

Two Essays on Turnaround Specialist CEOs

by

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Abstract

This dissertation consists of two essays investigating the labor market for CEOs who have developed a reputation for being a turnaround specialist. Turnaround specialists are managers who have developed reputations for having skills and experience in reversing the fortunes of financially distressed and underperforming firms. In the first essay I examine the economic consequences for firms that hire CEOs who, prior to being hired, have acquired a reputation for being a turnaround specialist. Abnormal returns around announcements that turnaround specialists have been hired as CEOs are significantly positive and more than 6 percentage points larger than the returns associated with announcements of other CEO successions. Significant differences exist in the attributes of firms that hire turnaround specialists as CEOs versus firms that hire others as CEOs in ways consistent with several hypotheses that I develop. Specifically, firms that hire turnaround specialists face a higher probability of distress, lower profit rates, and lower pre-succession stock returns than firms that hire others as CEOs. Firms that hire turnaround specialists reduce operating scale and show significant improvement in operating performance on average, indicating that the turnaround specialists' reputation is commensurate with their abilities and managerial style. In the second essay I examine the initial compensation contracts of turnaround specialist CEOs. After controlling for other factors that are associated with managerial compensation, I find that turnaround specialist CEOs earn significantly more total compensation than other newly appointed outside CEOs. Additionally, turnaround

specialist compensation is more sensitive to firm performance than that of other newly appointed CEOs, contrary to the notion that career concerns of managers would serve as substitutes for explicit incentive contracts. Turnaround specialists receive a lower proportion of fixed cash compensation and a higher proportion of equity-based incentives than other CEOs, which is consistent with theories that predict incentive compensation comes at a lower cost to successful managers and has higher benefits for firms operating in distress.

TABLE OF CONTENTS

1.0	CHAPTER ONE: ARE TURNAROUND SPECIALISTS SPECIAL? AN EXAMINATION OF CEO REPUTATION AND CEO SUCCESSION.....	1
1.1	INTRODUCTION	1
1.2	LITERATURE REVIEW	5
1.2.1	CEO reputation.....	5
1.2.2	CEO style.....	8
1.3	HYPOTHESIS DEVELOPMENT	10
1.3.1	Returns surrounding succession announcements.....	10
1.3.2	Firm characteristics and the hiring decision.....	12
1.3.2.1	Recent performance	13
1.3.2.2	Financial structure and distress.....	14
1.3.2.3	Firm size and growth opportunities	15
1.3.3	Operating performance following succession	16
1.3.4	Summary of major predictions	17
1.4	SAMPLE CONSTRUCTION AND METHODOLOGY	17
1.4.1	Sample construction	17
1.4.1.1	Identifying turnaround specialists.....	18
1.4.2	Methodology.....	20

1.4.3	Biographical details of newly hired CEOs	21
1.4.4	Summary statistics.....	25
1.5	RESULTS	26
1.5.1	Determinants of choice to hire a turnaround specialist	26
1.5.2	Event return analysis.....	30
1.5.2.1	Cross sectional analysis of succession CARs	32
1.5.3	Changes in ROA following succession.....	36
1.5.3.1	Multivariate analysis of ROA changes.....	39
1.5.4	Long-run stock returns following succession.....	41
1.6	ROBUSTNESS AND EXTENSIONS	42
1.6.1	What do turnaround specialists do?	42
1.6.2	Credit rating changes following succession.....	45
1.6.3	Potential Endogeneity of Succession CARs.....	48
1.7	CONCLUSION	51
2.0	CHAPTER TWO: THE COMPENSATION OF TURNAROUND SPECIALIST CEOS	71
2.1	INTRODUCTION	71
2.2	LITERATURE REVIEW	75
2.2.1	Total Compensation	75
2.2.2	Incentive Compensation.....	76
2.3	HYPOTHESIS DEVELOPMENT	77
2.3.1	Total Compensation	78
2.3.1.1	Managerial talent and reputation.....	78

2.3.1.2	General skill sets.....	79
2.3.1.3	Distress premium	79
2.3.1.4	Managerial typecasting.....	81
2.3.1.5	Distress as a restraint on compensation	81
2.3.2	Incentive Compensation.....	82
2.3.2.1	Career concerns and reputation as substitutes for explicit incentives 82	
2.3.2.2	Alternative monitoring mechanisms in distress	84
2.3.2.3	Distress environment may favor explicit incentives.....	85
2.3.2.4	Talented managers may prefer risky incentive compensation	86
2.4	SAMPLE CONSTRUCTION AND METHODOLOGY	88
2.4.1	Sample Construction	88
2.4.2	Methodology.....	91
2.5	RESULTS	94
2.5.1	Total Compensation	94
2.5.2	Incentive Compensation.....	98
2.5.2.1	Fixed Compensation %	99
2.5.2.2	Portfolio Delta	100
2.5.2.3	Incentive Ratio.....	101
2.6	ROBUSTNESS AND EXTENSIONS	103
2.6.1	Compensation regressions with succession announcement returns.....	103
2.6.1.1	Total compensation regressions with CARs and interaction effects 105	

2.6.2	Compensation of Other Top Executives	107
2.6.3	Initial shareholder wealth effects and initial CEO compensation	109
2.6.4	Total shareholder wealth effects and realized CEO compensation over tenure	111
2.6.4.1	Total realized options compensation	112
2.6.4.2	Total realized compensation vs. total shareholder wealth change over CEO tenure	113
2.6.5	Robustness of primary results	114
2.7	CONCLUSION	115
APPENDIX A		117
APPENDIX B		118
BIBLIOGRAPHY		120

LIST OF TABLES

Table 1.1: Turnaround CEO biographical information.....	54
Table 1.2: Summary statistics for sample of firms hiring outside CEOs.....	56
Table 1.3: Univariate comparisons of turnaround firms vs. benchmark firms	57
Table 1.4: Logit models predicting choice to hire Turnaround Specialist.....	58
Table 1.5: Cumulative abnormal returns (CARs) surrounding succession announcements.....	60
Table 1.6: Succession CAR regressions	61
Table 1.7: Changes in operating ROA following succession	63
Table 1.8: Changes in operating ROA regressions	65
Table 1.9: Long run abnormal returns following succession.....	66
Table 1.10: Post succession growth rates in employees, assets, and PP&E	67
Table 1.11: Credit ratings following succession.....	68
Table 1.12: Succession CARs controlling for endogenous selection	70
Table 2.1: Summary statistics	128
Table 2.2: Decomposition of compensation	129
Table 2.3: Total compensation regressions.....	131
Table 2.4: FIXED% compensation regressions	134
Table 2.5: Portfolio delta regressions	135

Table 2.6: Incentive Ratio regressions	136
Table 2.7: Compensation regressions including succession CARs	137
Table 2.8: Compensation regressions for top-4 (non-CEO) executives	140
Table 2.9: Shareholder wealth effects around succession vs. first year CEO compensation	142
Table 2.10: Total realized value of options compensation over CEO tenure	143
Table 2.11: Total realized compensation vs. total shareholder wealth change over CEO tenure	145
Table 2.12: Robustness - decomposition of TCEO into TSPEC and TCEO (Not TSPEC)	146

LIST OF FIGURES

Figure 1.1: Sample Attrition by CEO type	53
Figure 2.1: TSPEC compensation.....	126
Figure 2.2: TCEO compensation	127

1.0 CHAPTER ONE: ARE TURNAROUND SPECIALISTS SPECIAL? AN EXAMINATION OF CEO REPUTATION AND CEO SUCCESSION

1.1 INTRODUCTION

This essay examines the economic effects of chief executive officer (“CEO”) reputation by examining firms that hire CEOs who have reputations as “turnaround specialists.” Although turnaround specialists have received a great deal of attention in the press, little is known about the characteristics and post succession performance of firms that hire them.

I define turnaround specialists as CEOs who have developed reputations for having skills and experience in reversing the fortunes of financially distressed and underperforming firms. Although turnaround specialists need not be CEOs, in this essay I focus on firms that hire turnaround specialists as CEOs in order to test hypotheses related to the role that managerial reputation plays in the choice of CEOs and the post hiring performance of firms. Because turnaround specialists have developed a reputation for successfully helping troubled businesses, they provide an opportunity to examine how the market values managerial reputation. In addition, because turnaround specialists are known for having a set of characteristics, skills and experiences that differentiate them from other CEOs, they offer an opportunity to examine how managerial style and characteristics affect the matching between CEOs and firms in the managerial labor market.

This essay address several questions related to turnaround specialists. What types of distressed firms hire turnaround specialists? Is financial distress the only factor driving the

selection of a turnaround specialist or do performance declines matter as well? Does the stock price reaction to succession announcements of turnaround specialists differ from those of other outsider CEO successions? Does the post-hiring operating performance of firms differ significantly for firms hiring turnaround specialists versus firms that hire other outside CEOs? Similarly, do long run stock returns differ for firms hiring turnaround specialists versus firms that hire other outside CEOs?

Starting with a sample of CEO successions from 1992-2006, I collect biographical information on all newly hired CEOs and identify a set of 114 successions in which the new CEOs are identified in the press as having experience in turnaround situations, including 65 in which the new CEOs are known as turnaround specialists or experts. I identify turnaround specialists to be only those CEOs that have a reputation for being turnaround specialists at the time of hiring, not afterwards. This allows me to estimate the ex-post effects of having a reputation for being a turnaround specialist. I compare the characteristics and performance of firms that hire turnaround specialist CEOs to a benchmark group of firms that hired other outsider CEOs. In doing so I examine how the market values CEO reputation, as well as whether the turnaround specialist reputation is indicative of managerial talent and style.

I find turnaround specialists are more likely to have attended a “prestigious university” and have a longer and more diverse work history than newly hired CEOs who don’t have a turnaround reputation. Further, turnaround specialists have more public firm experience and are more likely to have previously held the title of CEO than other incoming outsiders. In fact more than one half of the sample of turnaround specialists had been a CEO at more than one firm prior to being hired by sample firms. This supports the notion that the turnaround specialist reputation reflects above average executive experience and skill.

I document that firms hiring turnaround specialists are more likely to be large firms with lower profit rates and a higher probability of financial distress than firms that hire alternative outsider CEOs. Also, controlling for various proxies of distress, I find firms with very poor recent stock performance are more likely to hire a turnaround specialist. This evidence is consistent with the notion that turnaround specialists CEOs have specialized knowledge and skills in managing distressed or underperforming businesses.

Event study analysis shows that the announcements that firms have hired turnaround specialists are associated with statistically significant residual returns. The mean (median) 3 day cumulative abnormal returns (CAR) surrounding the succession announcement is 10.31% (6.32%) for firms hiring turnaround specialists as compared to 2.38% (1.00%) for firms hiring other outsider CEOs. The difference in succession announcement CARs is statistically significant and remains so after controlling for various firm and succession characteristics in a multivariate regression.

Additionally, I find turnaround specialists are hired by firms with large negative changes in ROA in the year of succession, and that turnaround firms experience significantly large increases in ROA in the years following the succession. Turnaround firms are much more likely to downsize operations after succession: reducing employees, assets and plant property and equipment significantly more than benchmark firms. This evidence is consistent with the hypothesis that turnaround specialists have unique skills in improving the operating performance of troubled firms. However, consistent with markets efficiently processing the value of turnaround specialists at the time of the succession announcement, I find no evidence that firms hiring turnaround specialists have significantly different long-run post-succession stock performance from that of firms hiring other outside CEOs.

This essay contributes to the broad literature on managerial reputation as well as the growing literature on managerial style and their impact on the succession process and the policies and performance of firms. The evidence is consistent with the notion that reputation reflects managerial skill and style, and that the market believes the hiring of reputable CEOs to be value relevant. Furthermore, to my knowledge, this is the first empirical study of the market for turnaround specialist CEOs. Thus my findings have implications for boards, shareholders, and creditors of firms in turnaround situations in evaluating the potential impact of hiring a turnaround specialist.

This essay proceeds as follows. In section 1.2 I review the literature on managerial reputation and managerial style and their impact on the managerial labor market and subsequent firm performance. In section 1.3 I develop the hypotheses that are to be tested. I describe my sample construction and methodological issues in section 1.4. I discuss my main results in section 1.5 and consider extensions related to those results in section 1.6. I offer a concluding discussion in section 1.7.

1.2 LITERATURE REVIEW

1.2.1 CEO reputation

Most of the literature on CEO reputation addresses the notion that reputation reflects a manager's ability and skill sets, thus more reputable CEOs should exhibit better performance and receive higher pay (see Fama (1980), Gibbons and Murphy (1992), Johnson, Yeung and Welker (1993), and Milbourn (2003)).

The first and perhaps best known model of the consequences of managerial reputation in the labor market was developed by Fama (1980), who shows that agency concerns can be mitigated by the manager's interest in preserving his reputation. Fama argues that since the managerial labor market is a repeated game, a manager will tend to make value maximizing decisions rather than shirk because the outcome of his decisions today will affect his reputational capital in the future. A manager who makes bad decisions and develops a negative reputation will face a "settling up" in the labor market in the future, as his future job prospects are diminished by his poor reputation. The manager's present value of career earnings potential is a function of his reputation, giving the manager the incentive to develop a positive reputation. In this model managerial reputation is a critical signal that the labor market uses to evaluate managerial talent, indicating that the hiring decisions of firms should be influenced by the reputations of managers.

Contrasting the view that reputation reduces agency problems and leads to optimal labor market outcomes, there is a stream of literature which argues that the manager's concern for protecting and enhancing his own reputation can actually exacerbate agency problems in firms. For instance, Holmstrom (1982) models managerial behavior in the context of career concerns

and shows that because reputation is more important for managers when they are young, older managers nearing retirement have little incentive to protect their reputation and are more likely to slack off. Conversely, younger managers may be too worried about hurting their reputation and may exhibit excessive risk aversion (Hirshleifer and Thakor (1992)). In addition, managers concerned with their reputation may have an incentive to boost short-term firm value at the expense of long-run value since the manager can leave or retire before the impact of the negative decisions are realized (see Narayanan (1985) and Stein (1989)). Also, managers have the incentive to herd with other managers when “sticking your neck out” can hurt the manager’s reputation following bad decisions more than it helps the reputation following good decisions (Scharfstein and Stein (1990)). Finally, managers who develop ‘superstar’ reputations may have the incentive to spend more time on activities that enhance their public image rather than activities which enhance firm value (Malmandier and Tate (2009)).

To date the empirical studies of the influence of managerial reputation on hiring decisions and firm performance have yielded mixed results. There is some evidence which indicates that reputation proxies for ability in the managerial labor market and that managers face an ex-post “settling up” for their past decisions. For instance, Johnson, Young and Welker (1993) find evidence from analyst surveys that CEO reputation is the ex-post outcome of revealed firm performance ex-ante. Fee and Hadlock (2003) find that firms are more likely to hire CEOs from firms that have had strong past performance. Milbourn (2003) finds that more reputable CEOs receive higher pay and more stock based compensation. Lee (2006) finds that more reputable CEOs are better able to sustain good firm performance over the long run. In addition, Karpoff, Lee and Martin (2007) find that managers that have been identified as responsible parties in financial misreporting cases suffer a significant reputational penalty in

addition to civil and criminal penalties. They almost always lose their jobs and face diminished employment prospects in the future.

On the other hand, there is some evidence which indicates that managerial career concerns for their reputation create distorted incentives which lead to non-value maximizing behavior. Chevalier and Ellison (1999) show that young mutual fund managers are more likely to herd with other managers and take excessively low amounts of risk. Malmandier and Tate (2009) study a set of award winning CEOs and find that although their firms exhibited good performance leading up to the award grant date, firm performance suffered subsequently. They showed that award winning CEOs were paid more following the award, even though firm performance declined. They also found that award winning CEOs were more likely to write books and accept additional directorships following the award date; activities which appears to have more to do with preserving their lauded reputations rather than increasing firm value. Francis et al (2008) find that firms with more reputable CEOs have poorer disclosure quality, indicating that CEOs may manipulate earnings to uphold their reputations. Lee (2006) finds that CEOs with strong reputations are more likely to be fired following poor performance, indicating reputation can increase visibility among shareholders and turn the CEO into a scapegoat.

One disadvantage of the reputation studies to date is that by examining awards or media mentions they are unable to discern specific types of CEO reputation, since some CEOs may have reputations for being good entrepreneurs or inventors (perhaps better for growth firms), and other CEOs may have reputations for being skilled operators and cost cutters (perhaps more appropriate for large mature firms). For instance, Lee (2006) uses media counts to examine the association of CEO reputation with performance and shows that more reputable CEOs don't exhibit the ability to create performance reversals for firms. However, Lee points out that his

proxy for CEO reputation is unable to differentiate between CEOs who are well known by the media from those who are well known as having experience with turnaround situations. My study is unique in that I am identifying a particular category of managerial reputation, that of being a turnaround specialist, and examining the impact, if any, that reputation has on the CEO succession process and post succession firm performance.

1.2.2 CEO style

Complementing the literature on CEO reputation, there is a body of research that shows that managerial labor market outcomes can be explained in part by the specific styles, character traits, or experiences of the CEO. Bertrand and Schoar (2003) study CEOs that move from one firm to another and find that CEO fixed effects are important determinants for a wide range of corporate policy choices, including acquisitions, dividend policy, and diversification. Their results have spawned a multitude of empirical studies examining the particular character traits and backgrounds of CEOs that are related to observable managerial actions and outcomes. If the characteristics of a CEO affect what policies he will adopt, then boards would likely attempt to hire a CEO whose characteristics would result in policies that best match the firm's own situation.

Cronqvist et al. (2009) finds that the debt choices CEOs make in their personal life are correlated with the capital structure policies of the firms they work for, as well as the firms that hire them. In fact, they find that when a CEO departs a firm, that firm is likely to hire a CEO that shares the attitudes toward debt of the departing CEO. This indicates that managerial traits and attitudes can not only affect the firms they work for, but can enhance the matching process

between the firm and an outside candidate for CEO. Kaplan et al. (2009) examine the results of personality tests of CEO candidates interviewed by a sample of private equity firms and find that CEO personality and ability are related to both hiring decisions and subsequent firm performance, and that those relations differ between the sample of LBO and Venture Capital firms. Their results indicate not only that CEO ability is important in general but that CEO abilities can have a differential influence on firm hiring decisions and performance depending on the characteristics of the hiring firm. Using a survey-based approach, Graham and Puri (2009) find evidence that CEOs are hired by firms that match well with their personality and preferences. For instance, they find that risk loving CEOs are more likely to be hired by firms with high historical or expected future growth rates.

My study makes three primary contributions to the literature on managerial reputation and style. First, the market reacts favorably to the appointment of turnaround specialists, indicating the market uses CEO reputation as a means of forming expectations about future performance. Second, positive changes in operating performance after hiring turnaround specialists indicates that reputation does seem to proxy for managerial ability, contrasting with the notions that reputation is either uninformative (reflects lucky executives) or exacerbates agency problems (resting on laurels effect). Third, by identifying managers with a reputation for a certain type of management style, I am able to connect the literature of managerial reputation with managerial style. My results show that managers with a reputation for having specialized management skills are hired by firms that are most likely to demand those specialized skills. This indicates managerial style matters in the matching of firms to executives and that reputation is a multi-dimensional signal, providing information not only about managerial talent, but also about managerial style.

1.3 HYPOTHESIS DEVELOPMENT

In this section I develop the hypotheses that I test in section 1.5. In section 1.3.1 I argue that since turnaround specialists have a reputation for being effective and change oriented managers, the market should react favorably to the announcement that a firm has hired a turnaround specialist. In section 1.3.2 I develop hypotheses which predict the firm characteristics I expect to be related to the decision to hire a turnaround specialist. Section 1.3.3 outlines my hypotheses predicting the post-succession performance of firms that hire turnaround specialists. Section 1.3.4 contains a summary of my major predictions.

1.3.1 Returns surrounding succession announcements

There have been many studies examining the announcement returns surrounding CEO successions. Although the results vary based on time period and sample selection criteria, a connecting theme in most of the studies is that the market reacts more favorably to outside CEO appointments (CEOs who are hired from outside the company) than inside CEO appointments (CEOs who are promoted from within the company). Reingaum (1985) and Warner, Watts, and Wruck (1988) do not find evidence of a significant market reaction to the announcement of management turnover in general, but do find a significant positive reaction to the appointment of outsider CEOs. Borokovich, Parrino and Trapani (1996) find that following forced successions, the market reacts significantly negatively to inside replacements and significantly positively to outside replacements. There are two primary theories which explain the significant difference between outside and inside CEO successions. The change agent hypothesis predicts that outside

CEOs are more likely to enact significant changes at the firm than inside replacements. Outside CEOs are not emotionally connected to existing firm employees or projects and could have an easier time making substantial personnel changes or abandoning money-losing projects than insider CEOs could. Since the majority of outsider CEOs are appointed following poor firm performance, the market welcomes the change that the outsider CEO is expected to make.

The talent hypothesis predicts that the tournament incentives and information asymmetry in the market for managers would indicate that outsider CEOs are handicapped in CEO succession, and thus when we observe a firm selecting an outsider CEO he is likely to be significantly more talented than an insider candidate. Lazear (1989) argues that one of the motivations for lower managers to work hard is the prospect that they could become promoted to the CEO position and win the executive “tournament”. Hiring an outsider CEO dulls these incentives for insider candidates and could induce a cost on the firm in the form of reduced effort or higher wages for low-level managers. The difference between the expected ability of the outside and inside candidates must more than make up for the expected cost of reduced tournament incentives. Also, since boards know more about inside CEO candidates than outsider candidates the board takes a risk when it hires an outsider CEO with the same expected ability as the inside candidate. In order to be compensated for this risk the board would want to choose an outsider CEO with higher expected ability than the inside candidate (Agrawal, Knoeber, and Tsoulouhas (2006)).

The goal of this essay is not to differentiate between the talent or change agent hypothesis as explanations for the observed pattern in event returns surrounding outside CEO successions. However, I expect that both hypotheses can explain differentiations in the market response to hiring turnaround specialists vs. other potential outside CEO replacements. One of the most

common conceptions of turnaround specialists is that they are known for making sweeping changes at firms in their efforts to turn the firm around. Thus even when compared to other outside CEOs, I expect the market would perceive turnaround specialists as likely to make even more changes at the hiring firm. Additionally, turnaround specialists have a reputation for being talented managers who have had extreme success working with troubled companies. Their reputation should be a signal to the market that they have higher expected ability than other outside candidates. For these reasons I expect announcement returns surrounding succession announcements to be higher for firms hiring turnaround specialists than other outside CEOs.

Further, I expect that the market will welcome change more strongly in firms that have had more recent poor performance. Bonnier and Bruner (1989) study a sample of firms in or near financial distress and find that succession announcements are significantly positive on average, contrasting with the insignificant reaction to all firms in general. Weisbach (1988) finds that announcement returns are higher when outsider dominated boards hire outside CEOs after poor stock performance. These results are consistent with the change agent hypothesis which predicts that market will welcome change following poor performance. Since I argue that turnaround specialists are expected to be more significant change agents than other outsiders, I expect that the market response to firms hiring turnaround specialists should be stronger for firms that have recent poor stock and operating performance.

1.3.2 Firm characteristics and the hiring decision

Turnaround specialists are not just CEOs that have reputations for being successful in general; they are known for having a certain set of characteristics, skills and experiences that

differentiate them from the population of CEOs in general. Unlike traditional CEOs who generally are hired for the long term, turnaround specialists are often interim managers tasked with making significant changes in a short period of time in order to return the firm to financial stability and/or improve operating performance. According to the Turnaround Management Association, the leading professional organization for turnaround professionals, a turnaround specialist's skills in crisis situations are more important than industry skills, because business crises share many attributes that are common across industries. As mentioned previously, there is a growing literature which indicates that firms hire CEOs with characteristics and styles that are compatible with the firm's own unique situation. If turnaround specialists share a common set of characteristics and styles, then I would expect the firms that hire turnaround specialists to share common characteristics as well. Consistent with the literature on management style and characteristics influencing hiring decisions, I expect that certain firm characteristics will be related to the decision to hire a turnaround specialist as opposed to other outside executives as CEO.

1.3.2.1 Recent performance

First, because turnaround specialists have a reputation for improving poorly performing companies, I expect that firms will be more likely to hire a turnaround specialist than another outside CEO if they have had poor recent stock or operating performance. There is ample evidence indicating that firms that hire outside CEO candidates perform more poorly prior to succession than those that hire inside candidates, which is consistent with the change agent hypothesis (Parrino (1997), Agrawal et al. (2006)). Just as outsiders are more likely to be change agents for poorly performing firms than insiders, I expect turnaround specialists are more likely

to be change agents than other outside CEOs. Although it may seem like an obvious notion to hypothesize that firms that have performed poorly would be more inclined to hire a turnaround specialist, it is not obvious what type of performance and what performance windows would be most important in the hiring decision. Thus I examine both net and operating ROA in the year preceding the succession, as well as a multitude of stock return windows preceding the hiring decision. In general I predict a negative relation between stock and operating performance and the likelihood a firm hires a turnaround specialist vs. another outside candidate.

1.3.2.2 Financial structure and distress

It is well known in the literature on capital structure that one of the downsides of debt is the indirect costs of financial distress. Firms that are at or near financial distress or bankruptcy face a potential cascade of business disruptions which result from creditors, suppliers and customers declining to make further investments in the firm fearing potential losses from default. A distressed firm could benefit from hiring a manager that can restore credibility to the firm and encourage stakeholders to continue their relationship with the firm despite the recent decline in performance. There is evidence that firms tend to select CEOs that have attitudes toward and experiences with debt that are compatible with the firm's capital structure (Cronqvist et al. (2009), Graham and Puri (2009)). Similarly, it is likely that firms facing the possibility of financial distress would want to hire managers with experience in distress situations. Turnaround specialists are often cited as having experience dealing in distress situations which

have their own peculiar set of attributes that are common across industries¹. These general skills include dealing with and negotiating new terms with creditors as well as assuring customers and suppliers of continued business viability. These managerial skills should be desired by firms that have more short term and long term debt since those firms are more likely to face distress related business disruptions that exacerbate operating declines. Thus I expect the decision to hire a turnaround specialist to be positively related to the firm's long term debt and probability of financial distress as proxied for by Altman's Z score.

1.3.2.3 Firm size and growth opportunities

Turnaround specialists are well known executives with a reputation they want to protect and build for the future. Turnaround specialists would likely command high salaries due to their reputation which may only be affordable to larger firms. In addition, turnaround specialists would probably prefer to work for larger companies where their turnaround success would garner more attention. Larger firms may have more complex control structures which require better, more experienced managers than smaller firms (see Bonnier and Bruner (1989)). For these reasons I expect turnaround specialists to be hired by larger firms.

Similar to large firms, firms with fewer growth opportunities should be more likely to hire turnaround specialists. For one thing, firms with high levels of growth opportunities are less likely to be troubled in the first place, and thus less likely to need a turnaround. Secondly, turnaround specialists have the reputation of fixing troubled companies, not managing high growth firms. Thus I expect firms with more growth opportunities as proxied for by market to

¹ See turnaround industry overviews from the Turnaround Management Association, as well as "An Overview of the Turnaround Industry" by Alex Wolf.

book ratio to be less likely to hire a turnaround specialist than another outside candidate for CEO.

1.3.3 Operating performance following succession

An open question in the literature is whether reputable CEOs are in fact better skilled agents or just lucky. For instance, Lee (2006) finds that more reputable CEOs are better able to sustain good firm performance over the long run whereas Malmandier and Tate (2009) find that CEOs underperform their peers after their reputations are bolstered from winning managerial awards. If reputation reflects skill *ex ante*, then current CEO reputation should be associated with improved future firm performance. In this study I examine the post succession stock returns as well as changes in operating performance of firms that hire turnaround specialists. However, if the market is efficient then the risk adjusted long run stock performance of firms that hire turnaround specialists should not differ on average from those of other firms since the market would impound any expected gains from the turnaround specialist's succession at the time of succession. Thus, I argue that changes in operating performance are a better measure of post succession firm performance due to the impact of expectations on stock returns. If CEOs with turnaround reputations are in fact better or more skilled managers, then firms that hire turnaround specialists should experience higher than expected changes in operating performance than other hiring firms.

1.3.4 Summary of major predictions

1. **Announcement Returns:** Abnormal returns surrounding succession announcements should be higher for firms hiring turnaround specialists (turnaround firms) than for firms hiring other outside CEOs (benchmark firms).
2. **Hiring Firm Characteristics:** Turnaround firms should exhibit weaker recent stock and operating performance, face a higher likelihood of financial distress, be larger in size and have lower market to book values than benchmark firms.
3. **Post-Succession Performance:** Turnaround firms should exhibit positive changes in ROA after succession and those changes should be larger than benchmark firms.

1.4 SAMPLE CONSTRUCTION AND METHODOLOGY

1.4.1 Sample construction

The data for this study consists of a hand collected sample of CEO turnover in firms in the Execucomp database over the period of 1992 through 2006. I start by identifying all firms on Execucomp that changed CEO from 1992-2006, and searched news articles on Factiva to identify the timing and nature of the succession change (forced or voluntary, outside or inside succession), as well as the identity of any interim CEOs not identified by Execucomp. For this study I concentrate only on CEOs considered to be outsiders at the time of succession (outsiders are defined as CEOs that started with the firm one year or less before being selected as CEO) and do not include CEO successions that result from a merger. From this sample I identify approximately 2,500 turnovers from 1992 to 2006, of which 811 involve outside successors. I collected and read biographical information for each entering outsider CEO to determine if the

entering CEO was known as being a turnaround or restructuring specialist, known to have turnaround experience, or have exhibited a history of turning around a past company or division.

1.4.1.1 Identifying turnaround specialists

Throughout my analysis I employ two definitions of turnaround reputation, one that is broad and based on having any past turnaround experience, as well as a second more narrow definition that identifies CEOs known as turnaround experts or specialists. I show results for both samples as the former definition is likely to overidentify turnaround specialists, while the latter definition could under-identify turnaround specialists.

For each new outside CEO I searched for articles in Factiva that contained each outside successor CEO's name in Factiva and variants of the words 'turnaround' and 'restructuring'. Specifics of the exact search algorithm can be found in Appendix A. I restricted the search period to dates directly surrounding the succession and 10 years prior to the succession. I downloaded and read all articles that met the search criteria for each CEO to make a determination if the CEO had a turnaround reputation or not.

For each CEO I made two determinations. First, I read the articles to determine if the CEO was directly implicated as having turnaround experience either through directly leading a turnaround of a company or division or through turnaround consulting. If two separate articles directly indicated the CEO had this turnaround experience then I consider that CEO to be a Turnaround CEO. The Turnaround CEO may have gained experience by turning around another company as CEO, but he need not have ever previously been a CEO to be considered a turnaround CEO for my sample. In some instances, the CEO was hired in what was being called a "turnaround situation" or was hired "to turn around the failing firm." I did not consider these

CEOs to be a Turnaround CEO unless the article indicated that the CEO had turnaround experience prior to being hired in his current position. In order to be considered a Turnaround CEO, the CEO must have acquired that reputation/experience prior to his current position. This is a critical distinction in the identification process because it allows me to test the impact of managerial reputation on the labor market outcomes after the reputation has been established. This procedure identifies 114 of the 811 outside successions as Turnaround CEOs (referred to as **TCEO**). All other outsider CEOs that are not Turnaround CEOs are considered to be the control sample of “other outsiders”.

The second determination I made was whether or not the Turnaround CEO had more than just turnaround experience, but in fact had a reputation in the business community as being a turnaround specialist, expert or artist. Note that in order to be included in the TCEO sample I don't require the CEO to be labeled as a turnaround specialist in any articles. I merely require the CEO to be directly implicated as having experience in turning around a company in the past. I used this broad classification in order to capture CEOs who perhaps had a turnaround specialist reputation in the business community but were never directly referred to as such in news articles for idiosyncratic reasons. A potential drawback of this definition is that I am overidentifying the set of CEOs with a turnaround specialist reputation, introducing noise in my empirical tests. To combat this issue I create a narrower subset of CEOs that are directly labeled as turnaround CEOs in the news articles. For each of the 114 TCEOs I read the same articles from the original Factiva search to determine if the CEO was directly labeled as a turnaround “artist”, “expert” or “specialist”. If an article refers to a CEO as a turnaround specialist, the author is implying the CEO is well known for his turnaround skills and track record of success. This subset of TCEOs should more closely identify those CEOs with a strong reputation for turnaround expertise in the

business community, and are the focal point of my tests in the essay. 65 of the 114 TCEOs had this distinction and I refer to these as my sample of Turnaround Specialists (referred to as TSPEC).

1.4.2 Methodology

The tests in this essay involve comparing the set of firms that hire turnaround specialists to firms that hire an outsider CEO who does not have a turnaround reputation. In discussing results I will focus primarily on the set of turnaround specialists (TSPECs) since those are the CEOs with reputations for expertise and success rather than simply known for being involved in turnarounds or having had some limited success with corporate turnarounds that the remaining TCEOs would possess. However for robustness I show results for the broader sample of turnaround CEOs in most of my tables. Unless otherwise noted I will refer to the firms that hire TSPECs as the turnaround sample or turnaround firms, and the remaining firms as the other outsiders, benchmark or control firms. Since nearly all turnaround specialists are outside CEOs, I choose to compare the turnaround sample to the other outsiders sample and ignore inside CEO successions, since studies show that outside CEO successions differ from inside CEO successions in a number of systematic ways. First, inside succession is usually the result of a long-term succession planning by the firm (see Naveen (2006)). Such long-term succession planning would eliminate the surprise of succession announcement and would reduce the power of event return analysis. Second, the evidence on CEO turnover indicates that outside successions are more likely to occur following a “forced” turnover, and in situations where the board of directors is looking to make larger changes to the strategic direction of the firm (Parrino

(1997), Borokovich et al. (1996)). Because almost all turnaround specialists are hired as outsiders and they are likely to be hired to make dramatic changes and improvements to firm operations, the appropriate benchmark is other outside CEOs who are most likely to be charged with a similar task.

1.4.3 Biographical details of newly hired CEOs

In order to better understand the characteristics of turnaround specialists as well as confirm the validity of my identification process I have collected biographical information for each turnaround CEO as well as a matched control sample of other outsider CEOs without turnaround experience or reputation². For each of the 114 turnaround CEOs and 114 control CEOs I have collected age, education and work experience data for the CEO's career at the time of being hired in the sample. Biographical data comes primarily from proxy statements, Lexis Nexis and web searches. Where available I recorded the firm name, job title and years with the firm for each executive. I then matched each firm to CRSP and Compustat to find public firm information, primarily industry affiliation. I determined industry affiliation for private firms that did not match to CRSP or Compustat using web searches.

² Because it is very costly to hand collect biographical histories for each executive, I have not collected biographical data on all sample outsider CEOs but instead used a propensity score matched control group. Following Rosenbaum and Rubin (1983), I first estimate the probability a firm will hire a turnaround specialist using the same logit regression as in Table 4 model 2. Control variables used for matching include firm size, trailing returns, profitability, and financial distress. The estimated probability from that logit model becomes the propensity score that I use to match treatment firms (firms that hire turnaround CEOs) with control firms (firms that hired other outsider CEOs). Each treatment firm is matched to a control firm with the closest propensity score. In this way control firms are similar to treatment firms in all observable firm characteristics that should be related to the decision to hire a turnaround CEO. I have reported data for both turnaround specialists as well as the broader set of turnaround CEOs for robustness.

Table 1.1 shows the summary averages for biographical information for turnaround specialists, the full set of turnaround CEOs and set of matched control CEOs. As there is little academic research on turnaround specialists, there is a dearth of theory which would motivate the expected biographical composition of turnaround specialists. However, the biographical data paints a picture consistent with turnaround specialists being experienced and high ability agents. At an average age of 55.49 years turnaround specialists are slightly older than control CEOs (who average 52.54 years of age). Consistent with the difference in age turnaround specialists also have more years of executive experience on average than control CEOs and more years of experience at public firms. On average turnaround specialists worked for more firms and held shorter tenures at past firms they have worked for, especially in the case of positions at public firms. On average, turnaround specialists stayed only 4.58 years at each public firm vs. 5.7 years for control CEOs. This is consistent with turnaround specialists having more varied experiences which could lead to the accumulation of general skills vs. firm specific skills. However, turnaround specialists don't appear to merely possess general business experience. In fact most turnaround specialists have executive experience in the same industry as the hiring firm. Sixty-nine percent (72%) of turnaround specialists had experience in the same SIC2 (Fama French-48) industry versus 61% (67%) for control CEOs.

In addition to having more years of experience at more firms, turnaround specialists also have reached higher positions than control CEOs. Eighty-nine percent of turnaround specialists have been a CEO or chairman of the board (COB) before being hired, and 82% have been CEO or COB of a public firm compared to 64% and 54% for control CEOs respectively. In addition, 54% of turnaround specialists have been CEO at more than 1 firm before being hired by the sample firm. This is almost twice the 27% rate for control CEOs. Turnaround specialists were

also more likely to have been a board vice chairman or company director than control CEOs. Thus not only do turnaround specialists have more experience, they have more experience as leaders of a firm. Although turnaround specialists are only three years older on average, they are 50% more likely to have been a CEO than a newly hired control CEO.

Turnaround specialists are more likely to have worked for and been CEO of a distressed public firm prior to being hired³. 70.77% of TSPECs have held an executive position in a distressed public firm prior to being hired, and 43.08% have previously been the CEO of a distressed firm. Only 55.26% of other outsiders have experience at distressed firms and only 27.19% have held the CEO position in a distressed firm. This is consistent with turnaround specialists' reputation being commensurate with their greater experience in distress environments. This indicates that turnaround specialists are differentiated not only by the amount of experience, but by the kind of experiences they have had prior to being hired⁴.

In addition to (or perhaps because of) having a stronger work history than other CEOs, turnaround specialists also have a stronger educational background on average than control CEOs. Turnaround specialists were more likely to have an MBA or law degree (52% vs. 42%) or have attended an "elite" university (43% vs. 25%) than control CEOs. This could reflect the fact that advanced business or legal training can help lead to the development of general business skills.

Finally, one of the starkest differences between turnaround specialist and control CEOs is the average amount of time they spend on the job at the hiring firm. On average turnaround

³ I define a distressed public firm if over the course of the CEO's tenure at a particular position, the firm had an Altman Z score below 1.6.

⁴ Turnaround specialists and other outsiders have approximately the same amount and kind of experience at diversified firms, however turnaround specialists are more than twice as likely to have been the CEO of a focused firm

specialists stay a little over three years, while control CEOs stay 4.43 years on average. This is consistent with turnaround specialists usually being hired for short term deployments to make radical changes before hiring a longer term CEO to take over⁵.

To summarize, turnaround specialists tend to be more educated interim managers that have worked for more firms, have more public firm experience and have attained higher ranks than CEOs hired by similar firms who don't have a turnaround reputation. Taken as a whole, the backgrounds of turnaround specialists indicate that their reputation reflects above average executive experience and skill. In addition, this evidence helps to confirm the validity of the turnaround specialist identification procedure employed in this study. If a turnaround reputation was ad hoc or spurious, then it shouldn't be the case that CEOs hired by similar control firms have such drastically different backgrounds than turnaround specialists. However I must point out that this biographical information is merely provided to paint a picture of the characteristics of turnaround specialists rather than test specific hypotheses regarding what set of skills and experiences lead to a turnaround reputation. The tests in this essay focus on identifying the characteristics of firms that hire turnaround specialists and examining whether these firms behave differently than firms that hire outside CEOs who don't have a turnaround reputation.

⁵ I also examined the stock returns for firms before, during and subsequent to the turnaround specialist's departure from the firm (as compared to the other outsider CEOs). Buy and hold market adjusted returns prior to departure are slightly negative and insignificantly different from the other outsider sample. CARs surrounding departure are insignificant and not significantly different from the other outsider sample. Post departure performance is slightly positive, and the one month post departure window is significantly larger than the other outsider sample (p-value of .034). However no other monthly window is significantly different from the other outsider sample.

1.4.4 Summary statistics

Table 1.2 reports summary statistics for the full sample of 811 succession announcements used in the study. All accounting variables come from Compustat and stock returns come from CRSP. Accounting variables in Table 1.1 are measured as of the fiscal year ending before the succession announcement and stock returns are measured up to the day -3 preceding the succession announcement. As mentioned before, there are 65 TSPEC firms comprising 8% of the sample. Since my sample uses only those firms which appear on Execucomp, the average firm size is larger than the general population of public firms. Sample firms had mean (median) sales of \$3,532 million (\$948 million). The mean (median) trailing six month market adjusted return for the full sample of firms is -12% (-13%) consistent with prior literature which shows that firms have poor average stock returns prior to CEO successions. Similarly, the average net ROA (net income scaled by total assets) was -4%, and 36% of the sample had a net loss in the year preceding the succession. 36% of the CEO successions followed forced CEO turnovers. This rate is considerably higher than the forced turnover rate found in previous studies (ranging from 15%-20%), due to the fact that my sample consists solely of outside successions and past studies have found outside successions are more likely to follow forced turnovers (Parrino (1997), Borokovich et al. (1996)).

1.5 RESULTS

1.5.1 Determinants of choice to hire a turnaround specialist

The first question I investigate is what types of firms choose to hire turnaround specialists versus other outsider CEOs. If the reputations of turnaround specialists reflect perceived skill sets and managerial style, then certain firm characteristics should be related to the choice of hiring a turnaround specialist. As mentioned in section 1.3, I hypothesize that the decision to hire a turnaround specialist should be related to four major categories of firm characteristics: recent stock performance (as measured by market adjusted stock returns preceding the succession announcement), firm profitability (measured using both net and operating ROA), capital structure (as measured by long term debt scaled by total assets and Altman Z score), and size/growth opportunities (as measured by sales and market-to-book ratio). I begin by comparing firm characteristics of the turnaround firms to the benchmark firms in a univariate setting and then move on to model the hiring decision in a multivariate framework using a logit analysis.

Table 1.3 shows the mean and median firm characteristics of the turnaround firms compared to the benchmark sample of other outside CEO successions. Turnaround firms are larger in terms of sales than benchmark firms. Mean (median) sales in (\$000s) for turnaround firms is \$11,750 (\$3,860) vs. \$2,653 (\$814) for benchmark firms. Although all firms tended to have weak stock returns preceding succession announcements, returns for turnaround firms were much poorer than benchmark firms. On average turnaround firms exhibited a mean (median) market adjusted stock return of -29% (-32%) in the 6 months preceding the succession announcement compared to -10% (-12%). Turnaround firms were also more likely to lose

money in the year preceding succession. 49% of turnaround firms had a net loss, compared to 34% of the benchmark firms. Also, turnaround firms had significantly lower mean and median Altman Z scores and higher mean and median long term debt than benchmark firms (although the difference in means was not significant for long term debt). Overall, the univariate results in Table 1.3 are consistent with my hypotheses that turnaround specialists are more likely to be hired by poorly performing firms and by firms who are more likely to face financial distress related issues.

Although univariate comparisons are informative, the hiring decision is a multidimensional problem, and thus the most appropriate method to determine the marginal impact of each firm characteristic on the hiring decision is in a multivariate regression framework. Table 1.4 describes the results of six logit regressions which investigate the characteristics of firms that choose to hire turnaround specialists vs. those that hire other outside CEOs. The sample consists of all outside successions and the unit of observation is the succession year. The dependent variable equals 1 if the firm hired a CEO in the TSPEC sample (or TCEO in model 6), and a value of 0 if the firm hired another outside CEO. The independent variables are those that I hypothesize should be important determinants of the choice to hire a turnaround specialist. As in the univariate tables, accounting variables are measured as of the fiscal year immediately preceding the year of the succession announcement, and stock returns are measured up to three days prior to the succession announcement date.

As shown in Table 1.3, recent market adjusted stock returns are significantly negatively related to the choice to hire a turnaround specialist in all six specifications, consistent with the hypothesis that firms with weaker recent stock performance would be more likely to hire a

turnaround specialist⁶. In model 4 I extend the returns analysis to 12 months and divide the periods into four non-overlapping 3-month windows to investigate the speed with which boards seem to react to poor performance when hiring a turnaround specialist. If only recent windows matter, it indicates that boards react quickly to bad performance when making succession choices, which could also be consistent with turnaround specialists being hired in crisis situations. Interestingly I find that the (-3,0) month window and the (-6,-3) are significantly and negatively related to the choice to hire a turnaround specialist while the (-9,-6) and (-12,-9) month windows are not significant determinants of hiring choice. This implies that a firm is influenced more by very recent poor performance than longer intervals of poor performance when hiring a turnaround specialist, perhaps indicating that turnaround specialists are hired in crisis situations where the firm has recently experienced a large negative shock to its market value⁷.

Altman Z is negative and significant in each of the TSPEC models (models 2-6) but is insignificant in the broader TCEO model (model 6). This is consistent with distressed firms seeking the help not only of a CEO with turnaround experience but who has developed a reputation as being an expert in turnaround situations. The reputation of a turnaround specialist can restore credibility to a distressed firm and influence continued contracting with outside stakeholders. However, unlike in univariate models long term debt is not significantly related to the decision to hire a TSPEC (or TCEO).

⁶ I have run all models using market model adjusted stock returns instead of market adjusted returns and the results are qualitatively unchanged.

⁷ Although not reported, 1 month trailing stock returns are not significantly related to the choice to hire a turnaround specialist. Although this result seems puzzling considering the fact that recent stock performance seems to be driving the hiring decision, it is consistent with firms already making up their minds to hire a turnaround specialist 1 month before they make the announcement, and they simply need that time to find and contract with their new executive.

To investigate the impact of operating performance on the decision to hire a turnaround specialist, I include net ROA (net income scaled by assets) and operating ROA (income before depreciation, interest and taxes scaled by assets), as well as a dummy indicating whether or not the firm had an operating loss or a net loss. Net ROA, operating ROA, and operating loss are not significant in any model. However, Net Loss is significantly positive across all six models. This indicates that although the absolute level of net income is not an important hiring consideration, firms with a net loss are significantly more likely to hire a turnaround specialist, perhaps indicating that a net loss triggers an outrage constraint driving boards to hire a turnaround specialist to return the firm to profitability as soon as possible.

Finally, I find that in all models sales are positive and significantly related (at the 1% level) while market to book is negative (though not significantly) related to the choice of hiring a turnaround specialist. This indicates that larger, more mature firms are more likely to hire a turnaround specialist, all else equal. This is consistent with the specific human capital of turnaround specialists being better suited to fixing larger more mature companies, rather than smaller growth oriented firms. It is also consistent with larger firms having the resources and notoriety that would attract a well known turnaround specialist CEO.

Interestingly, when I broadened the definition of the dependent variable to include all turnaround CEOs in model 6, some of the variables from models 1-5 reduce in magnitude and significance (most notably Altman Z). Also the 11.1% pseudo R-squared for model 6 is much lower than the 16.2% value for the comparable model 1 using the narrow turnaround specialist definition. This indicates firms that hire specialists share more common traits than the broader set of firms hiring CEOs with turnaround experience. Taken together, the results in Table 1.4 indicate that firms in crisis situations are more likely to hire turnaround specialists than other

outside CEOs, lending support to the hypothesis that firms hire CEOs whose characteristics are compatible with the firm's own unique situation.

The primary results for TSPECs are robust to the inclusion of industry and year dummies, as well as to dropping those TCEOs that are not TSPECs from the sample. Additionally, in unreported results I have included industry adjusted market to book ratios, PP&E and a dummy for whether or not the hiring firm was a focused firm. None of those variables enter significantly and they do not affect the main results from the logit analysis.

I also examine whether the influence of unions plays a role in the firm's decision to hire a turnaround specialist. There is some anecdotal evidence that turnaround specialists are hired because of their experience in dealing with and extracting concessions from unions⁸. To explore this issue I collected industry unionization rates for the industries in my sample⁹. In unreported analysis I include a measure of industry union coverage %, as well as a dummy variable for industries with above median coverage % (where coverage % is defined as the % of industry workers covered by a union) in the main logit specification. Neither the continuous measure nor the discrete measure of unionization rates enters significantly into the logit regressions.

1.5.2 Event return analysis

Table 1.5 shows the results of an event study centered on the succession announcement dates for the hiring of turnaround specialists versus other outsiders. For each succession

⁸ For instance, turnaround specialist Robert "Steve" Miller Jr. famously dealt with the auto workers union when he was CEO of Delphi and the steelworkers union when he was CEO of Bethlehem Steel.

⁹ Unionization data is available at the SIC4 industry level at unionstats.com. I thank Barry Hirsch and David Macpherson for making their unionization data available.

announcement I compute the cumulative abnormal return (CAR) for various windows, including the [0], [0,1], [-1,1], and [-2,2] day windows where “day 0” is the succession announcement date. I use market model adjusted abnormal returns with market model parameters estimated over the 150 trading days before day -30.

Table 1.5 shows the difference in mean and median CARs surrounding succession for the turnaround firms versus firms hiring other outsiders. The results paint a clear picture of the market’s abnormally positive response to the news that a firm has hired a turnaround specialist. The mean (median) announcement day return (window [0,0]) is 7.68% (4.10%) for turnaround specialists sample as compared with 1.10% (0.39%) for the sample of remaining outsiders. These rather large differences in CARs surrounding announcement are all significant at the 1% level. In addition to the announcement day results, the CARs are significantly higher for the turnaround firms at wider event windows as well. The difference in mean CARs between the turnaround firms and other outsiders is 5.93%, 7.93%, and 8.46% at the [0,1], [-1,1], and [-2,2] day event windows, respectively. Similarly, the difference in median CARs between the turnaround firms and other outsiders is 5.73%, 5.32%, and 6.13% at the [0,1], [-1,1], and [-2,2] day event windows, respectively. These differences in medians and means are all significant at the 1% level.

The significantly higher CARs associated with the announcements of turnaround specialist successions is consistent with both the talent and change agent hypothesis which predict that announcement returns should be higher when firms hire more reputable CEOs as well as when firms hire CEOs the market perceives to be change agents. Additionally, this is strong evidence to support the notion that turnaround specialists have reputations for creating value in distressed firms. This implies that the market uses the reputation of turnaround

specialists as a means of inferring better expected future performance as compared with the firms hiring another outsider CEO candidate.

Table 1.5 also shows the announcement returns for firms that hire CEOs with turnaround experience who have not attained a reputation as a specialist (TCEO not TSPEC). Interestingly, mean (median) CARs for this subset of firms are somewhat higher than the benchmark group though much lower than the returns for the firms hiring TSPECs. For instance the mean (median) announcement day [0,0] return for these firms is 2.56% (1.67%). The differences in mean returns as compared to benchmark firms are only significant at the 10% level and only in the [0,0] window. Median returns for this group are significantly higher than benchmark firms though still far lower than firms hiring specialists. This could indicate that the market views both reputation and experience as valuable. Alternatively it could be the case that the market welcomes any change in firms that hire CEOs with turnaround experience, and views those that hire specialists as having landed a talented CEO with a good chance at reversing the fortunes of the company. The multivariate regression in the next section will lend support to the latter hypothesis rather than the former.

1.5.2.1 Cross sectional analysis of succession CARs

Although the results of Table 1.5 show that the average CARs surrounding succession announcements are significantly higher for firms hiring turnaround specialists than for those that hire other outsiders, the univariate results leave open the question as to whether or not those differences are driven by omitted factors that could be correlated with both CARs and the choice of CEO. To control for such omitted factors as well as further understand the influence that succession type and firm characteristics have on succession CARs, I employ a cross sectional

regression analysis of CARs using firm characteristics as well as a dummy variable for whether or not the new CEO was a turnaround specialist (TSPEC) as explanatory variables.

Table 1.6 shows the results of six cross-sectional ordinary least squares (“OLS”) regressions in which the [0,0] succession event window (1-day market model adjusted return) is the dependent variable in models 1-5 and the [-1,1] window is the dependent variable in model 6. The primary explanatory variable of interest in each model is a dummy variable equal to 1 if the firm hired a TSPEC (or TCEO) and 0 otherwise.

In each regression I include a measure of recent stock performance leading up to the succession as well as variables that control for a set of succession and firm characteristics used in previous studies. Because succession announcements often coincide with announcements that the present CEO is exiting, I control for whether or not the exiting CEO was forced out. Previous studies have found that forced turnovers are associated with significant CARs. Additionally I create a variable called Day_Diff, which is a dummy equal to 1 if the CEO succession takes place on a different day than the exiting CEO turnover announcement (since the resolution of uncertainty between permanent CEOs could itself affect succession returns). I also control for the firm characteristics from the logit model in Table 1.4 which were hypothesized to be important determinants of the choice of hiring a turnaround specialist, namely Altman Z, long term debt, net loss, market-to-book equity ratio, and firm size as proxied for by log of Market Cap¹⁰. Since stock price variability could affect CARs I also control for whether or not the firm had a stock price under \$5 (Low Price), which could drive higher announcement

¹⁰ Results are qualitatively unchanged when using log of sales, I employ log of market cap for CAR regressions because the market cap should have a larger impact on stock returns than sales, given the higher variability in returns of small cap companies.

CARs due to higher variability in the price of low priced stocks, as well as the standard deviation of daily returns for the year leading up to the succession announcement.

In Model 1 of Table 1.6, the coefficient on TSPEC is .0538 and statistically significant at the 1% level. This indicates that even when controlling for factors that could be correlated with the decision to hire a TSPEC, firms that hire turnaround specialists still have significantly higher CARs on average than firms that hire other outside CEOs. The coefficient on TSPEC remains positive and significant (p value of .025) when using the [-1,1] event window. The turnaround When using the broader TCEO definition the coefficient drops to .0371 but remains significant at the 1% level. The results are robust to the inclusion of year and Fama-French 48 industry dummies. This evidence implies that it is not just the succession or firm characteristics that drive the large event returns alone, but that the turnaround reputation of the CEO is value relevant as well.

Trailing stock returns are significantly negatively related to CARs in each model. This is consistent with the market welcoming a change in leadership at poorly performing firms. The variable Day_diff which equals 1 if the succession announcement happened on a date subsequent to the exit announcement date of the previous CEO is marginally significant and positively related to CARs in some of the models. Firms with higher standard deviation of daily returns also have higher conditional abnormal returns around succession announcements. Long Term Debt is positive and highly significant in all models indicating that the market views it positively when a leveraged firm hires an outsider. Also, Log Market Cap is positive and highly significant, indicating the market is more optimistic about succession announcements in larger firms.

In addition to examining the direct stock price effect of announcements that turnaround specialists have been hired as CEOs, in model 3 I also test whether this effect is related to the recent stock price performance of the hiring company. To do so, I include the interaction of the TSPEC dummy variable with recent stock returns as an independent variable. The coefficient on this interaction term is negative and significant at the 5% level, meaning that CARs are larger for firms that hire turnaround specialists if their recent stock performance was worse. This is consistent change agent hypothesis which indicates that the market will respond more favorably to the hiring of a turnaround specialist when the firm has recently performed poorly, since the turnaround specialist will be expected to make broader changes to the ailing firm¹¹.

In model 5 I include a TSPEC dummy as well as a dummy for firms that hire CEOs with turnaround experience that are not in the specialist sample (TCEO (not TSPEC)). This allows me to more directly test whether the market favors the reputation of turnaround specialists or if they simply are responding to the fact that a poorly performing firm has hired a CEO with experience in turnarounds. In this model the TSPEC dummy remains positive and the magnitude and statistical significance are essentially unchanged from model 1. However the coefficient on the TCEO (not TSPEC) dummy is a fourth the size of the specialist coefficient and is not statistically significant (p-value of .172). This means that controlling for factors that influence succession CARs and the choice to hire an executive with turnaround experience; it is the specialist reputation that ultimately affects CARs. This is further evidence that the market

¹¹ In unreported analysis, I examine the interaction of the TSPEC dummy with each of the control variables in the main specification. Interactions with Low Price, Market to Book, and Standard Deviation Returns are significantly positive, indicating that as those variables increase, the CAR for a firm hiring a turnaround specialist increases as well. However, the interaction with Log Market Cap is significantly negative, indicating larger firms receive a slightly smaller CAR when they hire a turnaround specialist. Interactions with Leverage and Altman Z are not significant.

responds to the reputation of the incoming CEO when assessing the value of a firm's hiring decision.

1.5.3 Changes in ROA following succession

If the turnaround specialist reputation is a meaningful measure of skill sets or talent, it should have some predictive power for future performance. Specifically, those managers should have better success in turning around the fortunes of a failing company than an alternative choice of CEO. Alternatively, if turnaround specialists do not have skill and were simply lucky, then they should not have any detectable performance differences between other incoming CEOs.

The higher than average abnormal returns surrounding the succession announcements of turnaround specialists found in Tables 1.5 and 1.6 indicate that the market views the hiring of a turnaround specialist as a positive signal for the future of the firm. Whether or not the market's favorable perception of turnaround specialists is warranted is an open question. If the market on average has unbiased expectations, then near term changes in the firms' operating performance should be higher for firms hiring turnaround specialists than other firms. I test the predictive power of the turnaround specialist's reputation as well as whether the market's reaction is warranted by examining changes in Operating ROA (operating income before depreciation, scaled by assets) around the succession in Table 1.7.

In panel A of Table 1.7 I report mean and median changes in ROA around the succession interval: year 0 to year 1. Year 0 is the fiscal year ending before the succession announcement and year 1 is the fiscal year ending after the succession announcement, and thus new CEOs start somewhere between the interval of years (0,1). Since the CEO starts in the (0,1) interval,

changes in operating variables from year 0 to year 1 could only partially reflect any impact the CEO could have on the firm's profitability. Thus changes in ROA from (0,1) are more likely to reflect the negative trend in profitability in the year leading up to the hiring, and not the effects of policies implemented by the new CEO. Changes in ROA from year 1 to year 2 reflect the first apples to apples comparison of firm operations after the CEO was in office.

The mean (median) unadjusted change in ROA from year 0 to year 1 is -0.0751 (-0.0284) for turnaround firms, compared to -0.017 (-0.0084) for other outsiders. The difference in mean (median) changes in ROA between the two samples is -0.0581 (-0.02) and both are significant at the 1% level. The significant difference in ROA changes between the turnaround and benchmark samples implies that the profitability of firms hiring turnaround specialists was dramatically deteriorating compared to other firms in the year they hired the new CEO. This is consistent with the results of the logit analysis which found that firms with poor recent performance were more likely to hire a turnaround specialist.

In the first full year following succession (1,2), the firms hiring turnaround specialists have significantly higher mean (median) improvement in ROA versus the sample of firms hiring other outsiders. The difference in mean (median) changes in ROA between the two samples is a positive 0.0464 (0.0279) and both are significant at the 1% level. These positive differences in mean and median change in operating ROA from year 1 to year 2 show some persistence from year 2 to year 3, with the turnaround specialist firms experiencing a mean (median) increase in ROA of 0.0132 (0.013) higher than that of the other outsiders sample. Though the difference in means is not statistically significant, the difference in medians is significant at the 5% level. The pattern of industry adjusted changes in ROA is very similar to that of the unadjusted changes in ROA. Thus on average firms hiring turnaround specialists achieve larger improvements in ROA

following the CEO succession than the firms that hire other outsiders, consistent with the reputation hypothesis.

Even though industry adjusted changes in ROA reflect the same pattern as the unadjusted changes, it could be the fact that the changes in ROA are due to the overall difference in profitability of those firms that hire turnaround specialists versus those that do not. To address the concern that the significant difference in mean and median changes in ROA for the turnaround firms is due to mean reversion in operating performance alone, I follow Barber and Lyon (1996) and construct an industry and performance matched benchmark sample for every sample firm year, and examine the difference in differences in ROA between sample and benchmark firms. The results of this performance matched control sample are reported in panel C. For each sample firm j and year t , I construct the benchmark sample in the following way: I match each succession firm j to all out-of sample firms that have ROA data in year t and year $t+1$ that are in the same 2 digit SIC code and that have ROA within 90% and 110% of sample firm j in year t . I then use the median ROA for the benchmark sample to be the baseline ROA in years t and $t+1$. I measure the abnormal change in ROA to be:

$$\Delta ROA(t, t+1)_j = (ROA_{j,t+1} - ROA_{j,t}) - (ControlROA_{j,t+1} - ControlROA_{j,t})$$

This method addresses the issue of mean reversion since Barber and Lyon (1996) show that matching on pre-event ROA can yield well-specified test statistics for detecting abnormal changes in ROA. The change in ROA in the benchmark firms should pick up the expected change due to lower past performance levels, while the incremental change in sample firm ROA should pick up abnormal changes in ROA beyond those expected for a similarly performing firm.

The results in Table 1.7 panel C show that even when controlling for past performance, the turnaround specialist firms have significantly smaller changes in ROA from year 0 to year 1 and then significantly higher changes in ROA from year 1 to year 2. From year 0 to year 1 the mean (median) abnormal change in ROA for turnaround specialist firms is 0.0617 (0.0251) lower than the other outsiders sample, while from year 1 to year 2 the change in ROA for turnaround specialist firms is 0.0427 (0.0103) higher than the other outsiders sample.

Taken together, the results of Table 1.7 paint a consistent picture of the changes in operating performance both before and after the hiring of a turnaround specialist versus those of firms that hire other outsiders. Both samples exhibit negative changes in ROA preceding or concurrent with the succession, followed by positive changes in ROA in the first full year following the succession. However, turnaround specialists are hired by firms with much larger decreases in ROA in the hiring year and respond with much larger increases in ROA in the first years following the hiring. This is consistent with the hypothesis that turnaround specialists are hired by firms in crisis, and their reputations are good signals of future performance since they are on average able to create large positive changes in ROA following their hiring.

1.5.3.1 Multivariate analysis of ROA changes

Although turnaround firms exhibit higher improvements in ROA than other firms, they are also hired by poor performers that have more room for improvement. Thus it could be that new outside CEOs generally reverse the ROA trend following their hiring year, and since turnaround specialists are hired following larger ROA declines, their firms end up with larger ROA increases post-succession. I investigate this issue further in Table 1.8 by regressing post

succession changes in ROA (denoted as $\Delta ROA(1,2)$) on changes in hiring year ROA ($\Delta ROA(0,1)$) and a turnaround specialist dummy. In models 1 through 3 I use unadjusted, industry adjusted, and performance matched abnormal changes in ROA in models 1 through 3 respectively. In each of the three models $\Delta ROA(0,1)$ is significantly negatively related to $\Delta ROA(1,2)$ with a coefficient ranging from -0.1543 to -0.1898. This indicates that regardless of what new outsider CEO is hired, the changes in ROA after succession partially reverse the trend in ROA prior to succession. However, the TSPEC dummy is positive and significant with a coefficient ranging from 0.0306 to 0.0387, with p-values ranging from .024 to .085. This means that even after controlling for prior year change in ROA, turnaround firms exhibit larger increases in ROA than those firms hiring other outsiders, indicating turnaround specialists do in fact have skill in turning around operating performance.

In models 4 through 6 I repeat the analysis of models 1 through 3 but I include the 1 day $([0,0])$ succession announcement abnormal return (CAR). Interestingly, in all three models CAR is positively related to post succession change in ROA. This means that the market tends to accurately predict the impact a new CEO will have on the operational performance of the company going forward, and supports the notion of an efficient market impounding unbiased expectations into stock price. Perhaps more interesting is that fact that once CAR is included in the regression models, the coefficient on the turnaround specialist dummy variable, although still positive, loses significance. This implies that although turnaround specialists are able to create larger increases in operating performance for their firms, that change is statistically captured by the larger market reaction (CAR) to the announcement that a turnaround specialist is hired. Were this not the case, it would indicate that the market either under or over reacts to the hiring

of turnaround specialists. Thus even though the data indicates turnaround specialists are skilled operators, the market tends to get it right.

1.5.4 Long-run stock returns following succession

In Table 1.9 I examine the long run stock performance of firms hiring turnaround specialists vs. other outsiders using abnormal long run returns calculated following the method detailed in Lyon, Barber and Tsai (1999). Returns are calculated for 12, 24 and 36 month periods starting three days after the succession announcement (succession CAR not included). Panel A of Table 1.9 shows simple market adjusted returns over the three return horizons. In panels B and C of Table 1.9 I form reference portfolios based on matching firm size and book to market deciles formed in the month preceding the succession announcement. Panel B uses a random control firm from the same size and book to market decile, while panel C uses all firms from the same size and book to market decile. I then calculate abnormal buy and hold returns to be the difference between the buy and hold return of the sample firm and the buy and hold return of the reference portfolio or control firm, which contains a constant composition of firms over the entire holding period. If returns are missing for either sample or control firms the market return is substituted.

I report the standard t-statistic as well as the bootstrapped skewness adjusted t-stat detailed in Lyon, Barber and Tsai (1999). As in most long run event studies, the results are highly sensitive to specification. However the one consistent pattern is the lack of significant event returns for turnaround firms at each of the three event windows. Long run returns for other outsiders are significantly negative in 24 and 36 month size and book to market control portfolio

approach. However, market adjusted returns are significantly positive over the 12 month window following succession. Differences in individual significance between turnaround and benchmark firms could be due to sample size differences across the two subsamples. Although not reported in the table, none of the long run return windows of turnaround firms are significantly different from the benchmark group. Thus the results are difficult to make any specific conclusions, but the lack of significant returns (either positive or negative) generally support the notion of market efficiency and the market adequately predicting the impact of succession at the time of announcement.

1.6 ROBUSTNESS AND EXTENSIONS

1.6.1 What do turnaround specialists do?

The results of the logit analysis of the hiring decision indicate that turnaround specialists are more likely to be hired by firms with poor recent stock performance, high current and long term liabilities, and low market to book ratios. Those results indicate turnaround managers have a management style which is conducive for firms in a crisis situation. However, it still leaves the question open as to how that style differs from that of traditional managers. In other words, what actions do turnaround specialists take which separate them from the pack of other CEOs?

Anecdotal evidence from the turnaround cases in my sample indicates that turnaround specialists may differ from other CEOs in their ability to make tough decisions regarding corporate downsizing: cutting costs, laying off employees, and restructuring or selling off assets

or divisions. For instance, Bettina Whyte was hired by Service Merchandise in January 1999 to help turn the company around. By February she had already announced the closure of 134 stores, amounting to a 40% reduction in operating scale. David Sadler of Merisel Corp. laid off 33% of the workforce and sold 4 warehouses within the first month of his hire. “Chainsaw” Al Dunlap, perhaps the most famous turnaround specialist from my sample, made a name for himself after being hired by Scott Paper in 1994. By 1995 he had laid off 11,000 employees and had sold the company to Kimberly Clark. James Kilts developed a reputation as a “hatchet man” at Nabisco where his turnaround plan included major layoffs and factory closings, including a notable closing in Pittsburgh: “Rallies were organized, and there was talk of a boycott that would make Pittsburgh a Nabisco-free zone. At one protest, kids carried signs that said, “You took my dad's job,” and Kilts was hanged in effigy.¹²” Kilts was then hired by Gillette in 2001 to orchestrate a turnaround and major global workforce reduction.

The “hatchet man” reputation of turnaround specialists separates them from typical CEOs in an important way. It indicates they are willing to cut implicit contracts with stakeholders in order to preserve the short-term survival of the firm. That managerial style is useful for firms that require downsizing, but could be detrimental for a firm that requires stakeholders to make long-term investments in the firm. That is likely the reason that most turnaround specialists are hired as interim managers only. If a permanent CEO was forced to restructure assets and lay off employees, the remaining employees of the firm would have a difficult time trusting the CEO for the long term. Once the turnaround specialist makes all the cuts and restructures the assets of the firm, a new permanent CEO can be hired with a focus on preserving the long-term value of the firm. In that sense, turnaround specialists provide a means for the firm to outsource the firing

¹² From the Boston Globe, April 15, 2001.

decision, thereby enabling the firm to adjust to profitable operating scale without completely damaging the credibility of the firm's permanent leadership.

To better understand the actual tendency of turnaround specialists to downsize following their hiring I examine the change in operating scale of firms following CEO succession in Table 1.10. Specifically, I examine the mean and median growth rates in employees, assets, and plant property and equipment in the years following the succession announcement. The results reflect a general pattern of declining growth in operating scale for turnaround firms relative to firms hiring other outsiders. In the year surrounding the succession (0,1), turnaround firms experienced a mean (median) decrease in employees of 11.85% (8.26%). Meanwhile the other outsiders sample experienced a mean increase in employees of over 19% and a median decrease of only 2.37%. The differences in mean and median growth rates between the turnaround and benchmark sample are significant at the 5% and 1% level respectively. In the following year (year (1,2)), the mean (median) growth rate in employees was -8.38% (-8.8%) vs. 0.25% (-1.74%) for other outsiders. Those differences in mean and median growth rates are significant at the 5% and 1% level respectively. Two year windows following the succession reflect the same pattern, with turnaround firms reducing employees more than other outsiders, at the mean and median level.

The results for assets and PP&E reflect a similar pattern. Turnaround firms experience 13.45% (10.68%) mean (median) declines in assets and 14.34% (14.84%) mean (median) declines in assets, significantly lower than the changes for benchmark firms. In the following year, turnaround firms continue to exhibit significant reductions in operating scale as compared to benchmark firms. Overall, in the two years following the succession the median turnaround firm exhibited a 16.23% reduction in employees, a 9.39% decline in assets and a 26.06%

reduction in PP&E from the year before the succession. All differences are significantly and economically different than the post-succession growth rates in the benchmark sample of firms. These results are consistent with the notion that a significant aspect of the “style” of turnaround managers is that they are more likely to take actions that reduce the scale of a firm’s operations. Although the turnaround firms reduce scale more than benchmark firms, this does not mean that benchmark firms that did not downsize should have or would have been downsized if they had simply chosen to hire a turnaround specialist vs. another outside CEO. Rather, it is much more likely the case that turnaround managers are brought into firms that can benefit the most by the skills in corporate downsizing that turnaround specialists possess.

1.6.2 Credit rating changes following succession

In section 1.5.2 I found that the stock market’s reaction to a firm hiring a turnaround specialist is on average very positive, supporting the notion that turnaround specialists have reputations for creating shareholder value. However an open question is what effects if any does hiring a turnaround specialist have on the value of the firm’s debt. It could be that the abnormal stock returns surrounding the succession announcement reflect a redistribution of wealth from creditors to shareholders. Adams and Mansi (2008) find that credit ratings of firms that hire outside CEO replacements are more likely to be downgraded following succession. They argue this reflects that outside CEO replacements are more likely restructure firm assets which could reduce overall asset-based collateral and could lead to increase riskiness of firm cash flows due to reduction in coinsurance of diversified business segments. Since turnaround specialists are more likely to restructure assets than other outside CEOs, turnaround firms should

be more likely to experience reductions in credit ratings following succession than the sample of other outsiders. Additionally it could be the case that hiring a turnaround specialist is a signal to the market that firm is distressed and is more likely to enter bankruptcy. In either case I expect credit ratings to decrease for turnaround firms relative to the benchmark firms.

In Table 1.11 I report the average behavior of long term credit ratings for those firms with public debt rated by the S&P in my sample. Consistent with past literature on credit ratings, I have converted each letter based rating issued by S&P into an ordinal ranking ranging from 1 for “AAA” to 22 for “D”. Thus a higher ordinal ranking reflects a lower credit rating from the S&P. 70% of turnaround firms (45 firms) have publicly rated debt at the time of succession versus 47% of the benchmark sample (320 firms) consistent with the fact that turnaround specialists are more likely to be hired by firms that could face financial distress. Interestingly, at the time of succession the credit rating of turnaround firms (10.8) is lower than the benchmark sample (10.08) but the difference is not statistically significant. However, in just 3 months following the succession the credit rating of turnaround firms (11.76) is significantly lower than benchmark firms (10.32), indicating the debt of turnaround firms has become significantly riskier following succession. Both samples exhibit an increasing pattern in credit ratings following succession (i.e. debt is getting riskier), consistent with results Adams and Mansi (2008).

To more directly examine the change in ratings following succession, I examine the proportion of firms that have experienced credit rating downgrades in the months following the succession. Panel B of Table 1.12 shows at each monthly interval, the proportion of firms whose credit has been downgraded from their baseline level of Month 0 (the month ending before the succession). By the third month following succession, a 36.36% of turnaround firms have experienced a credit rating downgrade while only 14.56% of the benchmark sample has been

downgraded. The proportion of turnaround firms that experience a credit rating downgrade increases as the monthly interval increases, and eclipses 50% of the sample by the 9 month mark. The proportion of benchmark firms experiencing credit downgrades is significantly lower than the turnaround firms at all monthly intervals, reaching a high of 34.88% by the 24 month mark. These results hold if I assign a downgrade to each firm that exits the sample¹³. Overall the results of Table 1.11 are consistent with the notion that while turnaround specialists may increase shareholder value for firms, they do not seem to increase debt-holder value¹⁴.

It is important to point out that although credit ratings tend to worsen for turnaround firms more so than benchmark firms, that fact does not necessarily mean that turnaround specialists directly redistribute wealth from creditors to shareholders. It could just be that turnaround specialists are hired by firms that know they are headed toward distress before the ratings agencies do. In other words, when a turnaround specialist is hired it could signal to the market that the firm's capacity to repay debt is worse than previously expected. In this empirical context it is difficult to separate the signaling effects with the real effects of hiring a turnaround specialist.

¹³ The Compustat manual indicates that firms with missing credit ratings are likely to be due to default based reasons, indicating that a firm should be treated as having been downgraded if exiting the sample in a given month.

¹⁴ I also examine the correlation between credit rating downgrades and post succession stocks returns. The redistribution hypothesis predicts that credit rating downgrades should be positively related to stock returns as stockholders gain at the expense of debt holders. I estimate the market adjusted stock returns for each firm for the 3, 6, 9 and 12 month windows following succession, and examine the difference in returns between firms that were downgraded over those return windows vs. firms that did not receive a credit rating downgrade. 3 month median returns are significantly lower for the downgraded sample than for the non-downgraded sample, inconsistent with the redistribution hypothesis. Returns are not significantly different for downgraded firms as compared to non-downgraded firms for the other return windows.

1.6.3 Potential Endogeneity of Succession CARs

The results detailed in section 1.5.2 show that firms hiring turnaround specialists exhibit much higher abnormal returns surrounding the succession announcement than firms that hire outsiders without a turnaround specialist reputation. If the market response to succession is independent of circumstances influencing the firm's hiring decision then I argue the higher CARs indicates that the market views turnaround specialists as having superior ability commensurate with their reputation which should benefit firms that hire them. However, it could be the case that the decision to hire a turnaround specialist is endogenously related to the market response to the announcement. For instance if the market welcomes any succession announcement from poorly performing firms (since that is a signal the board is taking action to reverse the course of the firm) then firms that hire turnaround specialists could experience higher succession CARs due to their recent poor performance and not due to the reputation of the turnaround specialist.

Although endogeneity is difficult to eradicate completely absent a natural experiment I have attempted to address this relation in several ways.

First, as discussed in section 1.5.2, I have not only examined the difference in mean and median CARs across turnaround and control groups, but have also modeled succession CARs in a multivariate regression framework controlling for many observable firm characteristics that I believe could determine the market response. Many of those control variables include variables that have been shown to be related to the choice to hire a turnaround specialist detailed in section 1.5.1, such as trailing stock returns, firm size, Altman-Z, long term debt, and firm profitability.

Second, I have shown that CARs are higher for firms that hire turnaround specialists (TSPECs) versus those that simply hire CEOs with turnaround experience (TCEO (not TSPEC)).

If firms that need a turnaround hire CEOs with turnaround experience and reputation is not important, then CARs for turnaround specialists should not be different from those of CEOs simply possessing turnaround experience.

Third, in unreported analysis I have examined separately those firms whose succession announcements come after the announcement that the exiting CEO is leaving (firms where $Day_diff=1$). These announcements are in some respects cleaner in that the firm has already announced it is changing CEOs and (and as such, the direction of the firm in many cases). Thus the information embedded in these succession announcements can be more directly tied to the market's evaluation of the hiring choice distinct from the information embedded in the decision to replace a CEO. For this group of firms, the difference in mean CARs between turnaround and control firms are even higher than the difference in means for firms that report succession and exit decisions on the same day. This fact is difficult to reconcile with the argument that succession CARs for turnaround firms merely reflect the market's positive appraisal of a change in leadership for poorly performing firms. If this were the case then the positive reaction should have been had at the exit announcement when the firm first signaled it was changing course.

In attempts to further address the potential endogeneity concerns, I have also estimated a treatment effects regression as well as a propensity score matching model to control for the selection decision of hiring a turnaround specialist in the estimation of succession CARs. The results of both tests are in Table 1.12. Panel A shows the results of a treatment effects regression using a standard two-stage Heckman selection model. The first stage selection model is a probit model with the same specification as the logit regression in Table 1.4 model 1. The second stage regression models the market response to succession announcements controlling for the inverse Mills ratio created from the first stage probit to correct for self selection. In this way

I am controlling for the unobservable information that could simultaneously drive the decision to hire a turnaround specialists along with the CARs surrounding succession. Note that although omitted from view, the second stage model employs the same control variables as the OLS models from Table 1.6 model (2). In panel A of Table 1.12 I have estimated a treatment effects model for each of the four succession event windows separately. In each model the turnaround specialist dummy remains positive and significant at the 1% level and the magnitudes qualitatively similar to the results from OLS models. Furthermore, Rho, the correlation between the error terms of the two equations is not significant in models 1, 3 and 4 and is only mildly significant in model 2. This indicates that selection bias is not a major problem in OLS estimation and that OLS estimators are consistent.

Panel B shows the results of a propensity score matching model which shows the average difference in CARs between turnaround firms and propensity score matched control firms. Following Rosenbaum and Rubin (1983), I first estimate the probability a firm will hire a turnaround specialist using the same logit regression as in Table 1.4 model 2. The estimated probability from that logit model becomes the propensity score that I use to match treatment firms (firms that hire turnaround specialists) with control firms (firms that hired other outsider CEOs). Each treatment firm is matched to a control firm with the closest propensity score. In this way control firms are similar in to treatment firms in all observable firm characteristics and differ primarily in their choice to hire a turnaround specialist. I then examine the difference in means between treatment and control firms to estimate the average treatment effect.

Panel B shows the univariate average CARs of the turnaround specialists group compared to that of the propensity score matched control group as well as the full sample of other outsider firms for comparison purposes. Note that the propensity score matched control group has higher

average CARs than the other outsider group as a whole, indicating that announcement returns are on average higher for firms with the qualities of a turnaround firm. This is consistent with the fact that turnaround firms are usually poor performing firms, and that CARs are on average higher for firms with poor recent performance. However, CARs for turnaround firms are still significantly higher than the propensity score matched control firms. The difference in means between turnaround and control groups (aka average treatment effect) is 5.48% for the [0,0] window surrounding succession and that difference is significant at the 1% level. The difference in means for the [0,1] , [-1,1] and [-2,2] window CARs are 4.58%, 5.91% and 6.76% respectively and are each significant at the 5% level. This indicates that even after controlling for the many characteristics that lead firms to hire a turnaround specialist, those that do in fact hire a turnaround specialist receive strikingly higher market response than similar firms that hire other outsiders.

Taken together the results of both the propensity score matching model and the treatment effects regression indicate that selectivity bias is not a serious problem in the analysis of the succession CARs. The results are consistent with the argument that the market rewards firms for landing high ability agents in the hiring process, and is inconsistent with the notion that the market is merely rewarding these firms for hiring a new CEO regardless of his reputation.

1.7 CONCLUSION

Although turnaround specialists are oft referred to in the media, little is known empirically about the types of firms that hire them, how the market reacts to the hiring decision and how the firms perform following the succession. In this essay I contribute to the growing

literature on the importance of CEO reputation and managerial style by providing the first quantitative study of firms that hire a CEO who has a reputation of being a turnaround specialist.

Starting with a sample of 811 outside CEO successions, I use keyword news searches and directly examine hundreds of news articles to identify 114 turnaround CEOs comprised of 65 turnaround specialist reputations and 49 CEOs with turnaround experience only. I compare firms hiring turnaround specialist CEOs to a benchmark sample of firms that hire other outside CEOs and find that CEO reputation matters to firms and investors in a way that is consistent with reputation providing value-relevant signals about managerial talent and style.

Turnaround specialists are older and more experienced managers that have held higher titles than CEOs hired by similar firms who don't have a turnaround reputation. Firms that hire turnaround specialists are more likely to be financially distressed and have poor recent stock and operating performance at the time of succession. Following the succession, firms that hire turnaround specialists show a considerable recovery in ROA. The market anticipates the recovery at the time of succession: abnormal returns surrounding turnaround specialist successions are significantly positive and over 6 times that of other outsider CEO successions. The difference in abnormal returns remains significant after controlling for firm and succession characteristics. However, consistent with market efficiency, long run returns following the succession for firms hiring turnaround specialists are not significantly different than the benchmark sample.

Figure 1.1: Sample Attrition by CEO type

Sample Attrition

<u>Full sample</u>	Year 1	Year 2	Year 3
Prior Year Firms	811	811	782
Lost due to Bankruptcy	0	6	12
Lost due to Merger	0	23	33
Total Lost	0	29	45
Total Firms	811	782	737

<u>Turnaround Specialists</u>	Year 1	Year 2	Year 3
Prior Year Firms	65	65	62
Lost due to Bankruptcy	0	0	2
Lost due to Merger	0	3	5
Total Lost	0	3	7
Total Firms	65	62	55

<u>Turnaround CEOs</u>	Year 1	Year 2	Year 3
Prior Year Firms	114	114	107
Lost due to Bankruptcy	0	2	2
Lost due to Merger	0	5	5
Total Lost	0	7	7
Total Firms	114	107	100

<u>Other Outsiders</u>	Year 1	Year 2	Year 3
Prior Year Firms	697	697	675
Lost due to Bankruptcy	0	4	10
Lost due to Merger	0	18	28
Total Lost	0	22	38
Total Firms	697	675	637

Table 1.1: Turnaround CEO biographical information

The table below shows sample averages of career and educational experience for the set of turnaround CEOs vs. a control matched subset of CEOs with no turnaround experience or reputation. Control CEOs are found using a propensity score matching algorithm based on the logit model in Table 4 determining the probability a firm will hire a turnaround CEO. Turnaround Specialists are the subset of Turnaround CEOs that have been given the specific reputation as being a turnaround (expert, specialist, or artist). Biographical information is found using Lexis Nexis, Factiva, proxy statements and internet searches. Each firm has been matched to CRSP to determine if the firm was public and what industry the firm belonged to. The industry composition of private firms has been determined by LexisNexis and internet searches. Elite Universities comprise 13 top USA institutions and are defined by Butler et al. (2009).

Biographical Information	Turnaround Specialists only <i>n=65</i>	Turnaround CEOs <i>n=114</i>	CEOs with no Turnaround Experience <i>n=114</i>
Age and Years of Experience			
Age	55.49	54.48	52.54
Number of firms worked for	4.48	4.16	3.43
Number of public firms worked for	2.97	2.76	1.96
Worked for public firm	93.85%	92.98%	89.47%
Total years of executive experience	17.94	16.29	15.15
Total years of executive experience at a public firm	13.62	12.39	11.21
CEO had experience with same industry SIC2	69.23%	65.79%	60.53%
Proportion of experience from same industry SIC2	41.71%	39.34%	43.36%
CEO had experience with same industry FF-48	72.31%	68.42%	66.67%
Percent of experience from same industry FF-48	43.81%	41.28%	48.45%
Tenure at Hiring Firm in years	3.20	3.44	4.43
Position Experience			
<i>Executive CEO had experience as:</i>			
CEO or Chairman of the Board	89.23%	81.58%	64.04%
CEO or Chairman of the Board of Public Firm	81.54%	73.68%	53.51%
More than 1 position as CEO	53.85%	46.49%	27.19%
CFO	12.31%	10.53%	9.65%
COO	27.69%	25.44%	31.58%
Director	60.00%	54.39%	50.00%
President	33.85%	37.72%	35.09%
Vice Chairman	18.46%	12.28%	7.02%
Vice President	66.15%	69.30%	64.91%

Table 1.1: Turnaround CEO biographical information (Continued)

Biographical Information	Turnaround Specialists only <i>n=65</i>	Turnaround CEOs <i>n=114</i>	CEOs with no Turnaround Experience <i>n=114</i>
Education			
CEO had Advanced Degree	61.54%	52.63%	58.77%
CEO had J.D.	6.15%	5.26%	5.26%
CEO had MBA	46.15%	38.60%	36.84%
CEO had MBA or J.D.	52.31%	43.86%	42.11%
Attended Elite University (as defined in Butler et al. (2009))	43.08%	35.09%	25.44%
Attended Elite or Ivy League University	43.08%	36.84%	28.07%
Firm Type Experience			
Executive in distressed public firm	70.77%	63.16%	55.26%
CEO of distressed public firm	43.08%	37.72%	27.19%
% of public experience at distressed firm	52.56%	45.60%	39.72%
Executive in diversified public firm	69.23%	65.79%	71.05%
CEO of diversified public firm	38.46%	36.84%	30.70%
% of public experience at diversified firm	36.54%	39.51%	53.36%
Executive in focused public firm	81.54%	80.70%	77.19%
CEO of focused public firm	58.46%	50.00%	22.81%
% of public experience at focused firm	63.46%	60.49%	46.64%

Table 1.2: Summary statistics for sample of firms hiring outside CEOs

The table below shows summary statistics for the full sample of outsider successions. Turnaround CEOs are all CEOs that are indicated in the press as having turnaround experience or skills. Turnaround Specialists are the subset of Turnaround CEOs that have been given the specific reputation as being a turnaround (expert, specialist, or artist). All financial data are measured as of the pre-succession year, which is defined to be the fiscal year ending before the succession announcement. Sales are in \$millions. All returns are cumulative returns preceding the succession announcement, adjusted for the same window return of the value weighted market index. Operating Loss and Net Loss are dummy variables equal to 1 if the firm has an operating or net loss in the succession year. Forced is a dummy variable equal to 1 if the exiting CEO was forced out, 0 otherwise. Day_diff is a dummy variable equal to 1 if the succession announcement day is different from the exit announcement date.

	N	Mean	Median	Std Dev	Minimum	Maximum
<i>Turnover Characteristics</i>						
Turnaround CEO	811	0.14	0.00	0.35	0.00	1.00
Turnaround Specialist	811	0.08	0.00	0.27	0.00	1.00
Forced	811	0.36	0.00	0.48	0.00	1.00
Day_Diff	811	0.44	0.00	0.50	0.00	1.00
<i>Size and Growth Opp.</i>						
Sales	810	3,532.19	948.35	7,539.04	0.05	79,905.00
Market to Book Ratio	809	2.16	1.74	6.93	-114.81	63.66
<i>Pre-Succession Performance</i>						
6 Month Mkt. adjusted Return	790	-0.12	-0.13	0.37	-1.05	3.37
ROA Operating	793	0.09	0.11	0.21	-2.99	0.57
Operating Loss Dummy	793	0.13	0.00	0.34	0.00	1.00
ROA Net	811	-0.04	0.02	0.34	-5.88	0.45
Net Loss Dummy	811	0.36	0.00	0.48	0.00	1.00
<i>Financial Structure and Distress</i>						
Long Term Debt / Total Assets	809	0.20	0.16	0.22	0.00	3.39
Altman Z	811	3.58	2.68	6.95	-59.96	116.49

Table 1.3: Univariate comparisons of turnaround firms vs. benchmark firms

The table below shows univariate comparisons of means and medians for the Turnaround Sample vs. the sample of Other Outsiders. Turnaround CEOs (TCEOs) are all CEOs that are indicated in the press as having turnaround experience or skills. Turnaround Specialists (TSPECs) are the subset of Turnaround CEOs that have been given the specific reputation as being a turnaround (expert, specialist, or artist). All financial data are measured as of the pre-succession year, which is defined to be the fiscal year ending before the succession announcement. Sales are in \$millions. All returns are cumulative returns preceding the succession announcement, adjusted for the same window return of the value weighted market index. Operating Loss and Net Loss are dummy variables equal to 1 if the firm has an operating or net loss in the succession year. Tests for difference in means use the t-test, and tests for differences in medians use the Wilcoxon Rank Sum test. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

	Sample Means			Difference in Means	
	TCEO	TSPEC	Other Outsiders	TCEO - Other	TSPEC - Other
Size and Growth Opp.					
Sales	8956.81	11750.21	2652.74	6304.08***	9097.47***
Market to Book Ratio	1.2572	0.53	2.31	-1.0544	-1.7802
Pre-Succession Performance					
6 Month Mkt. adjusted Return	-0.2115	-0.29	-0.10	-0.1119***	-0.1948***
ROA Operating	0.0947	0.08	0.09	0.0047	-0.0058
Operating Loss Dummy	0.1081	0.16	0.14	-0.0297	0.0184
ROA Net	-0.0256	-0.03	-0.04	0.0171	0.0099
Net Loss Dummy	0.4602	0.49	0.34	0.1163**	0.1485**
Financial Structure and Distress					
Long Term Debt / Total Assets	0.2247	0.23	0.19	0.0333	0.0367
Altman Z	2.873	2.26	3.70	-0.8268**	-1.4447***
Sample Medians					
	TCEO	TSPEC	Other Outsiders	TCEO - Other	TSPEC - Other
Size and Growth Opp.					
Sales	2770.38	3860.00	814.03	1956.35***	3045.97***
Market to Book Ratio	1.60	1.18	1.78	-0.1824**	-0.6015***
Pre-Succession Performance					
6 Month Mkt. adjusted Return	-0.21	-0.32	-0.12	-0.0816***	-0.1921***
ROA Operating	0.09	0.09	0.11	-0.0165	-0.022*
ROA Net	0.01	0.00	0.02	-0.0162**	-0.0225**
Financial Structure and Distress					
Long Term Debt / Total Assets	0.21	0.21	0.15	0.0585**	0.0585**
Altman Z	2.31	1.82	2.75	-0.4372**	-0.9233***

Table 1.4: Logit models predicting choice to hire Turnaround Specialist

The models below are logit models using the full sample of outsider successions. The dependent variable equals 1 if the new CEO is a Turnaround CEO or Turnaround Specialist, 0 otherwise. Turnaround CEOs (TCEOs) are all CEOs that are indicated in the press as having turnaround experience or skills. Turnaround Specialists (TSPECs) are the subset of Turnaround CEOs that have been given the specific reputation as being a turnaround (expert, specialist, or artist). Models 1-5 use the Turnaround Specialist dummy model 6 uses the Turnaround CEO dummy as the dependent variable. In model 5 Turnaround CEOs that are not experts are dropped from the sample. All financial data are measured as of the pre-succession year, which is defined to be the fiscal year ending before the succession announcement. All returns are cumulative returns preceding the succession announcement, adjusted for the same window return of the value weighted market index. Operating Loss and Net Loss are dummy variables equal to 1 if the firm has an operating or net loss in the succession year. P-values are listed below coefficients in brackets. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	TSPEC	TSPEC	TSPEC	TSPEC	TSPEC	TCEO
Mkt.-Adj Returns Mths: -6 to 0	-1.7075*** [0.004]	-1.6192*** [0.009]	-1.3013** [0.021]		-1.7270*** [0.006]	-0.9008** [0.038]
Mkt.-Adj Returns Mths: -3 to 0				-1.6051** [0.043]		
Mkt.-Adj Returns Mths: -6 to -3				-1.7493** [0.015]		
Mkt.-Adj Returns Mths: -9 to -6				-0.5345 [0.252]		
Mkt.-Adj Returns Mths: -12 to -9				0.2621 [0.428]		
Net Loss	0.6556** [0.047]	0.7974** [0.024]	0.8737** [0.032]	0.6217* [0.085]	0.9095** [0.010]	0.8421*** [0.001]
ROA Net	0.8848 [0.215]	1.0024 [0.179]	1.2611 [0.177]	0.9301 [0.223]	0.7976 [0.237]	0.5826 [0.381]
Operating Loss	0.2407 [0.687]	0.2449 [0.693]	0.3237 [0.614]	0.2435 [0.717]	0.0314 [0.960]	-0.3642 [0.438]
ROA Operating	-0.3114 [0.871]	0.0942 [0.964]	-0.1865 [0.932]	0.1657 [0.944]	0.1214 [0.955]	-0.7498 [0.512]
Altman Z	-0.0506* [0.073]	-0.0645** [0.048]	-0.0774** [0.027]	-0.0667** [0.048]	-0.0622* [0.054]	-0.0084 [0.623]
Long Term Debt / Total Assets	-0.6529 [0.459]	-0.9466 [0.268]	-0.9919 [0.338]	-0.8631 [0.333]	-0.9406 [0.281]	-0.3520 [0.601]
Log Sales	0.5697*** [0.000]	0.6089*** [0.000]	0.6068*** [0.000]	0.6001*** [0.000]	0.6399*** [0.000]	0.4734*** [0.000]
Market to Book Ratio	-0.0198 [0.202]	-0.0221 [0.156]	-0.0205 [0.347]	-0.0184 [0.215]	-0.0222 [0.171]	-0.0166 [0.272]
Constant	-6.9458*** [0.000]	-8.3987*** [0.000]	-6.7590*** [0.000]	-7.9461*** [0.000]	-8.2378*** [0.000]	-5.4716*** [0.000]
Observations	773	771	605	764	725	773
Pseudo R2	0.162	0.191	0.239	0.199	0.206	0.111
Year Dummies	No	Yes	Yes	Yes	Yes	No
FF-48 Dummies	No	No	Yes	No	No	No

Table 1.5: Cumulative abnormal returns (CARs) surrounding succession announcements

The table below shows univariate comparisons of the Cumulative Abnormal Returns (CARs) following succession announcements for sample CEOs. All CARs are market model adjusted using the prior 150 days to estimate betas, with the estimation window ending 50 days before the succession date. Turnaround CEOs (TCEOs) are all CEOs that are indicated in the press as having turnaround experience or skills. Turnaround Specialists (TSPECs) are the subset of Turnaround CEOs that have been given the specific reputation as being a turnaround (expert, specialist, or artist). TCEO (not TSPEC) is the set of Turnaround CEOs that are not in the Turnaround Specialist group. Tests for difference in means use the t-test, and tests for differences in medians use the Wilcoxon Rank Sum test. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

Panel A: Mean Market Model Adjusted CARs

Event Window	(1)	(2)	(3)	(4)	Difference in Means		
	TCEO	TSPEC	TCEO (but not TSPEC)	Other Outsiders	(1) - (4)	(2) - (4)	(3) - (4)
[0,0]	5.54%	7.68%	2.56%	1.10%	4.44%***	6.58%***	1.45%*
[0,1]	6.47%	8.11%	4.18%	2.18%	4.29%***	5.93%***	2.00%
[-1,1]	7.96%	10.31%	4.66%	2.38%	5.57%***	7.93%***	2.28%
[-2,2]	8.04%	10.77%	4.22%	2.32%	5.72%***	8.46%***	1.90%

Panel B: Median Market Model Adjusted CARs

Event Window	(1)	(2)	(3)	(4)	Difference in Medians		
	TCEO	TSPEC	TCEO (but not TSPEC)	Other Outsiders	(1) - (4)	(2) - (4)	(3) - (4)
[0,0]	3.09%	4.10%	1.67%	0.39%	2.70%***	3.71%***	1.28%**
[0,1]	4.61%	6.54%	3.53%	0.81%	3.80%***	5.73%***	2.72%**
[-1,1]	5.24%	6.32%	3.58%	1.00%	4.24%***	5.32%***	2.58%**
[-2,2]	4.71%	7.13%	2.85%	0.99%	3.71%***	6.13%***	1.86%*

Table 1.6: Succession CAR regressions

The models below are OLS regression models using the full sample of outsider successions. In models 1-5 the dependent variable is the [0,0] window abnormal return surrounding the succession announcement date. Model 6 uses the [-1,1] succession window. The abnormal returns are generated from a market model. Turnaround CEOs (TCEOs) are all CEOs that are indicated in the press as having turnaround experience or skills. Turnaround Specialists (TSPECs) are the subset of Turnaround CEOs that have been given the specific reputation as being a turnaround (expert, specialist, or artist). TCEO (not TSPEC) is the set of Turnaround CEOs that are not in the Turnaround Specialist group. All financial data are measured as of the pre-succession year, which is defined to be the fiscal year ending before the succession announcement. All returns are monthly cumulative returns adjusted for the same window return of the value weighted market index. Operating Loss and Net Loss are dummy variables equal to 1 if the firm has an operating or net loss in the succession year. Standard Deviation Returns is the annual daily standard deviation of returns before succession. Forced is a dummy=1 if the prior CEO was forced out. Day_diff =1 if the prior CEO exit date was before the succession date. P-values are listed below coefficients in brackets. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

Variables	(1) CAR [0,0]	(2) CAR [0,0]	(3) CAR [0,0]	(4) CAR [0,0]	(5) CAR [0,0]	(6) CAR [-1,1]
TSPEC	0.0538*** [0.000]	0.0521*** [0.000]	0.0317** [0.024]		0.0549*** [0.000]	0.0584** [0.025]
TCEO				0.0371*** [0.000]		
TCEO (not TSPEC)					0.0133 [0.172]	
TSPEC * 6 Month Mkt. adjusted Retu.			-0.0836** [0.030]			
6 Month Mkt. adjusted Return	-0.0171** [0.030]	-0.0145* [0.079]	-0.0114 [0.127]	-0.0195** [0.015]	-0.0173** [0.028]	-0.0463*** [0.000]
Forced	0.0026 [0.587]	0.0040 [0.417]	0.0028 [0.561]	0.0042 [0.395]	0.0028 [0.567]	-0.0020 [0.819]
Day_Diff	0.0080* [0.063]	0.0066 [0.155]	0.0089** [0.040]	0.0067 [0.124]	0.0071 [0.102]	0.0279*** [0.001]
Low Price	0.0106 [0.253]	0.0117 [0.218]	0.0101 [0.276]	0.0097 [0.298]	0.0100 [0.278]	0.0201 [0.286]
Log Market Cap	0.0030* [0.092]	0.0045** [0.025]	0.0033* [0.063]	0.0030* [0.088]	0.0028 [0.117]	-0.0031 [0.321]
Long Term Debt / Assets	0.0393*** [0.001]	0.0372*** [0.005]	0.0405*** [0.001]	0.0377*** [0.001]	0.0387*** [0.001]	0.0512*** [0.007]
Net Loss	-0.0022 [0.705]	-0.0012 [0.855]	-0.0011 [0.849]	-0.0030 [0.605]	-0.0026 [0.647]	0.0107 [0.176]
Market to Book	0.0002 [0.305]	0.0000 [0.887]	0.0003 [0.214]	0.0002 [0.395]	0.0002 [0.305]	-0.0002 [0.772]
Altman Z	-0.0002 [0.416]	-0.0005* [0.083]	-0.0003 [0.364]	-0.0003 [0.280]	-0.0002 [0.381]	0.0003 [0.505]
Standard Deviation Returns	0.0389** [0.010]	0.0357** [0.017]	0.0365** [0.014]	0.0340* [0.061]	0.0324** [0.031]	0.0350* [0.073]
Constant	-0.0635** [0.024]	-0.0607** [0.029]	-0.0587** [0.035]	-0.0854*** [0.009]	-0.0637** [0.020]	0.0165 [0.697]
Observations	771	771	771	771	771	771
Adjusted R2	0.111	0.122	0.123	0.111	0.136	0.108
Year Dummies	No	No	No	Yes	No	No
FF-48 Dummies	No	No	No	Yes	No	No

Table 1.7: Changes in operating ROA following succession

The following table shows mean and median changes in operating ROA (operating income divided by total assets) surrounding the announcement window of the incoming CEO. For example, (0,1) shows the mean change in ROA from year 0 to year 1 for sample firms. Year 0 is the last fiscal year to end before the new CEO's succession is announced. Thus year 1 is the fiscal year ending the year of the succession announcement. That makes year 2 the first full year following the new CEO's succession. Turnaround CEOs (TCEOs) are all CEOs that are indicated in the press as having turnaround experience or skills. Turnaround Specialists (TSPECs) are the subset of Turnaround CEOs that have been given the specific reputation as being a turnaround (expert, specialist, or artist). Panel A shows changes in unadjusted ROA. Panel B shows changes in industry adjusted ROA where industry adjustment subtracts the median value for the same SIC2 industry minus the own firm ROA. Panel C shows changes in ROA using the Barber and Lyon (1996) control group adjustment method. Specifically, each sample firm is matched to a control group of similar size, ROA and industry, and changes reflect the difference in differences between the sample firm and control group ROA each year. Control groups are matched based on beginning year financial data, thus for each change window a sample firm matches to a new control group. Tests for difference in means use the t-test.***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

		Mean Growth Rate					Median Growth Rate				
Panel A		TCEO	TSPEC	Other Outsiders	TCEO- Other	TSPEC- Other	TCEO	TSPEC	Other Outsiders	TCEO- Other	TSPEC- Other
Unadjusted ROA	(-3,-2)	-0.0052	-0.0071	-0.0077	0.0025	0.0006	-0.0039	-0.004	-0.0013	-0.0026	-0.0027
	(-2,-1)	-0.0183	-0.023	-0.0099	-0.0084	-0.0131	-0.0055	-0.0089	-0.0039	-0.0016	-0.005
	(-1,0)	-0.0188	-0.0122	-0.0214	0.0026	0.0092	-0.0179	-0.0198	-0.0079	-0.0099	-0.0119
	(0,1)	-0.0423	-0.0751	-0.017	-0.0253*	-0.0581***	-0.0083	-0.0284	-0.0084	0.0002	-0.02***
	(1,2)	0.0384	0.0618	0.0154	0.023**	0.0464***	0.0164	0.0352	0.0073	0.0091*	0.0279***
	(2,3)	-0.0099	0.0008	-0.0125	0.0026	0.0132	0.0023	0.0123	-0.0007	0.003	0.013**
Panel B											
Industry Adjusted ROA	(-3,-2)	-0.0001	-0.0013	-0.0014	0.0014	0.0002	-0.0023	-0.0005	0.0005	-0.0028	-0.001
	(-2,-1)	-0.011	-0.016	-0.0066	-0.0043	-0.0093	-0.0034	-0.0041	-0.0018	-0.0016	-0.0023
	(-1,0)	-0.0156	-0.0073	-0.0188	0.0032	0.0115	-0.0157	-0.0151	-0.0048	-0.011	-0.0103
	(0,1)	-0.0384	-0.0709	-0.0137	-0.0246*	-0.0572***	-0.0048	-0.028	-0.0063	0.0014	-0.0217***
	(1,2)	0.0354	0.0578	0.0145	0.021	0.0433**	0.0128	0.03	0.0079	0.0049	0.0222***
	(2,3)	-0.0084	0.0001	-0.0104	0.002	0.0105	0.0046	0.01	-0.0015	0.0061	0.0115*
Panel C											
Abnormal ROA	(-3,-2)	0.0016	-0.0033	0.0022	-0.0005	-0.0054	-0.003	-0.0049	0.0048	-0.0078	-0.0097
	(-2,-1)	-0.014	-0.0245	-0.003	-0.011	-0.0215	-0.0024	-0.0062	0.0004	-0.0028	-0.0066*
	(-1,0)	-0.0123	-0.0052	-0.017	0.0048	0.0118	-0.0099	-0.0088	-0.0027	-0.0072	-0.0061
	(0,1)	-0.0423	-0.0787	-0.017	-0.0254**	-0.0617***	-0.0119	-0.0308	-0.0051	-0.0068	-0.0257***
	(1,2)	0.0385	0.0588	0.016	0.0225	0.0427**	0.013	0.0191	0.0088	0.0042	0.0103*
	(2,3)	-0.0098	-0.0074	-0.0092	-0.0006	0.0018	0.0017	0.0031	0.0016	0.0001	0.0015

Table 1.8: Changes in operating ROA regressions

The following table shows the results of OLS regression models of changes in operating ROA (operating income divided by total assets) following the announcement window of the incoming CEO. Turnaround Specialists (TSPECs) are the subset of Turnaround CEOs that have been given the specific reputation as being a turnaround (expert, specialist, or artist). The dependent variable is the change (or adjusted change) in ROA from year 1 to year 2 (the first full year following the succession announcement). The dependent variable in models 1 and 4 is the unadjusted change in ROA. The dependent variables in models 2 and 5 is the change in ROA adjusted for 2 digit SIC code industry median. The dependent variable in models 3 and 6 is changes in ROA using the Barber and Lyon (1996) control group adjustment method. Specifically, each sample firm is matched to a control group of similar size, ROA and industry, and changes reflect the difference in differences between the sample firm and control group ROA each year. P-values are listed below coefficients in brackets. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Change in ROA (1,2)	SIC2 Adjusted Change in ROA (1,2)	Abnormal Change in ROA (1,2)	Change in ROA (1,2)	SIC2 Adjusted Change in ROA (1,2)	Abnormal Change in ROA (1,2)
TSPEC	0.0387** [0.024]	0.0338** [0.049]	0.0306* [0.085]	0.0228 [0.199]	0.0182 [0.306]	0.0155 [0.390]
Change in ROA (0,1)	-0.1543*** [0.000]			-0.1590*** [0.000]		
SIC2 Adjusted Change in ROA (0,1)		-0.1661*** [0.000]			-0.1725*** [0.000]	
Abnormal Change in ROA (0,1)			-0.1898*** [0.000]			-0.1559*** [0.000]
Succession CAR (0,0)				0.1763** [0.015]	0.1652** [0.023]	0.1776** [0.015]
Constant	0.0126*** [0.009]	0.0118** [0.015]	0.0129** [0.010]	0.0125*** [0.009]	0.0119** [0.014]	0.0131*** [0.007]
Observations	763	769	769	730	735	735
R-squared	0.040	0.042	0.036	0.051	0.053	0.037

Table 1.9: Long run abnormal returns following succession

The table reports long run post succession buy and hold returns for the full sample of new CEOs as well as the Turnaround and Other Outsiders subsamples. Abnormal Returns are calculated following the methodology in Lyon, Barber, and Tsai (1999). Turnaround CEOs (TCEOs) are all CEOs that are indicated in the press as having turnaround experience or skills. Turnaround Specialists (TSPECs) are the subset of Turnaround CEOs that have been given the specific reputation as being a turnaround (expert, specialist, or artist). Panel A reports market adjusted returns. In panel B each sample firm is matched to a control sample of firms in the month prior to succession that share the same size and book to market deciles as the sample firm. Abnormal returns are defined as the difference between the buy and hold return for the sample firm and the unrebalanced return on the control portfolio. Abnormal returns in panel C are calculated in the same way although in this case the control group is formed based on firms in the same SIC2 industry and trailing six month return decile as the sample firm. Returns are calculated starting 3 days after the succession announcement. For each return I report the unadjusted t-statistic as well as the bootstrapped skewness adjusted t-statistic which is calculated following the method in Lyon, Barber, and Tsai (1999).

	Turnaround CEOs			Turnaround Specialists			Other Outsiders		
	Abnormal Return	P-value from standard test	P-value from skewness adjusted T-test	Abnormal Return	P-value from standard test	P-value from skewness adjusted T-test	Abnormal Return	P-value from standard test	P-value from skewness adjusted T-test
Market Adjusted									
12 month	2.46%	(0.70)	(0.68)	7.00%	(0.43)	(0.39)	6.13%	(0.02)	(0.01)
24 month	3.97%	(0.67)	(0.65)	14.41%	(0.26)	(0.22)	2.95%	(0.36)	(0.34)
36 month	-2.33%	(0.84)	(0.86)	4.52%	(0.75)	(0.72)	3.06%	(0.51)	(0.48)
Size and Book to Market Control Firm Adjusted									
12 month	0.37%	(0.96)	(0.95)	8.05%	(0.44)	(0.42)	1.75%	(0.59)	(0.59)
24 month	-1.20%	(0.92)	(0.92)	8.84%	(0.59)	(0.58)	-4.83%	(0.23)	(0.24)
36 month	-6.89%	(0.62)	(0.63)	-5.61%	(0.76)	(0.77)	-10.39%	(0.08)	(0.09)
Size and Book to Market Control Portfolio Adjusted									
12 month	-4.49%	(0.48)	(0.51)	0.41%	(0.96)	(0.94)	0.22%	(0.93)	(0.91)
24 month	-10.34%	(0.26)	(0.29)	-0.17%	(0.99)	(0.99)	-8.31%	(0.01)	(0.01)
36 month	-22.19%	(0.05)	(0.08)	-14.05%	(0.33)	(0.38)	-13.04%	(0.00)	(0.02)

Table 1.10: Post succession growth rates in employees, assets, and PP&E

The table below shows univariate comparisons of means and median growth rates of operating variables for turnaround firms vs. the sample of firms hiring other outsider CEOs. Turnaround CEOs (TCEOs) are all CEOs that are indicated in the press as having turnaround experience or skills. Turnaround Specialists (TSPECs) are the subset of Turnaround CEOs that have been given the specific reputation as being a turnaround (expert, specialist, or artist). All growth rates represent the change in the variable of interest scaled by the initial year. For instance, (0,1) represents Year 1 minus Year 0 divided by Year 0. All years are based on the succession announcement year, with year 0 being the first fiscal year end before the succession announcement. All data comes from Compustat. Tests for difference in means use the t-test, and tests for differences in medians use the Wilcoxon Rank Sum test. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

	Mean Growth Rate					Median Growth Rate				
	TCEO	TSPEC	Other Outsiders	TCEO-Other	TSPEC-Other	TCEO	TSPEC	Other Outsiders	TCEO-Other	TSPEC-Other
Employees										
(0,1)	-0.0807	-0.1185	0.1941	-0.2749*	-0.3126**	-0.0575	-0.0826	-0.0237	-0.0338***	-0.0589***
(1,2)	-0.0626	-0.0838	0.0025	-0.0651**	-0.0863**	-0.0669	-0.088	-0.0174	-0.0495***	-0.0706***
(2,3)	-0.0173	0.0092	0.0257	-0.0431	-0.0165	-0.0151	-0.0151	-0.0069	-0.0082	-0.0082
(0,2)	-0.1356	-0.195	0.2236	-0.3592**	-0.4186***	-0.1412	-0.1623	-0.046	-0.0952***	-0.1163***
(1,3)	-0.0742	-0.0672	0.0852	-0.1593**	-0.1524	-0.1047	-0.117	-0.0279	-0.0768***	-0.0892**
Assets										
(0,1)	-0.0942	-0.1345	0.0255	-0.1197***	-0.16***	-0.0649	-0.1068	-0.0074	-0.0576***	-0.0994***
(1,2)	0.0283	-0.0224	0.0486	-0.0203	-0.071*	-0.0151	-0.0293	0.012	-0.0272	-0.0413***
(2,3)	0.0615	0.0943	0.0753	-0.0138	0.0191	-0.0099	-0.0258	0.0224	-0.0323*	-0.0482*
(0,2)	-0.0567	-0.1486	0.097	-0.1536***	-0.2455***	-0.078	-0.0939	0.007	-0.085***	-0.1009***
(1,3)	0.1042	0.0878	0.1458	-0.0416	-0.058	-0.0407	-0.095	0.0448	-0.0855***	-0.1398***
PP&E										
(0,1)	-0.0972	-0.1434	0.0197	-0.1168***	-0.1631***	-0.0728	-0.1484	-0.0286	-0.0442***	-0.1198***
(1,2)	-0.0699	-0.1371	0.0686	-0.1385**	-0.2057***	-0.0445	-0.0803	-0.0179	-0.0267**	-0.0624***
(2,3)	0.0596	0.0958	0.0454	0.0142	0.0504	-0.0303	-0.026	0.0026	-0.0329**	-0.0286
(0,2)	-0.145	-0.2463	0.1919	-0.3369***	-0.4382***	-0.167	-0.2606	-0.0485	-0.1185***	-0.2121***
(1,3)	-0.0193	-0.0725	0.1242	-0.1435	-0.1967	-0.0721	-0.089	-0.0106	-0.0615***	-0.0784***

Table 1.11: Credit ratings following succession

The following table shows the average behavior of long term debt ratings issued by the S&P following succession announcements for the turnaround sample vs. the control sample. Turnaround CEOs (TCEOs) are all CEOs that are indicated in the press as having turnaround experience or skills. Turnaround Specialists (TSPECs) are the subset of Turnaround CEOs that have been given the specific reputation as being a turnaround (expert, specialist, or artist). Panel A shows the average credit rating of sample firms in the month relative to the succession announcement. Month 0 is the month ending directly before the succession announcement, and Month t is the rating t months after the succession announcement. Credit ratings are converted from S&P letter-bases ratings to ordinal ratings to reflect average behavior. The correspondence between ordinal ratings and letter ratings is included below. An increase in ordinal rating reflects a decrease in credit worthiness. Panel B shows the proportion of the sample that has been downgraded by the S&P in the month-based window following the succession month. For example, Month t reflects the proportion of firms who have been downgraded by the S&P in the t months following the succession. Tests for difference in means use the t-test. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

Panel A: Credit rating

	Sample Means				
	TCEO	TSPEC	Other Outsiders	TCEO-Other	TSPEC-Other
Month 0	10.77	10.80	10.08	0.6932	0.7242
Month 3	11.30	11.76	10.32	0.9838**	1.4433*
Month 6	11.34	11.77	10.54	0.807	1.2316*
Month 9	11.31	11.64	10.50	0.813	1.146*
Month 12	11.46	11.83	10.51	0.951*	1.3231**
Month 15	11.18	11.59	10.49	0.6874	1.1006*
Month 18	11.27	11.62	10.54	0.7312	1.0779*
Month 21	11.25	11.51	10.50	0.7569	1.016
Month 24	11.09	11.45	10.48	0.6176	0.9712

Panel B: Proportion with rating downgrades

	Sample Means				
	TCEO	TSPEC	Other Outsiders	TCEO-Other	TSPEC-Other
Month 3	32.39%	36.36%	14.56%	0.1783***	0.218***
Month 6	41.18%	48.78%	20.98%	0.2019***	0.278***
Month 9	43.28%	52.50%	24.92%	0.1837***	0.2758***
Month 12	42.42%	51.28%	27.33%	0.1509**	0.2395***
Month 15	42.19%	54.05%	28.96%	0.1323**	0.251***
Month 18	46.77%	55.56%	32.53%	0.1424**	0.2302***
Month 21	49.18%	52.78%	33.68%	0.155**	0.1909**
Month 24	47.37%	52.94%	34.88%	0.1249*	0.1807**

SP Rating	Numeric Rating
BBB-	10
BB+	11
BB	12

Table 1.12: Succession CARs controlling for endogenous selection

The panels below show the results of tests of CARs for firms hiring turnaround specialists controlling for potential endogeneity in the choice to select a turnaround specialist. Panel A shows the results of a treatment effects (Heckman Selection) regression model that estimates the decision to hire a turnaround specialist simultaneously with the market response the hiring decision (CAR regression). In the first step I use the same logit model as in table 4, model 2. The CAR equation uses the same estimation form from table 6 model 3. In panel B I show the univariate differences in mean CARs for the turnaround specialists sample versus a propensity score matched control group. The propensity score is estimated using the same logit regression as in table 4 model 2. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

Panel A: Treatment Effects Regression for Succession CARs

	(1)	(2)	(3)	(4)
VARIABLES	CAR [0,0]	CAR [0,1]	CAR [-1,1]	CAR [-2,2]
Turnaround Specialist	0.0586*** [0.000]	0.1455*** [0.000]	0.0757*** [0.009]	0.0792*** [0.010]

**Hidden in above models are control variables for CAR equation same as table 6 model (2) and selection equation. Selection equation same as table 4 model (2)*

Observations 756 756 756 756

Test for Independence between selection and outcome equations:

Rho	-0.0525	-0.569	-0.0869	-0.0787
Chi-Squared	0.297	3.061	0.643	0.564
P-value	0.586	0.0802	0.423	0.453

Panel B: Propensity Score Matched Sample: Mean CARs

Event Window	(1)	(2)	(3)	Difference in Means	
	Turnaround Specialists (n=60)	All Other Outsiders (n=672)	Propensity Score Matched Control Group (n=60)	(1) - (2)	(1) - (3)
[0,0]	7.68%	1.10%	2.25%	6.58%***	5.43%***
[0,1]	8.11%	2.18%	3.53%	5.93%***	4.58%**
[-1,1]	10.31%	2.38%	4.40%	7.93%***	5.91%**
[-2,2]	10.77%	2.32%	4.01%	8.46%***	6.76%**

2.0 CHAPTER TWO: THE COMPENSATION OF TURNAROUND SPECIALIST CEOS

2.1 INTRODUCTION

In this essay I examine the compensation contracts of CEOs who have reputations for being turnaround specialists. I define turnaround specialists as CEOs who have developed reputations for having skills and experience in reversing the fortunes of financially distressed and underperforming firms. Turnaround specialists have unique features that allow me to address general questions in the literature on executive compensation. First, because turnaround specialists have reputations for being successful managers, they provide an opportunity to examine the role reputation plays in determining the size and structure of managerial compensation. Second, because turnaround specialists are hired for shorter horizons and are more likely to re-enter the labor market several times (serial managers) their compensation contracts shed light on the influence that managerial career concerns have on managerial incentives.

This essay addresses several questions regarding the compensation of turnaround specialists. Does the level of compensation differ for turnaround specialists versus other managers? Do turnaround specialists receive more or less incentive compensation than other CEOs? How is the mix of incentive compensation determined for turnaround specialists? Do

firms hiring turnaround specialists pay other top executives differently? How do shareholders and turnaround specialists share the gains from trade?

Academic theory and media reports suggest there are conflicting forces that would determine the size and more importantly the composition of turnaround specialist compensation. Because turnaround specialists are likely to be talented executives with general skills they should face better labor market opportunities and command a compensation premium, (Fama (1980), Murphy and Zbojnik (2007)). For instance, when Gillette hired turnaround specialist James Kilts in 2001, he also was rumored to be the top candidate at Campbell Soup to lead its restructuring efforts¹⁵. Perhaps not coincidentally Kilts wound up with a first year pay package at Gillette valued at over \$36 million. However, many firms hiring a turnaround specialist may face cash-constraints or political pressures that restrain them from offering lavish compensation packages to CEOs (DeAngelo and DeAngelo (1991) and Gilson and Vetsuypens (1993)).

Additionally, insofar that turnaround specialists have valuable reputations, career concerns models such as Fama (1980) and Gibbons and Murphy (1992) would predict that turnaround specialists receive less incentive compensation due to the stronger implicit incentives they face from the labor market. However, anecdotal evidence suggests turnaround specialists often receive compensation with little or no cash salaries, and instead receive compensation that is heavily weighted with performance-based equity grants. For instance, Paul Anderson of Duke Energy and Gary Sbona of Auspex Systems agreed to forego cash salaries in exchange for hefty packages of options and restricted stock. It could be that turnaround specialists would opt for incentive compensation out of a heightened belief in their own abilities (Dutta (2008)), or due to the higher relative benefits of incentive compensation for distressed firms (Gilson and

¹⁵ See “Gillette Names Former Nabisco CEO Kilts As Its New Chief Executive” Dow Jones Business News, January 22, 2001.

Vetsuypens (1993)). However, despite the spotlight turnaround specialists receive from the media, I am unaware of any studies that empirically document the size and structure of their compensation.

This chapter is related to chapter one of this dissertation where I examine the characteristics of firms that hire turnaround specialists, and document the average stock and operating performance after turnaround specialists are hired. The results of that study indicate that turnaround specialists have reputations for being talented managers and unique skill sets in dealing with poorly performing and distressed firms. In this essay I examine whether their unique skills and reputation contribute to significant differences in compensation when compared to other newly hired CEOs.

Starting with a sample of CEO successions from 1992-2006, I collect biographical information on all newly hired CEOs and identify a set of 114 successions in which the new CEOs are identified in the press as having experience in turnaround situations, including 65 in which the new CEOs are known as turnaround specialists or experts. I identify turnaround specialists to be those CEOs who have a reputation for being turnaround specialists at the time of hiring, not afterwards. This allows me to estimate the ex-post effects of having a reputation for being a turnaround specialist. I compare the initial compensation contract features of turnaround specialist CEOs to a benchmark group of newly hired outsider CEOs that are not turnaround specialists.

I find that turnaround specialist CEOs receive higher levels of cash, equity, and total compensation than other newly appointed CEOs. The difference is economically meaningful. After controlling for other factors known to affect compensation, I find that the total compensation of turnaround specialists is 24% more than the total compensation of other newly

appointed CEOs. I find that the majority of the abnormal pay difference is due to turnaround specialists receiving higher equity-based grants (both options and restricted stock) than other CEOs. Turnaround specialists receive a lower proportion of fixed cash compensation and a higher proportion of incentive compensation than other CEOs. Thus I find that the compensation of turnaround specialists is more performance sensitive than the compensation of other newly hired CEOs.

This essay contributes to the small but growing empirical literature that examines the roles reputation and managerial skill sets play in the compensation of managers. The evidence supports managerial reputation and skill sets as being important factors in compensation design. The fact that turnaround specialists have exemplary reputations in the labor market and therefore receive higher excess compensation is consistent with an efficient signaling theory of managerial reputation (Fama (1980)). However, my findings do not support the theory that a turnaround manager's serial career concerns serve as a substitute for explicit monetary incentives in aligning manager and shareholder interests. Instead I find turnaround specialists earn higher incentive compensation, which is consistent with theories that predict incentive compensation comes at a lower cost to successful managers (Becker (2006), Stiglitz (1975)) and has higher benefits for firms operating in distress (Gilson and Vetsuypens (1993)).

This essay proceeds as follows. In section 2.2 I review the literature on compensation and summarize the major theoretical predictions and empirical results regarding CEO compensation structure. In section 2.3 I develop my hypotheses regarding the compensation packages of turnaround specialists. I describe my sample construction and methodological issues in section 2.4. I discuss my main results in section 2.5 and consider extensions related to those results in section 2.6. I offer a concluding discussion in section 2.7.

2.2 LITERATURE REVIEW

2.2.1 Total Compensation

Most theoretical research on CEO compensation proposes that CEO pay is the outcome of supply and demand forces in a competitive labor market for managerial talent. On the supply side, a competitive labor market should lead to higher compensation for more talented CEOs. Thus executives have incentives to invest in human capital and develop reputations for being talented managers (Fama (1980)). For instance, Malmandier and Tate (2009) find that CEOs who have won awards receive increased compensation after winning the award. Chang, Hayes, and Hillegeist (2009) find that newly appointed CEOs of financially distressed firms receive higher pay as compensation for taking on the risk of damaging their reputation by being the CEO of a bankrupt firm.

Research on the demand side of executive compensation implies that observed differences in pay across firms should vary with the firm's resources and operating environment. Rosen (1982) argues that larger firms which have more resources should be able to attract more talented CEOs and thus pay should be higher for executives in larger firms. Smith and Watts (1992) find that firms with more complex operating environments (such as firms in deregulated industries or those with more growth options) require greater managerial talent to oversee the complex assets, and thus will pay their CEOs more. Similarly Hubbard and Palia (1995) argue that firms in more competitive industries require greater managerial talent. Consistent with these

predictions, Kole and Lehn (1999) find that executive pay rose in the airline industry after deregulation increased competition and the complexity of the firms' operating environments. Murphy and Zbojnik (2007) argue that general managerial skills are more valuable than firm-specific managerial skills. They predict that firms that value general managerial skills relatively more than firm specific skills will hire more talented and thus higher paid CEOs. Consistent with their theory, CEOs hired from outside the firm are paid significantly more than CEOs hired from inside the firm (Gilson and Vetsuypens (1993), Murphy and Zbojnik (2004).)

2.2.2 Incentive Compensation

Murphy (1998) shows that almost all firms employ some form or combination of incentive compensation and that there is considerable cross-sectional variation in the structure of incentive pay across firms. There is a large body of research which attempts to explain how variations in firm and CEO characteristics help explain the cross sectional variation in amounts and structure of incentive compensation across firms.

Demsetz and Lehn (1985) argue that equity ownership is a substitute for monitoring because it aligns manager and shareholder interests. Their theory predicts that firms with higher monitoring costs should use more equity compensation. Along these lines, Smith and Watts (1992) argue that growth options are complex assets that are difficult to monitor and find that CEOs of firms with more growth options receive more equity compensation. Consistent with regulatory agencies providing a substitute for shareholder monitoring, incentive compensation is lower in regulated industries and increases after an industry has been deregulated (Hubbard and Palia (1995), Kole and Lehn (1999)). Milbourn (2003) hypothesizes that stock price

performance is more informative for high ability CEOs and argues that CEOs with better reputations will receive more stock-based compensation. Using media mentions and CEO tenure as proxies for reputation, he finds evidence which confirms his hypothesis. Baker and Hall (2004) argue that, assuming decreasing absolute risk aversion, wealthier CEOs are expected to be less risk averse and thus have a higher certainty equivalent valuation of a dollar of incentive compensation as compared to less wealthy CEOs. They find that the dollar equity incentives of CEOs as a proportion of compensation increases with firm size, consistent with CEOs of large firms being wealthier and less risk averse. Becker (2006) uses a sample of Swedish firms where CEO wealth data is available and finds evidence consistent with wealthier CEOs being less risk averse and thus willing to accept more incentive pay.

2.3 HYPOTHESIS DEVELOPMENT

Theories from the literature on labor market economics and managerial compensation suggest there are opposing forces that could influence the optimal level and structure of compensation earned by turnaround specialist CEOs. For instance, the fact that turnaround specialists are talented managers who value their reputation in the labor market implies they would receive more total compensation (due to talent) and less incentive compensation (due to stronger implicit incentives stemming from career concerns). On the other hand, turnaround specialists may only be viable candidates for distressed firms who are limited in their ability to pay high compensation, and would opt to substitute fixed salary compensation with equity grants. These factors would point to turnaround specialists receiving less compensation with a higher proportion coming from incentives than other managers. Ultimately, determining which

forces dominate in the formation of turnaround specialist compensation contracts is an empirical issue. I discuss each of these perspectives below as well as develop opposing hypotheses that stem from their predictions.

2.3.1 Total Compensation

2.3.1.1 Managerial talent and reputation

In a competitive market for managerial talent, more talented managers should develop a reputation for being talented and should receive higher wages as a result of their abilities (Fama (1980)). There is some evidence which suggests that managerial talent is revealed to the labor market through executive reputation, and that more reputable managers receive higher compensation. For instance, Fee and Hadlock (2003) find that outside CEOs receive higher initial compensation if their previous employer had good stock performance during their tenure. Malmandier and Tate (2009) find that award winning CEOs receive increases in compensation after winning awards. Gilson and Vetsuypens (1993) found some evidence that managers with experience in distress situations received higher compensation when hired by bankrupt firms. In chapter one of this dissertation I find that the abnormal returns surrounding succession announcements of turnaround specialists is significantly positive and over four times that of the response to other outside successions. If the market's response to a firm hiring a turnaround specialist reflects their reputations for being talented managers, then I expect turnaround specialists to receive higher initial compensation than other executives.

2.3.1.2 General skill sets

In addition to being compensated for being talented, it could be that the type of skill sets that turnaround specialists possess command a premium in the labor market. Murphy and Zabojnik (2007) argue that general skills are valued more highly in the CEO labor market than firm specific skills. Their rationale is that an executive whose skills are more transferable across firms will have more outside employment options, driving up the price of his labor. Anecdotal evidence suggests that the skills of a turnaround specialist in managing crisis situations are general skills that can be applied across firms and industries¹⁶. Many turnaround specialists have had high level experience in several disparate industries prior to being hired as CEO. For instance, Robert S. Miller Jr. has held to posts in the steel, waste management, and automotive industries, before most recently being name chairman of foundering insurance giant AIG. The general skill sets of turnaround specialists may broaden their set of employment opportunities and drive up the price of their services.

2.3.1.3 Distress premium

Finally, turnaround specialists could require additional compensation to compensate them for working for firms with a higher likelihood of distress. Compensation is inherently riskier when firms face a higher possibility of bankruptcy. A firm may be unable to meet salary and bonus obligations and the value of executive stock and options are likely to lose most or all of their value when a firm becomes distressed. In addition to the compensation itself being riskier, the risk of business failure imposes costs on the human capital of an executive. In explaining the

¹⁶ For further discussion, see the Turnaround Management Association's "Corporate Renewal Industry Overview" at www.turnaround.org

pay practices at struggling firms, compensation analyst Paul Hodgson of The Corporate Library notes, “The generic attitude among corporate boards is, ‘We’re in a mess, and no one wants to work for us, so we have to spend oodles to get someone.’”¹⁷ Because turnaround specialists move from firm to firm, they have a strong incentive to preserve their human capital. A CEO that leads a firm into bankruptcy runs the risk of damaging his human capital as the market puts some of the blame on the CEO. Gilson (1989) finds that CEOs who led their firms into bankruptcy are rarely re-hired as CEOs in the future. A CEO of a firm with higher distress risk could require a premium to compensate him for the expected damage to his human capital should the firm fail (Berk et al. (2007))¹⁸. Because turnaround specialists are more likely to be hired by firms that have poor performance or are in distress, they may require additional compensation for the increased job-related risk imposed by the distressed firm.

In summary, a turnaround specialist is likely to earn higher total compensation due to their reputation for being talented managers, their transferable skill sets, and as compensation for working for firms with higher risk of failure. These predictions lead to my first hypothesis:

Hypothesis 1: *Turnaround specialists earn higher total compensation than other newly hired CEOs.*

¹⁷ “Troubled firms entice CEOs with platinum pay ; 'No restraint' as new leaders get golden hellos”, USA Today, February 21, 2003.

¹⁸ On the other hand, if a turnaround specialist is hired by a firm that the market knows is more likely to fail whether he was hired or not, that could reduce the amount of blame afforded to the turnaround specialist should the firm fail. In addition, a turnaround specialist already has an established reputation as a successful manager, and thus a failure could have a lower marginal impact on his human capital than it would for a less reputable CEO. For instance, Chang, Hayes, and Hillegeist (2009) find that the distress risk premium in compensation is lower for older CEOs, consistent with the notion that failure affects reputation more strongly for CEOs earlier in their career. A less well known CEO of a firm that fails could be permanently marked as damaged goods, whereas a turnaround specialist may face little damage to his reputation since he has already established himself as being a talented manager. This could reduce the amount of human capital risk that a turnaround specialist faces.

2.3.1.4 Managerial typecasting

Although the skills of turnaround specialists are general in the sense that they can be applied across firms and industries, they are specific in the sense that they are only valuable to firms in crisis situations. In a sense, turnaround specialists run the risk of being ‘typecast’, whereby they may not be considered for potentially lucrative posts at the firms with the greatest ability to pay high compensation, which are large, stable firms with strong earnings and cash flow. Thus although they have a great reputation, turnaround specialists may not be viable CEO candidates to the set of healthy firms. This ‘typecast’ effect could work to limit their outside options compared to other CEO candidates, and reduce their ability to earn excess compensation.

2.3.1.5 Distress as a restraint on compensation

Firms that hire turnaround specialists may be severely cash-constrained as they may be facing financial distress. Gilson and Vetsuypens (1993) found that 49% of their sample of financially distressed firms reduced compensation for senior management. This could in part be due to cash flow and financing constraints reducing their executive compensation budget. Also, firms in distress will likely seek concessions from creditors and other stakeholders, which could make it politically infeasible to pay high compensation to an incoming turnaround specialist. For example, in the wake of announcing deep wage cuts for hourly employees at Delphi, turnaround specialist Robert “Steve” Miller Jr. agreed to cut his initial salary from \$1.5 million to only \$1 a year. Miller said, "In the months ahead, I'm going to have to be explaining to thousands of our dedicated workers why they are going to have to take significant reductions in wages and benefits... I just couldn't find a way to look them in the eye and tell them I should be paid a

million-dollar salary for delivering that message."¹⁹ This is consistent with DeAngelo and DeAngelo (1991), who found that when large US steel companies were negotiating with labor unions in the 1980s, their CEOs took large cuts in their own pay. This presumably served as a signal to stakeholders that all constituents would need to make sacrifices in the face of the industry's looming decline. In other words, firms in the market for a turnaround specialist to lead their company may not have the economic or political capital necessary to pay high compensation.

In summary, the prospect of being 'typecast' combined with the restraints faced by distressed firms could reduce the observed level of compensation earned by turnaround specialists CEOs. These predictions conflict with Hypothesis 1 and lead to an alternative hypothesis:

Hypothesis 1A: *Turnaround specialists earn lower total compensation than other newly hired CEOs.*

2.3.2 Incentive Compensation

2.3.2.1 Career concerns and reputation as substitutes for explicit incentives

Typical principal-agent models argue that in order to align managerial and shareholder interests, compensation incentives need to be explicitly tied to firm performance, e.g. see Jensen and Meckling (1976). However, Fama (1980) maintains that the managerial labor market alone can effectively discipline managers, and Gibbons and Murphy (1992) argue that the career

¹⁹ "Delphi Executives, Under Criticism From Workers, Agree to Salary Cuts" New York Times, October 18, 2005. Miller announced the compensation reduction less than 4 months after being hired by Delphi. He did not, however, agree to give back any of the \$3 million signing bonus.

concerns of a manager can serve as a substitute for explicit incentives. Turnaround specialists are often serial managers that work for more companies and stay for shorter periods of time than other managers. Thus, they likely care more about protecting the value of their reputation capital. Rasmussen (2007) argues:

“Turnaround managers move from company to company. They do not view any assignment as a permanent one. Fail to do the job well at one company, and a turnaround manager will find less demand for her services in the future. The short time that a turnaround manager plans on spending with any one company means that she will not impair her long-term employment prospects for a short-term gain at the helm of her current employer.”

The fact that turnaround specialists are more likely to reenter the labor market implicitly incentivizes them to make value increasing decisions, as future employers will judge their ability on the past performance. Also, to the extent the reputation of a turnaround specialist can lead to better jobs with higher compensation, it is a valuable asset that the turnaround specialist will want to work hard to protect. In this way the reputational concerns of a turnaround specialist are not unlike those of the high-quality-type firms in Klein and Leffler (1981), who have an incentive to produce a high quality product to encourage word of mouth advertising and repeat-business. In other words, the career concerns of turnaround specialists could serve as a self-enforcing contract mechanism, reducing the need for explicit incentive compensation to align shareholder and managerial interests.

2.3.2.2 Alternative monitoring mechanisms in distress

The increased importance of alternative monitoring mechanisms in distress could also reduce the need to explicitly incentivize turnaround specialists. For instance, distressed or poorly performing firms are more likely to face increased monitoring by creditors, equity blockholders, regulatory agencies, and the market for corporate control (Hotchkiss (1995)). The increased intensity of external monitoring could serve as a substitute for performance based pay in the optimal compensation package of a turnaround specialist.

Additionally, the conflict between stockholders and bondholders is exacerbated in a distress environment. When a company is in distress, decisions that lead to increases in the value of equity could lead to decreases in the value of the firm's debt and potentially decreases in the value of the firm. Contrary to the interests of the debt holders, equity owners have the incentive to take excessive risk and "gamble for resurrection" as described in Jensen and Meckling (1976). To the extent that creditor's play a role in the selection or performance evaluation of a turnaround specialist, they will likely favor fixed compensation as it more closely mirrors the payoff structure faced by holders of the firm's debt.

In summary, turnaround specialists are less likely to receive strong explicit incentive compensation because their career concerns provide strong implicit incentives, and the increased influence of alternative monitoring mechanisms in distress reduce the value in aligning managerial and shareholder interests through compensation. These reasons lead to my second major hypothesis:

Hypothesis 2: *Turnaround specialists receive less performance based incentive compensation than other CEOs.*

2.3.2.3 Distress environment may favor explicit incentives

Turnaround specialists are typically hired by poorly performing firms that are likely to favor performance based compensation over cash-salary (Gilson and Vetsuypens (1993)). These firms are more likely to face cash flow constraints that limit their ability to pay cash compensation to their CEO, potentially forcing them to rely more heavily on equity-based compensation. Second, these firms are likely to face political pressure from stakeholders to reduce the amount of guaranteed cash salaries they pay their managers as in DeAngelo and DeAngelo (1991). To the extent that equity grants carry a lower public stigma than cash salaries and bonuses, distressed firms may substitute equity compensation for cash compensation to avoid political scrutiny from stakeholder groups²⁰.

In addition, the high stakes nature of the distress environment could increase the marginal value of CEO decisions. Managerial shirking could be more costly due to reduced margin of error (higher probability of failure) leading to a stronger need to align managerial and shareholder interests. Baker and Hall (2004) argue that incentive pay should increase in the marginal product of managerial decision making. They specifically reference decisions that are more likely in a turnaround, such as corporate reorganization and changes in strategic focus as having high a marginal product. Also, because a turnaround situation has a low unconditional probability of success ex ante, shareholders (and the labor market) may have a difficult time assessing if the firm's failure was due to the actions of the turnaround specialist or due to circumstances outside of his control. This noisier monitoring environment could lead to higher incentive compensation being optimal for the manager (Demsetz and Lehn (1985)).

²⁰ Core, Guay and Larcker (2007) find evidence that media scrutiny of CEO compensation packages is more intense for realized compensation than it is for expected fair value compensation.

Additionally, newly hired CEOs of distressed firms may opt for incentive compensation as a signaling device to outside stakeholders. If turnaround specialists have strong outside employment options, then choosing to work for a firm and accept performance based compensation could signal that the turnaround specialist has a strong belief in the prospects of the company. This certification could play a critical role in rebuilding credibility with stakeholders in a distress-based environment. For instance, when Thomas Gossage took the helm at the struggling Hercules, Inc. in 2000, he agreed to be paid only in equity. He explained his reasons were “to be focused, and make sure that the investment community, as well as my employees, understood that I was here to make a contribution.”²¹

2.3.2.4 Talented managers may prefer risky incentive compensation

If turnaround specialists are higher ability managers that have had successful careers, they may be less risk averse than other CEOs, leading them to be more willing to accept risky incentive compensation. First, because turnaround specialists have had successful careers prior to being hired (over 80% have previously held the post of CEO at a public firm), they are more likely to have generated higher personal wealth than other CEOs. Assuming decreasing absolute risk aversion, this would imply that turnaround specialists would be willing to sustain higher exposure to firm specific wealth shocks, and thus receive higher incentive pay, e.g. see Becker (2006). Plus, turnaround specialists may prefer outcome based compensation due being more confident in their own abilities. The presence of adverse selection in the labor market indicates that incentive compensation could be used as a screening device, attracting higher ability agents

²¹ “Pay Gaps: Interim CEOs require companies to ask themselves unusual questions -- and come up with unusual compensation plans” Wall Street Journal, April 12, 2001.

who are confident in their ability to positively affect firm performance, e.g. see Stiglitz (1975) and Dutta (2008).

Additionally, because their reputations are well known, firms may have more precise beliefs about the ability of turnaround specialists, making it optimal to impose more incentive risk on them. Gibbons and Murphy (1992) argue that managers with uncertain ability will prefer a flatter incentive contract in order to insure themselves against low realizations of ability. They find that the optimal pay-performance sensitivity increases when beliefs about managerial ability are more precise. Similarly, Milbourn (2003) argues that firms hiring talented CEOs may prefer using outcome based compensation because the actions of higher ability agents have a less noisy relation to future firm outcomes, and thus more weight can be placed on stock performance to infer managerial action.

In summary, the characteristics of distressed firms and talented CEOs may lead to turnaround specialists receiving more incentive compensation than other CEOs. These reasons conflict with the perspective underlying Hypothesis 2 and lead to an alternative hypothesis:

Hypothesis 2A: *Turnaround specialists receive more performance based incentive compensation than other CEOs.*

Whether the substitution effects from career concerns and alternative monitoring mechanisms outweigh the factors outlined above which predict turnaround specialists should receive higher incentive compensation is an empirical question.

2.4 SAMPLE CONSTRUCTION AND METHODOLOGY

2.4.1 Sample Construction

The data for this study consists of a hand collected sample of CEO turnover in firms in the Execucomp database over the period of 1992 through 2006. I start by identifying all firms on Execucomp that changed CEO from 1992-2006, and searched news articles on Factiva to identify the timing and nature of the succession change (forced or voluntary, outside or inside succession), as well as the identity of any interim CEOs not identified by Execucomp. For this study I concentrate only on CEOs considered to be outsiders at the time of succession (outsiders are defined as CEOs that started with the firm one year or less before being selected as CEO) and do not include CEO successions that result from a merger. From this sample I identify approximately 2,500 turnovers from 1992 to 2006, of which 811 involve outside successors. I collected and read biographical information for each entering outsider CEO to determine if the entering CEO was known as being a turnaround or restructuring specialist, known to have turnaround experience, or recognized as having turned around a company or division in the past. I identify turnaround specialists using the same methodology as that found in chapter one of the dissertation²². As in Ellis (2011) I employ two definitions of turnaround specialists throughout my tests, one that is broad and based on having any past turnaround experience (referred to as **TCEO**), as well as a second more narrow definition that identifies CEOs known as turnaround experts or specialists (referred to as **TSPEC**). One hundred and fourteen of the 811 newly hired

²² Section 1.4.1.1 for a detailed explanation of turnaround sample identification process.

CEOs meet the broader TCEO definition of turnaround reputation, and 65 of those 114 meet the more narrow specialist or TSPEC definition.

Characteristics of the CEO compensation contracts come from Execucomp. Execucomp provides data on the salary, bonus, equity and other supplemental compensation features of the top 5 compensated executives each year. For each test I focus on the first year compensation value paid to the incoming CEO. I do this because hypotheses are concerned with examining the influence of external labor market reputation (of being a turnaround specialist) on the initial compensation of executives. In the years following the first year compensation will be related to past performance as an executive of the firm, and thus will be less based on the external reputation developed by the CEO in the labor market.

I supplement my compensation measures with firm-level accounting characteristics from Compustat and stock return data from CRSP. I drop observations that don't have the necessary compensation, firm, or CEO characteristics, resulting in a sample of 736 CEO successions. Throughout the essay all firm-level and compensation variables are reported in \$000s. Table 2.1 shows sample summary statistics for my various measures of compensation as well as my firm and CEO characteristics. The average firm size is \$3,258,883, which is larger than the typical Compustat universe and reflecting the fact that Execucomp covers a larger subset of firms. Average total first year compensation is \$7,344 of which just over \$809 consists of Salary plus Bonus compensation. Average portfolio delta is \$151, indicating that the average CEO stock and option portfolio increases just over \$150,000 for every 1% change in firm value. The highest paid CEO in my sample is Terry Semel of Yahoo!, who received over \$273,000,000 in first year compensation, with the majority coming from stock option grants.

Throughout my analyses I focus on measures of the CEOs total compensation, as well as measures of the incentive structure of CEO's compensation. Following the literature I calculate total compensation to be the sum of salary, bonus, other annual compensation (such as perquisites, stock purchase discounts, tax reimbursements etc.), the value of restricted stock grants, options grants (value estimated using Black-Scholes), long term incentive plans, and all other compensation (which includes such items as severance payments, debt forgiveness, signing bonuses, etc.). Table 2.2 Panel A shows the average proportion each component contributes to total compensation for both the full sample as well as for sub-samples of turnaround specialists and other outsiders. Salary and Bonus combined make up just over 11% of total compensation for my sample of newly hired CEOs. By far the greatest proportion of total compensation comes from equity: options make up 65.39% and restricted stock grants account for 17.02%. LTIP, other annual compensation, and all other compensation combined make up just over 6% of total compensation. I focus primarily on the total compensation measure, but also show results breaking out cash compensation from other compensation.

In Table 2.2 Panel B I show differences in means and medians between turnaround specialists and other outsiders for the various components of total compensation. On average, turnaround specialists have significantly higher compensation than other outsiders. Median TSPEC (TCEO) total compensation is \$4,856 (\$5,171) compared to \$6,889 for the other outsiders sample. Both differences are significant at the 1% level. Mean TSPEC (TCEO) total compensation is \$10,712 (\$10,371) compared to \$6,889 for the other outsiders sample. Differences in mean compensation are not significant using the TSPEC definition (p-value of 0.111) but are significant at the 5% level using the TCEO definition, perhaps due to an increase in power from the larger sample size. Figure 1 and Figure 2 show box plots comparing the log of

total compensation for TCEO and TSPEC vs. the other outsider sample. Those plots indicate that although the other outsider sample has some outliers (such as Terry Semel from Yahoo!), the inter-quartile range and median compensation is higher for the turnaround specialist CEOs.

In comparing the components of compensation, there is some evidence that turnaround specialists receive higher salaries and bonuses. However, much of the difference in total compensation between turnaround specialists and other outsiders is coming from restricted stock. Turnaround specialists receive a significantly higher amount of pay from restricted stock grants than other outsiders but do not receive a significantly different amount of option grant compensation. This could indicate that restricted stock are a preferred means of payment for turnaround specialists due to the different incentive structures between restricted stock and options. Whereas options can go underwater and lose incentive power, restricted stock always provides a direct alignment between managerial and shareholder incentives. In addition restricted stock provides different incentives for managers to engage in risky investments. When options are out-of-the-money they encourage riskier investment strategy than restricted stock. The problem of “gambling for resurrection” is likely to be more severe in distressed firms (e.g. see Hall and Murphy (2003)).

2.4.2 Methodology

My objective is to test whether the unique reputation and job description of turnaround specialists leads to observed differences in the compensation structure of turnaround specialist CEOs versus other outsider CEOs. My primary testing strategy is to model compensation as a function of firm and CEO characteristics, where the primary variable of interest is an indicator

variable that identifies whether the incoming CEO has a turnaround reputation or not. As compensation studies are highly sensitive to outliers I follow Jin (2002) and Baker and Hall (2004) and use robust regression analysis (GLS) to test whether turnaround specialist CEOs have abnormally different compensation than other outsider CEOs. For each test I show results using both the narrow turnaround specialist definition (TSPEC) as well as the broader turnaround CEO definition (TCEO).

In addition to examining total compensation, I examine three measures of the incentive structure of CEO compensation. The first incentive measure I examine is called FIXED%, defined as the CEO's salary and bonus compensation as a fraction of total compensation²³. Cash salary and bonuses are lumped together since the literature typically treats realized bonuses as a fixed extension of salary. An executive that receives a higher proportion of fixed cash compensation derives proportionally less of his compensation from performance-based incentive compensation.

Secondly, I estimate the intensity of equity incentives allocated to the CEO by using a measure of the delta of the incoming CEO's portfolio of stock and option holdings (DELTA). An advantage of examining a CEO's portfolio delta is that it this measure incorporates the disparate sensitivities of options and stock grants and places all equity incentives on a level playing field. Additionally, DELTA measures the dollar change in CEO wealth for a percentage change in the value of the firm, rather than the dollar change in the value of the firm (as used in Jensen and Murphy (1990)). Baker and Hall (2004) argue that this is an appropriate measure of managerial incentives when CEO actions affect a firm's percentage returns (such as the implementation of corporate restructuring or change in strategy).

²³ Cash salary and bonuses are typically lumped together in the literature and treated as fixed component of executive compensation (e.g. see Mehran (1995) and Bergstresser and Philippon (2006)).

My third measure of incentives (Incentive Ratio) examines the relative importance of equity incentives versus cash compensation allocated to the CEO. Note that because portfolio deltas are dollar sensitivities of portfolio wealth, they are generally increasing functions of the total value of equity compensation. Thus delta is in some sense a measure of the level (not proportion) of equity incentives allocated to CEOs. In order to examine a CEO's proportional equity incentives I follow Bergstresser and Philippon (2006) and define Incentive Ratio as the ratio of DELTA to DELTA plus total fixed cash compensation.

All of my regressions include firm and CEO characteristics that have been shown by the literature to be important determinants of CEO compensation size and structure. I include firm size (measured as the log of market value of equity), as larger firms are likely to attract more talented CEOs, and larger firms could have higher costs of monitoring due to increased complexity of assets and control structures. I include Tobin's Q (measured as the ratio of market value of equity plus book value of debt divided by total assets) as a proxy for growth options, as firms with more growth options are likely to have higher monitoring costs. To proxy for diversification, I include the number of operating segments reported by the firm. I also include operating ROA, leverage ratio measured as long term debt divided by total assets, the 1 year trailing stock return of the firm, and a measure of the tangibility of firm assets (using the ratio of Plant, Property and Equipment to total assets). In addition I include the age of the incoming CEO as well as a dummy variable indicating if the exiting CEO was forced out of office. I identify forced successions using the tenor of the succession articles collected from the initial Factiva search. I also include a dummy if the incoming CEO was only brought on for a short tenure under one year (as CEOs with shorter tenures are likely to have vastly different compensation structures) than CEOs that stay for longer than one year.

2.5 RESULTS

2.5.1 Total Compensation

The first question I investigate is whether or not turnaround specialists receive more total compensation than other newly hired outsider CEOs. I focus primarily on the compensation received in the first year the CEO has taken office since it is a forward looking measure of compensation and allows me to compare CEOs that may have different tenures at the hiring firm. Table 2.3 shows results of robust regressions where the dependent variable is the logarithm of total compensation (models 1 and 2), the logarithm of cash (salary plus bonus) compensation (models 3 and 4), and the logarithm of total non-cash compensation (models 5 and 6). The primary independent variable of interest is a dummy variable equal to 1 if the incoming CEO has a turnaround reputation at the time of hiring. Models in panel A of Table 2.3 employ the narrow turnaround specialist definition (TSPEC) and models in panel B of Table 2.3 employ the broader turnaround CEO definition (TCEO). Each model contains the set of control variables discussed in section 2.4 that have been shown to influence the level and structure of CEO compensation. All models contain year effects and even-numbered models include Fama-French 48 industry fixed effects.

The findings shown in Table 2.3 indicate that turnaround specialist CEOs on average receive higher total cash compensation than other incoming outsider CEOs. The coefficient on TSPEC is positive and statically significant in models predicting total, cash and non-cash compensation. In model 1 of panel A the coefficient on TSPEC is 0.2473(p-value of .05), indicating that turnaround specialists earn about 24% more total compensation than other newly hired outsider CEOs. The magnitude and statistical significance of the coefficient on TSPEC is

largely unchanged by the inclusion of industry dummies in model 2. I find even stronger results when I broaden the definition of a turnaround specialist to include those CEOs with turnaround experience as well. In model 1 of panel B the coefficient on TCEO is 0.3561 and is significant at the 1% level. This indicates that after controlling for other factors that affect total compensation, turnaround specialists earn on average between 24% and 35% more than other newly hired CEOs. These results support Hypothesis 1 which predicts that turnaround specialist CEOs will earn more total compensation due to their reputation for success and valuable skill set.

Total compensation is positively related to firm size, consistent with the optimal matching theories of Rosen (1982) and Gabaix and Landier (2006) which predict larger firms will attract more talented executives through offering higher compensation. The fact that turnaround specialists still receive higher compensation after controlling for firm size implies they receive even more excess compensation than would be predicted from classical matching theory alone. Compensation is also generally negatively related to the age of the incoming CEO, negatively related to Fixed Assets, and positively related to trailing firm performance as measured by stock returns. Interestingly, total compensation is negatively related to operating ROA, with the result being driven primarily by variable compensation. This result is consistent with the findings of Core, Guay, and Larcker (2007). This result could reflect the fact that firms producing high operating cash flow have a less complex asset base and require less talented managers and less external monitoring. Additionally, it could reflect the fact that poorly performing firms need to offer a compensation premium to attract good CEOs. Total compensation is also significantly lower for those CEOs whose tenure lasts less than 1 year. This result is expected given the short tenure of the CEO, and the results in models 4-6 indicate this effect is driven almost entirely by the variable components of total compensation.

When I decompose the total compensation of incoming CEOs into cash (models 3 and 4) and non-cash compensation (models 5 and 6) the same pattern holds. Turnaround specialists earn between 24% and 38% more cash compensation than peer CEOs depending on the model and turnaround definition employed. These results are statistically significant in each model with p-values ranging from .074 to .001 across the 4 models. These results are interesting given that firms hiring turnaround specialists may be cash-strapped and less likely to be able to afford paying a fixed cash salary to their CEOs. However, these results reflect absolute levels of compensation, not ratios. It could be the fact that firms hiring turnaround specialists prefer to give less cash compensation as a proportion of total compensation, but still must pay a high cash premium in order to attain the services of the highly sought after executives. In fact, the non-cash compensation of turnaround specialists is also significantly higher than other outsiders, with coefficient estimates ranging from .3472 to .4257 across the models 5 and 6 in both panels A and B. Thus turnaround specialists receive more pay across the board, both in cash and non-cash compensation. From these results it is difficult to tell which compensation device is a relatively more important component of the structure of turnaround specialist compensation. I will revisit this issue in the next section when I examine the incentive structures of newly hired CEOs.

In unreported results I break out the total non-cash compensation into its equity and non-equity components and run the same regression specification found in Table 2.3. The equity components are the sum of restricted stock and option grants. Non-equity variable compensation includes Long Term Incentive Plans (LTIPs), and other annual and unclassified compensation such as severance packages, perquisites, relocation benefits, unclassified retirement benefits, etc. In models where the dependent variable is the log of equity compensation the coefficient on TSPEC and TCEO are positive and highly significant (coefficients ranging from .2919 - .3384).

However the turnaround dummies are not significant in models predicting the level of non-equity other compensation. This indicates that equity is the primary driver of the results in models 5 and 6 of Table 2.3 which show that turnaround specialists receive higher non-cash compensation than other outsiders.

Taken as a whole the results from Table 2.3 generally support the hypothesis that turnaround specialists are likely to receive higher total compensation than other CEOs. This is consistent with the efficient signaling theory of Fama (1980) which predicts that managers who develop reputations for being talented will be rewarded for those efforts. This is inconsistent with the 'typecasting' theory which predicts that turnaround specialists may receive less compensation due to the specialized nature of their skill sets resulting in having fewer outside options. This result also helps shed light on the overall dynamics of the labor market for turnaround specialists discussed in chapter one. Because firms hiring turnaround specialists receive significant abnormal stock returns around the hiring announcement, the higher compensation supports the notion that the abnormal response is due to the market's assessment of the talent of the incoming executive and the surplus he is expected to generate at the firm. The firm agrees with the market and rewards the incoming CEO with higher compensation. However, shareholder gains from succession announcements indicate turnaround specialists may be "leaving money on the table" when negotiating their compensation packages. The fact that abnormal returns still exist around succession indicate that managers do not reap 100% of the expected surplus from employment arrangement. If that were the fact then the turnaround specialist would bargain for every dollar expected to be gained by shareholders by his involvement with the company, effectively eliminating the abnormal returns to succession. The data indicates that there must be some competition or frictions in the labor market resulting in the

firms and turnaround managers sharing in the expected benefits from contracting with each other.

An alternative explanation for the observed abnormal returns to equity is that shareholders gain at the expense of creditors when they hire a turnaround specialist. If turnaround specialists take actions that on average reduce the value of debt (such as renegotiate more favorable terms from creditors, or reduce the firm's tangible asset base through restructuring activities) then the total surplus created when a firm hires a turnaround specialist may be overstated by examining equity returns alone. Observing reductions to the value of debt upon succession would indicate turnaround specialists leave less money on the table when negotiating their compensation. Due to data limitations I am unable to test the change in debt values surrounding succession. However I do investigate this issue further using changes in credit ratings in section 2.6.1.1.

2.5.2 Incentive Compensation

One of the interesting patterns that emerged in section 2.5.1 was that turnaround specialists received not only higher total compensation, but they received higher cash compensation in addition to higher non-cash compensation. This result supports that notion that turnaround specialists are compensated for their above average talent, but says little about how the compensation packages for turnaround specialists are structured to provide optimal incentives. As discussed in the hypothesis development section, there are opposing hypotheses predicting turnaround specialists could receive either higher or lower incentive compensation than other CEOs. For instance, firms hiring turnaround specialists may prefer a higher mix of

incentive compensation because the firms are cash constrained, or because incentive alignment is more important for firms in distress situations. On the other hand the serial nature of turnaround specialist career could serve as an alternative monitoring mechanism, reducing the need for increased incentive pay. The question of which effect would dominate in equilibrium is an empirical matter. In this section I consider several measures of a CEO's incentive compensation to test whether turnaround specialists receive more incentive-aligning compensation than their peers.

2.5.2.1 Fixed Compensation %

In Table 2.4 I show regressions where the dependent variable is `FIXED%`, defined as the CEO's salary and bonus compensation as a fraction of total compensation. Salary and bonuses are lumped together since the literature typically treats current bonuses as a fixed extension of salary. CEOs with a higher value of `FIXED%` derive a lower the proportion of their total compensation from incentive compensation. The specifications in Table 2.4 are the same as in Table 2.3 including a turnaround specialist dummy as well as the same control variables. In model 1 the coefficient on `TSPEC` is -0.0592 (p-value of .014), indicating turnaround specialists receive approximately 6% less fixed compensation as a fraction of total compensation. The coefficients on `TSPEC` and `TCEO` are both negative and significant in each of the 4 models of Table 2.4. This indicates that turnaround specialist CEOs receive significantly less fixed compensation as a fraction of their total pay than other incoming CEOs. Note that the relation between the control variables and `FIXED%` exhibit largely the opposite patterns from the regressions predicting total compensation. `FIXED%` is positively related to fixed assets, diversification, and the short tenure dummy. `FIXED%` is generally negatively related to firm

size, and Tobin's Q. The results generally support the notion that firms with fewer growth options favor fixed compensation over incentive pay due to the lower cost of monitoring those assets.

2.5.2.2 Portfolio Delta

In this section I examine the incentive structure of turnaround specialist compensation using a more direct measure of the pay for performance sensitivity of compensation. Because most incentive compensation is in the form of equity compensation (Core, Guay, and Larcker (2003)). I examine the intensity of the equity incentives provided to the CEO using the delta of the incoming CEO's equity portfolio. Specifically delta measures the dollar change in the CEO's wealth for a 1% change in the value of the stock price. I follow Core and Guay (2002) and estimate delta using the value-weighted deltas of their option and stock portfolios in the first year of employment. I estimate deltas for options using the given expiration dates and strike prices for each grant. The advantage of this measure over the level of equity pay is that this measure incorporates the disparate sensitivities of options and stock grants and places all equity incentives on a level playing field.

Table 2.5 shows results of regressions where the dependent variable is the logarithm of the CEO's portfolio delta (LDELTA) and the independent variables include a turnaround specialist dummy as well as the same control variables from earlier specifications. In model 1 the coefficient on TSPEC is positive and highly significant (coefficient of 0.3956 and p-value of .01). These results are consistent for both the TSPEC and TCEO definition (although stronger when using TSPEC), and are robust to the inclusion of industry dummies. This indicates that not only do turnaround specialist receive higher equity compensation than their peers, but that their

compensation is significantly more sensitive to performance than peer CEOs. The relation between the control variables and LDELTA are generally the mirror image of those found in the FIXED% regressions, with firm size and Tobin's Q being positively related to LDELTA and fixed assets and short tenure being negatively related to LDELTA. Again these results are consistent with firms allocating more incentive compensation to their managers when assets are perceived to be more difficult to monitor (such as in large firms or firms with more growth options.)

2.5.2.3 Incentive Ratio

Note that because portfolio deltas are dollar sensitivities of portfolio wealth, they are generally increasing functions of the total value of equity compensation. Thus delta is in some sense a measure of the level (not proportion) of equity incentives allocated to CEOs. Therefore it is unclear whether turnaround specialists receive more incentive compensation (higher delta) because they receive higher compensation in general or if they receive more intense equity incentives as a proportion of their total compensation package. In order to examine this issue I follow Bergstresser and Phillipon (2006) and define a ratio measure of incentive compensation called Incentive Ratio. I calculate Incentive Ratio in the following way:

$$\text{Incentive_Ratio}_i = (\text{DELTA}_i / (\text{DELTA}_i + \text{Salary}_i + \text{Bonus}_i))$$

Thus CEOs with a higher Incentive Ratio receive a higher proportion of their compensation from equity incentives than from fixed cash compensation. This is somewhat a mirror image of the FIXED% ratio but is different in that I am comparing cash compensation not to the total level of equity compensation but instead to the performance sensitivity of equity compensation. Similar results are obtained when I use the total value of equity holdings.

Table 2.6 shows results of regressions where the dependent variable is Incentive Ratio and the independent variables include a turnaround specialist dummy as well as the same control variables from earlier specifications. In model 1 the coefficient on TSPEC is positive and significant at the 5% level (coefficient of 0.0338 and p-value of 0.02.). This result is robust to the inclusion of industry fixed effects in model 2. This implies that not only do turnaround specialists receive more incentive compensation with higher pay for performance sensitivities, but that the incentive compensation is proportionally more important component of the total compensation package of these CEOs. Note that the coefficient on TCEO is positive in both models but not significant. This fact is not surprising given that the coefficient on TCEO was significantly larger in regressions predicting total salary and bonus compensation, and significantly weaker in regressions predicting FIXED% compensation.

Taken together, the results of section 2.5.2 indicate that incentive compensation is a critical component of the compensation package of turnaround specialists. These results are not consistent with Hypothesis 2 which predicts that the alternative monitoring mechanisms facing turnaround specialists (such as creditors and the managerial labor market) serve as substitutes for compensation-based incentive alignment. Instead, these results are consistent with the theories underlying Hypothesis 2A, which predict that both turnaround specialists and the distressed firms that hire them are more likely to favor equity incentives over fixed compensation.

2.6 ROBUSTNESS AND EXTENSIONS

2.6.1 Compensation regressions with succession announcement returns

As previously discussed in chapter one, I find that the abnormal returns surrounding succession announcements are significantly higher for firms hiring turnaround specialists than other executives. In fact the mean 3 day CAR for firms hiring turnaround specialists is 10.31% using the TSPEC definition and 7.96% using the TCEO definition compared to only 2.38% for other outsiders. I argue that the abnormal returns reflect the market's higher expected ability for the incoming turnaround specialist CEO. I have also found that turnaround specialist CEOs have higher pay and stronger incentives than other CEOs. It could be the case that CEOs generally receive higher pay and more incentives following high succession announcement returns, potentially driving the results I find for my sample of turnaround specialist CEOs. I investigate this issue in Table 2.7 by including the 3 day market model adjusted cumulative abnormal return (CAR) measured at the time of the succession announcement in the primary compensation regressions discussed earlier.

In models 1 and 2 the dependent variable is the log of total compensation (including fixed cash and non-cash compensation). Interestingly, the coefficient on CAR is positive and highly significant (p-value of .001). This indicates that incoming CEO compensation is strongly positively related to the market reaction to the firm's succession choice. This is an interesting fact because it implies that CEOs in general do not capture the full extent of the expected surplus from the employment arrangement reached by the firm. Instead it indicates that high ability CEO's and their hiring firms share in the surplus, reflected in abnormal compensation for the CEO and higher equity values for the hiring firm.

Even after controlling for CAR, turnaround specialists on average earn more total compensation than other newly hired outsiders. TSPEC and TCEO continue to be positive and significant although the magnitude of the coefficient is slightly reduced in both models. This is an interesting result in that it indicates that turnaround specialists not only earn more than other CEOs (indicating they are talented) but also earn more than other CEOs that the market anticipates will generate value for the hiring firm. This indicates that even among other talented CEOs, the specific abilities of turnaround specialists are in shorter supply, leading to those CEOs capturing greater compensation.

In models 3-8 I examine whether including CAR changes the incentive compensation dynamics found in section 2.5. I examine FIXED%, LDELTA, as well as Incentive Ratio. Interestingly I find that CAR is positively and significantly related to the amount of incentives (CAR is negatively related to FIXED%, but a higher value of FIXED% reflects less incentive compensation). This is consistent with the notion that higher ability CEOs (who are likely wealthier) need more incentive compensation to properly motivate them and align their interests with those of shareholders. This result is consistent with several possible explanations. It could be that reputable CEOs face less external labor market pressure due to the fact that they have certified their ability over their career. In addition it could be the case that reputable CEOs are wealthier and thus less risk averse (willing to accept more incentive compensation as a fraction of total compensation). To the extent that announcement CARs proxy for the same factors that make turnaround specialists unique, I should be less likely to find a difference in incentive compensation practices after controlling for succession CARs.

After controlling for CAR I find that turnaround specialists still receive higher incentive compensation than other CEOs, although the statistical significance is dampened when using the

broader TCEO definition. The results for FIXED%, LDELTA, and Incentive Ratio remain significant and largely unchanged when using the TSPEC definition. However, TCEO loses significance (p-value of 0.119) in the FIXED% regressions. TCEO was not significant in Incentive Ratio regressions previously and remains positive yet not statistically significant after controlling for CAR. Though the alternative explanations are difficult to completely disentangle, the results of Table 2.7 lend support to the notion that in addition to talent (which may be captured in part by the CAR), the nature of the specific skills and employment arrangements held by turnaround specialists lead to higher incentive-laden compensation, not simply reflecting the fact that turnaround specialists are talented only.

2.6.1.1 Total compensation regressions with CARs and interaction effects

In Panel B of Table 2.7 I show regressions of total compensation that include some interactions of succession CAR with firm size and a turnaround specialist dummy to investigate if the relation between CAR and compensation is affected by firm size and/or whether a firm hired a turnaround specialist. Each model contains a TURN dummy, which is equal to TSPEC in models 1 through 3 and TCEO in models 4 through 6. Each model contains the same set of control variables as those in model (1) of Table 2.7 Panel A. I also include a dummy variable BIGCAP which is equal to 1 if the market value of equity is in the top quartile of the sample.

BIGCAP is negative and significant at the 10% level in models 2 and 5. The logarithm of Firm Size is still positive and significant in those models implying there is a non-linear relation between compensation and firm size, with compensation increasing with firm size at a decreasing rate. This is consistent with the findings of Baker and Hall (2004). Interestingly, the interaction of BIGCAP*CAR is positive and highly significant in all models. This indicates that

CEO compensation is even higher when the market favors a large firm's choice of CEO. In other words, higher shareholder wealth effects from succession in dollar terms lead to higher dollar compensation captured by the CEO. To the extent that firms and CEOs share the gains from trade, this evidence is consistent with the market response to succession reflecting a higher assessment of managerial ability in dollar terms. This is consistent with the marginal productivity theory of Baker and Hall (2004) who argue that that managerial compensation should be higher when managerial input has a higher marginal product in dollar terms (such as when the market favors the choice of CEO for a large firm).

In model 1 and 4 I include just the TURN*CAR interaction. The interaction is positive in both models but is only significant in model 4 (using the TCEO definition). This provides some evidence that the compensation of turnaround CEOs is more strongly related to succession CARs than other CEOs. However this effect loses significance in models 2 and 5 when the BIGCAP*CAR interactions are included. In models 3 and 6 I include the triple interaction TURN*BIGCAP*CAR which is positive and significant at the 10% level in both models. Thus there is some evidence that turnaround specialist compensation is increasing in the announcement CAR, although this only holds true for those hired by large firms.

This effect is not inconsistent with the hypothesis that the positive market response to a firm hiring a turnaround specialist reflects a redistribution of wealth from creditors. If high announcement CARs reflect both increases in equity and decreases in the value of debt (though not observable), then the turnaround specialist may be capturing the total firm value wealth change through larger compensation. However, this result hinges on the presupposition that debt values decrease as equity CARs increase.

I do not have bond price data to test this proposition in my sample, so instead I examine the credit rating downgrade behavior following succession for my sample firms that have public debt ratings on Compustat (see Appendix B). I split the sample based on whether the firm had an above median or below median succession CAR. In the full sample, firms with above median succession CARs were more likely to be downgraded following succession than were firms with below median succession CARs. This is consistent with the notion that succession CARs could reflect redistribution from bondholders. However, for turnaround firms with above median CARs (which are far greater in number than turnaround firms with below median CARs) were less likely to be downgraded than turnaround firms with below median CARs. This is not consistent with the market favoring the hiring of a turnaround specialist simply due to his ability to redistribute wealth from bondholders. Thus overall the evidence is mixed regarding the redistribution hypothesis.

2.6.2 Compensation of Other Top Executives

If turnaround specialist CEOs earn higher compensation and have proportionally greater equity incentives than other incoming CEOs, do other executives at the hiring firms have similar differences in their pay dynamics? In this section I examine the pay practices of the remaining 4 of the top 5 executives excluding the newly hired CEO for each of my sample firms. I restrict my attention to firms that have available compensation values for at least 4 executives other than the incoming CEO and I examine only the top 4 of those remaining executives.

Table 2.8 shows regressions predicting the four primary compensation variables I have studied: log of total compensation, FIXED%, LDELTA, and Incentive Ratio. The dependent

variable is the average compensation measure for the top 4 executives in the succession year. Each compensation regression is specified largely in the same way as in the CEO compensation regressions including a dummy for an incoming turnaround specialist CEO and a similar set of firm controls. In addition, each model contains the value of the relevant compensation variable earned by the incoming CEO (as executive pay practices are likely to be highly correlated within a firm). Also, each model contains a variable called TURN_RATE which is the average turnover rate of the top 4 executives between the succession year and the year prior to succession²⁴. I include this variable because the average pay packages of a team of new executives are likely to differ from teams of established executives. Since executive age is largely unavailable for non-CEOs I omit executive age from the regressions.

In models 1 and 2 the dependent variable is the log of total compensation of the executive team. In model 1 the coefficient on TSPEC is positive and significant at the 5% level. When I employ the TCEO definition of a turnaround specialist in model 2 the coefficient remains positive but loses statistical significance (p-value of .113). Thus there is weak evidence that indicates that not only do turnaround specialists earn higher compensation than incoming CEOs, but that the executive team earns higher compensation as well. This could reflect the fact that firms hiring turnaround specialists have to pay a premium to attract or keep executive talent. Other than total compensation, none of the compensation structure variables (FIXED%, LDELTA, or Incentive Ratio) are significantly related to the turnaround specialist dummy.

In each model the compensation measure earned by the executive team is highly correlated to the same measure as that earned by the incoming CEO. Because the other control variables expected to influence the size and structure of compensation are included in the

²⁴ Note that the value of TURN RATE is 12% higher for the sample hiring TSPECs, suggesting that executive overhaul is more prevalent among firms in need of a turnaround.

regressions, this indicates that not only are pay practices correlated within firms (due to firm characteristics), but that abnormal pay practices are also correlated within firms. Top executive team turnover is positively related to total compensation but negatively related to both FIXED% and portfolio delta. Thus when there is higher turnover in the executive team, the new team gets higher pay and less fixed compensation as a fraction of total compensation. This is likely due to the fact that equity grants are high in the first year of employment in order to help align managerial incentives. However portfolio deltas are lower for executive teams with higher turnover reflecting the fact that established executives have built up a higher stock of incentive compensation over the course of their tenure. Top executive teams have higher pay and a lower proportion of fixed pay when the outgoing CEO was forced out. This result is interesting in light of the fact that incoming CEO pay is not related to the nature of the departure of the outgoing CEO (see Table 2.3).

2.6.3 Initial shareholder wealth effects and initial CEO compensation

Table 2.7 Panel B revealed some evidence that compensation is positively related to the dollar value change in shareholder wealth around succession. This indicates that what is good for the firm is also good for the CEO, but these results still leave open the question as to how gains from trade are shared between the firm and the CEO. So far my results indicate that turnaround firms receive higher succession CARs and turnaround specialists receive higher compensation, but it is unclear whether wealth effects are higher for turnaround firms in dollar terms, or if turnaround firms are receiving a better deal per dollar of compensation when they hire a turnaround specialist.

In Table 2.9 I directly compare the shareholder wealth effects around succession to first year CEO compensation for turnaround firms vs. firms hiring other outsiders. I calculate Succession Wealth Effect as the product of the firm's market value of equity 3 days prior to succession and the 3 day cumulative abnormal return (CAR) from a market model centered on the succession date. The mean TSPEC (TCEO) Shareholder Wealth Effect is \$435,731 (\$280,794) compared to \$27,280 for the other outsiders sample. Both differences in means are significant at the 5% level. The distribution of Shareholder Wealth Effects is highly skewed, as the medians are nearly one tenth the size of the means. However, median shareholder wealth effects are still significantly greater for turnaround firms than for firms hiring other outsiders. The median TSPEC (TCEO) Shareholder Wealth Effect is \$46,942 (\$28,145) compared to \$4,083 for the other outsiders sample. Both differences in medians are significant at the 1% level. This implies turnaround firms receive higher dollar benefits from hiring their CEO than other firms. However, they also have to pay their CEOs more than other outsiders. As shown in Table 2.2 Panel B, first year compensation is also significantly higher for turnaround specialist CEOs.

In order to compare the wealth gains received by shareholders to the compensation received by the CEO I examine both the difference between shareholder wealth gains and CEO compensation (Wealth Effect – Total Comp.) as well as the ratio of shareholder wealth gains to CEO compensation (Wealth Effect / Total Comp.). The mean and median value of (Wealth Effect – Total Comp.) for both the TSPEC and TCEO samples are significantly higher than the values for the other outsider sample. Netting out CEO compensation from wealth effects, shareholders of firms hiring TSPEC (TCEO) CEOs gain an average of \$424,862 (270,335) compared to only \$20,659 for firms hiring other outsiders. In addition the median ratio of

(Wealth Effect / Total Comp.) for both the TSPEC and TCEO samples is significantly higher than the values for the other outsider sample. The median firm hiring a TSPEC (TCEO) earns \$9 (\$7) in shareholder wealth for every dollar it pays in CEO compensation. This compares to a median of \$2 for the sample of other outsiders (both differences significant at the 1% level). The differences in means are not statistically significant across the samples²⁵. Holding debt values constant²⁶, these results imply that although turnaround specialists earn greater compensation than other CEOs, they may be yielding a smaller proportion of the surplus created by their employment with the firm.

2.6.4 Total shareholder wealth effects and realized CEO compensation over tenure

In this essay I have focused on the initial compensation received by turnaround specialists as I believe it is the best proxy for the market value of the incoming CEO at the time he is hired and is most directly related to his reputation at the time of hiring, and not due to subsequent realizations about performance after the hiring. My results indicate that turnaround specialists and the firms that hire them receive higher wealth gains around succession, and that the gains to CEO talent are shared between CEOs and firms in the labor market. In this section I extend my analysis beyond the first year of compensation and succession-related wealth effects

²⁵ Interestingly when I take the ratio of the two variables (Wealth Effect / Total Comp.), the average value is negative across all subsamples, ranging from -\$7 to -\$28 wealth per compensation dollars (note: differences are not significant between subsamples). This reflects the fact that the wealth effects and compensation values are heavily skewed and have some outlier observations. However the median value of the wealth effect/compensation ratio is better behaved, and is significantly positive across subsamples.

²⁶ This assumption may not be valid if turnaround specialists are effective at redistributing wealth from creditors, as discussed at the end of section 5.1.

to examine the relation between realized changes in shareholder wealth and total realized compensation over the CEO's entire tenure with a firm.

2.6.4.1 Total realized options compensation

Previously I have estimated the value of option compensation using the grant-date value imputed from the Black-Scholes model. However, because CEOs are often restricted from exercising their options for a certain period of time, it could be the case that the value CEOs realize from their options portfolios greatly differs from their imputed values using Black-Scholes. This would especially be the case if CEOs presided over a poor period of firm performance, and their options did not remain in the money.

In Table 2.10 I examine the realized value of option exercises over the CEO's tenure of turnaround specialists versus other outsiders. For this analysis I examine three different measures of the value realized (or realizable) from option exercises over the CEO's tenure with the firm. Total EX1 is the sum of value of options exercised over the CEO's tenure with the firm. A potential problem with EX1 is that when a CEO leaves the firm or firm leaves the Execucomp sample (such as through a merger) those CEOs are likely to receive a cash out of their exercisable in the money options, either through a golden parachute (in the case of a merger) or a golden handshake (in the case of CEO exit). Thus I also calculate a value called Total EX2 which is equal to Total EX1 plus the realizable value of the CEO's vested options in his last year with the firm. In addition, Yermack (2006) finds that companies routinely allow unvested equity awards to vest upon CEO changes. Thus I also calculate a third measure, Total EX3, which is equal to Total EX2 plus the realizable value of the CEO's unvested options in his last year with the firm. All values are shown in total and as their annual average over the CEO's

tenure. For CEOs that remained with the firm throughout the sample period, their last date is considered to be fiscal year end 2009.

Although tenures for turnaround specialists are shorter on average than other outsiders, they have higher mean and median values of realized options compensation throughout their tenure. However, none of the differences are statistically significant for Total EX1. Average EX3 per year is significantly higher for both the TSPEC and TCEO samples. TSPECs also have significantly higher mean values of Average EX2, and significantly higher median values of Total EX3 and Average EX3. Thus there is some limited evidence that turnaround CEOs receive higher realized option compensation throughout their tenure than other CEOs. However, these results are likely in part due to the fact that turnaround specialists receive higher (median) option grants over the course of their tenure²⁷.

2.6.4.2 Total realized compensation vs. total shareholder wealth change over CEO tenure

In Table 2.11 I examine the total change in shareholder wealth as compared to the total realized compensation over the CEOs' tenure with their firms. Total Shareholder Wealth Change is calculated as the market adjusted change in shareholder wealth over the tenure of the CEO. In defining Total Realized Compensation over Tenure I use the value of options exercised rather than grant date value of options. Turnaround specialists realize significantly higher total and average realized compensation throughout their tenure with the firm. The mean TSPEC (TCEO) Total Realized Compensation is \$36,522 (\$34,678) compared to \$18,874 for the other outsiders sample. The median TSPEC (TCEO) Total Realized Compensation is \$11,028

²⁷ Although the results of Table 2 Panel B suggest that turnaround specialists do not receive (significantly) higher options grants initially, they do have higher median option grants throughout their tenure with the firm.

(\$13,135) compared to \$8,023 for the other outsiders sample. Differences in means and medians are significant at the 5% level (1% level). TCEOs and TSPECs also earn significantly higher mean and median Average Annual Compensation throughout their tenure.

Although turnaround specialists earn more than their counterpart CEOs, firm that hire turnaround specialists do not exhibit statistically significant differences in market adjusted changes in shareholder wealth throughout their CEO's tenure. In addition, the ratio between Total Shareholder Wealth Change and Total Realized Compensation is not statistically different across the samples. Combining these results with the succession period wealth effects indicates that perhaps turnaround specialists add value initially, but are unable to add sustained value over the long term.

2.6.5 Robustness of primary results

I have performed several supplemental tests to confirm the robustness of my primary results. To control for the notion that firm level distress could be driving my results, I have re-run each of total and incentive compensation regressions incorporating three different proxies for financial distress: Cash/Net Assets, Current Ratio, and Altman Z score. Results and significance levels are unchanged by their inclusion. Further, my results are robust to the inclusion of the 12 month market adjusted stock return trailing the succession announcement, as a replacement for the fiscal year stock return. In addition, I have re-run all results using alternative proxies for firm size, including both Log(Sales) and Log(Book Assets). The results are qualitatively unchanged throughout although the TSPEC dummy loses conventional significance in the total compensation regressions only.

In addition, I have run each of my primary models breaking out the definitions of TCEO and TSPEC into two distinct subsamples. The results of these tests are in Table 2.12. In each model I include the same set of control variables as in earlier models as well as a TSPEC dummy and a new dummy variable, TCEO (Not TSPEC), which represents the remaining 49 TCEOs that do not qualify to be in the TSPEC sample. Perhaps not surprisingly, the TCEO (Not TSPEC) dummy enters insignificantly in the models predicting FIXED%, Portfolio Delta, and Incentive Ratio. TSPEC remains significant and point estimates are largely unchanged. This indicates that the differences in incentive compensation between the TCEO and other outsider samples are being driven by the TSPEC sample. Strikingly, in the total compensation regressions the TCEO (Not TSPEC) dummy is positive and significant at the 1% level. Furthermore, the coefficient of 0.4378 is 58% higher than the TSPEC dummy. This indicates that the non-TSPEC TCEOs are a very highly paid group of executives who, though they may have some turnaround experience, do not differ in their incentive contracts from the population of outside CEO replacements.

2.7 CONCLUSION

In this essay I examine the compensation contracts of a sample of newly hired CEOs who have a reputation at the time of their hiring as being a turnaround specialist. After controlling for other factors known to affect managerial compensation, I find that turnaround specialists earn over 24% more total compensation than other newly appointed CEOs. This finding is robust to controlling for the announcement return surrounding the succession announcement. I find that the majority of the abnormal pay difference is due to turnaround specialists receiving higher

equity grants (both options and restricted stocks) than other CEOs. Turnaround specialist compensation is more sensitive to performance than other CEOs. They receive a lower proportion of fixed cash compensation and a higher proportion of incentive compensation than other CEOs.

This essay contributes to the small but growing empirical literature that examines the roles reputation and managerial skill sets play in the compensation of managers. The evidence supports managerial reputation and skill sets as being important factors in the formation of compensation contracts. The fact that turnaround specialists have exemplary reputations in the labor market and therefore receive higher excess compensation is consistent with an efficient signaling theory of managerial reputation (Fama (1980)). However, my findings do not support the theory that a turnaround manager's serial career concerns will serve as a substitute for explicit monetary incentives in aligning manager and shareholder interests. Instead I find turnaround specialists earn higher incentive compensation, which is consistent with theories that predict incentive compensation comes at a lower cost to successful managers and has higher benefits for firms operating in distress.

APPENDIX A

IDENTIFICATION OF TURNAROUND SPECIALISTS

When searching Factiva for articles that would identify the reputation of the executive I ensure that both the last name and the first name (or common nickname) of each CEO is in the article, and that the turnaround phrases are sufficiently close to the last name in order to be flagged. This was done after numerous efforts of trial and error determining that in almost all cases the executive's last name is in the same paragraph as the turnaround phrase. I searched all articles from 10 years preceding the succession announcement and I searched the full text of the article. I used the following search template in Factiva for each executive in my sample:

((FirstName or Nickname) w/3 LastName) and ((LastName same (turnaround or turn around)) or (LastName same (restructuring w/2 (specialist or artist or manager or expert or CEO or executive or consultant)))))*

I downloaded and read through each article that came up from this search, taking care to ensure that the article really was referring the executive in question and that any turnaround related experience or reputation was directly attributed to the executive and not a different individual mentioned in the article.

APPENDIX B

CREDIT RATING DOWNGRADES CUT ON SUCCESSION ANNOUNCEMENT CAR

The table below shows the average proportion of firms who experienced a credit downgrade over the 3-12 month window following succession, split on whether the firm had an above or below median CAR surrounding the succession. (-1,1) CAR is estimated using a market model. These results are based on the subset of firms that had valid credit rating data from Compustat. Panel A shows the results for the full sample, Panel shows results for just the TCEO sample and Panel C shows results for the TSPEC sample. Below each panel in parentheses shows the number of observations that had above and below median CARs respectively. Tests for differences in means use the t-test. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

Panel A: Full Sample

(184, 183)

% Firms Downgraded in post-succession window

	Above Median CAR	Below Median CAR	Difference	P-value
Month 3	21.74%	13.11%	0.0862**	(0.029)
Month 6	29.89%	20.77%	0.0913**	(0.045)
Month 9	32.07%	26.23%	0.0584	(0.220)
Month 12	33.70%	28.42%	0.0528	(0.276)

Panel B: TCEO Sample Only

(45, 22)

% Firms Downgraded in post-succession window

	Above Median CAR	Below Median CAR	Difference	P-value
Month 3	33.33%	22.73%	0.1061	(0.381)
Month 6	37.78%	50.00%	-0.1222	(0.348)
Month 9	40.00%	54.55%	-0.1455	(0.268)
Month 12	40.00%	50.00%	-0.1	(0.445)

Panel C: TSPEC Sample Only

(28, 13)

% Firms Downgraded in post-succession window

	Above Median CAR	Below Median CAR	Difference	P-value
Month 3	32.14%	38.46%	-0.0632	(0.700)
Month 6	39.29%	76.92%	-0.3764**	(0.025)
Month 9	42.86%	84.62%	-0.4176**	(0.011)
Month 12	42.86%	76.92%	-0.3407**	(0.043)

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Figure 2.1: TSPEC compensation

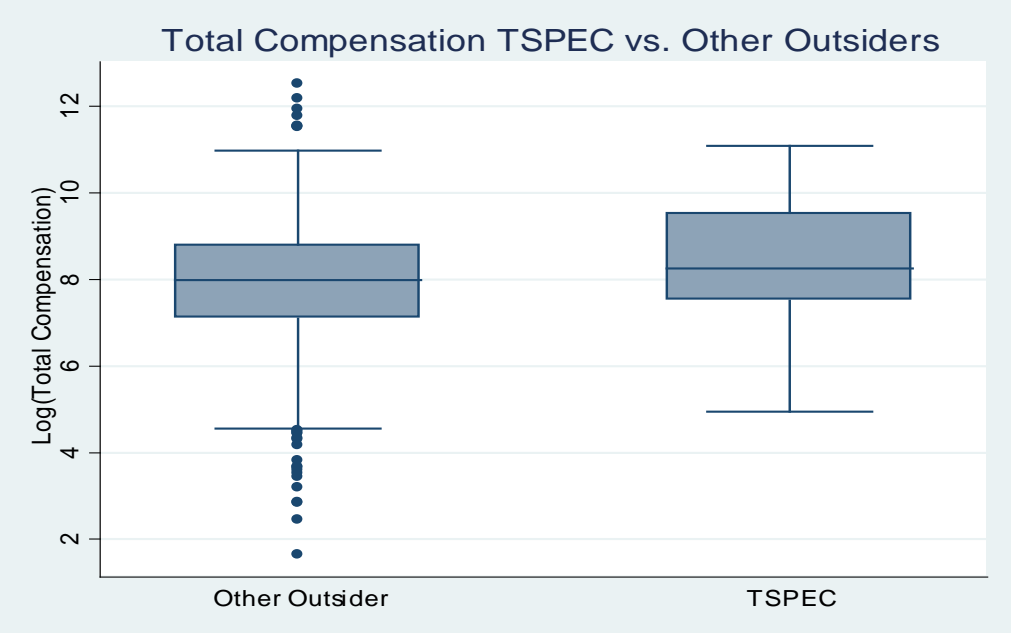


Figure 2.2: TCEO compensation

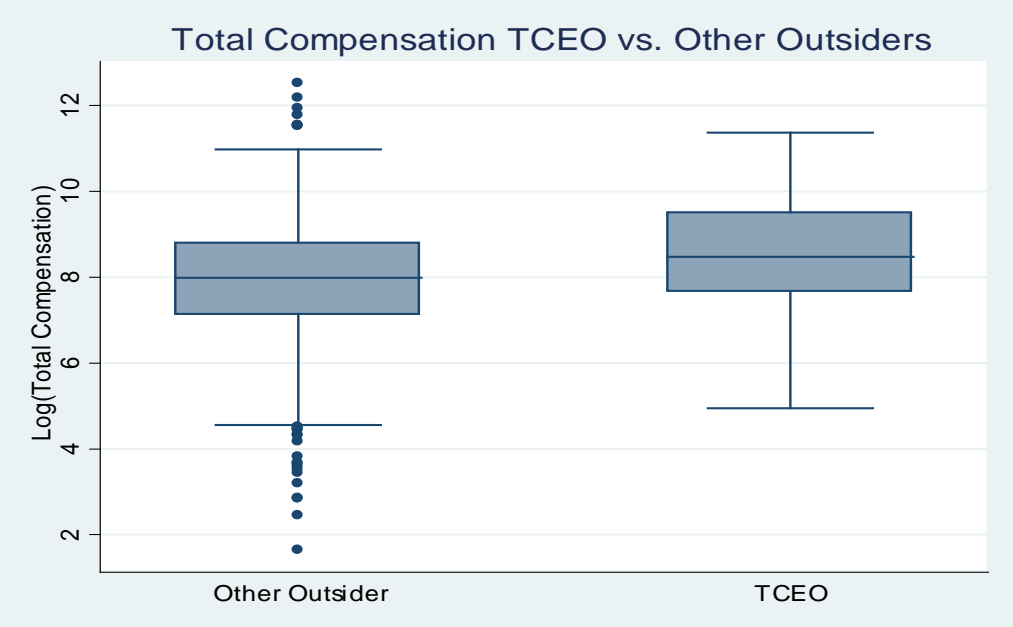


Table 2.1: Summary statistics

The table below shows summary statistics for the 736 observations in the outside CEO succession sample that have relevant financial and compensation data available. All financial and compensation data is measured at the first year of service by the incoming CEO and is measured in thousands of dollars. Total Compensation is the sum of salary, bonus, option grants, equity grants, and all other compensation. Salary plus Bonus is the sum of first year salary and bonus. FIXED% is the ratio of Salary plus Bonus to Total Compensation. DELTA is the portfolio delta of the incoming CEO's equity and option portfolio. Incentive Ratio is the ratio of DELTA to DELTA plus Salary plus Bonus. Stock Ownership (%) is the % of common shares owned by the CEO in percentage points. Stock Ownership (\$) is the dollar value of the CEO's stock portfolio as of the end of the fiscal year. Short Tenure =1 if the incoming CEO held his post for less than 1 year. Last CEO Forced Out =1 if the previous CEO was fired from his position. Num Segments are the number of operating segments reported by the firm. Fixed Assets is the ratio of plant, property and equipment to assets. Firm Size is measured as the market value of equity. Tobin's Q is the ratio of market value of equity plus book value of debt to total assets. CEO Age is the age of the entering CEO. OPROA is the ratio of operating cash flow to assets. Leverage is the ratio of long term debt to assets. Stock Return (1yr) is the annual stock return for the company measured over the course of the first fiscal year of service from the incoming CEO.

Variable	Mean	Median	Std. Dev	Min	Max
Total Compensation	7,344	3,242	16,917	4	273,416
Salary plus Bonus	809	479	1,178	0	16,971
FIXED%	0.26	0.17	0.26	0.00	1.00
DELTA	151	55	332	0	3,745
Incentive Ratio	0.18	0.10	0.22	0.00	1.00
Stock Ownership (%)	0.308	0.044	1.919	0.000	44.700
Stock Ownership (\$)	2,385	373	6,797	0	79,715
Short Tenure	0.14	0.00	0.35	0.00	1.00
Last CEO Forced Out	0.35	0.00	0.48	0.00	1.00
Num Segments	2.36	1.00	1.76	1.00	10.00
Fixed Assets	0.28	0.23	0.21	0.00	0.93
Firm Size	3,258,883	708,197	8,814,638	4,288	110,733,563
Tobin's Q	1.77	1.39	1.08	0.70	7.20
CEO Age	52.60	52.00	6.87	35.00	76.00
OPROA	0.07	0.10	0.19	-2.35	0.46
Leverage	0.19	0.16	0.19	0.00	1.00
Stock Return (1yr)	0.05	-0.01	0.71	-0.97	10.27

Table 2.2: Decomposition of compensation

The table below shows a decomposition of the variables that make up first year total compensation for the sample CEOs as defined by Execucomp. All financial and compensation data is measured at the first year of service by the incoming CEO and is measured in thousands of dollars. Salary is the annual Salary of the CEO. Bonus is realized bonus. Other Annual is non-salary annual compensation that includes items as such as perquisites, stock purchase discounts, tax reimbursements etc. Restricted Stock is the value of restricted stock grants valued as of grant date. Option Grants are the Black-Scholes value of option grants valued as of the grant date. LTIPs are value of any contributions from long term incentive plans. All Other compensation is one time compensation that is not included in the above values and includes items such as severance payments, debt forgiveness, signing bonuses, etc. Panel A shows the average compensation variable value for each subsample as well as the proportion of the average each compensation variable accounts for. Panel B shows differences in means and median compensation values between TCEOs (or TSPECs) and the Other Outsiders sample. Also included in Panel B is the variable Stock Ownership (\$), which is the dollar value of the CEO's stock portfolio as of the end of the fiscal year. Tests for differences in means use the t-test, and tests for differences in medians use the Wilcoxon Rank Sum test. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

Panel A: Summary statistics for subsamples

	Full Sample		Other Outsiders		Turnaround Specialist (TSPEC)		Turnaround CEO (TCEO)	
	Mean	% of Total	Mean	% of Total	Mean	% of Total	Mean	% of Total
Salary	334.61	4.56%	320.43	4.65%	407.10	3.80%	429.12	4.14%
Bonus	474.13	6.46%	415.33	6.03%	735.07	6.86%	866.13	8.35%
Other Annual	68.47	0.93%	54.40	0.79%	195.98	1.83%	162.24	1.56%
Restricted Stock	1,281.48	17.45%	1,021.61	14.83%	2,931.34	27.36%	3,013.93	29.06%
Option Grants	4,818.02	65.61%	4,823.60	70.01%	5,470.75	51.07%	4,780.84	46.10%
LTIPs	54.80	0.75%	4.74	0.07%	7.07	0.07%	388.58	3.75%
All Other	312.09	4.25%	249.31	3.62%	964.77	9.01%	730.62	7.04%
Total Compensation	7,343.59	100.00%	6,889.41	100.00%	10,712.08	100.00%	10,371.44	100.00%

Table 2.2: Decomposition of compensation (Continued)

Panel B

Panel B-1: TCEO vs. Other Outsiders

	Means				Medians			
	Other		Difference	P-value	Other		Difference	P-value
	TCEO	Outsiders			TCEO	Outsiders		
Salary	429	320	109***	(0.004)	354	279	76**	(0.032)
Bonus	866	415	451**	(0.021)	275	175	100**	(0.031)
Other Annual	162	54	108**	(0.025)	8	0	8***	(0.000)
Option Grants	4,781	4,824	-43	(0.965)	2,030	1,707	324	(0.161)
Restricted Stock Grant	3,014	1,022	1,992***	(0.001)	76	0	76***	(0.000)
LTIPs	389	5	384	(0.321)	0	0	0	(0.696)
All Other	731	249	481*	(0.071)	6	4	2	(0.657)
Total Compensation	10,371	6,889	3,482**	(0.019)	5,171	3,073	2,098***	(0.000)
Stock Ownership (\$)	3,358	2,238	1,121	(0.138)	778	352	427**	(0.014)

Panel B-2: TSPEC vs. Other Outsiders

	Means				Medians			
	Other		Difference	P-value	Other		Difference	P-value
	TSPEC	Outsiders			TSPEC	Outsiders		
Salary	407	320	87	(0.104)	289	279	10	(0.625)
Bonus	735	415	320**	(0.043)	100	175	-75	(0.758)
Other Annual	196	54	142*	(0.075)	0	0	0**	(0.031)
Option Grants	5,471	4,824	647	(0.626)	2,030	1,707	324	(0.331)
Restricted Stock Grant	2,931	1,022	1,910**	(0.018)	0	0	0*	(0.096)
LTIPs	7	5	2	(0.741)	0	0	0	(0.894)
All Other	965	249	715*	(0.095)	0	4	-4	(0.198)
Total Compensation	10,712	6,889	3,823	(0.111)	4,856	3,073	1,783**	(0.012)
Stock Ownership (\$)	2,781	2,238	544	(0.565)	712	352	361	(0.215)

Table 2.3: Total compensation regressions

The table below shows the results of robust regressions predicting compensation on firm level controls and a dummy variable equal to 1 if the incoming CEO is a turnaround specialist. Panel A uses the narrow TSPEC definition and Panel B uses the broader TCEO definition. All financial and compensation data is measured at the first year of service by the incoming CEO and is measured in thousands of dollars. Total Compensation is the sum of salary, bonus, option grants, equity grants, and all other compensation. Salary plus Bonus is the sum of first year salary and bonus. Non-Salary and bonus compensation equals the difference between Total Compensation and Salary plus Bonus. TCEO=1 if the incoming CEO was identified as being in the Turnaround CEO sample. TSPEC=1 if the incoming CEO was identified in the Turnaround Specialist sample (a subset of the TCEO sample). Short Tenure =1 if the incoming CEO held his post for less than 1 year. Last CEO Forced Out =1 if the previous CEO was fired from his position. Num Segments are the number of operating segments reported by the firm. Fixed Assets is the ratio of plant, property and equipment to assets. Firm Size is measured as the market value of equity. Tobin's Q is the ratio of market value of equity plus book value of debt to total assets. CEO Age is the age of the entering CEO. OPROA is the ratio of operating cash flow to assets. Leverage is the ratio of long term debt to assets. Stock Return (1yr) is the annual stock return for the company measured over the course of the first fiscal year of service from the incoming CEO. Industry dummies are formed using the Fama-French 48 industries. P-values are listed below coefficients in brackets. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

Table 2.3: Total compensation regressions (Continued)

Panel A: TSPEC Definition

VARIABLES	1	2	3	4	5	6
	Log (Total Compensation)	Log (Total Compensation)	Log (Salary + Bonus)	Log (Salary + Bonus)	Log (Non- Salary and Bonus Comp)	Log (Non- Salary and Bonus Comp)
TSPEC	0.2473** [0.050]	0.2424* [0.057]	0.2419* [0.074]	0.3357** [0.016]	0.3701** [0.013]	0.3664** [0.014]
Log(Firm Size)	0.4976*** [0.000]	0.5171*** [0.000]	0.3027*** [0.000]	0.2792*** [0.000]	0.5335*** [0.000]	0.5610*** [0.000]
Tobin's Q	0.0633* [0.063]	0.0316 [0.387]	-0.1731*** [0.000]	-0.1561*** [0.000]	0.1057*** [0.009]	0.0491 [0.252]
Fixed Assets	-0.7697*** [0.000]	-0.4418* [0.090]	0.1351 [0.458]	0.9671*** [0.001]	-1.0967*** [0.000]	-0.9938*** [0.001]
Num Segments	-0.0379* [0.066]	-0.0288 [0.184]	0.0238 [0.282]	0.0353 [0.137]	-0.0605** [0.013]	-0.0545** [0.032]
OPROA	-0.5666*** [0.003]	-0.6658*** [0.001]	-0.1900 [0.345]	-0.1695 [0.418]	-0.6702*** [0.002]	-0.7805*** [0.001]
Leverage	0.0068 [0.970]	0.1752 [0.359]	0.1868 [0.339]	0.4739** [0.024]	0.1932 [0.368]	0.3579 [0.111]
Stock Return (1yr)	0.0856* [0.088]	0.0967* [0.052]	0.2419*** [0.000]	0.2098*** [0.000]	0.0909 [0.125]	0.1214** [0.037]
Last CEO Forced Out	0.0369 [0.605]	-0.0085 [0.906]	-0.0050 [0.948]	-0.0666 [0.396]	0.0397 [0.637]	-0.0259 [0.758]
Log(CEO Age)	-1.2839*** [0.000]	-0.9867*** [0.000]	-0.5009* [0.094]	-0.5348* [0.080]	-1.3324*** [0.000]	-1.0276*** [0.002]
Short Tenure	-0.7884*** [0.000]	-0.8232*** [0.000]	-0.1413 [0.196]	-0.1264 [0.254]	-0.9539*** [0.000]	-0.9644*** [0.000]
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies	No	Yes	No	Yes	No	Yes
Observations	736	736	736	736	736	736
Adjusted R-squared	0.548	0.570	0.289	0.301	0.513	0.548

Table 2.3: Total compensation regressions (Continued)

Panel B: TCEO Definition

VARIABLES	1	2	3	4	5	6
	Log (Total Compensation)	Log (Total Compensation)	Log (Salary + Bonus)	Log (Salary + Bonus)	Log (Non- Salary and Bonus Comp)	Log (Non- Salary and Bonus Comp)
TCEO	0.3561*** [0.000]	0.3026*** [0.002]	0.3800*** [0.000]	0.3607*** [0.001]	0.4257*** [0.000]	0.3472*** [0.003]
Log(Firm Size)	0.4923*** [0.000]	0.5146*** [0.000]	0.2967*** [0.000]	0.2758*** [0.000]	0.5294*** [0.000]	0.5603*** [0.000]
Tobin's Q	0.0620* [0.066]	0.0333 [0.359]	-0.1700*** [0.000]	-0.1559*** [0.000]	0.1043*** [0.009]	0.0496 [0.245]
Fixed Assets	-0.7663*** [0.000]	-0.4263* [0.099]	0.1577 [0.378]	0.9910*** [0.000]	-1.0816*** [0.000]	-0.9644*** [0.002]
Num Segments	-0.0397* [0.051]	-0.0306 [0.154]	0.0260 [0.232]	0.0377 [0.107]	-0.0617** [0.010]	-0.0557** [0.028]
OPROA	-0.5652*** [0.002]	-0.6835*** [0.000]	-0.2157 [0.273]	-0.1986 [0.333]	-0.6959*** [0.001]	-0.8214*** [0.000]
Leverage	-0.0228 [0.899]	0.1393 [0.464]	0.1325 [0.491]	0.4115** [0.047]	0.1422 [0.504]	0.3138 [0.161]
Stock Return (1yr)	0.0888* [0.074]	0.0981** [0.047]	0.2595*** [0.000]	0.2223*** [0.000]	0.0910 [0.121]	0.1203** [0.038]
Last CEO Forced Out	0.0354 [0.614]	0.0004 [0.996]	-0.0026 [0.973]	-0.0496 [0.519]	0.0465 [0.576]	-0.0072 [0.931]
Log(CEO Age)	-1.3377*** [0.000]	-1.0167*** [0.000]	-0.5453* [0.064]	-0.5839* [0.053]	-1.3680*** [0.000]	-1.0318*** [0.002]
Short Tenure	-0.7757*** [0.000]	-0.8145*** [0.000]	-0.1351 [0.209]	-0.1216 [0.266]	-0.9506*** [0.000]	-0.9683*** [0.000]
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies	No	Yes	No	Yes	No	Yes
Observations	736	736	736	736	736	736
Adjusted R-squared	0.555	0.575	0.305	0.314	0.519	0.551

Table 2.4: FIXED% compensation regressions

The table below shows the results of robust regressions predicting compensation on firm level controls and a dummy variable equal to 1 if the incoming CEO is a turnaround specialist. All financial and compensation data is measured at the first year of service by the incoming CEO and is measured in thousands of dollars. FIXED% is the ratio of Salary plus Bonus to Total Compensation. Total Compensation is the sum of salary, bonus, option grants, equity grants, and all other compensation. TCEO=1 if the incoming CEO was identified as being in the Turnaround CEO sample. TSPEC=1 if the incoming CEO was identified in the Turnaround Specialist sample (a subset of the TCEO sample). Short Tenure =1 if the incoming CEO held his post for less than 1 year. Last CEO Forced Out =1 if the previous CEO was fired from his position. Num Segments are the number of operating segments reported by the firm. Fixed Assets is the ratio of plant, property and equipment to assets. Firm Size is measured as the market value of equity. Tobin's Q is the ratio of market value of equity plus book value of debt to total assets. CEO Age is the age of the entering CEO. OPROA is the ratio of operating cash flow to assets. Leverage is the ratio of long term debt to assets. Stock Return (1yr) is the annual stock return for the company measured over the course of the first fiscal year of service from the incoming CEO. Industry dummies are formed using the Fama-French 48 industries. P-values are listed below coefficients in brackets. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

VARIABLES	1 FIXED%	2 FIXED%	3 FIXED%	4 FIXED%
TSPEC	-0.0592** [0.014]	-0.0566** [0.029]		
TCEO			-0.0349* [0.065]	-0.0375* [0.060]
Log(Firm Size)	-0.0212*** [0.000]	-0.0272*** [0.000]	-0.0219*** [0.000]	-0.0276*** [0.000]
Tobin's Q	-0.0230*** [0.000]	-0.0136* [0.066]	-0.0225*** [0.001]	-0.0133* [0.074]
Fixed Assets	0.1776*** [0.000]	0.2174*** [0.000]	0.1777*** [0.000]	0.2151*** [0.000]
Num Segments	0.0130*** [0.001]	0.0131*** [0.003]	0.0129*** [0.001]	0.0131*** [0.003]
OPROA	-0.0027 [0.940]	0.0320 [0.409]	0.0036 [0.919]	0.0376 [0.330]
Leverage	-0.0464 [0.182]	-0.0485 [0.211]	-0.0440 [0.211]	-0.0442 [0.256]
Stock Return (1yr)	0.0078 [0.419]	0.0015 [0.882]	0.0080 [0.411]	0.0018 [0.855]
Last CEO Forced Out	0.0095 [0.489]	0.0110 [0.449]	0.0068 [0.620]	0.0077 [0.594]
Log(CEO Age)	0.0459 [0.388]	0.0499 [0.378]	0.0420 [0.435]	0.0483 [0.396]
Short Tenure	0.1093*** [0.000]	0.1049*** [0.000]	0.1106*** [0.000]	0.1062*** [0.000]
Year Dummies	Yes	Yes	Yes	Yes
Industry Dummies	No	Yes	No	Yes
Observations	736	736	736	736
Adjusted R-squared	0.158	0.216	0.156	0.216

Table 2.5: Portfolio delta regressions

The table below shows the results of robust regressions predicting compensation on firm level controls and a dummy variable equal to 1 if the incoming CEO is a turnaround specialist. All financial and compensation data is measured at the first year of service by the incoming CEO and is measured in thousands of dollars. DELTA is the portfolio delta of the incoming CEO's equity and option portfolio, and represents the \$ change in CEO stock and option portfolio for a 1% change in firm value. TCEO=1 if the incoming CEO was identified as being in the Turnaround CEO sample. TSPEC=1 if the incoming CEO was identified in the Turnaround Specialist sample (a subset of the TCEO sample). Short Tenure =1 if the incoming CEO held his post for less than 1 year. Last CEO Forced Out =1 if the previous CEO was fired from his position. Num Segments are the number of operating segments reported by the firm. Fixed Assets is the ratio of plant, property and equipment to assets. Firm Size is measured as the market value of equity. Tobin's Q is the ratio of market value of equity plus book value of debt to total assets. CEO Age is the age of the entering CEO. OPROA is the ratio of operating cash flow to assets. Leverage is the ratio of long term debt to assets. Stock Return (1yr) is the annual stock return for the company measured over the course of the first fiscal year of service from the incoming CEO. Industry dummies are formed using the Fama-French 48 industries. P-values are listed below coefficients in brackets. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

VARIABLES	1 Log (DELTA)	2 Log (DELTA)	3 Log (DELTA)	4 Log (DELTA)
TSPEC	0.3956** [0.010]	0.4197*** [0.008]		
TCEO			0.2690** [0.022]	0.2250* [0.063]
Log(Firm Size)	0.4647*** [0.000]	0.4885*** [0.000]	0.4667*** [0.000]	0.4934*** [0.000]
Tobin's Q	0.1531*** [0.000]	0.1039** [0.022]	0.1502*** [0.000]	0.1013** [0.026]
Fixed Assets	-1.2549*** [0.000]	-0.9598*** [0.003]	-1.2483*** [0.000]	-0.9395*** [0.004]
Num Segments	-0.0496** [0.044]	-0.0423 [0.111]	-0.0492** [0.045]	-0.0429 [0.108]
OPROA	0.0596 [0.789]	-0.0426 [0.855]	0.0277 [0.901]	-0.0814 [0.726]
Leverage	0.1220 [0.578]	0.2887 [0.219]	0.0900 [0.682]	0.2619 [0.269]
Stock Return (1yr)	0.5323*** [0.000]	0.5761*** [0.000]	0.5223*** [0.000]	0.5650*** [0.000]
Last CEO Forced Out	0.1009 [0.240]	0.0062 [0.944]	0.1203 [0.159]	0.0327 [0.710]
Log(CEO Age)	-1.2353*** [0.000]	-1.0147*** [0.003]	-1.2025*** [0.000]	-0.9706*** [0.005]
Short Tenure	-0.7220*** [0.000]	-0.6835*** [0.000]	-0.7341*** [0.000]	-0.7161*** [0.000]
Year Dummies	Yes	Yes	Yes	Yes
Industry Dummies	No	Yes	No	Yes
Observations	709	709	709	709
Adjusted R-squared	0.535	0.556	0.534	0.553

Table 2.6: Incentive Ratio regressions

The table below shows the results of robust regressions predicting compensation on firm level controls and a dummy variable equal to 1 if the incoming CEO is a turnaround specialist. All financial and compensation data is measured at the first year of service by the incoming CEO and is measured in thousands of dollars. Incentive Ratio is the ratio of DELTA to DELTA plus Salary plus Bonus. DELTA is the portfolio delta of the incoming CEO's equity and option portfolio, and represents the \$ change in CEO stock and option portfolio for a 1% change in firm value. TCEO=1 if the incoming CEO was identified as being in the Turnaround CEO sample. TSPEC=1 if the incoming CEO was identified in the Turnaround Specialist sample (a subset of the TCEO sample). Short Tenure =1 if the incoming CEO held his post for less than 1 year. Last CEO Forced Out =1 if the previous CEO was fired from his position. Num Segments are the number of operating segments reported by the firm. Fixed Assets is the ratio of plant, property and equipment to assets. Firm Size is measured as the market value of equity. Tobin's Q is the ratio of market value of equity plus book value of debt to total assets. CEO Age is the age of the entering CEO. OPROA is the ratio of operating cash flow to assets. Leverage is the ratio of long term debt to assets. Stock Return (1yr) is the annual stock return for the company measured over the course of the first fiscal year of service from the incoming CEO. Industry dummies are formed using the Fama-French 48 industries. P-values are listed below coefficients in brackets. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

VARIABLES	1 Incentive Ratio	2 Incentive Ratio	3 Incentive Ratio	4 Incentive Ratio
TSPEC	0.0338** [0.020]	0.0335** [0.032]		
TCEO			0.0089 [0.411]	0.0100 [0.393]
Log(Firm Size)	0.0045* [0.078]	0.0089*** [0.002]	0.0048* [0.052]	0.0094*** [0.001]
Tobin's Q	0.0333*** [0.000]	0.0272*** [0.000]	0.0312*** [0.000]	0.0256*** [0.000]
Fixed Assets	-0.0848*** [0.000]	-0.1403*** [0.000]	-0.0854*** [0.000]	-0.1356*** [0.000]
Num Segments	-0.0021 [0.354]	-0.0030 [0.248]	-0.0019 [0.389]	-0.0028 [0.279]
OPROA	0.0321 [0.127]	0.0259 [0.255]	0.0256 [0.210]	0.0203 [0.364]
Leverage	-0.0314 [0.128]	-0.0568** [0.014]	-0.0312 [0.123]	-0.0572** [0.012]
Stock Return (1yr)	0.0330*** [0.000]	0.0384*** [0.000]	0.0333*** [0.000]	0.0390*** [0.000]
Last CEO Forced Out	-0.0016 [0.840]	-0.0041 [0.636]	-0.0009 [0.910]	-0.0025 [0.770]
Log(CEO Age)	-0.0096 [0.759]	-0.0134 [0.688]	-0.0065 [0.833]	-0.0112 [0.736]
Short Tenure	-0.0226** [0.049]	-0.0269** [0.027]	-0.0216* [0.055]	-0.0264** [0.028]
Year Dummies	Yes	Yes	Yes	Yes
Industry Dummies	No	Yes	No	Yes
Observations	709	709	709	709
Adjusted R-squared	0.279	0.283	0.275	0.280

Table 2.7: Compensation regressions including succession CARs

The table below shows the results of robust regressions predicting compensation on firm level controls and a dummy variable equal to 1 if the incoming CEO is a turnaround specialist. All financial and compensation data is measured at the first year of service by the incoming CEO and is measured in thousands of dollars. (-1.+1) CAR is the 3 day cumulative abnormal return surrounding the succession announcement for the incoming CEO. Total Compensation is the sum of salary, bonus, option grants, equity grants, and all other compensation. FIXED% is the ratio of Salary plus Bonus to Total Compensation. DELTA is the portfolio delta of the incoming CEO's equity and option portfolio. Incentive Ratio is the ratio of DELTA to DELTA plus Salary plus Bonus. TCEO=1 if the incoming CEO was identified as being in the Turnaround CEO sample. TSPEC=1 if the incoming CEO was identified in the Turnaround Specialist sample (a subset of the TCEO sample). Short Tenure =1 if the incoming CEO held his post for less than 1 year. Last CEO Forced Out =1 if the previous CEO was fired from his position. Num Segments are the number of operating segments reported by the firm. Fixed Assets is the ratio of plant, property and equipment to assets. Firm Size is measured as the market value of equity. Tobin's Q is the ratio of market value of equity plus book value of debt to total assets. CEO Age is the age of the entering CEO. OPROA is the ratio of operating cash flow to assets. Leverage is the ratio of long term debt to assets. Stock Return (1yr) is the annual stock return for the company measured over the course of the first fiscal year of service from the incoming CEO. In Panel B I show regressions of total compensation and include a dummy variable (and interactions) of BIGCAP=1 if the firm has market value of equity in the top quartile of my sample of firms. Industry dummies are formed using the Fama-French 48 industries. P-values are listed below coefficients in brackets. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

Panel A

VARIABLES	1	2	3	4	5	6	7	8
	Log (Total Compensation)	Log (Total Compensation)	FIXED%	FIXED%	Log (DELTA)	Log (DELTA)	Incentive Ratio	Incentive Ratio
(-1,+1) car	1.0520*** [0.001]	0.9922*** [0.001]	-0.1208** [0.040]	-0.1249** [0.035]	1.7392*** [0.000]	1.7107*** [0.000]	0.0608* [0.075]	0.0662* [0.050]
TSPEC	0.2168* [0.087]		-0.0532** [0.030]		0.3763** [0.013]		0.0272* [0.058]	
TCEO		0.3331*** [0.001]		-0.0299 [0.117]		0.2368** [0.040]		0.0048 [0.661]
Log(Firm Size)	0.5021*** [0.000]	0.4966*** [0.000]	-0.0223*** [0.000]	-0.0230*** [0.000]	0.4647*** [0.000]	0.4675*** [0.000]	0.0048* [0.058]	0.0053** [0.032]
Tobin's Q	0.0654* [0.052]	0.0643* [0.053]	-0.0231*** [0.000]	-0.0226*** [0.001]	0.1660*** [0.000]	0.1632*** [0.000]	0.0317*** [0.000]	0.0302*** [0.000]
Fixed Assets	-0.7551*** [0.000]	-0.7528*** [0.000]	0.1743*** [0.000]	0.1732*** [0.000]	-1.2291*** [0.000]	-1.2217*** [0.000]	-0.0828*** [0.000]	-0.0837*** [0.000]
Num Segments	-0.0393* [0.054]	-0.0411** [0.041]	0.0132*** [0.001]	0.0130*** [0.001]	-0.0495** [0.038]	-0.0494** [0.038]	-0.0019 [0.393]	-0.0019 [0.388]
OPROA	-0.4876*** [0.008]	-0.4898*** [0.007]	-0.0061 [0.864]	-0.0006 [0.987]	0.1409 [0.514]	0.1045 [0.627]	0.0298 [0.148]	0.0251 [0.215]
Leverage	-0.0400 [0.824]	-0.0642 [0.719]	-0.0417 [0.233]	-0.0388 [0.270]	0.0522 [0.806]	0.0233 [0.913]	-0.0320 [0.114]	-0.0317 [0.114]
Stock Return (1yr)	0.0868* [0.081]	0.0892* [0.070]	0.0073 [0.451]	0.0074 [0.443]	0.5264*** [0.000]	0.5160*** [0.000]	0.0328*** [0.000]	0.0329*** [0.000]
Last CEO Forced Out	0.0222 [0.753]	0.0203 [0.771]	0.0111 [0.419]	0.0087 [0.526]	0.0722 [0.387]	0.0914 [0.271]	-0.0016 [0.839]	-0.0012 [0.878]
Log(CEO Age)	-1.3564*** [0.000]	-1.4097*** [0.000]	0.0524 [0.327]	0.0481 [0.371]	-1.2475*** [0.000]	-1.2098*** [0.000]	-0.0118 [0.702]	-0.0090 [0.769]
Short Tenure	-0.7690*** [0.000]	-0.7560*** [0.000]	0.1066*** [0.000]	0.1072*** [0.000]	-0.6495*** [0.000]	-0.6642*** [0.000]	-0.0210* [0.063]	-0.0201* [0.073]
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	729	729	729	729	703	703	703	703
Adjusted R-squared	0.557	0.563	0.163	0.160	0.551	0.549	0.276	0.272

Table 2.7: Compensation regressions including succession CARs (Continued)

Panel B: with CAR interactions

	TURN=TSPEC			TURN=TCEO		
	1	2	3	4	5	6
	Log (Total Comp)	Log (Total Comp)	Log (Total Comp)	Log (Total Comp)	Log (Total Comp)	Log (Total Comp)
TURN	0.1677 [0.251]	0.1679 [0.249]	0.3186 [0.108]	0.2520** [0.020]	0.2556** [0.018]	0.3427** [0.013]
BIGCAP		-0.1915* [0.094]	-0.1716 [0.138]		-0.1871* [0.097]	-0.1610 [0.167]
(-1,+1) CAR	0.9728*** [0.002]	0.6121* [0.070]	0.6954** [0.042]	0.7857** [0.014]	0.5181 [0.124]	0.6147* [0.073]
TURN*BIGCAP			-0.3667 [0.205]			-0.2403 [0.279]
TURN*CAR	0.9108 [0.318]	0.3148 [0.729]	-0.9570 [0.368]	1.7878** [0.025]	1.1522 [0.149]	-0.0071 [0.994]
BIGCAP*CAR		2.9146*** [0.001]	2.2916** [0.014]		2.5997*** [0.002]	1.8027* [0.062]
TURN*BIGCAP*CAR			4.2209* [0.075]			3.8112* [0.063]

Models also include same control variables from Table 7 Panel A model (1)

Observations	729	729	729	729	729	729
Adjusted R-squared	0.557	0.561	0.562	0.567	0.569	0.569

Table 2.8: Compensation regressions for top-4 (non-CEO) executives

The table below shows the results of robust regressions predicting average top-4 executive compensation on firm level controls and a dummy variable equal to 1 if the incoming CEO is a turnaround specialist. Only firms with compensation information for all 4 of the remaining top-5 executives were included in the sample. All financial and compensation data is measured at the first year of service by the incoming CEO and is measured in thousands of dollars. CEO Comp is the value of the CEO's compensation for the same measure used as the dependent variable. Total Compensation is the sum of salary, bonus, option grants, equity grants, and all other compensation. FIXED% is the ratio of Salary plus Bonus to Total Compensation. DELTA is the portfolio delta of the incoming CEO's equity and option portfolio. Incentive Ratio is the ratio of DELTA to DELTA plus Salary plus Bonus. TCEO=1 if the incoming CEO was identified as being in the Turnaround CEO sample. TSPEC=1 if the incoming CEO was identified in the Turnaround Specialist sample (a subset of the TCEO sample). Turn Rate is the average turnover rate of the top 4 executives between the succession year and the year prior to succession. Short Tenure =1 if the incoming CEO held his post for less than 1 year. Last CEO Forced Out =1 if the previous CEO was fired from his position. Num Segments are the number of operating segments reported by the firm. Fixed Assets is the ratio of plant, property and equipment to assets. Firm Size is measured as the market value of equity. Tobin's Q is the ratio of market value of equity plus book value of debt to total assets. OPROA is the ratio of operating cash flow to assets. Leverage is the ratio of long term debt to assets. Stock Return (1yr) is the annual stock return for the company measured over the course of the first fiscal year of service from the incoming CEO. Industry dummies are formed using the Fama-French 48 industries. P-values are listed below coefficients in brackets. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

VARIABLES	1 Log (Total Comp)	2 Log (Total Comp)	3 FIXED%	4 FIXED%	5 Log (DELTA)	6 Log (DELTA)	7 Incentive Ratio	8 Incentive Ratio
CEO Comp	0.1833*** [0.000]	0.1824*** [0.000]	0.1383*** [0.000]	0.1375*** [0.000]	0.3182*** [0.000]	0.3222*** [0.000]	0.0435*** [0.000]	0.0467*** [0.000]
TSPEC	0.2218** [0.015]		-0.0136 [0.674]		0.1415 [0.266]		0.0072 [0.388]	
TCEO		0.1137 [0.113]		-0.0134 [0.595]		-0.0542 [0.580]		-0.0059 [0.352]
Turn Rate	0.1990* [0.052]	0.2068** [0.043]	-0.1689*** [0.000]	-0.1690*** [0.000]	-0.6556*** [0.000]	-0.6361*** [0.000]	-0.0147 [0.103]	-0.0136 [0.131]
Short Tenure	0.4603*** [0.000]	0.4597*** [0.000]	-0.0852*** [0.001]	-0.0851*** [0.001]	0.4489*** [0.000]	0.4509*** [0.000]	0.0159** [0.010]	0.0165*** [0.007]
Last CEO Forced Out	0.2250*** [0.000]	0.2341*** [0.000]	-0.0663*** [0.000]	-0.0667*** [0.000]	0.0139 [0.843]	0.0244 [0.727]	-0.0025 [0.588]	-0.0019 [0.666]
Num Segments	-0.0002 [0.991]	0.0011 [0.942]	0.0047 [0.377]	0.0047 [0.377]	-0.0616*** [0.003]	-0.0603*** [0.003]	-0.0026* [0.052]	-0.0026* [0.051]
Fixed Assets	-0.2135* [0.089]	-0.2093* [0.096]	0.0283 [0.523]	0.0284 [0.522]	-0.6706*** [0.000]	-0.6598*** [0.000]	-0.0247** [0.026]	-0.0241** [0.030]
Log(Firm Size)	0.3145*** [0.000]	0.3174*** [0.000]	-0.0598*** [0.000]	-0.0599*** [0.000]	0.4084*** [0.000]	0.4135*** [0.000]	0.0133*** [0.000]	0.0138*** [0.000]
Tobin's Q	-0.0223 [0.374]	-0.0244 [0.331]	-0.0127 [0.153]	-0.0128 [0.152]	0.1444*** [0.000]	0.1386*** [0.000]	0.0188*** [0.000]	0.0186*** [0.000]
OPROA	0.0475 [0.729]	0.0211 [0.877]	0.0468 [0.334]	0.0480 [0.319]	0.6407*** [0.001]	0.6135*** [0.001]	0.0336*** [0.005]	0.0323*** [0.007]
Leverage	0.1981 [0.136]	0.1884 [0.158]	0.0073 [0.877]	0.0093 [0.843]	0.2444 [0.183]	0.2509 [0.173]	-0.0006 [0.957]	0.0007 [0.951]
Stock Return (1yr)	0.0417 [0.333]	0.0395 [0.358]	0.0141 [0.355]	0.0142 [0.350]	0.2390*** [0.000]	0.2335*** [0.000]	0.0111*** [0.006]	0.0108*** [0.007]
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	707	707	707	707	681	681	681	681
Adjusted R-squared	0.588	0.587	0.240	0.240	0.677	0.676	0.388	0.393

Table 2.9: Shareholder wealth effects around succession vs. first year CEO compensation

The table below shows mean and median values of first year compensation and shareholder wealth effects from the succession announcement. Both panels compare subsample means and medians of the turnaround sample to the sample of other outsiders. Panel A uses the broader TCEO definition and Panel B uses the more narrow TSPEC definition of a turnaround specialist. Total Compensation is the sum of salary, bonus, option grants, equity grants, and all other compensation. Succession Wealth Effect is calculated as the product of the firm's market value of equity 3 days prior to succession and the 3 day cumulative abnormal return (CAR) from a market model centered on the succession date. Wealth Effect – Total Comp is the firm by firm difference between the Succession Wealth Effect and the CEO's first year compensation. Wealth Effect/Total Comp. is the ratio of Succession Wealth Effect and the CEO's first year compensation. All financial and compensation data is measured at the first year of service by the incoming CEO and is measured in thousands of dollars. Tests for differences in means use the t-test, and tests for differences in medians use the Wilcoxon Rank Sum test. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

Panel A: TCEO vs. Other Outsiders

	Means				Medians			
	TCEO	Other Outsiders	Difference	P-value	TCEO	Other Outsiders	Difference	P-value
Succession Wealth Effect	280,794	27,280	253,513**	(0.045)	28,145	4,083	24,062***	(0.001)
1st year Total Compensation	10,371	6,889	3,482**	(0.019)	5,171	3,073	2,098***	(0.000)
Wealth Effect - Total Comp.	270,335	20,659	249,675**	(0.047)	20,766	1,711	19,055***	(0.001)
Wealth Effect/Total Comp.	-7	-28	21	(0.613)	7	2	5***	(0.004)

Panel B: TSPEC vs. Other Outsiders

	Means				Medians			
	TSPEC	Other Outsiders	Difference	P-value	TSPEC	Other Outsiders	Difference	P-value
Succession Wealth Effect	435,731	27,280	408,451**	(0.050)	46,942	4,083	42,858***	(0.001)
1st year Total Compensation	10,712	6,889	3,823	(0.111)	4,856	3,073	1,783**	(0.012)
Wealth Effect - Total Comp.	424,862	20,659	404,202*	(0.051)	43,477	1,711	41,765***	(0.001)
Wealth Effect/Total Comp.	-18	-28	9	(0.886)	9	2	8***	(0.002)

Table 2.10: Total realized value of options compensation over CEO tenure

The table below shows mean and median values of total realized value of option compensation using the (exercisable value of options) earned by the CEO his entire tenure with the firm. Both panels compare subsample means and medians of the turnaround sample to the sample of other outsiders. Panel A uses the broader TCEO definition and Panel B uses the more narrow TSPEC definition of a turnaround specialist. Total EX1 is the sum of value of options exercised over the CEO's tenure with the firm. Total EX2 is equal to Total EX1 plus the realizable value of the CEO's vested options in his last year with the firm. Total EX3 is equal to Total EX2 plus the realizable value of the CEO's unvested options in his last year with the firm. All values are shown in total and as their annual average over the CEO's tenure. For CEOs that remained with the firm throughout the sample period, their last date is considered to be fiscal year end 2009. Total Value of Option Grants is the sum of the grant-date Black-Scholes value of all options granted to the CEO over his tenure. Tests for differences in means use the t-test, and tests for differences in medians use the Wilcoxon Rank Sum test. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

Panel A: TCEO vs. Other Outsiders

	Means				Medians			
	Other		Difference	P-value	Other		Difference	P-value
	TCEO	Outsiders			TCEO	Outsiders		
Total EX1	9,468	5,630	3,838	(0.327)	0	0	0	(0.766)
Average EX1 per year	1,168	777	391	(0.298)	0	0	0	(0.822)
Total EX2	16,209	9,602	6,607	(0.238)	378	469	-92	(0.869)
Average EX2 per year	2,416	1,474	941	(0.164)	90	118	-28	(0.792)
Total EX3	18,518	11,054	7,464	(0.186)	1,334	1,002	332	(0.411)
Average EX3 per year	3,139	1,822	1,317*	(0.073)	383	225	159	(0.299)
Total Value of Option Grants	16,281	12,352	3,929	(0.168)	7,264	5,032	2,232**	(0.028)

Panel B: TSPEC vs. Other Outsiders

	Means				Medians			
	Other		Difference	P-value	Other		Difference	P-value
	TSPEC	Outsiders			TSPEC	Outsiders		
Total EX1	11,118	5,630	5,488	(0.370)	0	0	0	(0.696)
Average EX1 per year	1,431	777	653	(0.324)	0	0	0	(0.645)
Total EX2	20,582	9,602	10,980	(0.217)	790	469	321	(0.172)
Average EX2 per year	3,302	1,474	1,827*	(0.093)	328	118	210	(0.129)
Total EX3	23,536	11,054	12,482	(0.162)	4,319	1,002	3,317*	(0.069)
Average EX3 per year	4,351	1,822	2,529**	(0.032)	840	225	616**	(0.032)
Total Value of Option Grants	17,757	12,352	5,405	(0.145)	7,206	5,032	2,174*	(0.096)

Table 2.11: Total realized compensation vs. total shareholder wealth change over CEO tenure

The table below shows mean and median values of total realized compensation earned by the CEO and total market adjusted changes in shareholder wealth over the CEO's entire tenure with the firm. Both panels compare subsample means and medians of the turnaround sample to the sample of other outsiders. Panel A uses the broader TCEO definition and Panel B uses the more narrow TSPEC definition of a turnaround specialist. Total Shareholder Wealth Change is calculated as the market adjusted change in shareholder wealth over the tenure of the CEO. Avg. Annual Shareholder Wealth Change is equal to Total Shareholder Wealth Change divided by number of years with the firm. Total Realized Compensation is the sum of salary, bonus, equity grants, and all other compensation, as well as the value of all options exercised. This variable differs from the one used in previous tables in that options are valued at exercise rather than using the grant date value. For each CEO the realized compensation is summed over his entire tenure with the firm. Avg. Annual Realized Compensation is equal to Total Realized Compensation divided by number of years with the firm. For CEOs that remained with the firm throughout the sample period, their last date is considered to be fiscal year end 2009. Tests for differences in means use the t-test, and tests for differences in medians use the Wilcoxon Rank Sum test. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

Panel A: TCEO vs. Other Outsiders

	Means				Medians			
	Other		Difference	P-value	Other		Difference	P-value
	TCEO	Outsiders			TCEO	Outsiders		
Total Shareholder Wealth Change	1,224,891	-62,277	1,287,168	(0.235)	-85,611	-42,363	-43,249	(0.561)
Avg. Annual Shareholder Wealth Change	34,205	-43,859	78,064	(0.733)	-21,325	-11,621	-9,703	(0.434)
Total Realized Compensation over Tenure	34,678	18,874	15,804***	(0.008)	13,135	8,023	5,112***	(0.002)
Avg. Annual Realized Compensation	6,077	3,194	2,883***	(0.001)	3,436	1,685	1,751***	(0.000)
(Wealth Change) / (Total CEO Compensation)	-147	-152	4	(0.969)	-11	-11	0	(0.886)

Panel B: TSPEC vs. Other Outsiders

	Means				Medians			
	Other		Difference	P-value	Other		Difference	P-value
	TSPEC	Outsiders			TSPEC	Outsiders		
Total Shareholder Wealth Change	2,088,147	-62,277	2,150,424	(0.229)	-13,616	-42,363	28,746	(0.265)
Avg. Annual Shareholder Wealth Change	264,058	-43,859	307,917	(0.307)	-4,377	-11,621	7,244	(0.375)
Total Realized Compensation over Tenure	36,522	18,874	17,648**	(0.045)	11,028	8,023	3,005**	(0.031)
Avg. Annual Realized Compensation	6,228	3,194	3,034***	(0.005)	3,475	1,685	1,790***	(0.000)
(Wealth Change) / (Total CEO Compensation)	-41	-152	110	(0.156)	0	-11	11	(0.182)

Table 2.12: Robustness - decomposition of TCEO into TSPEC and TCEO (Not TSPEC)

The table below shows the results of robust regressions predicting compensation on firm level controls and a dummy variable equal to 1 if the incoming CEO is a turnaround specialist. All financial and compensation data is measured at the first year of service by the incoming CEO and is measured in thousands of dollars. TSPEC=1 if the incoming CEO was identified in the Turnaround Specialist sample (a subset of the TCEO sample). TCEO (Not TSPEC)=1 if the incoming CEO was identified as being in the Turnaround CEO sample but was not identified as being in the TSPEC sample. Total Compensation is the sum of salary, bonus, option grants, equity grants, and all other compensation. FIXED% is the ratio of Salary plus Bonus to Total Compensation. DELTA is the portfolio delta of the incoming CEO's equity and option portfolio. Incentive Ratio is the ratio of DELTA to DELTA plus Salary plus Bonus. Short Tenure =1 if the incoming CEO held his post for less than 1 year. Last CEO Forced Out =1 if the previous CEO was fired from his position. Num Segments are the number of operating segments reported by the firm. Fixed Assets is the ratio of plant, property and equipment to assets. Firm Size is measured as the market value of equity. Tobin's Q is the ratio of market value of equity plus book value of debt to total assets. CEO Age is the age of the entering CEO. OPROA is the ratio of operating cash flow to assets. Leverage is the ratio of long term debt to assets. Stock Return (1yr) is the annual stock return for the company measured over the course of the first fiscal year of service from the incoming CEO. Industry dummies are formed using the Fama-French 48 industries. P-values are listed below coefficients in brackets. ***, **, * indicate significance at the 1%, 5% and 10% levels respectively.

VARIABLES	1 Log (Total Compensation)	2 FIXED%	3 Log (DELTA)	4 Incentive Ratio
TSPEC	0.2772** [0.027]	-0.0599** [0.013]	0.4016*** [0.009]	0.0308** [0.029]
TCEO (Not TSPEC)	0.4378*** [0.002]	-0.0092 [0.736]	0.1485 [0.378]	-0.0101 [0.513]
Log(Firm Size)	0.4939*** [0.000]	-0.0211*** [0.000]	0.4639*** [0.000]	0.0043* [0.083]
Tobin's Q	0.0611* [0.070]	-0.0229*** [0.000]	0.1531*** [0.000]	0.0314*** [0.000]
Fixed Assets	-0.7560*** [0.000]	0.1775*** [0.000]	-1.2548*** [0.000]	-0.0847*** [0.000]
Num Segments	-0.0392* [0.055]	0.0130*** [0.001]	-0.0501** [0.041]	-0.0020 [0.366]
OPROA	-0.5935*** [0.001]	-0.0023 [0.950]	0.0464 [0.835]	0.0296 [0.149]
Leverage	-0.0342 [0.850]	-0.0450 [0.198]	0.1028 [0.640]	-0.0288 [0.154]
Stock Return (1yr)	0.0864* [0.082]	0.0078 [0.415]	0.5311*** [0.000]	0.0328*** [0.000]
Last CEO Forced Out	0.0423 [0.550]	0.0093 [0.498]	0.1024 [0.233]	-0.0016 [0.840]
Log(CEO Age)	-1.3163*** [0.000]	0.0465 [0.384]	-1.2431*** [0.000]	-0.0067 [0.828]
Short Tenure	-0.7804*** [0.000]	0.1091*** [0.000]	-0.7233*** [0.000]	-0.0233** [0.038]
Year Dummies	Yes	Yes	Yes	Yes
Observations	736	736	709	709
Adjusted R-squared	0.554	0.157	0.535	0.274