

**PURDUE UNIVERSITY  
GRADUATE SCHOOL  
Thesis/Dissertation Acceptance**

This is to certify that the thesis/dissertation prepared

By Baixiao Liu

Entitled  
Revisiting the Disciplinary Role of Failed Takeover Attempts

For the degree of Doctor of Philosophy

Is approved by the final examining committee:

John J. McConnell

Chair

Justin L. Tobias

Mara Faccio

Byoung-Hyoun Hwang

Jin Xu

To the best of my knowledge and as understood by the student in the *Research Integrity and Copyright Disclaimer (Graduate School Form 20)*, this thesis/dissertation adheres to the provisions of Purdue University's "Policy on Integrity in Research" and the use of copyrighted material.

Approved by Major Professor(s): John J. McConnell

Approved by: Mark Bagnoli

Head of the Graduate Program

07/11/2012

Date

**PURDUE UNIVERSITY  
GRADUATE SCHOOL**

**Research Integrity and Copyright Disclaimer**

Title of Thesis/Dissertation:

Revisiting the Disciplinary Role of Failed Takeover Attempts

For the degree of Doctor of Philosophy

I certify that in the preparation of this thesis, I have observed the provisions of *Purdue University Executive Memorandum No. C-22*, September 6, 1991, *Policy on Integrity in Research*.\*

Further, I certify that this work is free of plagiarism and all materials appearing in this thesis/dissertation have been properly quoted and attributed.

I certify that all copyrighted material incorporated into this thesis/dissertation is in compliance with the United States' copyright law and that I have received written permission from the copyright owners for my use of their work, which is beyond the scope of the law. I agree to indemnify and save harmless Purdue University from any and all claims that may be asserted or that may arise from any copyright violation.

Baixiao Liu

\_\_\_\_\_  
Printed Name and Signature of Candidate

07/11/2012

\_\_\_\_\_  
Date (month/day/year)

\*Located at [http://www.purdue.edu/policies/pages/teach\\_res\\_outreach/c\\_22.html](http://www.purdue.edu/policies/pages/teach_res_outreach/c_22.html)

REVISITING THE DISCIPLINARY ROLE OF  
FAILED TAKEOVER ATTEMPTS

A Dissertation

Submitted to the Faculty

of

Purdue University

by

Baixiao Liu

In Partial Fulfillment of the

Requirements for the Degree

of

Doctor of Philosophy

August 2012

Purdue University

West Lafayette, Indiana

UMI Number: 3544292

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI 3544292

Published by ProQuest LLC (2012). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106 - 1346

For my parents and wife.

## ACKNOWLEDGMENTS

I would never have been able to finish my dissertation without the help of my committee members and the support from my family.

First and foremost, I would like to express my deepest gratitude to the co-chairman of my committee, Dr. John J. McConnell, for his excellent guidance, caring, patience, and for encouraging me to conduct innovative research. I would also like to thank the other co-chairman of my committee, Dr. Mara Faccio, for spending long hours discussing my research, challenging me to take on tough questions, and leading me to a scientific way of doing research.

I am deeply indebted to my committee members, Dr. Byoung-Hyoun Hwang, Dr. Seoyoung Kim, Dr. Justin Tobias, and Dr. Jin Xu, for all the time and effort that they invested. I am also appreciative of all the help and suggestions by Dr. David Denis, Dr. Diane Denis, Dr. Huseyin Gulen, and Dr. Xiaoyan Zhang. My discussion with them helped me to constantly improve the quality and novelty of my work.

I thank my parents, Sha Li and Bin Liu, for their unwavering faith in me and for encouraging me to pursue my dreams. Finally, I would like to thank my wife, Xue Wang, for always cheering me up and standing by me through all the good and bad. I dedicate this dissertation to them.

## TABLE OF CONTENTS

	Page
LIST OF TABLES.....	vi
LIST OF FIGURES.....	vii
ABSTRACT.....	viii
I. INTRODUCTION.....	1
II. RELATED LITERATURE.....	8
A. Managerial Turnover in Target Firms Following Failed Takeover Attempts.....	8
B. Positive Revaluation of Target Firms following Failed Takeover Attempts.....	11
C. Activism of Outside Blockholders.....	12
III. CEO TURNOVER IN TARGET FIRMS FOLLOWING FAILED TAKEOVER ATTEMPTS.....	15
A. The Sample of Target Firms Following Failed Takeover Attempts.....	15
B. The Incidence of CEO Turnover .....	18
IV. CEO TURNOVER AND PERFORMANCE.....	23
A. The Relation of CEO Turnover to Firm and Takeover Attempt Characteristics.....	23
B. CEO Turnover and Stock Returns during the Failed Takeover Attempt Period.....	24
C. CEO Turnover and Firm Performance prior to the Failed Takeover Attempt....	26
C.1. Stock Return Evidence.....	26
C.2. Operating Performance Evidence.....	29
D. CEO Turnover and Firm Performance: Multivariate Probit Regressions.....	30

V. CORPORATE RESTRUCTURINGS DURING FAILED TAKEOVER ATTEMPTS.....	34
A. CEO Turnover, Corporate Restructurings, and Shareholder Wealth.....	34
B. Corporate Restructurings and Changes in Operating Performance.....	38
VI. CEO TURNOVER AND ACTIVISM OF OUTSIDE BLOCKHOLDERS.....	40
A. CEO Turnover and Activism of Outside Blockholders: Univariate Tests.....	40
B. CEO Turnover and Activism of Outside Blockholders: Multivariate Tests.....	41
C. CEO Turnover, Active Outside Blockholders, and Corporate Restructurings....	43
VII. ADDITIONAL ROBUSTNESS TESTS.....	45
A. Takeover Attempts Rejected by Targets.....	45
B. CEO Turnover during the Failed Takeover Attempt Period.....	46
C. Other Sensitivity Tests.....	47
VIII. CONCLUSION.....	48
BIBLIOGRAPHY.....	62
APPENDICES	
Appendix A.....	69
Appendix B.....	74
VITA.....	76



## LIST OF TABLES

Table	Page
Table 1: Distribution of sample by announcement years and reasons for takeover failure.....	51
Table 2: CEO turnover in target firms following failed takeover attempts.....	52
Table 3: Sample descriptive statistics.....	54
Table 4: Probit regression analysis of CEO turnover following failed takeover attempts.....	56
Table 5: Restructurings of target firms during the failed takeover attempt period.....	58
Table 6: The Impact of corporate restructurings during the failed takeover attempt period.....	57
Table 7: Probit regression analysis of CEO turnover and shareholder activism.....	59
Table 8: CEO turnover in target firms following failed takeover attempts grouped by FTA-CAR, restructurings and active outside blockholders.....	60

## LIST OF FIGURES

Figure	Page
Figure 1: The frequency of announced and failed takeover attempts over the period of 1985 through 2008.....	50

## ABSTRACT

Liu, Baixiao Ph.D., Purdue University, August 2012. Revisiting the Disciplinary Role of Failed Takeover Attempts. Major Professors: John J. McConnell and Mara Faccio.

I find that the likelihood of CEO turnover in target firms following failed takeover attempts is negatively correlated with the target firms' performance both prior to and during the failed takeover attempt. I also find that target firms that initiate corporate restructurings during the failed attempt have more positive stock returns in this period and are less likely to experience subsequent CEO turnover. When restructurings do not occur, an active outside blockholder is more likely to emerge and to facilitate the ouster of the target CEO. Together these findings indicate that failed takeover attempts act as "wake-up calls" either to target managers to make value-increasing improvements or to alternative control mechanisms to replace the incumbent managers.

## I. INTRODUCTION

In the academic finance literature, the takeover market has long been thought of as a “court of last resort” that imposes discipline on underperforming managers of target firms in which internal control is weak or ineffective (Manne (1965) and Jensen (1986)). Consistent with this view, Martin and McConnell (1991) and Kini, Kracaw, and Mian (1995) find that more than 50% of CEOs in target firms are replaced within the 2 years following the completion of successful takeover attempts, and that such turnover is concentrated in target firms that have significantly underperformed prior to the takeover.

However, as reported by the *Thomson Financial Securities Data Company*, almost 25% of announced takeover attempts failed during the period of 1985 through 2008 (see Figure 1). Related empirical studies report a high incidence of CEO turnover in target firms following such failed takeover attempts, suggesting that there exist mechanisms that impose discipline on the CEOs of target firms even when takeover attempts fail. Surprisingly, however, these studies also report that, unlike in successful takeover attempts, CEO changes in target firms following failed takeover attempts are not significantly correlated with target firms’ pre-takeover attempt performance (Franks and Mayer (1996) and Denis and Serrano (1996)). These

findings leave open the question as to whether the high incidence of CEO turnover in target firms following failed takeover attempts reflects performance-related discipline or random managerial replacement. Motivated by the puzzling empirical evidence on this subject, I revisit the disciplinary role of failed takeover attempts using a sample of 389 failed attempts that occurred in the U.S. over the interval of 1985-2008. Consistent with prior studies, I find that more than 41% of CEOs of target firms are replaced during the course of or within two years following the resolution of these failed takeover attempts. The 18% annualized CEO turnover rate following these attempts is more than double the 8.8% annualized turnover rate of the sample target firms over the 5-year period prior to the failed attempt.

In an important departure from prior studies, I give particular attention to the impact of the target firm's stock returns during the period from the day after the takeover initiation through its resolution (henceforth, the *failed takeover attempt period*) on CEO turnover in the target firm following the failed attempt. I do so because a target firm's stock returns during the failed takeover attempt period incorporate the impact of actions taken by target managers during this period. For example, target managers may voluntarily initiate value-increasing corporate policy changes that commit themselves to making improvements that would otherwise have been undertaken by the potential acquirer. Therefore, target firms' stock returns during the failed takeover attempt period may convey important information about target firms' managerial performance and could play a key role in determining the fate of target CEOs following failed takeover attempts. If so, ignoring the target firm's

stock returns during the failed takeover attempt period may obscure the true relation between CEO turnover and the target firm's stock price performance.

Indeed, I find that the likelihood of CEO turnover in target firms following failed takeover attempts is negatively correlated with the target firm's stock returns during the failed takeover attempt period. Estimates of probit regressions show that a one standard deviation increase in the target firm's cumulative abnormal stock returns during the failed takeover attempt period (henceforth, *FTA-CAR*, as defined in Appendix A) reduces the likelihood of CEO turnover by 10.5%. Further, in contrast to prior studies, holding constant the target firm's *FTA-CAR*, I find a significant negative correlation between the likelihood of CEO turnover and the target firm's stock returns and operating performance prior to the failed takeover attempt. For example, holding constant the target firm's *FTA-CAR*, a one standard deviation decrease in the target firm's market-adjusted buy-and-hold returns during the 2-year period prior to the takeover attempt increases the likelihood of CEO turnover by 9.8%.

Moreover, I find that target firms that announce corporate restructurings, defined as divestitures, spin-offs, plant closings or reorganizations, liquidations of investment stakes and increases in dividends or leverage, during the failed takeover attempt period have higher stock returns in this period and significant post-takeover attempt improvements in operating performance, measured as industry-adjusted operating returns on assets (henceforth, *IAORA*, as defined in Appendix A), than their

counterparts that do not announce such corporate restructuring programs.<sup>1</sup> Shares of target firms with restructuring during the failed takeover attempt period are traded significantly higher than before the takeover announcement. In addition, target firms that undertake restructurings during the failed takeover attempt period are 17% less likely to experience CEO turnover following the failed attempt.

Finally, I find that the target firm's *FTA-CAR* and the initiation of corporate restructurings during the failed takeover attempt period are negatively correlated with the emergence of an active outside blockholder, defined as any outside investors, other than the initial acquirer, who acquire more than 5% of the target firm's shares or who already have more than 5% of the target firm's shares and increase their ownership in the firm, during the failed takeover attempt period or the following two years. Conditional on the emergence of an active outside blockholder, CEOs of target firms that perform poorly during the failed takeover attempt period are more likely to be replaced following the failed attempt. Estimates of probit regressions show that a one standard deviation decrease in the target firm's *FTA-CAR* together with the emergence of an active outside blockholder increases the likelihood of CEO turnover by 27.7%.

---

<sup>1</sup> Dann and DeAngelo (1986), Denis and Serrano (1996), and Denis and Kruse (2000) find that corporate asset restructurings have positive stock price reactions at announcement. Denis (1990) and Holl and Kyriazis (1997) find that increases in dividend announced by target firms during takeover attempts have a positive impact on shareholder returns. Safiddine and Titman (1999) and Jandik and Makhija (2005) find that increases in leverage have a positive impact on target firms' post-takeover attempt performance.

I interpret these findings to imply that the CEO of the target firm in a failed takeover attempt can increase the likelihood of continuing in his/her position by initiating corporate restructurings that generate more positive (or less negative) stock returns during the failed takeover attempt period. When restructurings do not occur and when the takeover attempt fails, an active outside blockholder is more likely to enter the picture and facilitate the ouster of the underperforming CEO.

Collectively, my evidence suggests that there exists an “appellate court” that imposes performance-related discipline on managers in target firms following failed takeover attempts. These findings do not repeal the argument that takeover attempts, when they succeed, serve as a court of last resort to afford assurance of competitive efficiency among corporate managers, but do imply the need to amend the analogy, especially when takeover attempts fail. A reasonable amendment is: takeover attempts, when they fail, act as “wake-up calls” to target managers to initiate policy changes that enhance value. If the target manager does not wake up, the appellate court (e.g., an active outside blockholder) intervenes, at least in many instances, and facilitates the ouster of the underperforming manager.

I view the contribution of this study as threefold. First, this study provides new evidence on the disciplinary role of failed takeover attempts, which sheds light on the puzzling evidence found in prior work on this subject. Specifically, by explicitly analyzing the role of the target firm’s stock returns during the failed takeover attempt period in determining the fate of the target CEO following the failed takeover attempt, I find an important link between CEO turnover and the target firm’s



performance both prior to and during the failed takeover attempt period. This evidence indicates that the high incidence of management turnover in target firms following failed takeover attempts is significantly performance-related and, thereby, affords effective protection to target shareholders, implying that takeover attempts serve a valuable corporate monitoring role even when they fail.

Second, this study complements the research by Bradley, Desai, and Kim (1983), Davidson, Dutia, and Cheng (1989), Sullivan, Jensen, and Hudson (1994), and Malmendier, Opp, and Saidi (2011), which study the positive revaluation of target firms following failed takeover attempts. For example, Bradley et al. (1983) and Davidson et al. (1989) conclude that the positive revaluation of target firms following failed takeover attempts is primarily due to the emergence of and/or the anticipation of another takeover attempt. Sullivan et al. (1994) and Malmendier et al. (2011) find that the positive revaluation of target firms following failed takeover attempts is concentrated in cash-financed transactions, suggesting that the positive revaluation of target firms is a result of revelation of private information possessed by acquirers about the stand-alone value of the target firm. In contrast, I find that shares of target firms that initiate corporate restructurings during the failed takeover attempt period trade at higher prices following the failed attempts. For target firms that do not initiate restructuring during the failed takeover attempt period, the target share prices return to their pre-takeover levels. My findings suggest that the positive revaluation of target firms following failed takeover attempts is primarily induced by policy changes adopted by target firms during the failed takeover attempt period.

Third, this study contributes to the debate on whether the activism of outside blockholders is effective as a source of corporate monitoring. Proponents of activism argue that through multi-period relationships, large outside investors that commit to holding a firm's equity have increased credibility and influence in monitoring management (Ayers and Cramton (1993), and Gillian and Starks (2000)). In contrast to this positive view, opponents of the activism argue that outside blockholders lack the expertise and incentives to monitor corporate managers (Smith (1996) and Karpoff, Malatesta, and Walking (1996)). This paper finds that active outside blockholders, by increasing their ownership in target firms that perform poorly during the failed takeover attempt period, facilitate the ouster of underperforming CEOs following failed takeover attempts, suggesting that the activism of outside blockholders serves as an effective source of corporate monitoring.

The rest of the paper is organized as follows. Section II discusses the relevant literature. Section III describes the failed takeover attempt sample and documents CEO turnover in target firms following failed takeover attempts. The empirical analysis is presented in Section IV through VI. The robustness of my results is tested in Section VII. Finally, Section VIII concludes the paper.

## II. RELATED LITERATURE

In this section, I review related literature. This paper fits into three broad research areas. The first is the literature on managerial turnover in target firms following failed takeover attempts. The second is the study of positive revaluation of target firms following failed takeover attempts. The third is the analysis of whether the activism of outside blockholders serves an effective corporate governance role.

### A. Managerial Turnover in Target Firms Following Failed Takeover Attempts

Managerial turnover in target firms following failed takeover attempts has been examined in several studies. DeAngelo and DeAngelo (1989), Denis (1990), Agrawal and Walking (1994) and Ryngaert and Scholten (2010) all document a high incidence of CEO turnover in U.S. target firms following unsuccessful takeover attempts. However, these studies do not address the question on whether CEO turnover following failed takeover attempts is correlated with the performance of the target firm.

Franks and Mayer (1996) examine 23 unsuccessful hostile takeover attempts that occurred in the U.K. in 1985 and 1986. They report that 39% of target firms in unsuccessful takeover attempts experience board turnover in the two years subsequent to the failed attempts. However, they find little evidence of a relation between the target firm's stock price performance prior to the takeover attempt and the target firm's board turnover and, thereby, conclude that the high incidence of board turnover in target firms following unsuccessful takeover attempts does not derive from past managerial failure.

Safieddine and Titman (1999) document a 32% CEO turnover rate in a sample of 573 unsuccessful takeover attempts that occurred in the US. They further find that target firms terminate takeover offers by significantly increasing their leverage ratios, and those that increase their leverage the most outperform their benchmarks in the five years following the failed takeover attempt. However, they do not find any relation between increases in leverage and CEO turnover following unsuccessful takeover attempts.

My paper is closely related to, but distinct from, Denis and Serrano (1996), who examine top management turnover following 98 unsuccessful control contests that occurred in the US between 1983 and 1989. They report that 34% of target firms of unsuccessful control contests experience a change in the top manager within two years following the contest. However, they find little or no evidence that firms with top management turnover are characterized by poorer stock price performance prior to the takeover attempt. They also examine the impact of the target manager's

use of defensive tactics on the target firm's stock returns during the control contest, and find no significant difference in stock price performance during the control contest between target firms with and those without post-contest CEO turnover.<sup>2</sup>

In sum, the evidence on managerial turnover in target firms following failed takeover attempts is that there is an abnormally high incidence of managerial turnover in target firms following failed takeover attempts, but these changes in management do not appear to be correlated with pre-takeover attempt performance, raising the question as to whether the high incidence of CEO turnover in target firms following failed takeover attempts reflects performance-related discipline or random managerial replacement.

---

<sup>2</sup> In contrast, I do find that the target firm's stock returns during the failed takeover attempt period are significantly correlated with post-takeover attempt CEO turnover. A plausible reconciliation of this apparently conflicting finding is that: (1) in Denis and Serrano's (1996) sample, there are cases in which the CEO of a target firm is replaced by a subsequent successful control contest following the failed contest. In these cases, the target firm's stock returns during the control contest are more positive due to the emergence of and/or the anticipation of another takeover attempt that would ultimately result in the transfer of control (Bradley, Desai, and Kim (1983) and Davidson, Dutia, and Cheng (1989)). Therefore, in their sample, the stock returns during the control contest of target firms with CEO turnover are more positive than the true market response to the failure of the control contest. In contrast, to diminish this confounding impact, I only include takeover attempts in which target firms remain independent for at least two years after the takeover resolution. (2) Denis and Serrano (1996) examine unsuccessful control contests over the period 1983-1989. My sample includes failed takeover attempts that occurred during the period from 1985 to 2008, and 70% of my sample occurred after 1989, a period characterized by stronger takeover impediments. Thus, my finding is not necessarily conflict with that of Denis and Serrano (1996) due to the significantly different sample period that we cover. In untabulated results, I find that the negative correlation between the target firm's stock returns during the failed takeover attempt period and post-takeover attempt CEO turnover is only significant at the 0.1 level for takeover attempts that occurred prior to 1989.

## B. Positive Revaluation of Target Firms following Failed Takeover Attempts

Earlier studies by Dodd and Ruback (1977) and Bradley (1980) document that shares of target firms following failed takeover attempts trade significantly higher than before the announcement of the takeover attempt. Several papers are devoted to explain the positive revaluation of target firms following failed takeover attempts.

Dodd (1980) finds that for takeover attempts that are terminated by incumbent target management, there is a permanent positive revaluation of the target shares following the failure of the takeover attempt. For takeover attempts that incumbent managements do not veto, the target share price falls back to the pre-takeover level. However, Dodd (1980) does not provide any explanation to such difference in the net wealth effect between takeover attempts terminated by target firms and those terminated by other parties (i.e. acquirers, regulators, or market condition).

Bradley et al. (1983) and Davidson et al. (1989) find that following failed takeover attempts, shares of target firms that are more likely to receive a subsequent takeover offer trade higher than before the transaction announcement. In contrast, stock prices of target firms that do not become involved in subsequent takeover activity return to pre-takeover announcement levels. Their results do not vary when acquiring firms or target firms terminate the proposed transaction. They interpret their results to suggest that the positive revaluation of target firms is primarily due to the emergence of and/or the anticipation of another takeover attempt.

Sullivan et al. (1994) and Malmendier et al. (2011) examine the relation between the method of payment (cash or stock) and revaluation effects of target firms associated with failed takeover attempts. They find that the positive revaluation of target firms following failed takeover attempts is concentrated in cash-financed transactions, but does not exist in stock-financed transactions. This difference persists irrespective of whether a subsequent takeover bid emerges or which party deciding to terminate the transaction. They interpret this result as evidence that target firm shares are revalued according to private information signaled by the method of payment that pertains to the target firm's stand-alone value.

To conclude, the positive revaluation of target firms following failed takeover attempts remains elusive.

### C. Activism of Outside Blockholders

There is a debate in the corporate governance literature on whether the activism of outside blockholder serves an effective mechanism of corporate monitoring. Proponents of activism argue that through multi-period relationships, large outside investors that commit to holding a firm's equity have increased credibility and influence in monitoring management. For example, Ayers and Cramton (1993) argue that rational shareholders will become "active" if the expected benefits of activism exceed the expected costs of activism. They further argue that as institutional ownership of shares has increased, the role of institutional investors as

shareholders has also evolved. Given their increasing influence in the firm, institutional investors increase the expected benefits of activism by increasing the probability of success in monitoring.

Consistent with this argument, Gillian and Starks (2000) study shareholder proposals related to corporate governance submitted to a sample of US firms over the period 1987 to 1994. They find that active institutional shareholders can be more successful than individual shareholders in gaining support for shareholder proposals, suggesting that activism of outside blockholders plays an important role in monitoring management.

Denis and Serrano (1996) examine the emergence of active outside blockholders in the target firms during the course of or immediately following failed control contests. They find that top management turnover is concentrated among poorly performing target firms in which outside blockholders acquire an ownership stake. They interpret this finding to imply that active outside blockholders are induced by the target firm's poor pre-takeover attempt performance to obtain shares and to facilitate post-takeover attempt CEO turnover, although they also find that the target firm's pre-contest performance is not correlated with the likelihood of post-contest CEO turnover in the target firm.

In contrast to these supportive findings of the activism by large outside shareholders, opponents argue that outside blockholders lack the expertise and incentives to monitor corporate management. Murphy and Van Nuys (1994), for example, contend that the incentive structure of some outside blockholders, such as



public pension funds, is such that it is unlikely that they engage in corporate monitoring activities.

In addition, Smith (1996) examines 51 firms targeted by CalPERS (California pension funds) over the 1987 to 1993 period, and finds no significant improvement in operating performance of firms that adopt changes proposed by CalPERS or make changes resulting in a settlement with CalPERS.

Finally, Karpoff, Malatesta, and Walking (1996) study shareholder-initiated proxy proposals on corporate governance issues, but fail to find evidence that operating returns improve after such proposals. They also find that these proposals have negligible effect on company share value and top management turnover.

Taken together, the above findings in prior literature indicate that the evidence is unclear as to whether the activism of outside blockholders plays an effective role as a source of corporate monitoring.

### III. CEO TURNOVER IN TARGET FIRMS FOLLOWING FAILED TAKEOVER ATTEMPTS

In this section, I describe the collection of the sample of target firms in failed takeover attempts and the procedures for documenting CEO turnover in target firms both prior to and subsequent to the failed takeover attempts.

#### A. The Sample of Target Firms Following Failed Takeover Attempts

My takeover dataset is drawn from the *Thomson Financial Securities Data Company's (SDC) U.S. Mergers and Acquisitions Database* and contains takeover attempts that were announced between January 1, 1985 and December 31, 2008. The initial sample is winnowed using various criteria. Unless otherwise noted, the data used to implement the winnowing process are from *SDC*. To be included in the sample for analysis: (1) the form of the takeover attempt must be a merger, acquisition, or acquisition of a majority interest; (2) the acquirer must own less than 50% of the target firm's shares prior to the takeover attempt and seek to own 100% of the shares after the attempt; (3) the target firm must be a publicly-traded US company, and the acquiring firm must also be a US company but can be either publicly-traded or privately-held; (4) the acquirer and the target firm must not have the same parent

company; (5) the target firm must be neither in the public utility industry nor in the financial services industry (SIC Code 4900 to 4999 and 6000 to 6999). These criteria produce 7,428 entries, 1,838 of which were failed takeover attempts. To avoid double counting of failed takeover attempts, I exclude 329 takeover attempts in which the target firm has previously been a target in a failed takeover attempt. In addition, as in Schwert (1996), the target firm must have at least 100 days of stock returns data beginning from 127 days prior to the announcement of the attempted takeover available on *CRSP*. These data are required to estimate the target firm's abnormal returns during the period from the day after the takeover initiation through the day of its resolution.<sup>3</sup> Furthermore, I exclude entries with an announced takeover attempt value of less than \$1 million. These filters reduce the sample to 1,038 takeover attempts as potential observations for my sample. I examine these 1,038 takeover attempts using *Dow Jones News Service (DJNS)* to determine whether

---

<sup>3</sup> The resolution date of a failed takeover attempt is defined similar to Ryngaert and Scholten (2010): (1) in cases that the acquirer withdraws its takeover attempt and sells shares in the target, or that both parties mutually withdraw the takeover attempt, the takeover attempt is deemed terminated if the acquirer takes no additional action to acquire control of the firm or its assets for four months and no other takeover offers are made for four months. In these cases, the takeover attempt withdrawal (or share sale) date is considered the resolution date. (2) In cases that the acquirer drops the initial takeover attempt but clearly states that it will actively seek control of the firm or takes subsequent actions to control the firm, the takeover attempt is deemed dropped if four months pass with the acquirer taking no action to acquire control of the firm and with no other takeover attempts being made. In these cases, the resolution date is defined as 40 trading days after the last acquirer action. (3) In cases that the takeover attempt is rejected and the acquirer never formally drops its takeover attempt and no reason of termination is identified, the takeover attempt is deemed failed if the acquirer ceases to take actions to influence control of the target for four months with no other takeover attempts being made during this interval. In these cases, the resolution date is defined as 40 trading days after the termination date or the date of the last acquirer action. In addition, if another failed takeover attempt is initiated for the same firm before the resolution of the first takeover, I combine the two takeover attempts into a single failed takeover attempt.

the proposed takeover attempt is in fact a terminated takeover attempt. I also double check the announcement and termination dates on *DJNS* because, while announcement dates on *SDC* and *DJNS* usually coincide, termination dates are sometimes misreported on *SDC* (Crocchi (2006)). Thus, I rely on *DJNS* dates for the empirical analysis.

After reviewing *DJNS*, some takeover attempts are further eliminated from the sample. The focus of this paper is on examining whether a “truly” failed takeover attempt, rather than a subsequent successful takeover attempt or the bankruptcy court, serves a source of corporate governance. Therefore, I exclude 447 takeover attempts in which the target firm was acquired and 74 target firms that filed for bankruptcy within two years after the resolution date of the failed takeover attempt. In addition, 73 takeover attempts were led by the target firm’s management and 2 takeover attempts were led by the target firm’s employee union. For 51 entries, we cannot verify the announcement date of the attempted takeover in the *DJNS*. We drop these entries from the analysis. One takeover attempt is eliminated because it was a Pac-man offer, and another one, according to *DJNS*, was announced before 1985.<sup>4</sup> Thus, the final sample consists of 389 firms that were targeted by a failed takeover attempt and remained independent for at least two years after the resolution of the attempt. Financial information of these firms are obtained from *CRSP* and *COMPUSTAT*.

---

<sup>4</sup> A Pac-man offer is a defensive tactic used by a target firm in a hostile takeover situation. In a Pac-Man defense, the target firm turns around and tries to acquire the other company that has made the hostile takeover attempt.

The final sample of 389 firms consists of 197 (51%) NASDAQ-listed targets and 192 (49%) targets listed on NYSE/AMEX. Panel A of Table I reports the distribution of the sample of failed takeover attempts by the year of takeover announcement. The pattern of failed takeover attempts is consistent with the well-known patterns in takeover activity over the past two decades. Significantly more failed takeover attempts occurred during the mid-to-late 1980s, with relatively fewer observations during the early 1990s, followed by a moderate increase in the middle of the 1990s with a decrease in attempts toward the end of my sample period.

Panel B of Table I reports the distribution of the sample failed takeover attempts by parties who terminated the takeover attempt. The table shows that 53.2% of the takeover attempts were rejected by targets and the remaining 47.8% failed for other reasons, including 18.8% of takeover attempts mutually rejected, 17.0% terminated by the acquirers, 8.7% with no reason given in *Factiva*, and 2.3% for anti-trust concerns.

## B. The Incidence of CEO Turnover

The starting point for collecting data on CEO turnover is the initial announcement date of the takeover attempt. The 12 calendar months prior to the announcement date are considered to be year -1. The 12 calendar months prior to that are year -2, and so forth. Year 0 is the failed takeover attempt period. On average, year 0 encompasses 4 calendar months. Year +1 begins with the resolution

date of the failed takeover attempt and continues for 12 months following the resolution date. Year +2 begins with the first calendar month following the end of year +1 and ends 12 months later.

The CEO is defined as the individual occupying the position of CEO, or, if the firm has no such position, the president. For each target firm, the individual occupying the position of CEO is identified in the *Standard and Poor's Register of Corporations, Directors, and Executives* (hence forth, *S&P Register*) for year -5 through year +2. Some firms are not listed in the *S&P Register* for all years during the period of concern. In these cases, the firm's proxy statements and the *Factiva* database are used to determine the identity of the CEO. If the CEO still cannot be identified, no CEO turnover is recorded. To gather information on the date of CEO changes, the motive for replacement of the CEO, and the origin of the successor for each CEO turnover, *Factiva* articles describing CEO changes following the failed takeover attempt are collected. I also search for the proxy statements of each target firm from the *Thomson OneBanker* and the *EDGAR* database and collect the proxy statement that is closest in time but prior to the announcement of the takeover. From these proxy statements, I gather information on CEO age, CEO tenure, board size, the number of independent directors, whether the CEO also serves as the chairman of the board, CEO stock ownership, insider stock ownership and the percentage of shares held by outside blockholders.<sup>5</sup> I obtain institutional stock ownership data for each

---

<sup>5</sup> An independent director is defined as a director who is not employee or former employee of the firm. An outside blockholder is defined as a shareholder who is not employee, family trust, company stock

target firm from the *Thomson Reuters's* s34 Master File.

Panel A of Table II presents summary statistics of CEO turnover. For years -5 through -1, the annual rate of change in the CEO position ranges from 5.7% to 10.8% with an average of 8.8%. For purpose of comparison, Martin and McConnell (1991) report an average 9.9% annual CEO turnover rate during the 5-year period prior to the announcement of the takeovers in a sample of 253 successful tender offers. Denis and Denis (1995), in their study of 1,689 firms covered by the *Value Line Investment Survey*, report an average of 9.3% annual CEO turnover rate. Thus, compared to prior studies, target firms in the sample used here are subject to a slightly lower rate of management turnover prior to the initiation of the failed takeover attempt.

During year 0 (on average 4 months), the rate of CEO turnover is 5.4%, or 16.2% annually. During year +1, the rate of CEO turnover is 18.8%. In year +2, the rate of CEO turnover is 16.7%. All three CEO turnover rates are higher than the average annual rate of CEO turnover reported by Martin and McConnell (1991) and Denis and Denis (1995), and are statistically significantly greater than the sample firms' CEO turnover rate during the 5-year period prior to the failed takeover attempt. More than 41% of target firms in failed takeover attempts experience a change in CEO during the failed takeover attempt period or during the following two years. By way of comparison, the post-takeover attempt CEO turnover rate within two years following failed takeover attempts is 44% in Agrawal and Walking (1994)'s study of

---

ownership plan, and retirement plan of the target but beneficially own more than 5% of the firm's common shares.

59 failed takeover attempts, 34% in Denis and Serrano's (1996) study of 98 failed takeover attempts, 32% in Safieddine and Titman's (1999) study of 573 unsuccessful takeover attempts, and 31% in Ryngaert and Scholten's (2010) study of 269 unsuccessful hostile takeover attempts. Thus, the CEO turnover rate following failed takeover attempts in the sample used here is similar to the findings in prior studies.

Panel B of Table II reports the stated reasons for CEO turnover in the sample firms. In 15.0% of the sample, the CEO either has been fired or resigned due to poor performance or because of pressure from shareholders. "Unexpected retirement" or "to pursue other interests" account for 56.3% of the turnover instances. Warner, Watts, and Wruck (1988) suggest that both such reasons signal a forced resignation. By way of comparison, the above stated reasons account for fewer than 10% of top management changes studied in Warner, Watts, and Wruck (1988) and Weisbach (1988). Thus, this evidence suggests that a larger than normal fraction of CEO turnover in my sample appears to be involuntary.

Panel C of Table II reports the origins of the arriving CEOs and provides further evidence consistent with the notion that an abnormal fraction of the sample CEO turnovers are forced replacements. Furtado and Rozeff (1987) report that firms exhibit a preference for promoting insiders to the CEO position rather than hiring externally. Such studies often label all CEO changes followed by external hiring as having been preceded by involuntary turnover. In my sample, 45.6% of arriving CEOs are externally hired. The fraction of external hiring is high in comparison



with other studies of top management changes in firms that were not involved in takeover attempts. For example, the fraction of external hiring is 13% in Reinganum's (1985) study of 158 CEO departures and 25% in Vancil (1987).

Panel D of Table II reports that, on average, CEO changes following failed takeover attempts are associated with significant increases in target shareholders' value. Specifically, the mean two-day market model-adjusted cumulative abnormal return of target firms around the CEO turnover announcement is 1.27% with a Patell Z-statistic of 2.82. The evidence suggests that CEO changes in failed takeover attempts are deemed as value-increasing.

#### IV. CEO TURNOVER AND PERFORMANCE

In this section, I first show how firm and takeover attempt characteristics differ between target firms with and those without CEO turnover following the failed takeover attempts. I then explore whether the high incidence of CEO turnover in target firms following failed takeover attempts can be explained by the target firms' performance both prior to the failed attempts and during the failed takeover attempt period. To do that, I conduct univariate comparisons on firms' performance across target firms with and those without CEO turnover and then estimate multivariate probit regressions.

##### A. The Relation of CEO Turnover to Firm and Takeover Attempt Characteristics

Panel A through Panel C of Table III report takeover attempt and target firm characteristics for the failed takeover attempt sample. I report the information for the full sample and for target firms with and those without CEO turnover following failed takeover attempts. All variables are defined in Appendix A. Panel B shows that target firms with younger CEOs and CEOs with longer tenure are less likely to replace their CEOs following the failed takeover attempts, consistent with the findings

of Weisbach (1988), Murphy and Zimmerman (1993), and Goyal and Park (2002). In addition, consistent with Denis, Denis, and Sarin (1997), Panel C shows that target CEOs who have more stock ownership in the firm are less likely to be replaced following the failed takeover attempts. Earlier research also shows that takeover attempt and firm characteristics including the method of payment, takeover attempt hostility, the acquirer's toehold, premium offered, firm size, board size and independence, and outside blockholdings are related to CEO turnover (Morck et al. (1988), Choi (1991), Denis, Denis, and Sarin (1997), Shleifer and Vishny (2003)). Panel A through Panel C show that these characteristics do not differ significantly between target firms with and those without CEO turnover following failed takeover attempts. In the following multivariate analysis, I control for these target firm and takeover attempt characteristics to isolate the impact of firm performance on CEO turnover following failed takeover attempts. The correlation matrix of these variables is presented in Appendix B.

#### B. CEO Turnover and Stock Returns during the Failed Takeover Attempt Period

Following failed takeover attempts, CEO turnover in target firms could be correlated with the firms' stock returns during the failed takeover attempt period, which may convey important information about the managerial performance of the target firm. Therefore, using CRSP daily stock returns, I calculate cumulative abnormal stock returns for each target firm around the takeover announcement

( $CAR[-42,+1]$ ) and during the failed takeover attempt period ( $FTAR-CAR$ ).<sup>6</sup> I use the Fama-French three-factor model to estimate abnormal returns. I estimate parameters of Fama-French three-factor model over the period beginning 379 days prior to the takeover attempt and ending 127 days prior to the takeover attempt. If stock returns are not available for this entire 252-day period, a shorter interval, but not less than 100 days, is used. The market index employed is the value weighted index of all stocks contained in the CRSP daily returns file.

Panel D of Table III reports my results. For the full sample, the mean  $CAR[-42,+1]$  is 24.0%, suggesting that the initiations of the sample takeover attempts are associated with significant premium for target shareholders. However, Panel D also shows that there is no significant difference in  $CAR[-42,+1]$  between target firms with and those without subsequent CEO turnover.

The mean  $FTA-CAR$  for the full sample is -16.6%. This evidence implies that, on average, a significant fraction of the takeover premium has been dissipated by the date of the resolution of the failed takeover attempt. In other words, shareholders of target firms incurred, on average, 16.6% wealth loss due to the target firm's failure to consummate the takeover attempt. This is not surprising considering the large premium offered by the acquiring firms. What is surprising, however, is that  $FTA-CARs$  for target firms with post-takeover attempt CEO turnover is significantly

---

<sup>6</sup> Schwert (1996) finds that due to information leakage, the stock price of target firms in takeover attempts starts to rise around the 42<sup>nd</sup> trading day (two months) prior to the first announcement. Therefore,  $CAR[-42,+1]$  captures the entire premium received by the target firm's shareholders due to the initiation of a takeover offer.

lower than those for target firms without post-takeover attempt CEO turnover. The difference in mean (median) *FTA-CAR* is 13.2% (11.9%) and significant at the 0.01 level, indicating that the likelihood of post-takeover attempt CEO turnover is significantly negatively correlated with the target firm's stock returns during the failed takeover attempt period. These results suggest that the target firm's stock returns during the failed takeover attempt period play a role in determining the fate of the target firm's CEO following the failed attempt.

### C. CEO Turnover and Firm Performance prior to the Failed Takeover Attempt

Based on univariate tests, prior studies find that CEO turnover in target firms following failed takeover attempts is not correlated with target firms' stock price performance prior to the takeover attempt (Denis and Serrano (1996) and Franks and Mayors (1996)). In this section, I revisit this relation and compare stock price performance between target firms with and those without CEO turnover. In addition, I also investigate the difference in target firms' operating performance prior to the failed attempts.

#### C.1. Stock Return Evidence

Using CRSP monthly stock returns, I calculate cumulative abnormal stock returns for each of the target firms over a period of T months through three months

prior ( $T > 3$ ) to the month of the first announcement of the failed takeover attempt. I measure stock price performance up to 3 months prior to the first announcement of the takeover attempt so as to avoid any possible contamination by takeover-related information (as suggested by Schwert (1996)). For robustness, I vary the number of months,  $T$  ( $T=50, 38, 26, 14$ ), in my tests to produce cumulative abnormal returns over various time intervals prior to the failed takeover attempt. For each performance interval, I calculate the average abnormal returns for each target firm and conduct difference of means and medians tests to examine whether a difference in pre-takeover attempt stock price performance exists between target firms with and those without CEO turnover following the failed takeover attempts. I conduct tests using two methods for assessing stock market performance to control for the various statistical problems documented in the literature of long-term abnormal returns.

In the first set of tests, I compute market-adjusted buy-and-hold returns (*BHR*). *BHR* is calculated as the difference between the monthly returns of the target firm compounded from month 3 to month  $T$  prior to the takeover attempt and the corresponding compounded returns of the CRSP value-weighted index. Barber and Lyon (1997) favor this measure on conceptual grounds in tests designed to detect long-run abnormal stock returns because it captures the experience of an investor who holds a security for a long period of time.

In the second set of tests, I compute size and market-to-book (MB) adjusted cumulative abnormal returns (*SMBCAR*) for each target. I compute abnormal returns as the difference between the monthly return of the target firm and the monthly return

of an appropriate size- and MB-matched portfolio from the Fama-French 25 portfolios. This measure of long-run abnormal returns accounts for cross-sectional dependence of event firms' abnormal returns (Fama (1998) and Mitchell and Stafford (2000)).

Panel E of Table III presents my findings using *BHR*. For the overall sample, the *BHRs* are significantly negative for all four performance intervals, suggesting that, on average, failed takeover attempts are partially motivated by disciplinary considerations. Furthermore, the *BHRs* for target firms with post-takeover attempt CEO turnover are negative and lower than those for target firms without post-takeover attempt CEO turnover for all four performance intervals, but the differences are not statistically significant.

Panel F of Table III reports the results from similar tests using *SMBCAR*. I find that the *SMBCAR* for target firms with post-takeover attempt CEO turnover is lower than that for target firms without post-takeover attempt CEO turnover for all performance intervals, but the differences are not significantly different from zero.

To conclude, using univariate tests, I find no significant association between the target firm's pre-takeover attempt stock price performance and CEO turnover following the initiations of failed takeover attempts. This evidence is consistent with Denis and Serrano (1996) and Franks and Mayors (1996) who find no evidence in univariate tests on a significant correlation between post-takeover attempt CEO turnover and target firms' stock price performance prior to the failed takeover attempts.

## C.2. Operating Performance Evidence

In a departure from earlier studies, I also examine operating-based measures of performance of target firms prior to the failed takeover attempts. I calculate the industry-adjusted operating return on assets (*IAORA*) using data from COMPUSTAT. For each firm, I compute operating return on assets (*ORA*) as annual operating income before depreciation and taxes divided by total assets as of the beginning of the year. I compute the industry *ORA* as the median operating performance for the firm's industry based on the firm's 4-digit SIC code.<sup>7</sup> I compute *IAORA* as the difference between the target firm's *ORA* and the industry median *ORA*. I measure *IAORA* for each fiscal years, from one year prior to through four years prior to the year of the takeover announcement. I then compute the average *IAORA* over the intervals of year -1, year -2 through year -1, year -3 through year -1, and year -4 through year -1.

Panel G of Table III presents average *IAORAs*. The difference between mean *IAORA* for target firms with and those without post-takeover attempt CEO turnover is statistically significant at the 0.05 level for the performance intervals of year -1 and year -2 through -1. The differences in median *IAORAs* are significant at the 0.05 level for all four performance intervals.

Overall, the results in Panel E through Panel G of Table III suggest that in univariate comparison, CEO turnover in target firms following failed takeover

<sup>7</sup> In the event I find less than three other firms in the industry at the 4-digit SIC level, I match at the 3-digit SIC level. If there is less than three other firms in the industry at the 3-digit level, I match at the 2-digit SIC level.



attempts is not correlated with the target firm's pre-takeover attempt stock price performance, but mildly correlated with the target firm's operating performance prior to the failed takeover attempt.

#### D. CEO Turnover and Firm Performance: Multivariate Probit Regressions

The above univariate comparisons of target firms' performance prior to the failed takeover attempts, together with findings using univariate tests in prior studies, could be misleading, as they ignore that target firms differ in other dimensions than pre-takeover attempt stock price performance, especially differ in target firms' stock returns during the failed takeover attempt period. For example, Safieddine and Titman (1999) propose that during the failed takeover attempt period, target managers can increase leverage to commit themselves to making improvements that would otherwise be undertaken by the potential acquirer. As a result, these target managers could be less likely to be replaced even if they have underperformed prior to the failed takeover attempt period. To take into account other determinants of CEO turnover following failed takeover attempts, I estimate multivariate probit regressions to examine whether controlling for other determinant of CEO turnover, especially the target firm's stock returns during the failed takeover attempt period, may reveal the true relation between CEO turnover and target firms' pre-takeover attempt performance.

In Table IV, model (1) shows that the target firm's *FTA-CAR* is negatively correlated with the likelihood of post-takeover attempt CEO turnover. The coefficient is significant at the 0.01 level. Model (2) indicates that without controlling for other target firm and takeover attempt characteristics and, most importantly, *FTA-CAR*, CEO turnover following failed takeover attempts is not significantly correlated with the target firm's market adjusted buy-and-hold returns two years prior to the takeover announcement (*BHR(-2)*). In contrast, model (3) shows that after controlling for the target firm's *FTA-CAR*, *BHR(-2)* is negatively and significantly correlated with the likelihood of CEO turnover following failed takeover attempts. The coefficient on *BHR(-2)* is significant at the 0.01 level. In addition, model (4) through model (7) report that the negative relation between the target firm's *FTA-CAR* and post-takeover attempt CEO turnover and that between *BHR(-2)* and post-takeover attempt CEO turnover remain significant at the 0.01 level after controlling for CEO characteristics, takeover attempt characteristics, board compositions, stock ownership structures, and the target firm's performance during the two years following the resolution of the failed takeover attempt. Based on model (5), keeping everything else the same, a one standard deviation increase (decrease) in the target firm's *FTA-CAR* (*BHR(-2)*) reduces (increases) the likelihood of CEO turnover by 10.5% (9.8%).

Results for the control variables are generally consistent with the univariate results in Table III and with earlier research. In particular, the coefficient on CEO age is positively significant, and that on CEO tenure is negatively significant,

indicating that younger CEOs and CEOs with longer tenure are less likely to be replaced after a failed takeover attempt. In addition, the coefficient on  $BHR(+2)$  is significantly negative, suggesting that post-takeover attempt CEO turnover is also negatively correlated with the target firm's performance following the resolution of the failed takeover attempt.

For robustness, I use alternative measures to proxy for the target firm's pre-takeover attempt performance. Model (8) through model (15) of Table IV show that the significant correlation between CEO turnover and target firms' performance prior to the failed takeover attempt is not sensitive to the measurement of performance or the time period examined. Holding constant the target firm's  $FTA-CAR$ , both stock price-based measures of performance ( $SMBCAR$ ) and operating performance ( $IAORA$ ) of target firms 1 to 4 years prior to the failed takeover attempt are negatively correlated with the likelihood of post-takeover attempt CEO turnover. In particular, the coefficients on alternative measures of target firms' performance prior to the failed takeover attempt are negative for all models and significant in 6 out of 8 models. Further,  $IAORAs$  are more significantly correlated with post-takeover attempt CEO turnover than in univariate tests.

In summary, in contrast to prior studies, the results in Table IV provide evidence on the view that CEO turnover in target firms following failed takeover attempts is significantly performance-related. On the one hand, the results show a significantly negative correlation between post-takeover attempt CEO turnover and the target firm's stock returns during the failed takeover attempt period. On the

other hand, the evidence shows that holding constant the target firm's stock returns during the failed takeover attempt period, there does exist a significant link between the target firm's performance prior to the failed takeover attempt and CEO turnover following the failed takeover attempt, shedding light on the puzzling evidence found in prior studies. Taken together, my evidence suggests that takeover attempts serve a valuable performance-related disciplinary role even when they fail.

## V. CORPORATE RESTRUCTURINGS DURING FAILED TAKEOVER ATTEMPTS

According to the analysis above, target firms with more positive (or less negative) stock returns during the failed takeover attempt period are less likely to oust the incumbent CEO. Such correlation may be serendipitous or it could be that some CEOs under duress proactively seek to improve firm performance. The voluntary initiation of improvements could enhance the value of the target firm and thereby reduce the likelihood of CEO turnover following the failed takeover attempt. I investigate this possibility in this section.

### A. CEO Turnover, Corporate Restructurings, and Shareholder Wealth

One way to improve performance, but not the only way, is to initiate major corporate restructurings. Indeed, Dann and DeAngelo (1986), Denis and Serrano (1996), and Denis and Kruse (2000) find that corporate asset restructurings have positive stock price reactions at the announcement and generate operating improvements afterwards. Thus, I define a firm as having restructured if it announces divestitures, spin-offs, plant closings or reorganizations, and liquidations of investment stakes during the failed takeover attempt period.

In addition, Denis (1990) and Holl and Kyriazis (1997) find that dividend increases or initiations announced by target firms of takeovers have a positive impact on target shareholder returns. Safiddine and Titman (1999) and Jandik and Makhija (2005) find that increases in leverage, especially bank debt, during the failed takeover attempt period have a positive impact on target firms' post-takeover attempt performance. In sum, actions voluntarily undertaken by target managers during the failed takeover attempt period to pay out free cash flow should be considered as corporate policy changes that increase value. Therefore, I also define increases or initiations of dividends, debt issuances, and increases in bank loans as corporate restructurings during the failed takeover attempt period.

To conduct this analysis, I examine news articles of each target firm in *Factiva* database during the failed takeover attempt period for announcements of corporate restructurings by target firms in my sample failed takeover attempts. Table V summarizes the results. According to the table, there exists a substantial amount of corporate restructuring activities among the sample target firms during the failed takeover attempt period. Asset restructurings are the most common action, with 19.3% of the target firms undertaking some type of asset restructuring and 12.6% increasing either dividends or leverage during the failed takeover attempt period. In sum, a total of 92 (23.7%) target firms announced restructuring actions during the failed takeover attempt period. The average number of actions undertaken by each firm that announces restructuring programs during the failed takeover attempt period is 1.35, ranging from 1 to 3. Table V also shows that for target firms that undertake

some restructuring actions during the failed takeover attempt period, their stock returns during the period two months prior to the takeover attempt to its resolution ( $CAR[-42, resolution]$ ) are significantly positive, suggesting that, on average, the takeover premiums for target firms that announce restructurings during the failed takeover attempt period do not dissipate completely at the resolution of the takeover attempt.<sup>8</sup>

To further examine whether these corporate restructurings affect target shareholder wealth, I investigate the target firm's  $FTA-CAR$  and  $CAR[-42, resolution]$  for target firms that do and those do not undertake corporate restructurings during the failed takeover attempt period. Panel A of Table VI reports that in target firms that announce restructurings during the failed takeover attempt period, the  $FTA-CAR$  is 3.5% on average and not significantly different from zero. The  $FTA-CARs$  of target firms with restructurings are significantly higher than those of target firms without restructurings. The mean (median) difference is 26.4% (23.5%), significant at the 0.01 level. Moreover,  $CAR[-42, resolution]$  for target firms with restructurings (25.6%) during the failed takeover attempt period is also significantly higher than those for firms without restructurings (-5.6%). The difference is significant at the 0.01 level.

---

<sup>8</sup>  $CAR[-42, resolution]$  is the Fama-French three-factor model-adjusted cumulative abnormal returns of the target firm from the 42<sup>nd</sup> trading day prior to the takeover attempt through its resolution. Schwert (1996) shows that due to information leakage and insider trading, stock prices of target firms in takeovers start to rise around day -42 prior to the announcement. Therefore,  $CAR[-42, resolution]$  measures the net impact on target shareholders' wealth due to the initiation of a takeover attempt, its failure, and any actions taken by the target manager during the failed takeover attempt period.

In sum, the results suggest that restructurings taken by target firms during the failed takeover attempt period have a significant positive impact on target shareholder wealth: the gains of target shareholders associated with the initiation of a failed takeover attempt are dissipated unless the target firm voluntarily initiates policy changes during the failed takeover attempt period to enhance its value. Contrary to prior literature (see, Bradley et al. (1983), Davidson et al. (1989), and Sullivan et al. (1994)), this evidence indicates that, the positive revaluation of target firms following failed takeover attempt is primarily induced by value-increasing policy changes that adopted by target firms to thwart the takeover attempt.

Panel A of Table VI also shows that CEO turnover following the initiations of failed takeover attempts in target firms with restructurings during the failed takeover attempt period is 28% (12% on an annualized basis), somewhat higher than the 8.8% annualized turnover rate of the full sample target firms during the period 5-year prior to the takeover attempt. In comparison, the CEO turnover rate in target firms without restructuring during the failed takeover attempt period is 45% (20% on an annualized basis). This evidence suggests that voluntary initiations of restructurings during the failed takeover attempt period are associated with less subsequent CEO replacement in the target firm.



## B. Corporate Restructurings and Changes in Operating Performance

To complement my evidence on the impact of corporate restructurings during failed takeover attempts period on target firms' performance, I examine target firms' operating performance following failed takeover attempts and changes in target firms' operating performance in the years surrounding the failed takeover attempts. I define industry-adjusted operating return on assets (*IAORA*) as in Appendix A. I measure the target firm's *IAORA* and the changes in this ratio between the fiscal year prior to (year -1) the initiation of the takeover attempt and the three-year period following (year +1 to +3) the fiscal year of the resolution of the takeover attempt.

Panel B of Table VI reports mean and median *IAORA* for the whole sample and for target firms with and those without restructurings during the failed takeover attempt period. For firms with restructurings, *IAORA* is significantly positive in the three years following the resolution of the failed takeover attempt. In contrast, *IAORA* is insignificantly different from zero for firms without restructurings during the failed takeover attempt period. The mean and median differences of *IAORA* in the three years following the failed takeover attempt for firms with and those without restructurings are significant at the 0.01 level, suggesting that target firms that undertake restructurings during the failed takeover attempt period have significantly better operating performance following the resolution of the takeover attempt than their counterparts without restructurings.

Panel C of Table VI reports mean and median changes of *IAORA* for the whole sample and target firms with and those without restructurings around the failed takeover attempt period. For the full sample, changes in *IAORA* are negative and statistically significant at the 0.05 level over the (-1, +1) year interval, suggesting that, on average, operating performance of target firms deteriorates following failed takeover attempts. However, changes in operating performance of target firms with and those without restructurings differ significantly. *IAORA* changes are positive for target firms with restructurings and significant at the 0.05 level over the (-1, +1), (-1, +2), and (-1, +3) intervals. In contrast, *IAORA* changes are significantly negative for firms without restructurings over the same intervals. The differences in means and medians of *IAORA* changes are above 4% and significant at the 0.01 level.

In sum, these findings provide evidence that the level and the changes in operating performance following failed takeover attempts are significantly more positive in those firms that have announced restructurings during the failed takeover attempt period, suggesting that the target firm's restructurings during the failed takeover attempt period significantly improve the firm's operating performance. This evidence echoes my earlier findings that target firms with restructurings during the failed takeover attempt period have more positive (or less negative) stock returns in this period and are less likely to replace the incumbent CEOs. These findings support the notion that takeover attempts, even when they fail, act as "wake-up calls" to target managers to initiate policy changes that enhance value and, thereby, facilitate the process that reallocates assets toward higher-valued uses.

## VI. CEO TURNOVER AND ACTIVISM OF OUTSIDE BLOCKHOLDERS

The results of previous sections suggest that when restructurings during the failed takeover attempt period do not occur in the target firm, there does exist mechanism of performance-related discipline that serves as an “appellate court” following the failed takeover attempt. In this section, I examine whether the activism of outside blockholders acts as such control mechanism that imposes performance-related discipline on managers of target firms following failed takeover attempts.

### A. CEO Turnover and Activism of Outside Blockholders: Univariate Tests

As in Denis and Serrano (1996), I employ one proxy for shareholder activism: *active outside blockholder* is a dummy variable that equals one if, other than the acquirer, an outside shareholder increased his/her ownership in the target firms to more than 5% or an outside blockholder who increased his position during the failed takeover attempt period or within two years following the resolution of the takeover attempt, zero otherwise. Similar to Bange and Mazzeo (2004), outside shareholders are defined as shareholders other than employees, former employees, family trusts,

company stock ownership plans, and retirement plans. If shareholder activism plays a role in imposing discipline on target managers following failed takeover attempts, I expect that poorly performing CEOs are more likely to be replaced in target firms with the emergence of an active outside blockholder. In untabulated results, I find that 39% of the target firms in my sample have an active outside blockholder who acquires a stake during the failed takeover attempt period or the following two years. Moreover, a significantly greater fraction of target firms with post-takeover attempt CEO turnover (50%) have an active outside blockholder that emerges following the failed takeover attempt than firms without post-takeover attempt CEO turnover (31%). The difference is significant at the 0.01 level. This evidence is consistent with the view that active outside blockholders play an important role in facilitating the replacement of target CEOs following failed takeover attempts.

#### B. CEO Turnover and Activism of Outside Blockholders: Multivariate Tests

I also examine the impact of shareholder activism on CEO turnover in multivariate probit regressions. My main interest is in the coefficient on the interaction variable that consists of the product of *active outside blockholder* dummy with the target firm's *FTA-CAR*. For example, if target firms with the presence of an active outside blockholder are more likely to replace poorly performing CEOs following failed takeover attempts, the coefficient on the interaction of *active outside blockholder* with target firm's *FTA-CAR* is expected to be significantly negative.

Table VII presents my results. Model (1) shows that the presence of an active outside blockholder is positively correlated with post-takeover attempt CEO turnover following the failed takeover attempt. The coefficient on active outside blockholder is significant at the 0.01 level. Based on model (1), if an active outside blockholder emerges in the target firm following the failed takeover attempt, the target CEO is 17.7% more likely to be replaced. Moreover, the interaction term between active outside blockholder and the target firm's *FTA-CAR* enters model (2) with negative coefficient, significant at the 0.05 level. Estimates of probit regression show that a one standard deviation decrease in the target firm's stock returns during the failed takeover attempt period together with the emergence of an active outside blockholder increases the likelihood of CEO turnover by 27.7%. This evidence suggests that if an active outside blockholder emerges in the target firm following the failed takeover attempts, CEO turnover in the target firm is more sensitive to the target firm's stock returns during the failed takeover attempt period. In contrast, in the absence of an active outside blockholder, CEO turnover following the failed takeover attempt is not significantly correlated with the target firm's stock returns during the failed takeover attempt period.

Taken together, the evidence of this section indicates that active outside blockholders play a role in imposing performance-related discipline on managers of target firms following failed takeover attempts. In particular, active outside blockholders are more likely to obtain partial control in target firms that have performed poorly during the failed takeover attempt period. This evidence is

consistent with outside blockholders becoming “active” to obtain shares in target firms in which a management change would be most valuable. Consistent with this view, in untabulated results, I find that *FTA-CAR* averages -28.2% ( $t=-10.91$ ) for target firms with the presence of an active outside blockholder following the failed takeover attempt, but averages -9.4% ( $t=-3.46$ ) for target firms without the presence of an active outside blockholder. The difference is significant at the 0.01 level.

### C. CEO Turnover, Active Outside Blockholders, and Corporate Restructurings

Panel A of Table VI reports that an active outside blockholder is less likely to emerge in target firms with restructurings during the failed takeover attempt period (26%) than in firms without restructurings (42%). The difference is significant at the 0.01 level. To further examine the joint distribution of corporate restructurings, the emergence of active outside blockholders, and CEO turnover, I divide the sample firms into four mutually exclusive groups on the basis of whether the target firm announces restructurings during the failed takeover attempt period, and whether there is an active outside blockholder emerging in the target firm. I then examine the frequency of CEO turnover within each group.

The results are reported in Panel A of Table VIII. These results suggest that CEO turnover following failed takeover attempts is concentrated among firms that do not undertake any restructurings during the failed takeover attempt period and in which active outside blockholders acquire shares. Panel B of Table VIII further

illustrates that target firms with negative *FTA-CAR* and with the emergence of an active outside blockholders are more likely to experience CEO turnover following the failed takeover attempts.

These findings suggest that active outside blockholders are less likely to obtain partial control and facilitate the ouster of incumbent CEO in target firms in which value-increasing corporate policy changes have been initiated by the target managers during the failed takeover attempt period.

## VII. ADDITIONAL ROBUSTNESS TESTS

The main conclusion of this study is that CEO turnover in target firms following failed takeover attempts is negatively correlated with the target firm's performance both during the failed takeover attempt period and prior to the takeover attempt. In this section, I address the robustness of my evidence.

### A. Takeover Attempts Rejected by Targets

The first robustness question concerns the reason of takeover attempt failure. Some takeover attempts fail for reasons outside the control of the target firm's top managers. If so, it would be inappropriate to hold managers accountable for shareholder wealth losses incurred between the initiation and resolution of the failed takeover attempts. Therefore, although target resistance may also affect takeover outcomes in cases when the acquirer withdraws the offer, when the target and the acquirer mutually terminate the takeover negotiation, and when reasons of takeover attempt failure are not reported, I perform robustness analysis using the subsample of 207 failed takeover attempts in which the target firm either explicitly rejected the takeover offer or terminated the takeover negotiation. The results are very similar to



those reported in the paper using the full sample in terms of both the signs and the significance levels. Thus, I conclude that the correlation between target firms' performance and CEO turnover following failed takeover attempts are not driven by cases in which the takeover attempt fails for reasons outside the control of the target firm's top managers.

#### B. CEO Turnover during the Failed Takeover Attempt Period

The second relevant question that I address related to the timing of CEO turnover following failed takeover attempts. In particular, there are 21 cases of my sample CEO changes occurred during the failed takeover attempt period. One interpretation of these CEO changes is that the target CEO may step down due to the threat of the takeover attempt, which is motivated by replacing the incumbent CEO who underperforms prior to the takeover attempt. Subsequently, the takeover attempt fails because the CEO has already been replaced. Therefore, these CEO changes should not be correlated with the target firm's stock returns during the failed takeover attempt period.

To address this issue, I exclude the 21 observations with CEO turnover during the failed takeover attempt period and re-run my analysis. The results are very similar to those reported in the paper using the full sample in terms of both the signs and the significance levels. Moreover, I keep the 21 observations in the full sample as "No CEO Turnover" observations and re-run my analysis. The results are

qualitatively similar: the negative coefficients on variables that measure target performance prior to the takeover attempt become less significant, echoing the conjecture that CEO changes during the failed takeover attempt period are more likely to be related to the target firm's pre-takeover attempt performance. Thus, I conclude that the correlation between CEO turnover and target firm's stock returns during the failed takeover attempt period is not driven by CEO changes that occurred during the failed takeover attempt period.

### C. Other Sensitivity Tests

I also perform the following sensitivity tests: i) using equally-weighted CRSP index (as opposed to value-weighted) as the market return; ii) using market-adjusted (assuming  $\alpha = 0$  and  $\beta = 1$  as market model parameters) and market-model-adjusted abnormal returns to measure the target firm's stock returns during the failed takeover attempt period; iii) winsorizing all measures of target performance at the 1<sup>st</sup> and 99<sup>th</sup> or 5<sup>th</sup> and 95<sup>th</sup> percentiles to control for outliers; iv) controlling for year fixed effects. None of these variations change my results.

## VIII. CONCLUSION

This paper provides evidence on the disciplinary role of failed takeover attempts. In particular, in addition to reaffirming the high incidence of CEO turnover reported in prior studies in target firms following the initiations of failed takeover attempts, I find that, contrary to the findings of prior studies, changes in CEO are negatively correlated with target firms' performance both prior to and during the failed takeover attempt period. Moreover, I find that target firms that announce corporate restructurings during the failed takeover attempt period have more positive (or less negative) stock returns in this period and significant improvements in operating performance following the failed takeover attempt. Together these findings indicate that failed takeover attempts act as "wake-up calls" either to target managers to initiate corporate policy changes that enhance value, or to alternative control mechanisms to replace the underperforming target managers, suggesting that takeover attempts serve a valuable monitoring role even when they fail.

Beyond providing evidence about the disciplinary role of failed takeover attempts, my findings also shed light on the positive revaluation effect of target firms following failed takeover attempts. Prior studies conclude that the positive revaluation effect is either due to the emergence of and/or the anticipation of subsequent takeover

bid to the target firm or due to cash bid inducing the market to positively revalue the target firm because of the revelation of positive private information of the acquirer about the target firm. In contrast, I find that shares of target firms that initiate corporate restructurings during the failed takeover attempt trade higher than before the attempt announcement, suggesting that the positive revaluation of target firms following failed takeover attempt is primarily induced by value-increasing policy changes that adopted by target firms to thwart the takeover attempt.

Finally, this study also offers further insights into the debate on the effectiveness of activism by large outside shareholders as a source of corporate monitoring. I find that post-takeover attempt CEO turnover is concentrated among poorly performing target firms in which active outside blockholders obtain an ownership stake following the failed takeover attempts. In contrast, in target firms in which active outside investors do not obtain a stake during the failed takeover attempt period or following the failed attempt, these firms are more likely to announce corporate restructurings and have significantly more positive (or less negative) stock returns during the failed takeover attempt period and, thereby, less likely to replace their CEOs following the failed takeover attempts. This evidence is consistent with the view that outside blockholders are more likely to be “active” in firms in which the expected benefits of activism exceed the expected costs of activism, suggesting that the activism of outside blockholders plays an effective role in corporate governance.

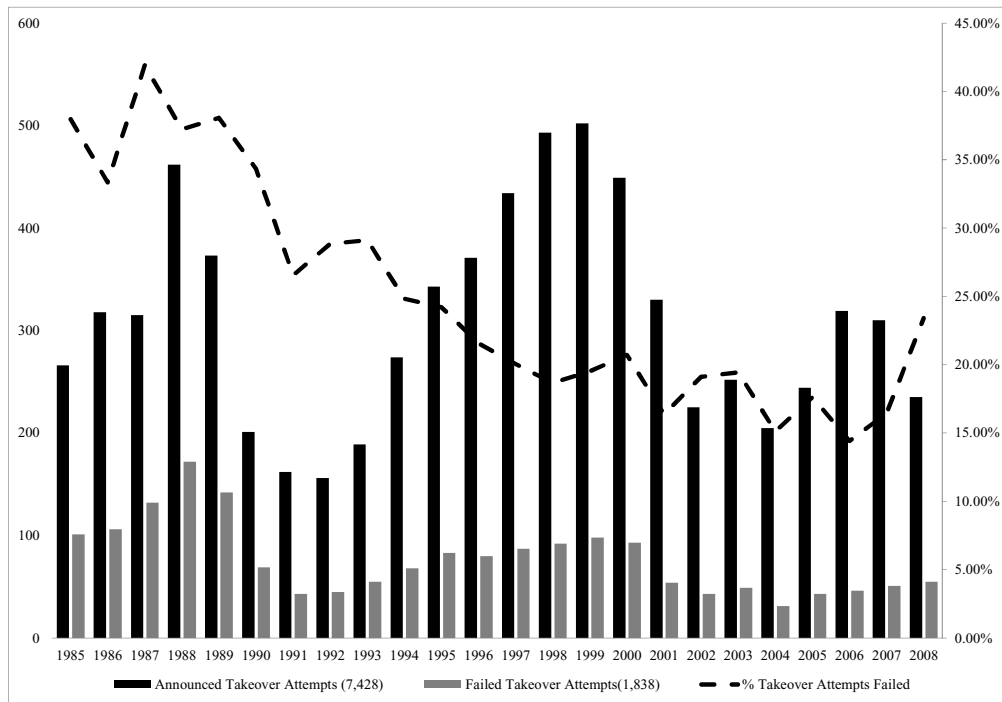


Figure 1: The Frequency of Announced and Failed Takeover Attempts over the Period of 1985 through 2008.

The figure presents the number of announced takeover attempts, the number of failed takeover attempts, and the fraction of failed takeover attempts to all announced takeover attempts in a given year for 7,428 takeover attempts announced over the period of 1985 through 2008 obtained from the *Thomson Financial SDC Mergers and Acquisitions Database*. To be included in the sample for analysis: (1) the form of the takeover attempt must be a merger, acquisition, or acquisition of a majority interest; (2) the acquirer must own less than 50% of the target firm's shares prior to the takeover attempt and seek to own 100% of the shares after the attempt; (3) the target firm must be a publicly-traded US company, and the acquiring firm must also be a US company but can be either publicly-traded or privately-held; (4) the acquirer and the target firm must not have the same parent company; (5) the target firm must be neither in the public utility industry nor in the financial services industry (SIC Code 4900 to 4999 and 6000 to 6999).

Table 1: Distribution by Announcement Years and Reasons for Takeover Failure.

The table presents the number and percentage of failed takeover attempts for a sample of 389 such attempts that occurred over the period of 1985 through 2008 obtained from the *Thomson Financial SDC Mergers and Acquisitions Database*. Panel A gives the frequency of failed takeover attempts by announcement year. Panel B reports the frequency of attempts according to the reason for termination.

<b>Year</b>	<b>Number of Failed Takeover Attempts</b>	<b>Percent of Overall Sample</b>
<b>Panel A: Distribution by Year of Takeover Announcement</b>		
1985	16	4.11%
1986	14	3.60%
1987	23	5.91%
1988	39	10.03%
1989	24	6.17%
1990	16	4.11%
1991	7	1.80%
1992	9	2.31%
1993	14	3.60%
1994	16	4.11%
1995	19	4.88%
1996	20	5.14%
1997	17	4.37%
1998	24	6.17%
1999	27	6.94%
2000	20	5.14%
2001	11	2.83%
2002	9	2.31%
2003	7	1.80%
2004	8	2.06%
2005	9	2.31%
2006	5	1.29%
2007	15	3.86%
2008	20	5.14%
<b>Total</b>	<b>389</b>	<b>100.00%</b>
<b>Panel B: Distribution by Reasons for Takeover Failure</b>		
<b>Antitrust</b>	9	2.31%
<b>Mutually Rejected</b>	73	18.77%
<b>No Reason Given</b>	34	8.74%
<b>Rejected by Target</b>	207	53.21%
<b>Terminated by Acquirer</b>	66	16.97%
<b>Total</b>	<b>389</b>	<b>100.00%</b>

Table 2: CEO Turnover in Target Firms Following Failed Takeover Attempts.

The table presents summary statistics of CEO changes in a sample of 389 target firms in failed takeover attempts over the period of 1985 through 2008. The CEO is defined as the CEO if there is one and the president otherwise. CEO changes are identified through the *S&P's Register of Corporations, Directors, and Executives*, the target firm's proxy statements, and the *Factiva* database.

Panel A: Frequency Distribution of CEO Changes around Takeover Attempts		
Time Period Relative to Takeover (a)	Number of Changes in CEO	Percent of Changes in CEO
Year -5	22	5.66%
Year -4	35	9.00%
Year -3	35	9.00%
Year -2	39	10.03%
Year -1	40	10.28%
Year 0	21	5.40%
Year +1	73	18.77%
Year +2	65	16.71%

a. Years -5 through -1 are the years preceding the announcement of the takeover attempt. Year +1 begins with the resolution of the takeover attempt. Year 0 begins with the announcement of the takeover attempt to the resolution of the takeover attempt. The mean length of Year 0 is 4 months. The turnover rate is calculated as the number of top manager changes in a year divided by 389.

Table 2: continued

<b>Panel B: Reasons for CEO Changes in Year 0, +1, and +2</b>		
<b>Reason Cited</b>	<b>Number of Changes in CEO</b>	<b>Percent of Changes in CEO</b>
<b>Fired, Poor Performance/Conflict</b>	24	15.00%
<b>Resigned to Pursue Other Interests</b>	24	15.00%
<b>Unexpected Retirement</b>	66	41.25%
<b>Retirement/Normal Succession</b>	34	21.25%
<b>Death or Poor Health of CEO</b>	6	3.75%
<b>No Reason Given</b>	5	3.13%
<b>Panel C: Origin of Successors for CEO Changes in Year 0, +1, and +2 (b)</b>		
<b>Origin of Successor</b>	<b>Number of Changes in CEO</b>	<b>Percent of Changes in CEO</b>
<b>Insider</b>	87	54.38%
<b>Outsider</b>	73	45.63%
<b>Panel D: Target Firms' Abnormal Stock Returns around the Announcement of CEO Changes in Year 0, +1, and +2</b>		
<b>CAR[-1,0]</b>	<b>Z-statistics</b>	<b>Number of Changes in CEO</b>
1.27%	2.82	151

b. An outsider is an individual who was not employed by the target firm at the time he assumed the top manager position. An insider is an individual who was employed by the target firm at the time he assumed the top manager position.



Table 3: Sample Descriptive Statistics.

The table presents descriptive statistics for the sample. Panels A through G describe the mean and median for takeover attempt and target firm characteristics, both for the CEO turnover sample and no CEO turnover sample. Stock price data is from *CRSP*, takeover attempt characteristics are from *SDC*, and CEO characteristics are either from the proxy statement immediately prior to the announcement of the takeover attempt or from the *Factiva* database. Variables are defined in Appendix A. Significance of differences in means and medians between target firms with and without CEO turnover is estimated using t-test and Wilcoxon rank-sum test.

	Full Sample (N = 389)		CEO Turnover (N=160)		No CEO Turnover (N=229)		Difference	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
<b>Panel A: Takeover Attempt Characteristics</b>								
Target Size	848.54	94.50	1197.34	98.40	604.83	90.98	592.50	7.42
Transaction Value	1268.85	141.90	1717.95	148.44	955.06	139.00	762.89	9.44
Cash Deal	0.46	-	0.44	-	0.47	-	0.02	-
Hostile	0.41	-	0.39	-	0.41	-	0.02	-
Toehold (%)	2.34	0.00	2.91	0.00	1.95	0.00	0.95	0.00
Premium (%)	63.66	44.93	57.52	42.45	67.95	47.30	-10.44	-4.85
<b>Panel B: Target CEO Characteristics</b>								
CEO Age	53.77	53.00	55.06	55.00	52.86	53.00	2.20**	2.00**
CEO Tenure	8.61	7.00	7.73	6.00	9.22	7.00	-1.49**	-1.00
CEO/Chariman	0.60	-	0.61	-	0.59	-	0.02	-
<b>Panel C: Target Board Composition and Ownership Structure</b>								
Board Size	7.51	7.00	7.83	7.00	7.30	7.00	0.53	0.00
Board Independence	0.69	0.71	0.69	0.69	0.69	0.71	0.00	-0.02
CEO Ownership (%)	8.11	2.87	6.12	2.02	9.44	3.80	-3.32**	-1.78**
Insider Ownership (%)	19.94	13.23	18.72	11.37	20.77	14.80	-2.05	-3.43
Institutional Ownership (%)	38.69	35.24	39.93	35.98	37.81	33.92	2.12	2.06
Outside Blockholdings (%)	21.40	19.21	23.35	20.98	20.10	17.35	3.25	3.63

\*\*\*, \*\*, and \* indicate significance at 1%, 5%, and 10% levels, respectively.

Table 3: continued

	Full Sample (N = 389)		CEO Turnover (N=160)		No CEO Turnover (N=229)		Difference	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
<b>Panel D: Target Stock Returns around the Failed Takeover Attempt (%)</b>								
CAR[-42,+1]	23.99	22.14	22.56	19.45	24.98	22.97	-2.42	-3.52
FTA-CAR	-16.63	-13.94	-24.40	-20.81	-11.20	-8.90	-13.20***	-11.91***
<b>Panel E: Market-adjusted Buy-and-hold Returns (BHR (%) )</b>								
Month -50 to -3	-35.94	-57.58	-45.20	-65.70	-29.46	-51.84	-15.74	-13.86
Month -38 to -3	-21.65	-42.65	-33.12	-48.30	-13.63	-41.48	-19.49	-6.82
Month -26 to -3	-17.82	-32.73	-26.35	-31.38	-11.86	-34.16	-14.49	2.78
Month -14 to -3	-10.27	-17.17	-14.91	-18.24	-7.03	-12.94	-7.87	-5.30
<b>Panel F: Size- and MB-adjusted Cumulative Abnormal Returns (SMBCAR(%))</b>								
Month -50 to -3	-1.51	-1.63	-7.52	-9.17	2.75	1.56	-10.27	-10.73
Month -38 to -3	0.60	-0.38	-3.33	-5.13	3.40	2.07	-6.27	-7.2
Month -26 to -3	-3.92	-6.04	-5.04	-7.62	-3.13	-3.26	-1.91	-4.36
Month -14 to -3	-4.32	-3.26	-7.51	-4.00	-2.09	-2.48	-5.42	-6.48
<b>Panel G: Industry-adjusted Operating Return on Asset (IAORA (%) )</b>								
Average over Years -4 to -1	1.39	1.90	0.86	0.48	1.76	3.17	-0.90	-2.69**
Average over Years -3 to -1	2.20	1.63	0.78	0.15	3.18	3.08	-2.41	-2.93**
Average over Years -2 to -1	2.86	1.88	1.08	0.30	4.08	3.10	-3.00**	-2.80**
Year -1	2.77	1.56	1.03	0.00	3.96	3.01	-2.93**	-3.01**

\*\*\*, \*\*, and \* indicate significance at 1%, 5%, and 10% levels, respectively.

Table 4: Regression Analysis of CEO Turnover Following Failed Takeover Attempts.

The table presents the results of probit estimations based on a sample of 389 target firms in failed takeover attempts over the period of 1985 through 2008. The dependent variable is a dummy variable that equals one if the target firm's CEO is replaced during the period from the announcement of the takeover attempt through two years after the resolution of the takeover attempt, and zero otherwise. Variables are defined in Appendix A. The coefficients are estimates of the marginal effect on the probability of CEO departure when the dependent variable is at its mean value. Standard errors are shown in parentheses. Number of observations is the actual number of firms included in each regression that have complete data for each included variable.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>FTA-CAR</b>	-0.211*** (0.065)		-0.255*** (0.066)	-0.273*** (0.068)	-0.262*** (0.070)	-0.266*** (0.080)	-0.318*** (0.086)
<b>BHR(-2)</b>		-0.071 (0.037)	-0.106*** (0.039)	-0.124*** (0.041)	-0.139*** (0.042)	-0.169*** (0.052)	-0.166*** (0.054)
<b>CEO Age</b>				0.012*** (0.003)	0.012*** (0.003)	0.013*** (0.004)	0.013*** (0.004)
<b>CEO Tenure</b>				-0.013*** (0.004)	-0.013*** (0.004)	-0.011** (0.005)	-0.007 (0.005)
<b>CEO/Chairman</b>				0.039 (0.053)	0.042 (0.053)	0.017 (0.065)	0.048 (0.068)
<b>Target Size</b>					-0.023 (0.054)	0.031 (0.066)	0.046 (0.069)
<b>Cash Deal</b>					-0.055 (0.057)	0.001 (0.071)	0.014 (0.075)
<b>Hostile</b>					0.016 (0.010)	0.017 (0.011)	0.022 (0.013)
<b>Toehold (%)</b>					0.009 (0.005)	0.007 (0.006)	0.006 (0.006)
<b>BHR(+2)</b>					-0.058** (0.024)	-0.044 (0.032)	-0.039 (0.033)
<b>Board Size</b>						0.009 (0.014)	0.011 (0.015)
<b>Board Independence</b>						-0.151 (0.215)	-0.299 (0.231)
<b>CEO Ownership (%)</b>							-0.005 (0.003)
<b>Insider Ownership (%)</b>							0.002 (0.003)
<b>Institutional Ownership (%)</b>							-0.001 (0.001)
<b>Outside Blockholdings (%)</b>							0.003 (0.002)
<b>Pseudo-R Square (%)</b>	2.0	0.7	3.6	7.2	9.8	10.9	12.6
<b>Number of Observations</b>	389	389	389	389	388	273	267

\*\*\* and \*\* indicate significance at 1% and 5% levels, respectively.

Table 4: continued

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<b>FTA-CAR</b>	-0.242*** (0.073)	-0.245*** (0.075)	-0.239*** (0.073)	-0.229*** (0.072)	-0.243*** (0.082)	-0.228*** (0.082)	-0.229*** (0.082)	-0.224*** (0.082)
<b>CEO Age</b>	0.012*** (0.004)	0.013*** (0.003)	0.012*** (0.003)	0.013*** (0.003)	0.011*** (0.004)	0.012*** (0.004)	0.012*** (0.004)	0.012*** (0.004)
<b>CEO Tenure</b>	-0.011*** (0.004)	-0.011*** (0.004)	-0.012*** (0.004)	-0.012*** (0.004)	-0.014*** (0.005)	-0.014*** (0.005)	-0.014*** (0.005)	-0.014*** (0.005)
<b>CEO/Chariman</b>	0.049 (0.055)	0.035 (0.055)	0.041 (0.055)	0.039 (0.055)	-0.002 (0.062)	0.001 (0.062)	-0.000 (0.061)	-0.001 (0.061)
<b>Target Size</b>	-0.039 (0.056)	-0.049 (0.056)	-0.055 (0.056)	-0.054 (0.056)	-0.030 (0.063)	-0.025 (0.063)	-0.024 (0.063)	-0.015 (0.063)
<b>Cash Deal</b>	-0.080 (0.058)	-0.088 (0.058)	-0.097 (0.059)	-0.095 (0.059)	-0.048 (0.067)	-0.053 (0.067)	-0.051 (0.067)	-0.049 (0.066)
<b>Hostile</b>	0.013 (0.009)	0.012 (0.009)	0.012 (0.009)	0.013 (0.009)	0.015 (0.009)	0.015 (0.010)	0.015 (0.009)	0.014 (0.009)
<b>Toehold (%)</b>	0.008 (0.006)	0.008 (0.006)	0.010 (0.005)	0.010 (0.005)	0.012** (0.006)	0.013** (0.006)	0.012** (0.006)	0.011 (0.006)
<b>BHR(+2)</b>	-0.052** (0.025)	-0.057** (0.025)	-0.056** (0.025)	-0.058** (0.025)	-0.026 (0.027)	-0.025 (0.027)	-0.027 (0.026)	-0.030 (0.026)
<b>SMBCAR(-1)</b>	-0.128** (0.062)							
<b>SMBCAR(-2)</b>		-0.085 (0.044)						
<b>SMBCAR(-3)</b>			-0.077** (0.034)					
<b>SMBCAR(-4)</b>				-0.082*** (0.032)				
<b>IAORA(-1)</b>					-0.607** (0.256)			
<b>IAORA(-2)</b>						-0.612** (0.261)		
<b>IAORA(-3)</b>							-0.485** (0.244)	
<b>IAORA(-4)</b>								-0.158 (0.192)
<b>Pseudo-R Square (%)</b>	8.3	8.2	8.6	8.8	9.4	9.4	9.0	8.1
<b>Number of Observations</b>	359	361	362	363	286	287	287	287

\*\*\* and \*\* indicate significance at 1% and 5% levels, respectively.

Table 5: Corporate Restructurings of Target Firms during the Failed Takeover Attempt Period.

The table presents corporate restructuring actions taken by target firms during the failed takeover attempt period in 389 failed takeover attempts occurred over the period of 1985 through 2008. 92 target firms have announced any corporate restructuring during the failed takeover attempt period. Restructurings include the sale of assets or divisions, the closing or reorganization of a plant or division, spin-offs, and increases in payouts or debt. For each type of restructuring action, the first column reports the number of target firms that announce the corresponding action during the failed takeover attempt period; the second column reports the fraction of target firms that announce the corresponding restructuring to the number of target firms in the full sample; and the third column reports the mean  $CAR[-42,Resolution]$  of target firms that announce the corresponding restructuring action during the failed takeover attempt period. Variables are defined in Appendix A.

	Number of Takeover Attempts	% of Overall Sample	CAR[-42,Resolution] (%)
<b>Sale of Asset or Division</b>	54	13.88%	22.55***
<b>Close or Reorganize Plant or Division</b>	21	5.40%	33.78***
<b>Increase in Dividends</b>	20	5.14%	38.31***
<b>Increase in Leverage</b>	29	7.46%	21.04***
<b>Any Restructuring</b>	92	23.65%	25.61***

\*\*\*, \*\*, and \* indicate significance at 1%, 5%, and 10% levels, respectively.

Table 6: The Impact of Corporate Restructurings during the Failed Takeover Attempt Period.

The table presents takeover-related stock returns, CEO turnover, shareholder activism, and changes in operating performance for the years surrounding a sample of 389 target firms in failed takeover attempts as well as for the restructuring sample that consists of 92 firms that announce corporate restructuring during the failed takeover attempt period, and the remaining 285 firms included in the "No Restructuring" sample. Restructurings during the failed takeover attempt period include the sale of assets or divisions, the closing or reorganization of a plant or division, spin-offs, and increases in payouts or debt. Announcements of restructurings are obtained from *Factiva* database. All variables are defined in Appendix A. Significance of means, medians, and their differences between target firms with and without restructuring during the failed takeover attempt period is estimated using the t-test and the Wilcoxon sign-rank and rank sum test.

	Full sample (N=389)		Restructuring (N=92)		No Restructuring (N=297)		Difference	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
<b>Panel A: Takeover-related Returns, CEO Turnover, and Shareholder Activism</b>								
FTA-CAR (%)	-16.63***	-13.94***	3.53	4.47	-22.87***	-19.01***	26.40***	23.48***
CAR[-42,Resolution] (%)	1.79	3.30	25.61***	24.20***	-5.58**	-3.77	31.19***	27.97***
CEO Turnover	0.41	-	0.28	-	0.45	-	-0.17***	-
Active Outside Blockholder	0.39	-	0.26	-	0.42	-	-0.16***	-
<b>Panel B: IAORA (%)</b>								
Year +1	0.96	0.80	4.90***	4.07***	-0.45	0.00	5.35**	4.07***
Year +2	1.52	0.83**	5.60***	4.52***	0.00	0.00	5.60**	4.52***
Year +3	2.50**	1.54***	5.72***	4.12***	1.19	0.00	4.53**	4.12**
<b>Panel C: Changes in IAORA (%)</b>								
Year -1 to +1	-1.85**	-0.26	2.63	2.61**	-3.44***	-1.50***	6.07***	4.11***
Year -1 to +2	-1.47	0.19	3.44	3.47**	-3.28***	-1.15**	6.72***	4.62***
Year -1 to +3	-1.00	-0.83	2.83	2.29**	-2.54**	-1.89**	5.37***	4.18***

\*\*\*, \*\*, and \* indicate significance at 1%, 5%, and 10% levels, respectively.

Table 7: Probit Regression Analysis of CEO Turnover and Shareholder Activism.

The table presents the results of probit estimations based on the full sample of 389 target firms in failed takeover attempts over the period of 1985 through 2008. The dependent variable is a dummy variable that equals one if the target firm's CEO is replaced during the period from the announcement of the takeover attempt through two years after the resolution of the takeover attempts, and zero otherwise. Variables are defined in Appendix A. The coefficients are estimates of the marginal effect on the probability of CEO change when the dependent variable is at its mean value. Standard errors are shown in parentheses. Number of observations is the actual number of firms included in each regression that have complete data for each included variable.

	(1)	(2)
<b>Active Outside Blockholder</b>	0.177*** (0.055)	0.086 (0.068)
<b>Active Outside Blockholder × FTA-CAR</b>		-0.392** (0.165)
<b>FTA-CAR</b>	-0.211*** (0.073)	-0.120 (0.082)
<b>BHR(-2)</b>	-0.130*** (0.042)	-0.135*** (0.042)
<b>CEO Age</b>	0.013*** (0.004)	0.013*** (0.004)
<b>CEO Tenure</b>	-0.014*** (0.004)	-0.014*** (0.004)
<b>CEO/Chairman</b>	0.026 (0.054)	0.028 (0.055)
<b>Target Size</b>	0.018 (0.011)	0.020 (0.011)
<b>Cash Deal</b>	-0.027 (0.055)	-0.013 (0.055)
<b>Hostile</b>	-0.063 (0.058)	-0.050 (0.059)
<b>Toehold (%)</b>	0.009 (0.005)	0.008 (0.005)
<b>BHR(+2)</b>	-0.056** (0.024)	-0.054** (0.024)
<b>Pseudo-R Square (%)</b>	11.7	12.8
<b>Number of Observations</b>	388	388

\*\*\*, \*\*, and \* indicate significance at 1%, 5%, and 10% levels, respectively.

Table 8: CEO Turnover in Target Firms Following Failed Takeover Attempts by FTA-CAR, Restructurings and Active Outside Blockholders

The table presents summary statistics on CEO turnover from the takeover announcement through two years after its resolution grouped by whether an active outside blockholder emerges in the target firm during the failed takeover attempt period or within two years following its resolution, whether the target firm announces restructuring during the failed takeover attempt period, and whether *FTA-CAR* is negative. Variables are defined as in Appendix A. The number of target CEOs who are replaced during the period of the takeover announcement through two years after the takeover resolution are displayed in parentheses. Significance of difference in proportions is estimated using group proportion test.

<b>Panel A: Corporate Restructuring during the Failed Takeover Attempt Period</b>			
	<b>No Restructuring</b>	<b>Restructuring</b>	<b>Difference</b>
<b>No Active Outside Blockholder</b>	36.84% (N = 63)	25.00% (N = 17)	11.84%
<b>Active Outside Blockholder</b>	56.35% (N = 71)	37.50% (N = 9)	18.85%**
<b>Difference</b>	-19.51%***	-12.50%	
<b>Panel B: Target Firms' Stock Returns during the Failed Takeover Attempt Period</b>			
	<b>FTA-CAR &lt; 0</b>	<b>FTA-CAR ≥ 0</b>	<b>Difference</b>
<b>No Active Outside Blockholder</b>	35.81% (N = 53)	29.67% (N = 27)	6.14%
<b>Active Outside Blockholder</b>	58.87% (N = 73)	26.92% (N = 7)	31.95%***
<b>Difference</b>	-23.06%***	2.75%	

\*\*\*, \*\*, and \* indicate significance at 1%, 5%, and 10% levels, respectively.



## BIBLIOGRAPHY

## BIBLIOGRAPHY

- Agrawal, Anup, and Ralph A. Walking, 1994, Executive careers and compensation surrounding takeover bids, *The Journal of Finance* 49, 985-1014.
- Ausquith, Paul, 1983, Merger bids, uncertainty, and stockholder returns, *Journal of Financial Economics* 11, 51-83.
- Ayres, Ian, and Peter Cramton, 1993, An agency perspective on relation investing, Unpublished manuscript, Stanford Law School.
- Barber, Brad M. and John D. Lyon, 1997, Detecting long-run abnormal stock returns: The empirical power and specification of test statistics, *Journal of Financial Economics* 43, 341-372
- Bargeron, Leonce L., Frederik P. Schlingemann, Rene M. Stulz, and Chad J. Zutter, 2008, Why do private acquirers pay so little compared to public acquirers?, *Journal of Financial Economics* 89, 375-390.
- Bange, Mary B., and Michael A. Mazzeo, 2004, Board composition, board effectiveness, and the observed form of takeover bids, *The Review of Financial Studies* 17, 1185-1215.
- Banz, Rolf W., 1981, The relation between return and market value of common stock, *Journal of Financial Economics* 9, 3-18.
- Bradley, Michael, 1980, Interfirm tender offers and the market for corporate control, *The Journal of Business* 53, 345-376
- Bradley, Michael, Anand Desai, and E. Han Kim, 1983, The rationale behind interfirm tender offers: information or synergy, *Journal of Financial Economics* 11, 183-206.
- Bradley, Michael, and Lee Wakeman, 1983, The wealth effects of targeted repurchases, *Journal of Financial Economics* 11, 301-328.
- Brown, Stephen J., and Jerold B. Warner, 1985, Using daily stock returns: The case of event studies, *Journal of Financial Economics* 14, 3-31.

- Chatterjee, Sourav, 1992, Sources of value in takeovers: Synergy or restructuring? Evidence from tender offer bid, *Strategic Management Journal* 13, 267-286.
- Comment, Robert, and G. William Schwert, 1995, Poison or placebo? Evidence on the deterrent and wealth effects of modern antitakeover measures, *Journal of Financial Economics* 39, 3-43.
- Coughlan, Anne T., and Ronald M. Schmidt, 1985, Executive compensation, management turnover, and firm performance: An empirical investigation, *Journal of Accounting and Economics* 7, 43-66.
- Croci, Ettore, 2006, Stock price performance of target firms in unsuccessful mergers and acquisitions, Working paper, University of Lugano.
- Dahya, Jay, John J. McConnell, and Nickolaos G. Travlos, 2002, The Cadbury committee, corporate performance, and top management turnover, *The Journal of Finance* 57, 461-483.
- DeAngelo, Harry, and Linda DeAngelo, 1989, Proxy contests and the governance of publicly held corporations, *Journal of Financial Economics* 23, 29-59.
- Demsetz, Harold, and Kenneth Lehn, 1985, The structure of corporate ownership: Causes and consequences, *The Journal of Political Economy* 93, 1155-1177.
- Dann, Larry Y., and Harry DeAngelo, 1988, Corporate financial policy and corporate control: A study of defensive adjustments in asset and ownership structure, *Journal of Financial Economics* 20, 87-128.
- Davidson III, Wallace N., Dipa Dutia, and Louis Cheng, 1989, A re-examination of the market reaction to failed mergers, *The Journal of Finance* 44, 1077-1083.
- Denis, David J., 1990, Defensive changes in corporate payout policy: share repurchases and special dividends, *The Journal of Finance* 45, 1433-1456.
- Denis, David J., and Diane K. Denis, 1995, Performance changes following top management dismissals, *The Journal of Finance* 50, 1029-1057.
- Denis, David J., Diane K. Denis, and Atulya Sarin, 1997, Ownership structure and top executive turnover, *Journal of Financial Economics* 45, 193-221.
- Denis, David J., and Timothy A. Kruse, 2000, Managerial discipline and corporate restructuring following performance declines, *Journal of Financial Economics* 55, 391-424.
- Denis, David J., and Atulya Sarin, 1999, Ownership and board structures in publicly traded corporations, *Journal of Financial Economics* 52, 187-223.

- Denis, David J., and Jan M. Serrano, 1996, Active investors and management turnover following unsuccessful control contests, *Journal of Financial Economics* 40, 239-266.
- Dodd, Peter, 1980, Mergers proposals, management discretion, and stock holder wealth, *Journal of Financial Economics* 8, 105-138.
- Dodd, Peter, and Richard S. Ruback, 1977, Tender offers and stock returns: an empirical analysis, *Journal of Financial Economics* 5, 351-373.
- Fama, Eugene F., 1980, Agency problems and the theory of the firm, *The Journal of Political Economy* 88, 288-307.
- Fama, Eugene F., and Kenneth French, 1992, The cross-section of expected stock returns, *The Journal of Finance* 47, 427-466.
- Fama, Eugene F., 1998, Market efficiency, long-term returns, and behavioral finance, *Journal of Financial Economics* 49, 283-306.
- Franks, Julian, and Colin Mayer, 1996, Hostile takeovers and the correction of managerial failure, *Journal of Financial Economics* 40, 163-181.
- Furtado, Eugene P., and Michael S. Rozeff, 1987, The wealth effects of company initiated management changes, *Journal of Financial Economics* 18, 147-160.
- Gibbons, Robert S., and Kevin J. Murphy, 1990, Relative performance evaluation for chief executive officers, *Industrial and Labor Relation Reviews* 43, 30S-51S.
- Gillan, Stuart L., and Laura T. Starks, 2000, Corporate governance proposals and shareholder activism: The role of institutional investors, *Journal of Financial Economics* 57, 275-305.
- Goyal, Vidhan K., and Chul W. Park, 2002, Board leadership structure and CEO turnover, *Journal of Corporate Finance* 8, 49-66.
- Grossman, Sanford J., and Oliver D. Hart, 1981, The allocation role of takeover bids in situations of asymmetric information, *The Journal of Finance* 36, 253-270.
- Hadlock, Charles J., and Gerald B. Lumer, 1997, Compensation, turnover, and top management incentives: historical evidence, *The Journal of Business* 70, 153-187.
- Hartzell, Jay C., Eli Ofek, and David Yermack, 2004, What's in it for me: CEOs whose firms are required, *The Review of Financial Studies* 17, 37-61.

- Hirshleifer, David, and Anjan V. Thakor, 1994, Managerial performance, boards of directors and takeover bidding, *Journal of Corporate Finance* 1, 63-90.
- Holl, Peter, and Dimitris Kyriazis, 1997, Agency, bid resistance and the market for corporate control, *Journal of Business Finance and Accounting*, 24, 1037-1066.
- Huang, Yen-Sheng, and Ralph A. Walking, 1987, Target abnormal returns associated with acquisition announcements: Payment, acquisition form, and managerial resistance, *Journal of Financial Economics* 19, 329-348.
- Huson, Mark R., Robert Parrino, and Laura T. Starks, 2001, Internal monitoring mechanisms and CEO turnover: a long-term perspective, *The Journal of Finance* 56, 2265-2297.
- Jandik, Tomas, and Anil K. Makhija, 2005, Debt, debt structure and corporate performance after unsuccessful takeovers: evidence from targets that remain independent, *Journal of Corporate Finance* 11, 882-914.
- Jensen, Michael C., 1986, The takeover controversy: Analysis and evidence, *Midland Corporate Finance Journal* 4, 6-32.
- Jensen, Michael C., 1988, Takeovers: Their causes and consequences, *Journal of Economic Perspectives* 2, 21-48.
- Jensen, Michael C., 1993, The modern industry revolution, exit, and the failure of internal control systems, *The Journal of Finance* 48, 831-880.
- Jensen, Michael C., and Richard S. Ruback, 1983, The market for corporate control: The scientific evidence, *Journal of Financial Economics* 11, 5-50.
- Jensen, Michael C., and Jerold B. Warner, 1988, The distribution of power among corporate managers, shareholders, and directors, *Journal of Financial Economics* 20, 3-24.
- Kahan, Marcel, and Edward B. Rock, 2002, How I learned to stop worrying and love the pill: adaptive responses to takeover law, *University of Chicago Law Review* 69, 871-915.
- Karpoff, Jonatha M., Paul H. Malatesta, and Ralph A. Walking, 1996, Corporate governance and shareholder initiatives: Empirical evidence, *Journal of Financial Economics* 42, 365-395.
- Kini, Omesh, William Kracaw, and Shenzad Mian, 1995, Corporate takeovers, firm performance, and board composition, *Journal of Corporate Finance* 1, 383-412.

- Kini, Omesh, William Kracaw, and Shenzad Mian, 2004, The nature of discipline by corporate takeovers, *The Journal of Finance* 59, 1511-1552.
- Lehn, Kenneth M., and Mengxin Zhao, 2006, CEO turnover after acquisitions: are bad bidders fired?, *The Journal of Finance* 61, 1759-1811.
- Malmendier, Ulrike, Marcus Matthias Opp, and Farzad Saidi, 2011, Cash is king: revaluation and the medium of exchange in merger bids, Working paper.
- Manne, Henry G., 1965, Mergers and the Market for Corporate Control, *The Journal of Political Economy* 73, 110-120.
- Martin, Kenneth J., and John J. McConnell, 1991, Corporate performance, corporate takeovers, and management turnover, *The Journal of Finance* 46, 671-687.
- McConnell, John J., and Henri Servaes, 1990, Additional evidence on equity ownership and corporate value, *Journal of Financial Economics* 27, 595-612.
- Malatesta, Paul H., and Ralph A. Walking, 1988, Poison pill securities: Stockholder wealth, profitability, and ownership structure, *Journal of Financial Economics* 20 347-376.
- Mikkelson, Wayne H., and M. Megan Partch, 1997, The decline of takeovers and disciplinary managerial turnover, *Journal of Financial Economics* 44, 205-228.
- Mitchell, Mark L., and Erik Stafford, 2000, Managerial decisions and long-term stock price performance, *The Journal of Business* 73, 287-329.
- Morck, Randall, Andrei Shleifer, and Robert W. Vishny, 1988, Management ownership and market valuation: An empirical analysis, *Journal of Financial Economics* 20, 293-315
- Mulherin, J. Harold, and Annette B. Poulsen, 1994, Proxy contests and corporate change: implications for shareholder wealth, *Journal of Financial Economics* 47,279-313.
- Murphy, Kevin J., and Jerold L. Zimmerman, 1993, Financial performance surrounding CEO turnover, *Journal of Accounting and Economics* 16, 273-315.
- Novas, Walter, 2002, Managerial turnover and leverage under a takeover threat, *The Journal of Finance* 57, 2619-2650.
- Officer, Michael, 2003, Termination fees in mergers and acquisitions, *Journal of Financial Economics* 69, 431-467.

- Parrino, Robert, Richard W. Sias, and Laura T. Starks, 2003, Voting with their feet: institutional ownership changes around forced CEO turnover, *Journal of Financial Economics* 68, 3-46.
- Pound, John, 1988, The information effects of takeover bids and resistance, *Journal of Financial Economics* 22, 207-227.
- Reinganum, Marc R., 1985, The effect of executive succession on stockholder wealth, *Administrative Science Quarterly* 30, 45-60.
- Ryngaert, Michael, 1988, The effect of poison pill securities on shareholder wealth, *Journal of Financial Economics* 20, 377-418.
- Ryngaert, Michael, and Ralph Scholten, 2010, Have changing takeover defense rules and strategies entrenched management and damaged shareholders? The case of defeated takeover bids, *Journal of Corporate Finance* 16, 16-37.
- Safieddine, Assem, and Sheridan Titman, 1999, Leverage and corporate performance: evidence from unsuccessful takeovers, *The Journal of Finance* 54, 547-580.
- Schwert, William G., 1996, Markup pricing in mergers and acquisitions, *Journal of Financial Economics* 41, 153-192.
- Shleifer, Andrei, and Robert W. Vishny, 1986, Large shareholders and corporate control, *Journal of Political Economy* 94, 461-488.
- Shleifer, Andrei, and Robert W. Vishny, 2003, Stock market driven acquisitions, *Journal of Financial Economics* 70, 295-311.
- Smith, Michael P., 1996, Shareholder activism by institutional investors: Evidence from CalPERS, *The Journal of Finance* 51, 227-252.
- Sullivan, Michael J., Marlin R. H. Jensen, and Carl D. Hudson, 1994, The role of medium of exchange in merger offers: examination of terminated merger proposals, *Financial management* 23, 51-62.
- Vancil, Richard F., 1987, *Passing the baton: Managing the process of CEO succession* (Harvard Business School Press, Cambridge, MA).
- Warner, Jerold B., Ross L. Watts, and Karen H. Wruck, 1988, Stock prices and top management changes, *Journal of Financial Economics* 20, 461-492.
- Weisbach, Michael S., 1988, Outside directors and CEO turnover, *Journal of Financial Economics* 20, 431-460.

Weisbach, Michael S., 1995, CEO turnover and the firm's investment decisions, *Journal of Financial Economics* 37, 159-188.

Wong, Pauline, and Noel O'Sullivan, 2000, The determinants and consequences of abandoned takeovers, *Journal of Economic Surveys* 15, 145-186.



## APPENDIX

## Appendix A: Variable Definitions

Variable	Definition
Panel A: CEO Turnover and Target Firm Performance	
CEO Turnover	A dummy variable that equals one if the target firm replaces its CEO during the failed takeover attempt period or within two years following the resolution of the failed takeover attempt, and equals zero otherwise.
FTA-CAR	The Fama-French-three-factor-model-adjusted cumulative abnormal returns computed by cumulating the difference between the daily returns of the target firm and the predicted returns of the Fama-French-three-factor-model from the day after the takeover announcement through the resolution of the failed takeover attempt. I estimate the Fama-French-three-factor-model parameters over the period -380 to -127 days relative to the first public announcement of the takeover. CRSP value-weighted index is the market return.
CAR[-42,+1]	The Fama-French-three-factor-model-adjusted cumulative abnormal returns computed by cumulating the difference between the daily returns of the target firm and the predicted returns of the Fama-French-three-factor-model from the 42 <sup>nd</sup> trading day prior to the takeover announcement through the day after the takeover announcement. I estimate the Fama-French-three-factor-model parameters over the period -380 to -127 days relative to the first public announcement of the takeover. CRSP value-weighted index is the market return.
CAR[-42,Resolution]	The Fama-French-three-factor-model-adjusted cumulative abnormal returns computed by cumulating the difference between the daily returns of the target firm and the predicted returns of the Fama-French-three-factor-model from the 42 <sup>nd</sup> trading day prior to the takeover announcement through the resolution of the failed takeover attempt. I estimate the

## Appendix A: continued

Variable	Definition
CAR[-42,Resolution]	Fama-French-three-factor-model parameters over the period -380 to -127 days relative to the first public announcement of the takeover. CRSP value-weighted index is the market return.
BHR( $X$ )	The market-adjusted buy-and-hold returns (BHR) for each target firm from $X \times 12$ months prior to the takeover announcement month to 3 months prior to the takeover announcement month. I calculated BHR as the difference between the monthly target returns compounded from month 3 to $X \times 12$ months prior to the takeover attempt and the corresponding compounded returns of the CRSP value-weighted index.
SMBCAR( $X$ )	The size- and market-to-book (MB) adjusted cumulative abnormal returns. I compute abnormal returns as the difference between the monthly return of the target firm and the monthly return of an appropriate size- and MB-matched portfolio from the Fama-French 25 portfolios. I cumulate the abnormal returns for each target firm from $X \times 12$ months prior to the takeover announcement month to 3 months prior to the takeover announcement month. I obtain monthly stock returns of Fama-French 25 portfolios formed on size and book-to-market from Kenneth R. French's home page. CRSP value-weighted index is the market return.
IAORA( $X$ )	The average industry-adjusted operating return on assets over the $X \times 12$ months prior to the takeover announcement through two months prior to the takeover announcement. Operating return on assets (ORA) equals operating income before depreciation and taxes as a percentage of total assets at the beginning of the year. I measure the industry level as the median operating performance of firms in the same industry (4-digit SIC code) as the target firm. In the event I find less than three other firms in the industry at the 4-digit SIC level, I match at the 3-digit SIC level. If there is less than three other firms in the

## Appendix A: continued

Variable	Definition
IAORA( <i>X</i> )	industry at the 3-digit level, I match at the 2-digit SIC level. I obtain target firm's financial information from <i>COMPUSTAT</i> .
<b>Panel B: Takeover Attempt Characteristics</b>	
Cash Deal	A dummy variable that equals one if the payment for the takeover is cash only, and equals zero otherwise, as reported by <i>SDC</i> .
Hostile	A dummy variable that equals one if the takeover attempt is reported as either hostile or unsolicited, and equals zero otherwise, as reported by <i>SDC</i> .
Toehold	The percentage of shares owned by the acquirer when the acquirer announces the takeover offer, as reported by <i>SDC</i> .
Premium	The difference between the first offer price and the target firm's stock price on the 43 <sup>rd</sup> trading day prior to the takeover announcement, scaled by target firm's stock price on the 43 <sup>rd</sup> trading day prior to the takeover announcement
Transaction Value	The announced transaction value as reported by <i>SDC</i> .
<b>Panel C: Target Firm and CEO Characteristics</b>	
Target Size	The market value of the target firm's equity on the 43 <sup>rd</sup> trading day prior to the announcement date of the takeover attempt. Market value of equity is from <i>CRSP</i> .
Restructuring	A dummy variable that equals one if the target firm announces corporate restructuring during the failed takeover attempt period. Restructurings include the sale of assets or divisions, the closing or reorganization of a plant or division, spin-offs, and increase in dividend or leverage. I search for restructuring announcements for each target firm during the failed takeover attempt period from the <i>Factiva</i> database.
CEO Age	The age of the CEO at the time of the takeover announcement according to the proxy statement of the target firm immediately prior to the announcement of the takeover attempt. For firms in which a proxy statement is unavailable, I obtain this information from <i>Factiva</i> .

## Appendix A: continued

Variable	Definition
CEO Tenure	The length of time that the CEO held the position of CEO at the time of the takeover announcement, as reported in the proxy statement of the target firm. For firms in which proxy statement is unavailable, I obtain this information from <i>Factiva</i> .
<b>Panel D: Target Board Composition and Ownership Structure Variables</b>	
Active Outside Blockholder	A dummy variable that equals one if, other than the acquirer, an outside shareholder increased his ownership in the target firms to more than 5% or an outside blockholder who increased his position during the failed takeover attempt period or within two years after the resolution of the takeover attempt, zero otherwise. I conduct news search on <i>Factiva</i> to obtain this information.
Institutional Ownership	The percentage of target shares outstanding held by institutions. I obtain institutional ownership data for each sample firm from the <i>Thomson Reuters's</i> s34 Master File.
Outside Blockholdings	The percentage of target shares outstanding held by outside shareholders who beneficially own more than 5% of the target shares outstanding. Outside shareholders are defined as shareholders other than employees, former employees, family trusts, company stock ownership plans, and retirement plans. I obtain ownership information from target firms' proxy statements.
CEO Ownership	The percentage of target firm's shares owned by the target CEO at the announcement of the takeover attempt. I obtain ownership information from target firms' proxy statements.
Other Insider Ownership	The percentage of target firm's shares owned by the target directors and executives other than the CEO at the announcement of the takeover attempt. I obtain ownership information from target firms' proxy statements.
CEO/Chairman	A dummy variable that equals one if the target CEO also serves as the chairman of the board, zero otherwise. I obtain board composition information from target firms' proxy statements.

## Appendix A: continued

Variable	Definition
Board Size	The number of directors on the target board. I obtain this information from target firms' proxy statements.
Board Independence	The percentage of directors who are not employees/former employees of the target firm at the takeover announcement. I obtain this information from target firms' proxy statements.

## Appendix B: Correlation Matrix

	CEO Change	FTA-CAR	CAR[-42,+1]	CAR [-42,Resolution]	BHR(-2)	SMBCAR(-2)	IAORA(-2)	Active Outside Blockholder
<b>FTA-CAR</b>	-0.165							
<b>CAR[-42,+1]</b>	-0.041	0.213						
<b>CAR[-42,Resolution]</b>	-0.133	0.828	0.662					
<b>BHR(-2)</b>	-0.096	-0.231	-0.305	-0.334				
<b>SMBCAR(-2)</b>	-0.014	-0.322	-0.301	-0.380	0.810			
<b>IAORA(-2)</b>	-0.124	-0.021	0.032	-0.025	0.048	0.035		
<b>Active Outside Blockholder</b>	0.197	-0.232	-0.042	-0.191	-0.002	0.063	-0.071	
<b>Restructuring</b>	-0.146	0.286	0.090	0.271	-0.067	-0.102	0.056	-0.143
<b>BHR(+2)</b>	-0.121	0.043	0.045	0.045	-0.072	-0.081	0.075	-0.057
<b>CEO Age</b>	0.131	-0.046	-0.113	-0.077	0.059	0.038	0.022	-0.003
<b>CEO Tenure</b>	-0.100	-0.064	0.007	-0.042	-0.012	0.023	0.035	0.035
<b>CEO/Chairman</b>	0.017	0.056	-0.026	0.012	0.040	0.002	0.033	0.070
<b>Target Size</b>	0.084	-0.030	-0.041	-0.042	0.038	0.016	0.013	-0.040
<b>Transaction Value</b>	0.074	-0.042	-0.027	-0.043	0.040	0.020	0.011	-0.046
<b>Cash</b>	-0.023	0.109	0.199	0.165	-0.076	-0.124	-0.075	0.004
<b>Hostile</b>	-0.021	0.173	-0.016	0.134	0.048	-0.075	0.006	-0.010
<b>Toehold</b>	0.086	0.031	-0.005	0.025	0.003	-0.068	0.095	0.043
<b>Premium</b>	-0.052	-0.033	0.256	0.132	-0.025	-0.031	-0.131	-0.066
<b>Board Size</b>	0.104	0.050	-0.047	0.038	0.011	-0.047	0.034	-0.114
<b>Board Independence</b>	0.006	0.046	-0.061	0.008	0.038	-0.083	0.014	0.000
<b>CEO Ownership</b>	-0.126	-0.176	0.083	-0.095	0.086	0.079	-0.065	-0.062
<b>Other Insider Ownership</b>	0.046	-0.019	0.045	-0.017	0.005	-0.016	-0.074	0.006
<b>Institutional Ownership</b>	0.035	-0.059	-0.134	-0.086	0.088	0.010	0.155	-0.064
<b>Outside Blockholdings</b>	0.088	0.074	0.021	0.062	-0.048	-0.159	-0.127	0.026

AppendixB: continued

	Restructuring	BHR(+2)	CEO Age	CEO Tenure	CEO/Chairman	Target Size	Transaction Value	Cash
<b>BHR(+2)</b>	0.052							
<b>CEO Age</b>	0.051	-0.010						
<b>CEO Tenure</b>	-0.057	0.036	0.329					
<b>CEO/Chairman</b>	-0.011	0.046	0.108	0.139				
<b>Target Size</b>	0.038	-0.020	0.006	0.034	0.0241			
<b>Transaction Value</b>	0.027	-0.022	0.011	0.053	0.033	0.977		
<b>Cash</b>	0.072	0.065	0.081	0.020	-0.075	-0.091	-0.100	
<b>Hostile</b>	0.230	-0.062	0.107	-0.057	-0.003	0.086	0.069	0.176
<b>Toehold</b>	0.052	-0.033	0.072	-0.043	-0.074	-0.023	-0.036	0.212
<b>Premium</b>	0.045	-0.061	-0.115	-0.031	-0.029	-0.035	0.006	-0.054
<b>Board Size</b>	0.204	0.019	0.183	-0.065	0.053	0.313	0.318	0.070
<b>Board Independence</b>	0.029	-0.027	0.101	-0.101	0.121	0.123	0.113	0.108
<b>CEO Ownership</b>	-0.156	0.065	0.024	0.364	0.118	-0.100	-0.104	0.022
<b>Other Insider Ownership</b>	-0.107	-0.004	-0.135	-0.152	-0.149	-0.133	-0.140	-0.023
<b>Institutional Ownership</b>	0.060	-0.062	0.079	-0.084	0.049	0.223	0.236	0.043
<b>Outside Blockholdings</b>	-0.096	-0.021	-0.009	-0.103	-0.093	-0.112	-0.107	0.050
	Hostile	Toehold	Premium	Board Size	Board Independence	CEO Ownership	Other Insider Ownership	Institutional Ownership
<b>Toehold</b>	0.312							
<b>Premium</b>	-0.108	-0.142						
<b>Board Size</b>	0.278	0.081	-0.052					
<b>Board Independence</b>	0.041	-0.042	-0.029	0.227				
<b>CEO Ownership</b>	-0.194	-0.096	0.120	-0.224	-0.252			
<b>Other Insider Ownership</b>	-0.140	0.067	0.126	-0.096	-0.115	0.005		
<b>Institutional Ownership</b>	0.055	-0.024	-0.034	0.246	0.257	-0.274	-0.302	
<b>Outside Blockholdings</b>	-0.071	0.050	0.120	0.003	0.167	-0.230	0.171	0.256



VITA

## VITA

Education

Ph.D. in Finance, Purdue University, Krannert School of Management GPA: 3.87	2012
MBA, Purdue University, Krannert School of Management GPA: 3.72, GMAT: 800 (99 percentile), Merit-Based Scholarship, Dean's List	2008
B.Sc. in Communication Engineering, UESTC, China GPA: 3.74, Merit-Based Scholarship, Graduating with Honors	2006

Research

## Publications:

- “Why Did Auction Rate Bond Auctions Fail During 2007-2008?” (with John J. McConnell and Alessio Saretto) in *The Journal of Fixed Income*, 2010, vol. 20, No. 2: pp 5-18.

## Working papers:

- Revisiting the Disciplinary Role of Failed Takeover Attempts
- The Role of the Media in Corporate Governance: Does the Media Influence Managers' Decisions to Abandon Proposed Acquisitions? (with John J. McConnell)
- Short Squeeze (with Wei Xu)

## Work in Progress:

- The Impact of Public Media on the Cost of Debt
- More Than A Bad Bid: What the Market Learns about Acquirers through Failed Takeover Attempts
- Short Interest and Security Prices (with Byoung-Hyoun Hwang and Wei Xu)

### Academic Positions

- |  |           |
|--|-----------|
| Purdue University, Krannert School of Management   | 2010      |
| <ul style="list-style-type: none"> <li>• Graduate Student Instructor of MGMT 411 – Investment Management</li> <li>• Lectured two sections with overall rating: 4.6/5.0</li> </ul>  |           |
| Purdue University, Krannert School of Management   | 2008-2011 |
| <ul style="list-style-type: none"> <li>• Research Assistant for Prof. John J. McConnell, Prof. Alessio Saretto, and Prof. Seoyoung Kim.</li> <li>• Contributed research assistance towards “Auction Failures and the Market for Auction Rate Securities” subsequently published in the <i>Journal of Financial Economics</i>, 2010, vol. 97, issue 3.</li> </ul> |           |

### Scholarships and Awards

- |  |      |
|--|------|
| Purdue University Graduate School Summer Research Grant                  | 2011 |
| Krannert Certificate for Distinguished Teaching                          | 2010 |
| Ross Assistantship, Purdue University                                    | 2008 |
| First place of Widiger’s Investment Essay Competition, Purdue University | 2007 |

### Leadership

- |  |           |
|--|-----------|
| Chairman, Student Managed Investment Fund (SMIF), Purdue University  | 2006-2008 |
| <ul style="list-style-type: none"> <li>• Managed an equity fund with \$400K capital and beat our benchmark by more than 10%.</li> <li>• Attended R.I.S.E. VII and VIII investment conference at Dayton, Ohio, in 2007 and 2008, and participated in the Student Managed Portfolio Competition on behalf of Purdue University.</li> </ul> |           |

### Industry Experience

- |  |             |
|--|-------------|
| Summer Associate, Agricultural Bank of China, Chengdu, China   | Summer 2007 |
| <ul style="list-style-type: none"> <li>• The Agricultural Bank of China is one of the Big 4 commercial banks in China. I interned in the commercial loan department, and my team negotiated a RMB 15 million secured lines of credit with a real-estate client.</li> </ul> |             |

### Languages & Statistical Software Competency

Fluent English and native Mandarin  
SAS, Stata, MATLAB, Python, and C++

### References

Professor John J. McConnell (Co-Chair)  
Emanuel T. Weiler Distinguished Professor of Management  
Krannert School of Management (Finance area)  
Purdue University  
(765)494-5910  
mconnj@purdue.edu

## References

---

Professor Mara Faccio (Co-Chair)  
Hanna Chair in Entrepreneurship and Professor of Finance  
Krannert School of Management (Finance area)  
Purdue University  
(765)496-1951  
mfaccio@purdue.edu

Professor Byoung-Hyoun Hwang  
Assistant Professor of Finance  
Krannert School of Management (Finance area)  
Purdue University  
(404)580-3978  
bhwang@purdue.edu