age) decreases CEO succession and departures.
> Hypothesis 2B: Board power (percentage of outsiders, average board tenure, or officer and director shareholdings) increases retention of non-succession directors and reduces departures.
> Hypothesis 2C: Board size reduces retention (increases departures).

### 2.3. Firm Performance

Hermalin \& Weisbach (1988) find that positive stock returns reduce the likelihood of board member departures and that negative stock returns increase the likelihood of board member additions. While a positive change in earnings before interest and taxes over the prior year, reduces the number of outsiders appointed to the board of directors.

Parrino (1997) focuses on the role of firm performance and industry homogeneity on CEO successions. Parrino finds poor firm performance precedes succession and increases the likelihood of outsider successors. In addition, Parrino finds that succession often occurs around the time that CEOs approach retirement suggesting that CEOs often get to complete their term before succession occurs. In terms of industry factors, Parrino finds that homogeneity increases the likelihood that outside CEOs succeed during a forced departure.

Given Hermalin and Weisbach (1988) and Parrino (1997) evidence that firm characteristics and performance influence board appointment behavior, we conclude such measures are likely to play a role in new employee director career outcome. Parrino's (1997) result is that poor performance reduces internal CEO succession. Hermalin and Weisbach's (1988) result is that poor performance reduces existing insider retention, but since we are looking at performance prior to the appointment of a new insider that sign should reverse so that poor performance increases retention and decreases departures. Our hypotheses are:

## Hypothesis 3A: Poor performance (firm growth or ROA) decreases CEO succession.

Hypothesis 3B: Poor performance increases retention of non-CEO directors. Hypothesis 3C: Poor performance decreases departures.

### 2.4. Heir Apparent

Cannella and Shen (2001), and similar work by Zhang \& Rajagopalan (2003), suggest that heir apparent based measures ${ }^{7}$ are a significant influence on whether an insider succeeds the CEO in the future. Cannella and Shen focus on whether heirs succeed as CEO and find that board power and positive ROA performance, as well as, CEO retirement measures increase the likelihood of heir promotion to CEO. While Cannella and Shen do not test the significance of an heir apparent status, they do find heir apparent tenure reduces promotion possibilities, and heir age or tenure increases exit possibilities. Zhang and Rajagopalan focus on who succeeds as CEO and find that both heir and non-heir apparent status increases the likelihood of promotion to CEO among employee directors. In a later study, Shen and Cannella (2003) examine market reactions to succession events involving heirs, non-heirs, and outsiders. Shen and Cannella find that heir promotion to CEO and outsider succession to CEO generate significantly positive returns, that heir exit produces significantly negative returns, and that heir appointment and non-heir inside succession do not generate a significant market reaction.

Cannella and Shen (2001), Shen and Cannella (2003), and Zhang and Rajagopalan (2003) suggests that characteristics of new employee directors such as heir apparent status and title are likely indicators of career outcome post-appointment. Specifically, Cannella and Shen's (2001) result is that heir apparent status is indicative of success in future CEO successions. A logical alternative consequence of Cannella and Shen (2001), Shen and Cannella (2002), and Zhang and Rajagopalan (2003), is that non-heir apparent status is (likely) indicative of failure in future CEO successions. Along these lines, another logical alternative consequence of Cannella and Shen (2001), Shen and Cannella (2002), and Zhang and Rajagopalan (2003), is that non-heir apparent status is (likely) indicative of departure. This leads to the last group of hypotheses:

Hypothesis 4A: Heir apparent status increases likelihood of CEO succession.
Hypothesis 4B: Heir apparent status increases likelihood of retention as non-CEO.
Hypothesis 4C: Non-heir apparent status increases likelihood of future departure.

[^4]The next section describes the data used to test the four preceding hypotheses. Methods employed in analysis of the data, a discussion of the results of the analysis, and conclusions follow.

## 3. Data

Data for board member characteristics comes from the biographies provided within proxy statements filed with the Securities and Exchange Commission's EDGAR system. Firm financial statement items come from the annual reports of the firms available through WRDS (COMPUSTAT) or from annual or quarterly reports on file with the Securities and Exchange Commission's EDGAR system (as necessary). CRSP is the source for stock performance data.

Only firms on all four Forbes 500 lists in the same year during any year within the period 1997 to 2001 are eligible for inclusion in the data set. In addition, firms subsequently acquired by these firms are also included in the data set prior to the acquisition. If a firm is eligible and a new employee director joins the board or a succession event occurs during the period 1997 to 2001, then the records within the data set represent the employee director at the time of appointment. During the period 1997 to 2001 there are 400 appointments of employee directors by firms not engaging in a merger or acquisition. During this same period, amongst nonmerging firms, 546 employee directors depart from the board and 196 employee related CEO succession events occur. Hence, there is a trend during this period towards less insiders serving on the board within this population. This trend amongst board of directors in the sample is consistent with perceptions and evidence regarding good governance practices, in the form of more independent or outsider dominated boards.

Since the emphasis is intra-firm succession and board service, this paper includes only CEO succession events involving serving inside directors. Said differently, this data set excludes two cases. The first and most obvious case excluded is CEO succession events involving outsiders (defined as not having sat on the board as an employee for a least one year). The second case excludes CEO appointments involving employees who have no prior service on the board of directors. Therefore, of the 196 employee-related CEO succession events, the data set excludes 89 events involving insiders who had not previously sat upon the board of directors. ${ }^{8}$

[^5]Of the 400 appointments of employee directors, the data set excludes 154 appointments of employee directors associated with CEO succession without prior board service.

During the period 1997 to 2001, 246 (400-154) new employee directors join boards that do not merge or cease reporting in the next year, however one new employee director who subsequently is appointed CEO is omitted due to an insufficient security trading history prior to appointment. ${ }^{9}$ The final data set includes 106 (196-89-1) succession events of which 48 involve one of the 245 new employee directors. ${ }^{10}$ Of the 245 new employee directors, after the first year of service, 23 ( $9.4 \%$ ) become CEO, 193 (78.8\%) remain on the board, and 29 (11.8\%) retire or depart. After 3 years, 53 of the 245 new employee directors serve on firms that either merge or cease reporting. Of the 192 (245-53) new employee directors covered for three years (2000 to 2005), 34 (17.7\%) become CEO, 92 (47.9\%) remain on the board, 16 (8.3\%) retire, and 50 ( $26.0 \%$ ) depart. After 5 years, 65 of the 245 new employee directors serve on firms that merge or cease reporting. Of the $180(245-65)$ new employee directors covered for five years, 43

[^6](23.9\%) become CEO, 48 (26.7\%) remain on the board, 25 ( $13.9 \%$ ) retire, and 16 ( $35.6 \%$ ) depart. Table 1 summarizes much of this data and includes the abnormal market reactions segregated by career outcome (Panels A-C differ as to when the career outcome is measured).

The abnormal market reaction data presented in Table 1 comes from CRSP and reflects a three-day window $(-1,+1)$ and a two day window of $(0,+1) .{ }^{11}$ Comparing market reactions to career outcomes of CEO elevation, retention by the board, or exit reveals no difference in significance at the one, three, or five year time periods. In other words, there is no significant difference between the market reaction to the appointment of an employee director who becomes CEO in one year and the market reaction to the appointment of an employee director who exits (or remains on) the board in one year. The same statement holds for three and five years.

Roughly 1 in 10 new employee directors become CEO one year after appointment to the board of directors and roughly the same proportion retire or depart after one year. After three years, less than half of all appointees (47.9\%) remain on the board of directors without attaining the role of CEO, which is reserved for $17.7 \%$ of appointees, as $34.4 \%$ of all appointees (roughly 1 in 3) depart or retire from the board. By the time five years have passed, almost half ( $49.5 \%$ ) of the (formerly) new employee appointees have either retired or departed and just over a quarter ( $26.7 \%$ ) are retained by the board still.

Table 2 presents descriptive statistics for new employee directors involved in CEO succession at one, three, and five year periods. Table 3 presents details about Exit at one, three, and five year periods. Table 4 presents details about retention as a non-CEO director at one, three, and five year periods. The data presented in Tables 2-4, are as of appointment. In each

[^7]table (2-4), observations representing less than $20 \%$ or more than $80 \%$ of the population are noted with bold italics.

One of the concerns when running logistic regressions is that an outcome is sufficiently infrequent as to make accurately estimating coefficients impossible. It appears that one-year outcomes of CEO succession and exit are the most likely to be adversely influenced by outcome infrequency. Fortunately, this does not appear to be a significant problem based on the outcomes for all periods analyzed. However, a different issue is also present. Looking at outcomes, there are characteristics that are infrequent, as well as, quite frequent with respect to a specific outcome. For characteristic data, this is an important issue. While frequency (or infrequency) of observations associated with a career outcome is not problematic in the sense that this is information, any characteristic present in less than $20 \%$ or more than $80 \%$ of these populations is likely to introduce estimation error in logits. To address this, tables note when a variable is not used due to this issue and identify characteristic variables where frequency or infrequency are an issue.

Looking at CEO Succession (Table 2), International Experience, Proxy Announcement, Vice Chairman, Chief Financial Officer, CEO is New, CEO Duality, and Regulated Industry all merit attention owing to their frequencies. At one extreme, CEO Duality, with frequency in excess of $80 \%$ in all three periods, does appear to be associated with new employee directors being named CEO. However, looking at Exit (Table 3) and Non-CEO Retention (Table 4) suggests that CEO Duality is both common amongst firms and normal prior to a succession event. Proxy Announcement, where the announcement date is also the proxy date, is rare in the case of CEO Succession (Table 2) and Non-CEO Retention (Table 4) candidates but common in the case of Exit (Table 3). Such a pattern is consistent with the idea that candidates for Exit are brought in during the din of other news related to proxies (as close to the cover of darkness as possible).

New employee directors who are Vice Chairmen appear less likely to be involved in CEO succession (Table 2) with Vice Chairmen remaining for a short period before exiting (Table $3 \&$ 4). International Experience appears to follow a similar pattern while CFOs are not involved in succession yet also stick around for a short period before exiting. At Regulated Industries, CEO Succession appears less likely than retention and exit, suggesting that CEO turnover may be less frequent and or employee directors are more common at these firms. Finally, when a firm has a
new CEO, not surprisingly, CEO succession events are infrequent, one-year and five-year exit are common, and retention at year one is less common. This suggests that boards in the shortterm keep their CEO, let non-successors depart, and retain non-CEO employee directors in advisory or future succession roles. ${ }^{12}$

With regard to Tables $3 \& 4$, titles of President and Chief Operating Officer (and their cousin Heir Apparent) appear to reduce Exit (and hence improve Retention) likelihood. This result is consistent with expectations that these titles are associated with CEO Succession.

Longer periods suffer from a slightly different type of problem. Specifically, as time elapses, firms exit due to mergers and acquisitions or data sufficiency problems (firms delist due to filing for bankruptcy and no longer have to file reports with the SEC) and hence drop out of the sample.

A sample selection issue commonly addressed by omission is whether financials and utilities are sufficiently dissimilar to industrial firms as to warrant their inclusion. In the context of this study, since we are examining market reactions to appointments of inside directors, and the influence of their experiences and titles on actual and potential career outcome, classical differences motivating exclusion are viewed as unlikely to play an obscuring role. However, the application of some discretion in specifications reflects the inclusion of independent variables of a financial nature, such as size, growth, and profitability that usually differ between industrials and financials and utilities.

## 4. Methodology

Using logistic regressions, this essay examines the determinants of new employee director career outcomes. Equation (1) is the specification applied for testing hypotheses related to career outcomes prediction. While the specification below is in terms of a solitary logistic regression, similar specifications for nested and multinomial logits are employed.

$$
\begin{equation*}
\text { Logit Outcome }_{i}(0,1)=\alpha+\beta\left(\text { Char }_{i}\right)+\beta\left(\text { Title }_{i}\right)+\beta\left(\text { Power }_{i}\right)+\beta\left(\text { Ind }_{i}\right)+\varepsilon \tag{1}
\end{equation*}
$$

[^8]where,
Outcome $_{\mathrm{i}}=$ CEO Succession, Retention (Non-CEO Succession), or Departure Char ${ }_{i}=$ New Insider's Characteristics (Age, Other Board Service, etc.) Title $_{i}=$ New Insider's Current Title (President, Vice Chairman, etc.) Power $_{\mathrm{i}}=$ CEO and Board Characteristics (CEO duality, \% of Outsiders, etc.) Ind $_{\mathrm{i}}=$ Firm Characteristics and Industry (Profitability, Growth, Utility, etc.)

The multinomial specifications uses retention as the default outcome and estimates CEO succession and departure. The nested logit specification assumes exit is determined first and elevation to CEO or retention second. ${ }^{13}$ Ordinary and step-wise regression results are not reported but are consistent with the results reported.

The specification for testing hypotheses relating to the market's reaction to director appointment, using actual career outcome and observed predictive factors, are below.

$$
\begin{align*}
& {\text { OLS Market } \operatorname{Return}_{i}=\alpha+\beta\left(\text { Actual }_{i}\right)+\beta\left(\text { Power }_{\mathrm{i}}\right)+\varepsilon}_{{\text {OLS Market } \operatorname{Return}_{\mathrm{i}}}=\alpha+\beta\left(\text { Char }_{\mathrm{i}}\right)+\beta\left(\text { Title }_{\mathrm{i}}\right)+\beta\left(\text { Power }_{\mathrm{i}}\right)+\beta\left(\text { Ind }_{\mathrm{i}}\right)+\varepsilon}{ }^{2} \tag{2a}
\end{align*}
$$

where,
Market $^{2}$ Return ${ }_{\mathrm{i}}=(\mathrm{T}-1$ to $\mathrm{T}+1),(\mathrm{T}=0$ to $\mathrm{T}+1)$
Actual $_{\mathrm{i}}=$ CEO Succession, Retention, or Departure $(0,1)$
Char ${ }_{i}=$ New Insider's Characteristics (Age, Other Board Service, etc.)
Title $_{i}=$ New Insider's Current Title (President, Vice Chairman, etc.)
Power $_{\mathrm{i}}=$ CEO and Board Characteristics (CEO duality, \% of Outsiders, etc.)
Ind $_{\mathrm{i}}=$ Firm Characteristics and Industry (Profitability, Growth, Utility, etc.)

Since a probability estimate of career outcome would use data at the time of appointment, all 245 observations can be used in the analysis of market returns since there is no reason to know which observations will drop out (due to mergers and acquisitions, going private transactions, and bankruptcies) and hence reduce the sample size in longer periods. Critical independent variables established using the logits are employed in the specification of (2b). ${ }^{14}$

Market reaction tests use Dodd and Warner's (1983) standard event study methodology centering on the date of the announcement of the new employee appointment to the board of directors. Specifically, a "market model" is estimated using return data during the period T-170 to T-41 (similar to Rosenstein and Wyatt, 1997). The excess return is defined as the prediction

[^9]error or the difference between the actual stock return and the estimated intercept ( $\alpha$ ) and the estimated slope ( $\beta$ ) times the actual market index return. Risk adjusted abnormal returns are calculated for an event window, T-20 to T+20. Testing of market reaction hypotheses examine cumulative abnormal returns from two windows: a three-day $(-1,+1)$ and a two-day $(0,+1)$. The market index used in the market model is the S\&P 500.

## 5. Results

Table 5 presents Market Reaction to Actual Career Outcome to establish the significance of the three Career Outcomes (CEO Succession, Exit, and non-CEO Retention). Tables 6, 7, \& 8 identify Predictors of Career Outcomes at each period (one, three, and five years). Table 9 reexamines Market Reaction with predictive variables (Predictors of Career Outcome) used in place of Actual Career Outcome.

## A. Market Reactions to Actual Career Outcomes (Table 5)

Panels A, B, and C of Table 5 estimate the influence of actual outcomes of CEO succession, exit (retirement or departure), and retention (respectively) of new employee directors for one, three, and five-year periods. The evidence suggests that controls, CEO is New, CEO Tenure, and CEO Age < 60 are significant in most cases, while Percentage of Outsiders, CEO Duality, Board Size, and Average Board Tenure are not significant (all but the first are omitted from the table). In terms of significance of estimates, CEO Age $<60$ leads, with CEO is New, and CEO Tenure following. However, it should be noted that with an average CEO tenure of about 10 years for Exit, 11 years for Retention, and 14 years for CEO Succession, that CEO Tenure on average contributes 70 to 100 basis points relative to the roughly 245 basis points of CEO is New and the 130 basis points of CEO Age $<60$.

With respect to Actual Career Outcomes, the evidence indicates that five-year CEO Succession contributes 232 to 239 basis points to the market reaction. Exit in the two-day window using the three and five-year outcome generate a negative 146 to 171 basis point reaction. Unlike Exit and Succession, which are significant at or very near standard levels, Retention results are more difficult to interpret. The three-year two-day window indicates that the reaction is positive at around 124 basis points, but the five-year three-day window indicates that the reaction is negative at around 110 basis points. It is plausible that retention reactions are
sensitive to duration (hence the sign reversal) but this may also reflect too few observations for year five and the relative weight of the outcome compared to other regressors.

To address the concern that the direction of causality in Table 5, namely that an actual future outcome determines market reactions today, might be reversed, the three-year specifications are used in a logit model with actual career outcome and abnormal market returns reversed. When using abnormal market returns as an explanatory variable, the implication is that future career outcomes reflect market reactions at appointment. The evidence on these tests are not reported in the tables. There is no evidence of significance with respect to returns on CEO succession, but there is evidence of significance $(\mathrm{T}=1.987)$ in the two-day window that a negative reaction increases departures and weaker evidence $(T=1.734)$ that a positive reaction increases retention.

The results suggest that markets do price future career outcomes for newly appointed employee directors and that it is not likely that market reactions drive (but may influence) future career outcomes.

## B. Prediction of Retention at One-Year (Table 6)

With CEO Succession and Exit constituting 23 of 245 and 29 of 245 observations, estimating via logit the role of predictors with respect to those outcomes is not possible. However, with Retention constituting 193 of 245 observations, we can look at what factors appear to influence that outcome.

Age, CFO, CEO Age < 60, and Percentage of Outsiders positively influence retention at one year. Evidence on Age suggests that the imperative (and the plausibility) to move up to CEO or out may subside as employees age. CFO retention seems to imply a supporting advisory role within the boardroom. CEO Age $<60$ suggests that younger CEOs and their boards are more likely to implement steps to prepare for succession events (with older CEOs having already done so) by bring on to board possible successors. An additional motivation may be to provide younger CEOs with advisors in the boardroom and directors access to other top management (which explains the Percentage of Outsiders result).

Only Other Board Service and Firm Size adversely influence retention. Other Board Service is likely indicative of suitability for CEO Succession either at the firm or alternatively (via Exit) externally. Firm Size suggests an inclination to eschew excessive employee
representation on the board of directors through ready access to more outsiders and possibly a higher quality pool of employee talent.

## C. Prediction of Career Outcome at Three-Years (Table 7)

CEO Duality positively influences CEO Succession and CEO Age < 60 negatively influences CEO Succession at significant levels. International Experience and Heir Apparent also positively influence CEO Succession but not at the same level of significance. These results suggest that if the CEO is ready depart (Age $>60$ ), then CEO Duality may lead to promotion of internal candidates for the CEO title or both the CEO and Chairman title.

CEO Duality and Board Size increase Exit likelihood and Replacement Director and Firm Size reduce Exit likelihood at significant levels. While Other Board Service increases Exit likelihood and Heir Apparent decreases Exit likelihood at lower levels of significance. The interpretation of these results is similar to CEO Succession. If succession events occur (associated with CEO Duality), then exit owing to constraints of Board Size and the eligibility of a departing director (Other Board Experience) seems likely. To the extent that a Replacement Director involves exit (in a prior period) of another employee director being addressed with an appointment, there is reason to argue that the board may hold seats open exclusively for employees (this may also be a function of Firm Size).

## D. Prediction of Career Outcome at Five-Years (Table 8)

Heir Apparent and International Experience increase CEO Succession likelihood at fiveyears. Officer and Director Shareholdings reduce CEO Succession likelihood at five-years. The Heir Apparent result is consistent with expectation but the International Experience result is new. Shareholdings of Officers and Directors likely are driven by CEO ownership, which in turn likely reduces CEO turnover. ROA and Regulated Industry are both negative influences on CEO Succession but at a weak level of significance.

Heir Apparent, Officer and Director Shareholdings, and Percentage of Outsiders decreases Exit while CEO Duality, Board Size, and International Experience increases Exit at five years. Weaker evidence on the negative influence of Average Board Tenure and Regulated Industry are also present. Regulated Industry suggest that CEO turnover may be less frequent at these firms, possibly due to the stability of these firms.

## E. Market Reaction Weights of Predictors of Career Outcome (Table 9)

While numerous variables are identified as predictors of Career Outcome, only President, Chief Operating Officer (COO), and ROA appear to be significant. Of the controls, Percentage of Outsiders appears to improve in significance while CEO Age < 60 declines. President as an indicator of future CEO Succession (and possibly Retention) contributes +276 basis points in the two-day window (but is not significant in the three-day window, where Percentage of Outsiders is approximately 240 basis points higher than in Table 5). COO reduces return by 162 basis points in the three-day window to 233 basis points in the two-day window. Since COO is positively associated with CEO Succession, this suggests a negative reaction to appointment of a Successor, which is inconsistent with the result of Table 5.

## 6. Conclusions

This paper identifies characteristics of new employee directors at appointment that influence career outcomes for new employee directors in one, three, and five-year periods. Evidence shown suggests that markets price new employee director appointments based on their actual career outcomes, including CEO succession. However, this result lacks strong support when using characteristics influential in predicting career outcomes. While alternative specifications using predictive characteristics may better support the evidence of market reactions, the possibility that market reactions to actual outcomes are spurious (although the evidence that causality is reversed is weak enough to rule that issue out).

Interestingly, all evidence is inconsistent with Rosenstein and Wyatt (1997) and their finding that the market reaction to the appointment of the actual future CEOs is significantly negative. Evidence on market reactions to actual outcomes does seem to support the hypothesis of negative reactions to Exit related appointments and positive reactions to Retention related appointments.

One plausible issue is that the prediction model may correctly capture who should be appointed CEO rather than who is appointed CEO. This phenomenon, for example, might stem from an appointee who should become the CEO departing the board to become the CEO of another company (rather than waiting to become the CEO at the first company), yet because of their qualities, they garner a positive reaction to their appointment which is attributed to
departure rather than appointment. Along these lines, the actual appointee to CEO may also be a candidate for departure by the predicted models and hence the negative reaction to their appointment.

Evidence on CEO Power is as follows: CEO Duality increases succession and departures, CEO Tenure does not appear to influence succession and departures, and CEO Age does appear to reduce succession but not influence departures. These results suggest that CEO Power arguments may not apply as strongly in the period under study. Further, evidence does not strongly suggest that board power (average tenure or outside blockholder) favorably influences retention. Only board size appears as a form of Board Power seems to play a role by increasing departures.

Firm performance does not clearly influence new employee director career outcome. Firm performance has no influence on Succession, Exit, or Retention of new employee directors. While poor (good) firm performance increases (decreases) CEO succession event probabilities it does not appear to influence a successor's likelihood. These results indicate that boards think in terms of CEO performance and firm performance as linked and related to succession but not to successors.

Evidence presented concurs with existing results that heir apparent status (defined here a little differently) does positively influence CEO succession. Further, additional evidence presented suggests that Vice Chairman and especially CFO are less favored in succession events. The evidence indicates that non-heir status is not necessarily a path to departure. This supports the idea that employee board members may not in fact be serving in a succession related role.

## Table 1 - Market Reactions by Career Outcomes for New Employee Director Appointments

Panels A, B, and C report career outcome frequency and market reaction for 245 new employee directors one, three, and five years after their board appointment. Career outcomes involving exit, retiring or departing, are combined under the title Total Exits (Retires or Departs). Omissions reflect observations lost due to data issues or mergers and acquisitions activity in future periods. The last two columns report mean cumulative abnormal market reactions over a three and two-day window. Reactions are not significant at relevant levels (comparing the mean to its standard deviation). Significance: * for $0.10,{ }^{* *}$ for 0.05 , and ${ }^{* * *}$ for 0.01

| Panel A. Career Outcomes After ONE Year |  | Abnormal Market Reactions $(\%)$ |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Becomes CEO | $\mathrm{N}=245$ | Three Days $(-1,+1)$ | Two Days $(0,+1)$ |  |
| $\quad$ Retire (Exits, Age > 60) | 23 | -0.2589 | -0.1121 |  |
| $\quad$ Depart (Exits, Age $<60$ ) | 2 |  |  |  |
| Total Exits (Retires or Departs) | 27 |  |  | 0.3234 |
| Retained by the Board (Does not exit) |  | 29 | 0.2703 | 0.2956 |
| Total | 193 | 0.4511 |  |  |
| Omissions due to data/M\&A (of 245) | 245 |  |  |  |
|  | 0 |  |  |  |


| Panel B. Career Outcomes After THREE Years |  | Abnormal Market Reactions (\%) |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Becomes CEO | $\mathrm{N}=192$ | Three Days $(-1,+1)$ | Three Days $(-1,+1)$ |  |
| $\quad$ Retire (Exits, Age > 60) | 34 | -0.2884 | -0.2536 |  |
| $\quad$ Depart (Exits, Age < 60) | 16 |  |  |  |
| Total Exits (Retires or Departs) | 50 |  |  | -0.9249 |
| Retained by the Board (Does not exit) |  | 66 |  | -0.2968 |
| Total | 92 | 0.7148 | 0.9134 |  |
| Omissions due to data/M\&A (of 245) | 192 |  |  |  |


| Panel C. Career Outcomes After FIVE Years |  | Abnormal Market Reactions (\%) |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Becomes CEO | $\mathrm{N}=180$ | Three Days ( $-1,+1$ ) | Three Days ( $-1,+1$ ) |  |
| $\quad$ Retire (Exits, Age > 60) | 43 | 1.5967 | 1.5435 |  |
| $\quad$ Depart (Exits, Age < 60) | 25 |  |  |  |
| Total Exits (Retires or Departs) | 64 |  |  |  |
| Retained by the Board (Does not exit) |  | 89 | -0.6452 |  |
| Total | 48 | -0.1040 | 0.3561 |  |
| Omissions due to data/M\&A (of 245) | 180 |  |  |  |

Table 2 - Descriptive Statistics for New Employee Directors Eventually Named CEO
This table reports descriptive statistics at appointment for new employee directors with the career outcome of becoming CEO after one, three, and five years. All appointments examined occur in non-succession event years. Appendix A discusses the definitions of variables. Heir Apparent is defined as a Chief Operating Officer or President who is also less than 56 years of age. Observations in bold and italic represent less than $20 \%$ or more than $80 \%$ of the population.
Significance: * for $0.10,{ }^{* *}$ for 0.05 , and $* * *$ for 0.01

|  | Named CEO After |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | ONE Year | THREE Years | FIVE Years |  |
| $\mathrm{N}=$ | 23 | 34 | 43 |  |

New Employee Director's Characteristics

| Age | 49.13 |
| :--- | ---: |
| Other Board Service | 10 |


| International Experience | $\mathbf{2}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | ---: | ---: | ---: |
| Shareholdings (\%) | $0.05 \%$ | $0.04 \%$ | $0.04 \%$ |
| Heir Apparent | 17 | 24 | 29 |
| Replacement Director | 5 | 10 | 15 |
| Proxy Announcement | $\mathbf{2}$ | $\mathbf{4}$ | $\mathbf{5}$ |

New Employee Director's Titles
President 16
Vice Chairman 5
23

Chief Operating Officer 13
Chief Financial Officer
0
CEO Characteristics

| CEO is New | $\mathbf{2}$ | $\mathbf{2}$ | $\mathbf{5}$ |
| :--- | ---: | ---: | ---: |
| CEO Tenure | 14.22 | 13.18 | 12.16 |
| CEO Age $<60$ | 6 | 13 | 22 |
| CEO Duality | $\mathbf{2 2}$ | $\mathbf{3 3}$ | $\mathbf{3 8}$ |

Board Characteristics

| Board Size | 13.70 | 13.12 | 13.37 |
| :--- | ---: | ---: | ---: |
| Percentage of Outsiders | $73.6 \%$ | $73.5 \%$ | $72.7 \%$ |
| Outside Blockholder | 14 | 23 | 29 |
| O\&D Shareholdings (\%) | $0.91 \%$ | $1.18 \%$ | $1.57 \%$ |
| Average Board Tenure | 8.21 | 8.00 | 7.85 |
|  |  |  |  |
| Firm Characteristics \& Industry | $4.5 \%$ | $4.5 \%$ |  |
| ROA | $11.4 \%$ | $16.1 \%$ | $4.0 \%$ |
| Growth | 26,710 | 20,608 | $18.8 \%$ |
| Firm Size | $\mathbf{5}$ | $\mathbf{5}$ | 19,267 |
| Regulated Industry |  |  | $\boldsymbol{8}$ |

Table 3 - Descriptive Statistics for New Employee Directors Eventually Exiting the Firm
This table reports descriptive statistics at appointment for new employee directors with the career outcome of exiting the firm after one, three, and five years. All appointments examined occur in non-succession event years. Appendix A discusses the definitions of variables. Heir Apparent is defined as a Chief Operating Officer or President who is also less than 56 years of age. Observations in bold and italic represent less than $20 \%$ or more than $80 \%$ of the population.
Significance: * for 0.10 , ** for 0.05 , and ${ }^{* * *}$ for 0.01

|  | EXITS Firm After |  |  |
| :---: | :---: | :---: | :---: |
|  | ONE Year | THREE Years | FIVE Years |
| $\mathrm{N}=$ | 29 | 66 | 89 |
| New Employee Director's Characteristics |  |  |  |
| Age | 50.93 | 52.83 | 52.52 |
| Other Board Service | 15 | 31 | 40 |
| International Experience | 8 | 7 | 16 |
| Shareholdings (\%) | 0.03\% | 0.16\% | 0.15\% |
| Heir Apparent | 7 | 11 | 13 |
| Replacement Director | 10 | 22 | 36 |
| Proxy Announcement | 8 | 17 | 21 |
| New Employee Director's Titles |  |  |  |
| President | 6 | 12 | 14 |
| Vice Chairman | 4 | 14 | 18 |
| Chief Operating Officer | 7 | 12 | 13 |
| Chief Financial Officer | 2 | 10 | 14 |
| CEO Characteristics |  |  |  |
| CEO is New | 6 | 13 | 20 |
| CEO Tenure | 9.79 | 9.30 | 10.36 |
| CEO Age < 60 | 20 | 47 | 61 |
| CEO Duality | 23 | 51 | 69 |
| Board Characteristics |  |  |  |
| Board Size | 14.76 | 14.09 | 14.07 |
| Percentage of Outsiders | 63.4\% | 67.2\% | 66.9\% |
| Outside Blockholder | 22 | 48 | 60 |
| O\&D Shareholdings (\%) | 5.59\% | 3.48\% | 3.36\% |
| Average Board Tenure | 6.42 | 6.75 | 7.09 |
| Firm Characteristics \& Industry |  |  |  |
| ROA | 2.6\% | 3.9\% | 4.4\% |
| Growth | 35.9\% | 37.4\% | 36.0\% |
| Firm Size | 11,947 | 12,874 | 12,831 |
| Regulated Industry | 11 | 19 | 25 |

Table 4 - Descriptive Statistics for New Employee Directors Remaining (as non-CEOs)
This table reports descriptive statistics at appointment for new employee directors with the career outcome of remaining (as non-CEO) after one, three, and five years. All appointments examined occur in non-succession event years. Appendix A discusses the definitions of variables. Heir Apparent is defined as a Chief Operating Officer or President who is also less than 56 years of age. Observations in bold and italic represent less than $20 \%$ or more than $80 \%$ of the population.
Significance: * for 0.10 , ${ }^{* *}$ for 0.05 , and ${ }^{* * *}$ for 0.01
REMAINS with Firm After

|  | ONE Year | THREE Years | FIVE Years |
| :---: | :---: | :---: | :---: |
| $\mathrm{N}=$ | 193 | 92 | 48 |
| New Employee Director's Characteristics |  |  |  |
| Age | 51.20 | 50.62 | 50.00 |
| Other Board Service | 68 | 26 | 13 |
| International Experience | 43 | 20 | 4 |
| Shareholdings (\%) | 0.41\% | 0.60\% | 1.08\% |
| Heir Apparent | 41 | 21 | 10 |
| Replacement Director | 75 | 43 | 21 |
| Proxy Announcement | 38 | 14 | 7 |
| New Employee Director's Titles |  |  |  |
| President | 42 | 21 | 10 |
| Vice Chairman | 32 | 8 | 3 |
| Chief Operating Officer | 37 | 17 | 7 |
| Chief Financial Officer | 31 | 16 | 11 |
| CEO Characteristics |  |  |  |
| CEO is New | 38 | 25 | 13 |
| CEO Tenure | 10.87 | 11.17 | 11.79 |
| CEO Age < 60 | 128 | 64 | 33 |
| CEO Duality | 149 | 61 | 29 |
| Board Characteristics |  |  |  |
| Board Size | 13.48 | 13.34 | 12.58 |
| Percentage of Outsiders | 68.0\% | 67.0\% | 66.6\% |
| Outside Blockholder | 128 | 54 | 28 |
| O\&D Shareholdings (\%) | 5.39\% | 6.61\% | 10.14\% |
| Average Board Tenure | 7.58 | 7.87 | 8.42 |
| Firm Characteristics \& Industry |  |  |  |
| ROA | 4.3\% | 4.9\% | 5.6\% |
| Growth | 34.2\% | 31.1\% | 35.1\% |
| Firm Size | 11,849 | 13,034 | 11,525 |
| Regulated Industry | 54 | 24 | 13 |

Table 5 - Market Reaction to Actual Career Outcomes over Time - Test of Hypotheses 4A - 4C Panels A-C report OLS regression results. Dependent variables are cumulative abnormal returns for three and two-day windows. Independent variable of interest is Actual Career Outcomes at three and five-years with Panels A-C examining CEO Succession, Exit, and Retention (as nonCEO) respectively. CEO and Board Characteristics are as of new employee director appointment and Appendix A discusses the definitions of these variables. At years 3 and 5, the number of director appointments is 192 and 180 respectively (given in each panel by year are the number of observations of each specific outcome). Estimates are calculated using a heteroskedasticity-consistent covariance matrix. P-values less than 0.20 are in parentheses. Coefficient estimates for CEO Duality, Board Size, and Average Board Tenure are not significant and omitted.

| PANEL A. CEO Succession | Abnormal Market Returns |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Three-Day Window (-1,+1) |  | Two-Day Window (0,+1) |  |
| New Employee Director Career Outcome: | 3-Year | 5-Year | 3-Year | 5-Year |
| Becomes CEO Obs $=34 \& 43$ for years $3 \& 5$ | 0.0008 | $\begin{gathered} 0.0232 \\ (0.056) \end{gathered}$ | 0.0021 | $\begin{gathered} 0.0239 \\ (0.032) \end{gathered}$ |
| CEO Characteristics |  |  |  |  |
| CEO is New | 0.0250 | 0.0279 | 0.0189 | 0.0222 |
|  | (0.087) | (0.074) | (0.153) | (0.110) |
| CEO Tenure | 0.0007 | 0.0009 | 0.0007 | 0.0008 |
|  | (0.143) | (0.086) | (0.165) | (0.094) |
| CEO Age < 60 | $\begin{aligned} & 0.0134 \\ & (0.074) \end{aligned}$ | $\begin{gathered} 0.0196 \\ (0.016) \end{gathered}$ | $\begin{aligned} & 0.0105 \\ & (0.164) \end{aligned}$ | $\begin{aligned} & 0.0171 \\ & (0.035) \end{aligned}$ |
| Board Characteristics |  |  |  |  |
| Percentage of Outsiders | 0.0279 | 0.0207 | 0.0175 | 0.0066 |
| Constant | $\begin{array}{r} -0.0335 \\ (0.145) \\ \hline \end{array}$ | $\begin{array}{r} -0.0335 \\ (0.155) \\ \hline \end{array}$ | -0.0150 | -0.0160 |
| PANEL B. Exit | Abnormal Market Returns |  |  |  |
|  | Three-Day Window (-1,+1) |  | Two-Day Window (0,+1) |  |
| New Employee Director Career Outcome: | 3-Year | 5-Year | 3-Year | 5-Year |
| Exits the Firm Obs $=66 \& 89$ for years $3 \& 5$ | -0.0076 | -0.0092 | $\begin{gathered} -0.0146 \\ (0.054) \end{gathered}$ | $\begin{gathered} \hline-\mathbf{0 . 0 1 7 1} \\ (0.041) \end{gathered}$ |
| CEO Characteristics |  |  |  |  |
| CEO is New | 0.0246 | 0.0258 | 0.0179 | 0.0204 |
|  | (0.088) | (0.090) | (0.162) | (0.133) |
| CEO Tenure | 0.0007 | 0.0008 | 0.0006 | 0.0007 |
|  | (0.159) | (0.141) | (0.194) | (0.153) |
| CEO Age < 60 | $\begin{aligned} & 0.0138 \\ & (0.064) \end{aligned}$ | $\begin{aligned} & 0.0179 \\ & (0.024) \end{aligned}$ | $\begin{aligned} & 0.0111 \\ & (0.131) \end{aligned}$ | $\begin{aligned} & 0.0159 \\ & (0.042) \end{aligned}$ |
| Board Characteristics |  |  |  |  |
| Percentage of Outsiders | 0.0259 | 0.0272 | 0.0137 | 0.0093 |
| Constant | $\begin{array}{r} -0.0311 \\ (0.179) \\ \hline \end{array}$ | -0.0317 | -0.0103 | -0.0104 |
| PANEL C. Retention | Abnormal Market Returns |  |  |  |
|  | Three-Day Window (-1,+1) |  | Two-Day Window (0,+1) |  |
| New Employee Director Career Outcome: | 3-Year | 5-Year | 3-Year | 5-Year |
| Retained (but not the CEO) Obs $=92 \& 48$ for years $3 \& 5$ | 0.0066 | $\begin{gathered} -0.0110 \\ (0.192) \end{gathered}$ | $\begin{aligned} & \hline 0.0124 \\ & (0.092) \end{aligned}$ | -0.0014 |
| CEO Characteristics |  |  |  |  |
| CEO is New | 0.0239 | 0.0204 | 0.0167 | 0.0199 |
|  | (0.091) | (0.090) | (0.186) | (0.153) |
| CEO Tenure | 0.0007 | 0.0008 | 0.0005 | 0.0007 |
|  | (0.190) | (0.109) |  | (0.153) |
| CEO Age < 60 | $\begin{array}{r} 0.0126 \\ (0.089) \end{array}$ | $\begin{aligned} & 0.0175 \\ & (0.027) \end{aligned}$ | 0.0088 | $\begin{aligned} & 0.0147 \\ & (0.063) \end{aligned}$ |
| Board Characteristics |  |  |  |  |
| Percentage of Outsiders | 0.0280 | $\begin{aligned} & 0.0325 \\ & (0.165) \end{aligned}$ | 0.0177 | 0.0183 |
| Constant | $\begin{array}{r} -0.0379 \\ (0.105) \\ \hline \end{array}$ | -0.0292 | -0.0233 | -0.0179 |

Table 6 - Predictors of Retention at 1-Year for New Employee Directors
The table below presents the logistic estimation of retention amongst new employee directors one-year after appointment. The dependent variable is a dummy variable representing retention on the board ( 193 observations out of 245 appointments). Explanatory variable values are at the time of appointment of the new employee director. Appendix A discusses how the explanatory variables are defined.

| Explanatory Variable ( $\mathrm{N}=245$ ) | Retention |  | Retention | P-Value |
| :---: | :---: | :---: | :---: | :---: |
|  | $\beta$ |  |  |  |
| New Insider's Characteristics |  |  |  |  |
| Age | 0.0814 | ** | 0.0404 | 0.044 |
| Other Board Service | -0.7835 | * | 0.4027 | 0.052 |
| International Experience | 0.1251 |  | 0.4429 | 0.778 |
| Shareholdings (\%) | 3.6146 |  | 2.4481 | 0.140 |
| Heir Apparent | -0.7934 |  | 0.8784 | 0.366 |
| Replacement Director | 0.1838 |  | 0.4413 | 0.677 |
| Proxy Announcement | -0.6002 |  | 0.5109 | 0.240 |
| New Insider's Current Title |  |  |  |  |
| President | -0.1829 |  | 0.8242 | 0.824 |
| Vice Chairman | -0.0976 |  | 0.5633 | 0.862 |
| Chief Operating Officer | 0.0510 |  | 0.6070 | 0.933 |
| Chief Financial Officer | 1.8477 | ** | 0.8685 | 0.033 |
| CEO Characteristics |  |  |  |  |
| CEO is New | -0.2020 |  | 0.5848 | 0.730 |
| CEO Tenure | 0.0030 |  | 0.0362 | 0.934 |
| CEO Age < 60 | 0.9809 | ** | 0.4570 | 0.032 |
| CEO Duality | -0.7323 |  | 0.6027 | 0.224 |
| Board Characteristics |  |  |  |  |
| Board Size | -0.0635 |  | 0.0694 | 0.360 |
| Percentage of Outsiders | 2.9121 | * | 1.6840 | 0.084 |
| Outside Blockholder | -0.3479 |  | 0.4513 | 0.441 |
| O \& D Shareholdings (\%) | 0.0080 |  | 0.0206 | 0.696 |
| Average Board Tenure | 0.1266 |  | 0.0978 | 0.195 |
| Firm Characteristics \& Industry |  |  |  |  |
| ROA | 2.8718 |  | 4.0014 | 0.473 |
| Growth | 0.5400 |  | 0.6819 | 0.428 |
| Firm Size (log of Sales) | -1.0166 | ** | 0.4585 | 0.027 |
| Regulated Industry | -0.3472 |  | 0.5011 | 0.488 |
| Constant | -0.5480 |  | 3.0814 | 0.859 |
| Maddala R-Squared | 0.1907 |  |  |  |
| Correct Prediction | 80.00\% |  |  |  |
| Goodness of Fit ( $\chi^{2}, 24$ d.f.) | 51.8256 | *** |  | 0.000 |
| Significance: * for $0.10, * *$ for 0.05 , and $* * *$ for 0.01 |  |  |  |  |

Table 7 - Predictors of Succession or Exit at 3-Years for New Employee Directors
The table below presents the logistic estimation of CEO Succession and Exit amongst new employee directors three-years after appointment. The dependent variable is a dummy variable representing CEO Succession ( 34 observations out of 192 appointments) and Exit ( 66 observations out of 192 appointments). Explanatory variable values are at the time of appointment of the new employee director. The first two columns present the results of a nested logit (exit or retain, then CEO or retain). The last two columns present the results of a multinomial logit. Appendix A discusses how the explanatory variables are defined.

| Employee Career Outcomes | Nested Logit |  | Multinomial Logit |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Named CEO | Exits | Named CEO | Exits |
| New Insider's Characteristics |  |  |  |  |
| Age | -0.0399 | 0.0499 | -0.0358 | 0.0412 |
| Other Board Service | 0.4843 | 0.5677 | 0.6626 | 0.7249* |
| International Experience | 1.4280* | -0.3416 | 0.4689 | -0.1693 |
| Shareholdings (\%) | -5.2913 | -0.0184 | -4.2479 | -0.0064 |
| Heir Apparent | 2.0889 | -1.5894* | 2.8929* | -0.8872 |
| Replacement Director | 0.1193 | -0.7906** | -0.3658 | -0.8051** |
| Proxy Announcement | CV | CV | CV | CV |
| New Insider's Current Title |  |  |  |  |
| President | 0.3658 | -0.1422 | -0.8396 | -0.2613 |
| Vice Chairman | CV | CV | CV | CV |
| Chief Operating Officer | 0.0666 | 0.7350 | -0.1756 | 0.8169 |
| Chief Financial Officer | CV | CV | CV | CV |
| CEO Characteristics |  |  |  |  |
| CEO is New | CV | CV | CV | CV |
| CEO Tenure | -0.0199 | -0.0298 | -0.0271 | -0.0398 |
| CEO Age < 60 | -1.4342** | 0.2159 | -1.3102** | -0.2215 |
| CEO Duality | 2.6298* | 0.9403* | 2.3122** | 1.2411** |
| Board Characteristics |  |  |  |  |
| Board Size | 0.0951 | 0.1493** | 0.1285 | 0.1696** |
| Percentage of Outsiders | -3.5473 | -1.1337 | -2.6361 | -1.5800 |
| Outside Blockholder | 0.6137 | 0.6288 | 0.8417 | 0.7607 |
| O \& D Shareholdings (\%) | -0.1333 | -0.0160 | -0.0912 | -0.0263 |
| Average Board Tenure | 0.0060 | -0.1394 | 0.0550 | -0.1274 |
| Firm Characteristics \& Industry |  |  |  |  |
| ROA | 6.4552 | 2.5199 | 2.1935 | 3.7684 |
| Growth | -0.3589 | 0.2341 | -1.5779 | 0.1123 |
| Firm Size (log of Sales) | -0.2808 | -0.8818* | -0.5627 | -1.1095** |
| Regulated Industry | -0.5174 | -0.1322 | -1.1787 | -0.4382 |
| Constant | 0.3783 | -0.6469 | 1.0446 | 0.8947 |
| Maddala R-Squared | 0.370 | 0.208 |  |  |
| Correct Prediction \% | 86.5\% | 74.5\% |  |  |
| Goodness of Fit ( $\chi^{2}, 20$ d.f.) | 58.23*** | 44.75*** | 102.5*** |  |
| Hausman Test of IIA ( $\chi^{2}, 13$ d.f.) |  |  |  |  |
| Significance: * for $0.10, * *$ for 0.0 | ** for 0.01 |  |  |  |

Table 8 - Predictors of Succession or Exit at 5-Years for New Employee Directors
The table below presents the logistic estimation of CEO Succession and Exit amongst new employee directors five-years after appointment. The dependent variable is a dummy variable representing CEO Succession (43 observations out of 180 appointments) and Exit (89 observations out of 180 appointments). Explanatory variable values are at the time of appointment of the new employee director. The first two columns present the results of a nested logit (exit or retain, then CEO or retain). The last two columns present the results of a multinomial logit. Appendix A discusses how the explanatory variables are defined.

| Explanatory Variable ( $\mathrm{N}=180$ ) | $\begin{array}{r} \text { CEO } \\ \text { Nested } \end{array}$ | Exits Nested | $\begin{aligned} & \text { CEO } \\ & \text { MNL } \end{aligned}$ | Exits MNL |
| :---: | :---: | :---: | :---: | :---: |
| New Insider's Characteristics |  |  |  |  |
| Age | -0.0437 | 0.0422 | -0.0233 | 0.0261 |
| Other Board Service | 0.3430 | 0.3780 | 0.1678 | 0.3933 |
| International Experience | 2.5343** | 0.5319 | 1.7260** | 1.6457** |
| Shareholdings (\%) | -3.2350 | -0.0508 | -3.1834 | -0.0391 |
| Heir Apparent | 2.8688*** | -1.5949*** | 2.2028*** | -0.3595 |
| Replacement Director | 0.7254 | -0.3376 | 0.0512 | -0.3959 |
| Proxy Announcement | 0.3019 | 0.4977 | 0.1250 | 0.6606 |
| New Insider's Current Title |  |  |  |  |
| President | CV | CV | CV | CV |
| Vice Chairman | CV | CV | CV | CV |
| Chief Operating Officer | CV | CV | CV | CV |
| Chief Financial Officer | CV | CV | CV | CV |
| CEO Characteristics |  |  |  |  |
| CEO is New | CV | CV | CV | CV |
| CEO Tenure | -0.0043 | -0.0193 | -0.0042 | -0.0271 |
| CEO Age < 60 | -0.2551 | 0.1831 | -0.3270 | -0.0430 |
| CEO Duality | 0.5758 | 1.0825* | 1.3445 | 1.6113*** |
| Board Characteristics |  |  |  |  |
| Board Size | 0.1180 | 0.1309* | 0.1891* | 0.1922** |
| Percentage of Outsiders | -5.3619 | -2.3894 | -3.2311 | -4.2036** |
| Outside Blockholder | -0.6233 | 0.2562 | 0.2712 | 0.1285 |
| O \& D Shareholdings (\%) | -0.1096* | -0.0325 | -0.1001** | -0.0626*** |
| Average Board Tenure | 0.0247 | -0.1738* | -0.0196 | -0.1842* |
| Firm Characteristics \& Industry |  |  |  |  |
| ROA | -12.2820 | -0.3824 | -12.2920* | -6.1498 |
| Growth | -1.1239 | 0.2228 | -0.5043 | 0.0056 |
| Firm Size (log of Sales) | 0.8673 | -0.6102 | -0.0457 | -0.7406 |
| Regulated Industry | -0.5418 | -0.3315 | -1.3975* | -1.0516* |
| Constant | 0.4308 | 0.9144 | 0.5783 | 3.6312 |
| Maddala R-Squared | 0.449 | 0.259 |  |  |
| Correct Prediction \% | 84.6\% | 70.6\% |  |  |
| Goodness of Fit ( $\chi^{2}, 19$ d.f.) | 54.28*** | 53.92*** | 110.9*** |  |
| Hausman Test of IIA ( $\chi^{2}, 13$ d.f.) |  |  |  |  |
| Significance: * for $0.10,{ }^{* *}$ for 0.05 , and ${ }^{* * *}$ for 0.01 |  |  |  |  |
| $\mathrm{CV}=$ critical variable, omitted du | equency in the | sample (see text | scussion of the | variable). |

Table 9 - Market Reaction Weights of Predictors of Career Outcome
The table below reports the results of OLS regressions. Dependent variables are cumulative abnormal returns for a three-day window and twoday window. The first five independent variables listed (CEO and Board Characteristics) are carry over from Table 5, where they are estimated in conjunction with actual career outcomes (one-year period are not estimated in Table 5 and actual outcome are not used in the table below). Specifications by year differ due to differing independent variables identified as influential in career outcome over a one, three, or five year interval (from Tables 6-8). For example, age, new insider's shareholdings, and growth are not included in any specifications based on Tables 6-8 results. The number of new employee director appointments is 245 . Characteristics are observed at the time of new employee director appointment. Estimation uses a heteroskedasticity-consistent covariance matrix. Appendix A discusses how the explanatory variables are defined. P -values less than 0.20 are in parentheses.

|  | Abnormal Market Returns |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Three-Day Window (-1,+1) |  |  | Two-Day Window (0,+1) |  |  |
|  | 1-Year | 3-Year | 5-Year | 1-Year | 3 -Year | 5-Year |
| CEO Characteristics |  |  |  |  |  |  |
| CEO is New | 0.0207 | 0.0242 | 0.0212 | 0.0160 | 0.0165 | 0.0144 |
|  | (0.074) | (0.041) | (0.098) | (0.120) | (0.125) |  |
| CEO Tenure | 0.0004 | 0.0003 | 0.0004 | $\begin{aligned} & 0.0005 \\ & (0.188) \end{aligned}$ | 0.0004 | 0.0004 |
| CEO Age < 60 | 0.0075 | 0.0068 | 0.0085 | 0.0081 | 0.0071 | $\begin{aligned} & 0.0090 \\ & (0.179) \end{aligned}$ |
| Board Characteristics |  |  |  |  |  |  |
| Percentage of Outsiders | 0.0274 | 0.0316 | $\begin{aligned} & 0.0443 \\ & (0.083) \end{aligned}$ | 0.0005 | 0.0048 | 0.0136 |
| Prediction Factors |  |  |  |  |  |  |
| New Insider's Characteristics |  |  |  |  |  |  |
| Other Board Service | -0.0011 | -0.0006 |  | -0.0019 | -0.0008 |  |
| International Experience |  | -0.0003 | -0.0001 |  | 0.0001 | 0.0008 |
| Heir Apparent |  | -0.0062 | -0.0060 |  | -0.0013 | -0.0141 |
| Replacement Director |  | -0.0023 |  |  | 0.0023 |  |
| Proxy Announcement |  | 0.0053 |  |  | 0.0039 |  |
| New Insider's Current Title |  |  |  |  |  |  |
| President |  |  | 0.0178 |  |  | $\begin{aligned} & 0.0276 \\ & (0.058) \end{aligned}$ |
| Vice Chairman |  | -0.0099 | -0.0083 |  | -0.0106 | -0.0078 |
| Chief Operating Officer |  |  | -0.0233 |  |  | -0.0162 |
|  |  |  | (0.019) |  |  | (0.095) |
| Chief Financial Officer | 0.0050 | 0.0035 | 0.0025 | -0.0035 | -0.0043 | -0.0040 |
| Additional CEO Characteristics |  |  |  |  |  |  |
| CEO Duality |  | 0.0062 | 0.0040 |  | 0.0025 | 0.0005 |
| Additional Board Characteristics |  |  |  |  |  |  |
| Board Size |  | 0.0005 | 0.0005 |  | 0.0002 | 0.0003 |
| Outside Blockholder |  |  | -0.0028 |  |  | -0.0048 |
| O \& D Shareholdings (\%) |  |  | 0.0370 |  |  | 0.0480 |
| Average Board Tenure |  |  | -0.0001 |  |  | 0.0004 |
| Firm Characteristics \& Industry |  |  |  |  |  |  |
| ROA |  |  | $\begin{gathered} -0.1214 \\ (0.155) \end{gathered}$ |  |  | $\begin{gathered} -0.1366 \\ (0.056) \end{gathered}$ |
| Firm Size (log of Sales) | -0.0051 | -0.0051 |  | -0.0051 | -0.0048 |  |
| Regulated Industry |  |  | 0.0015 |  |  | 0.0013 |
| Constant | -0.0089 | -0.0185 | $\begin{aligned} & -0.0406 \\ & (0.158) \end{aligned}$ | -0.0094 | 0.0016 | -0.0178 |
| R-Squared | 0.0325 | 0.0415 | 0.0695 | 0.0273 | 0.0359 | 0.0777 |

## Appendix A. Variable Type, Definition, and Data Source

| New Insider Characteristics | Type | Definition | Data Source |
| :---: | :---: | :---: | :---: |
| Age | Integer | Time since reported birth (in years) | Proxy |
| Other Board Service | $(1,0)$ | Current service on another corporate board | Proxy |
| International Experience | $(1,0)$ | Current or prior service as an employee abroad | Proxy |
| Shareholdings | Cont. | Percentage ownership of the firm | Proxy |
| Heir Apparent | $(1,0)$ | Serves the firm as COO or President and is younger than 56 years of age | Proxy |
| Replacement Director | $(1,0)$ | Any director appointed at the time of the departure of an existing director | Proxy |
| Proxy Date Appointment | $(1,0)$ | Appointment date is also the proxy filing date | Proxy |
| New Insider's Current Title | Type | Definition | Data Source |
| Vice Chairman | $(1,0)$ | Title is conferred to director at appointment* | Proxy |
| President | $(1,0)$ | Director bears or receives this title at appointment | Proxy |
| Chief Financial Officer | $(1,0)$ | Director bears or receives this title at appointment | Proxy |
| Chief Operating Officer | $(1,0)$ | Director bears or receives this title at appointment | Proxy |
| CEO Characteristics | Type | Definition | Data Source |
| CEO is New | $(1,0)$ | Director appointment occurs within a year of the appointment of the current CEO | Proxy |
| CEO Tenure | Integer | Years since the appointment of the CEO | Proxy |
| CEO Age < 60 Years | $(1,0)$ | CEO's age is less than 60 years | Proxy |
| CEO Duality | $(1,0)$ | Chairman of the Firm serves as CEO | Proxy |
| Board Characteristics | Type | Definition | Data Source |
| Board Size | Integer | Total number of directors on the board | Proxy |
| Percentage of Outsiders | Cont. | Proportion of outside directors to all directors | Proxy |
| Outside Blockholder | $(1,0)$ | A non-affiliated shareholder controls 5\% of shares | S Proxy |
| O \& D Shareholdings | Cont. | Total shares controlled by officers \& directors | Proxy |
| Average Board Tenure (Years) | Cont. | Average tenure of all directors on the board | Proxy |
| Firm Characteristics \& Industry | Type | Definition | Data Source |
| ROA | Cont. | Average Return On Assets over the last 2 years | 10K |
| Growth | Cont. | Cumulative change in Sales over the last 2 years | 10K |
| Firm Size | Cont. | Annual sales (log or in millions) | 10K |
| Regulated Industry | $(1,0)$ | Firm is in banking, insurance, or brokerage Yah or is a utility in water, natural gas, or elec | hoo Profile ctricity |

* At the time of appointment, the new director cannot currently have the title of Vice Chairman, a board membership based title. However, at the announcement of the appointment, a board can also announce that the new employee director will serve as the Vice Chairman of the firm.


## Appendix B. Summary Data - New Employee Directors versus New CEO Directors

The table below reports summary data at the time of the appointment for 245 new employee director appointments that occur in non-succession event years and for 89 new employee CEO appointments during the period 1997 to 2002. New CEO's current titles reflect titles held after promotion to CEO. Parentheses contain proportions relative to the sample size (N). Appendix A discusses how variables are defined. Significance: $*$ for $0.10,{ }^{* *}$ for 0.05 , and ${ }^{* * *}$ for 0.01

| Summary Data | New Employees | New CEOs | Differences |
| :---: | :---: | :---: | :---: |
| $\mathrm{N}=$ | 245 | 89 |  |
| New Insider's Characteristics |  |  |  |
| Age ( $\mu$ ) | 50.98 | 50.80 | $\mathrm{t}=0.230$ |
| Standard Deviation Age ( $\sigma$ ) | 6.33 | 6.27 |  |
| Other Board Service | 93 | 44 | $\mathrm{z}=1.760^{*}$ |
| International Experience | 57 | 14 | $\mathrm{z}=1.338$ |
| Shareholdings (\% in basis points) ( $\mu, \sigma$ ) | 34, 246 |  |  |
| Heir Apparent (COO or Pres. < 56) | 65 |  |  |
| Founding Family Member | 8 |  |  |
| Replacement Director | 90 | 52 | $\mathrm{z}=3.421^{* * *}$ |
| New Insider's Current Title |  |  |  |
| President | 64 | 59 | $\mathrm{z}=6.601^{* * *}$ |
| Vice Chairman | 41 | 3 | $\mathrm{z}=3.009^{* * *}$ |
| Chief Operating Officer | 57 | 4 | $\mathrm{z}=3.767$ *** |
| Chief Financial Officer | 33 | 1 | $\mathrm{z}=3.095^{* * *}$ |
| SVP, EVP, CAO, CTO or Division CEO | 124 | 1 | $\mathrm{z}=8.135^{* * *}$ |
| CEO \& Board Characteristics |  |  |  |
| CEO is New at Appointment | 46 |  |  |
| CEO Tenure on Board (<5 Years) | 109 |  |  |
| CEO Tenure on Board ( $\mu$ ) | 11.05 |  |  |
| Std Dev. of CEO Tenure on Board ( $\sigma$ ) | 8.40 |  |  |
| CEO Age (<60) | 154 | 82 | $\mathrm{z}=5.058 * * *$ |
| CEO is also Chairman | 194 | 36 | $\mathrm{z}=6.624^{* * *}$ |
| Board Size ( $\mu$ ) | 13.65 | 10.98 | $\mathrm{t}=6.479 * * *$ |
| Std Dev. of Board Size ( $\sigma$ ) | 3.45 | 2.97 |  |
| Percentage of Outsiders ( $\mu$ ) | 68.0\% | 76.2\% | $\mathrm{t}=4.908^{* * *}$ |
| Std Dev. of Percentage of Outsiders ( $\sigma$ ) | 13.5\% | 13.5\% |  |
| Officer or Director holds a Block (5\%) | 36 |  |  |
| Outside Shareholder holds a Block (5\%) | 164 |  |  |
| O\&D Shareholdings (\% in bp) ( $\mu$ ) | 499 |  |  |
| Std Dev. of O\&D Shareholdings ( $\sigma$ ) | 1135 |  |  |
| Less Than Average Board Tenure ( $\mu=7.5$ ) | 115 | 48 | $\mathrm{z}=1.006$ |
| Average Board Tenure ( $\mu$ ) | 7.50 | 7.36 | $\mathrm{t}=0.386$ |
| Std Dev. of Average Board Tenure ( $\sigma$ ) | 2.75 | 3.39 |  |
| Firm Characteristics \& Industry |  |  |  |
| Profitability (Avg. 2YR ROA) ( $\mu$ ) | 4.1\% | 3.7\% | $\mathrm{t}=0.569$ |
| Median of Profitability (median) | 3.3\% | 3.6\% |  |
| Std Dev. of Profitability ( $\sigma$ ) | 5.3\% | 6.7\% |  |
| Firm Growth (2YR Cum. Sales) ( $\mu$ ) | 32.3\% | 7.2\% | $\mathrm{t}=4.918 * * *$ |
| Median of Firm Growth (median) | 21.4\% | 5.6\% |  |
| Std Dev. of Firm Growth ( $\sigma$ ) | 45.3\% | 26.5\% |  |
| Firm Size (Sales, millions) ( $\mu$ ) | 13,255 | 16,073 | $\mathrm{t}=1.000$ |
| Std Dev. of Firm Size ( $\sigma$ ) | 20,909 | 27,248 |  |
| Financials | 59 | 11 | $\mathrm{z}=2.175^{* *}$ |
| Utilities | 10 | 6 | $\mathrm{z}=0.717$ |
| "Industrials" (Non-Financial/Utility) | 176 | 72 | $\mathrm{z}=1.533$ |

Appendix C - Market Reaction to New Employee Characteristics - Specification of Hypo. 1 Below are OLS regression results using a heteroskedasticity-consistent covariance matrix. The dependent variable is a cumulative abnormal return with a window that varies by specification. Explanatory variable values are at the time of appointment of the new employee director. Abnormal returns are risk adjusted using a standard market model methodology. Appendix A discusses how the explanatory variables are defined.

| Explanatory Variable | Abnormal Market Returns |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | T-1 to T=0 | T=0 to T+1 | T-1 to T+1 | T-1 to T+5 | $\mathrm{T}=0$ to $\mathrm{T}+5$ |
| Number of Observations | 245 | 245 | 245 | 245 | 245 |
| New Insider's Characteristics |  |  |  |  |  |
| Age | 0.001 | 0.001 | 0.001 | 0.001 | 0.000 |
| Other Board Service | 0.001 | 0.001 | 0.001 | -0.009 | -0.008 |
| International Experience | -0.003 | -0.002 | -0.002 | -0.011 | -0.004 |
| Shareholdings (\% in basis points) | 0.001 | -0.003*** | -0.003*** | 0.001 | -0.001 |
| Heir Apparent (COO or Pres. < 56) | -0.003 | -0.015 | -0.007 | -0.011 | -0.012 |
| Founding Family Member | -0.009 | -0.003 | 0.009 | -0.039 | -0.032 |
| Replacement Director | 0.011* | 0.005 | 0.001 | 0.019* | 0.021** |
| Proxy Date Appointment | 0.005 | 0.001 | 0.003 | 0.002 | 0.002 |
| New Insider's Current Title |  |  |  |  |  |
| President | 0.002 | 0.018 | 0.010 | 0.032 | 0.030 |
| Vice Chairman | -0.011 | -0.017* | -0.016 | 0.001 | 0.000 |
| Chief Operating Officer | -0.014 | -0.021** | -0.028*** | -0.034** | -0.032** |
| Chief Financial Officer | 0.018 | -0.004 | 0.004 | 0.022 | 0.021 |
| SVP, EVP, CAO, CTO or Div. CEO | -0.007 | -0.017** | -0.014 | -0.012 | -0.009 |
| CEO \& Board Characteristics |  |  |  |  |  |
| CEO is New at Appointment | 0.010 | 0.018* | 0.029** | -0.009 | -0.015 |
| CEO Tenure on Board (<5 Years) | -0.018 | -0.003 | -0.010 | -0.018 | -0.011 |
| CEO Tenure on Board | 0.001 | 0.001 | 0.001 | 0.001 | 0.000 |
| CEO Age (<60) | 0.007 | 0.008 | 0.008 | 0.005 | 0.004 |
| CEO is also Chairman | 0.007 | 0.003 | 0.005 | -0.007 | -0.014 |
| Board Size | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| Percentage of Outsiders | -0.002 | 0.017 | 0.048* | -0.014 | -0.001 |
| O or D Block (5\%) Dummy | 0.029 | -0.001 | -0.001 | 0.043 | 0.032 |
| Outside Block (5\%) Dummy | 0.002 | -0.006 | -0.004 | -0.010 | -0.009 |
| O \& D Shareholdings (\% in bp) | 0.001 | 0.001 | 0.001 | -0.001 | -0.001 |
| Less Than Average Board Tenure | 0.006 | -0.008 | -0.015 | 0.026* | 0.024 |
| Average Board Tenure | 0.001 | -0.001 | -0.003 | 0.005 | 0.007* |
| Firm Characteristics \& Industry |  |  |  |  |  |
| Profitability (Avg. 2YR ROA) | 0.011 | -0.123 | -0.104 | -0.071 | -0.107 |
| Firm Growth (2YR Sales) | -0.006 | -0.004 | -0.005 | -0.001 | 0.010 |
| Firm Size (log of Sales) | 0.012** | 0.001 | 0.001 | 0.022** | 0.025*** |
| Financial Dummy | 0.005 | 0.003 | 0.006 | 0.004 | 0.002 |
| Utility Dummy | 0.008 | 0.001 | -0.004 | -0.014 | -0.023 |
| Constant | -0.073 | 0.015 | 0.017 | -0.123 | -0.127 |
| R-Squared | 0.144 | 0.112 | 0.106 | 0.133 | 0.136 |

Significance (p-values): * for $0.10, * *$ for 0.05 , and ${ }^{* * *}$ for 0.01 or lower.

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[^0]:    ${ }^{1}$ Previously titled "Career Outcomes of New Employee Directors: Board Service Role and Market Reaction to Appointment"

[^1]:    ${ }^{2}$ Previous literature (Cannella and Shen, 2001, and Zhang and Rajagopalan, 2003) defines heir apparent as the President or Chief Operating Officer (COO) of the firm assuming that this insider is five or more years younger than the CEO. By this definition, it is possible for a firm not to have an heir apparent.
    This paper uses a slightly modified definition of heir apparent. Specifically, this paper defines heirs apparent as being appointed to the board, younger than 56 years of age, and having the title of either COO or President (or both). Requiring service on the board of directors improves the collection and the quality of biographical data. But perhaps more importantly, since the sample firms analyzed are mostly large public companies, employees serving as directors are elevated above other employees and information, for consumption by markets, regarding these employees should be more transparent due to their elevated (and regulated or at least legally liable) position. Requiring heirs apparent to be 10 years younger than a common mandatory retirement age of 65 at appointment serves two purposes. First, the choice eliminates definitional dependence on the current CEO's age, which in the analysis we control for separately, and, secondly, the choice reduces the likelihood that an heir apparent is misidentified as plausible despite obvious proximity to retirement when the current CEO is over 65 years of age. ${ }^{3}$ Cannella and Shen (2001), Shen and Cannella (2002), and Zhang and Rajagopalan (2003) find that only some heirs become CEO successors. Finding that only some heirs become CEO successors implies that, beyond being an heir apparent, additional factors influence succession. This suggests that firm or industry specific expertise of insiders may warrant their sitting on the board of directors even though they are not expected (or they do not aspire) to be participants in CEO succession.
    ${ }^{4}$ Rosenstein and Wyatt (1997) find evidence that some levels of ownership do (not) in fact appear to align interest to the extent that announcements are greeted with share price increases (decreases).

[^2]:    ${ }^{5}$ Rosenstein and Wyatt (1997) find a negative reaction at three years of $1.73 \%$ over $\mathrm{T}-1$ to $\mathrm{T}=0$ that is significant at $5 \%$ in a sample with 16 CEO appointments out of 170 observations from NYSE and ASE listed from 1981 to 1995. This paper reports a positive reaction at five years of $2.39 \%$ over $\mathrm{T}=0$ to $\mathrm{T}+1$ that is significant ( $\mathrm{p}=0.032$ ) and $2.32 \%$ over $T-1$ to $\mathrm{T}+1$ that is significant $(\mathrm{p}=0.056)$ in a sample with 43 CEO appointments out of 180 observations from firms listed on all four Forbes 500 lists for any year from 1997 to 2001. Evidence is inconclusive when looking at market reactions using actual outcomes at three years.

[^3]:    ${ }^{6}$ Rosenstein and Wyatt (1997), just discussed, are close to an exception to the extent that they use actual results of a particular career outcome, CEO succession, in analyzing market reactions, rather than predicted or actual results based on multiple potential outcomes. Therefore, this paper represents an extension to Rosenstein and Wyatt (1997).

[^4]:    ${ }^{7}$ See footnote 2 for the definition of heir apparent.

[^5]:    ${ }^{8}$ Appendix B. presents data on these 89 new CEOs to clarify who they are. See also Footnote 10.

[^6]:    ${ }^{9}$ Appointment of new employee directors by year is as follows 1997: 61, ‘98: 70, ‘99: 40, 2000: 36, and 2001: 38.
    ${ }^{10}$ It is noteworthy that 89 CEO succession events, or $45 \%$ of all 196 events, are ignored because they involve employees that have not served on the board prior to appointment. It appears common to avoid placing successors on corporate boards. The intent of this practice may be to avoid poaching of potential successors by other firms or simply a response to perceptions about good governance practices. Unfortunately, which, the former or the latter, is unclear. As noted in footnote 8, some data on these 89 successions is available in Appendix B. New employee directors $(\mathrm{N}=245)$ are in the first column and newly appointed to the board CEOs ( $\mathrm{N}=89$ ) are in the second column. The third column presents statistics regarding differences between the two groups. The average and standard deviation of age of new employee directors $(51,6)$ is comparable to the average and standard deviation of heir apparent age $(50,6)$ in Cannella and Shen (2001). In terms of titles, 15 year have elapsed between the data sets of Rosenstein and Wyatt (1997) and this paper, and their finding that $12.4 \%$ serve as a president or COO at appointment is much lower than the $23.3 \%$ for COO and $26.1 \%$ for President found in this data set. In addition, Rosenstein and Wyatt report $87.7 \%$ of employees served as either a subsidiary or division CEO or vice president prior to board appointment, while this paper's data set suggest that this number has fallen to $50.6 \%$ of new appointees.

    Of the newly appointed board members who join during a non-succession event, $18.8 \%$ are serving a CEO who has been in place for only a year and $44.5 \%$ are serving a CEO who has been in place for less than 5 years. The CEOs that these new employee appointees serve is usually younger than 60 ( $62.9 \%$ of the time) and holds the title of Chairman of the board ( $79.2 \%$ of the time). Average (median) annual ROA has run at $4.1 \%(3.3 \%)$ over the prior two years and cumulative growth during that period has been $32.3 \%$ (21.4\%).

    For firms that appointed a new CEO to the board, the story differs. Average (median) cumulative growth amongst firms that appoint a new CEO to the board is significantly slower at $7.2 \%(5.6 \%)$ while profitability is not significantly different at $3.7 \%(3.6 \%)$. These new CEOs are younger ( $92.1 \%$ are under 60 ), carry the President's title, are mildly more likely to have other board service experience ( $49.4 \%$ versus $38.0 \%$ ), and are not given the Chairman role immediately ( $40.5 \%$ earn that dual role). Interestingly, the boards these new CEOs serve are smaller ( 10.98 members) and more independent ( $76.2 \%$ are outsiders). All of this evidence suggests that either a difference in corporate governance style or corporate events exists between boards that promote new CEOs without prior service to the board versus boards that appoint employees to the board and then promote from those ranks an employee to the role of CEO. This evidence suggests that poor revenue growth is leading these boards to exercise more authority through the replacement of the CEO and the reduction in signs of CEO and managerial power (board size, independence, and duality).

[^7]:    ${ }^{11}$ Like Rosenstein and Wyatt (1997), the average abnormal return for the sample is essentially zero. The mean excess return on the day of announcements for the sample is 42.4 basis points with a standard deviation of 386 basis points. While the mean excess return of 42 basis points is a little more than a tenth of the standard deviation, the mean excess return associated with the announcement is more than 25 times the size of the mean excess return earned over the previous two days (T-2 to T-1). Mean excess returns, standard deviations, and relative sizes for date ranges around the announcement $(\mathrm{T}=0)$ are shown below:

    | Date Range | Mean Excess Return $($ Standard Deviation) | Relative to T-2 to T-1 |
    | :--- | :---: | ---: |
    | T- 2 to T-1 | $0.0001591(0.0336175)$ | 1.00 |
    | T-1 to T $=0$ | $0.0052650(0.0445353)$ | 33.09 |
    | T- 1 to +1 | $0.0036302(0.0511166)$ | 22.82 |
    | T -1 to T +5 | $0.0044093(0.0689088)$ | 27.71 |
    | T $=0$ | $0.0042407(0.0386209)$ | 26.65 |
    | T $=0$ to $\mathrm{T}+1$ | $0.0026059(0.0463601)$ | 16.38 |
    | T $=0$ to +5 | $0.0033851(0.0655803)$ | 21.28 |

[^8]:    ${ }^{12}$ If CEOs serve in excess of five years, then some of the cycle for succession candidates, exit, and retention remains unobserved when examining a five year window.

[^9]:    ${ }^{13}$ Hausman tests of Independence of Irrelevant Alternatives are employed.
    ${ }^{14}$ Appendix C presents a non-parsimonious specification applied to five windows. The windows are $\mathrm{T}-1$ to $\mathrm{T}+1$, $\mathrm{T}=0$ to $\mathrm{T}+1, \mathrm{~T}-1$ to $\mathrm{T}=0, \mathrm{~T}-1$ to $\mathrm{T}+5$ and $\mathrm{T}=0$ to $\mathrm{T}+5$. On a related issue, it appears likely that in the intervening years, since Rosenstein and Wyatt's 1981 to 1985 sample, sufficient emphasis on fair and uniform disclosure practices has led to changes in information dissemination and leakages.

