



Essays on Corporate Governance and Shareholder Activism

Citation

Shin, Sa-Pyung. 2016. Essays on Corporate Governance and Shareholder Activism. Doctoral dissertation, Harvard Business School.

Permanent link

<http://nrs.harvard.edu/urn-3:HUL.InstRepos:32744405>

Terms of Use

This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Other Posted Material, as set forth at <http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA>

Share Your Story

The Harvard community has made this article openly available.
Please share how this access benefits you. [Submit a story](#).

[Accessibility](#)



H A R V A R D | B U S I N E S S | S C H O O L

DOCTORAL PROGRAMS |

DISSERTATION ACCEPTANCE CERTIFICATE

(To be placed in First Library Copy)

The undersigned, approved by the Chair of the Doctoral Programs,
have examined a dissertation entitled

**Essays on Corporate Governance and Shareholder
Activism.**

presented by **Sa-Pyung Sean Shin**

candidate for the degree of Doctor of Business Administration
and hereby certify that it is worthy of acceptance.

Signature.....*Paul Healy*
Paul M. Healy, Chair

Signature.....*Suraj Srinivasan*
Suraj Srinivasan

Signature.....*Ian D. Gow*
Ian D. Gow

Date.....*April 18, 2016*

Essays on Corporate Governance and Shareholder Activism

A thesis presented

by

Sa-Pyung Sean Shin

In partial fulfillment of the requirements

For the degree of

Doctor of Business Administration

Harvard University

Graduate School of Business Administration

Cambridge, Massachusetts

April 2016

© 2016 Sa-Pyung Sean Shin

All rights reserved

ESSAYS ON CORPORATE GOVERNANCE AND SHAREHOLDER ACTIVISM

ABSTRACT

In these essays, I explore the relation between shareholder activism and corporate governance, mainly the board of directors and takeover defense measures.

In the first essay, “Takeover defenses in the era of shareholder activism,” I examine whether or not takeover defense measures that were originally developed to protect the management have differential effects on the probability of shareholder activism. I also examine what are the types of demands activists make when there are defense measures in place and look at the outcomes following activist campaigns. I find that firms with a staggered board or dual-class shares are less likely to be targeted while firms with a poison pill in place are more likely to be targeted. Also, staggered board and poison pill are more likely to be removed following activism and target firms are more likely to be taken over following activism despite having defense measures in place.

In the second essay, “Consequences to Directors of Shareholder Activism,” co-authored with Ian D. Gow and Suraj Srinivasan, we examine how shareholder activists can influence accountability of the board of directors. We find that the directors are more likely to leave the board in the two years following activist engagement and their turnover is more sensitive to their performance in the period leading up to shareholder activism. However, we do not find evidence of reputational consequences for the directors as we do not find changes in the number of other board seats.

In the third essay, “Activist directors – determinants and consequences,” also co-authored with Ian D. Gow and Suraj Srinivasan, we examine whom the directors shareholder activists put in when they are granted a board seat or when they win proxy fights and whether having these board seats can help them achieve their goals more effectively. We identify 1,369 activist directors during the period of 2004–2015. Activists remain as shareholders longer when they have board seats and having activist directors is associated with significant strategic and operational actions by firms.

ACKNOWLEDGEMENTS

First of all, I would like to express my sincere gratitude to my dissertation committee: Paul M. Healy, my dissertation chair, who devoted much of his time reading numerous drafts of my thesis; Suraj Srinivasan, who has been a foremost mentor during the past six years of my doctoral study; and Ian D. Gow, who has helped me become an empirical researcher with his invaluable resources and guidance.

Also, I would like to thank all the faculty at the Accounting and Management unit as well as all the staff at the Doctoral Programs Office for their help and encouragement. I would also like to thank all other accounting DBA students, especially Akash Chattopadhyay, Carolyn Deller, Rajesh Vijayaraghavan, and Shelley Xin Li, who shared every moment of my doctoral studies. I would not have been able to endure the program without the support of my friends at HBS, including Sanghyup Kwak, Doyoon Kim and Yosub Jung, who have been like brothers to me. I appreciate all the prayers and care from my Godfather, Jin Hyung Kim, and my Godmother, Doory Kim. I would like to give special thanks to a couple, Seil Kim and Jihwon Park, who have been more than just colleagues in the same field. Additionally, Harvard Korea Society, HBS Section K, and Daewon Alumni in Boston have been special groups that enriched my life during the doctoral years.

Lastly, I am most grateful to my family: my father, Hae Ryong Shin, my mother, Jung Sook Kim, and my little sister, Yoon Ji Shin. Their love and support have been and are always beyond words of description. And I am thankful to the most special and the most important addition to my life, Woo Rhi Suh, for all the luck she has brought me.

To all my family and friends, I dedicate this thesis.

TABLE OF CONTENTS

1. Introduction	1
2. Takeover Defenses in the Era of Shareholder Activism	4
2.1. Introduction	4
2.2. Prior research and institutional setting	9
2.2.1. Shareholder activism	9
2.2.2. Takeover defenses	11
2.2.2.1. Dual-class shares	
2.2.2.2. Staggered board	
2.2.2.3. Poison pill	
2.2.2.4. Takeover defenses and consequences	
2.2.3. Takeover defenses and shareholder activism	15
2.3. Data and descriptive statistics	18
2.3.1. Activism events	18
2.3.2. Defense measures	21
2.3.3. Other variables	21
2.4. Takeover defenses and activist target selection	23
2.4.1. Empirical analysis	23
2.4.2. Cross-sectional variation: size	30
2.5. Takeover defenses and activist demand and outcomes	31
2.5.1. Activist demand	31
2.5.2. Activism outcomes	34
2.5.2.1. Removal of defense measures	
2.5.2.2. Takeover probabilities	
2.5.2.3. Financial policies	
2.6. Board response to shareholder activism	41
2.6.1. Poison pill adoption	41
2.6.2. Effectiveness of poison pill adoption	44
2.7. Conclusion	47
3. Consequences to Directors of Shareholder Activism	49
3.1. Introduction	49
3.2. Prior research and institutional setting	53
3.2.1. Director turnover	53
3.2.2. Effect of shareholder votes and institutional shareholder activism	54
3.2.3. Director elections and proxy fights	55
3.2.4. Hedge fund and other institutional activism	56

3.3. Data and sample description	58
3.3.1. Directorship data	58
3.3.2. Firm-level data	59
3.3.3. Activism events	59
3.4. Director turnover in targeted companies	64
3.4.1. Shareholder activism and director turnover	64
3.4.2. Shareholder activism and performance sensitivity of director turnover	72
3.4.3. Settlements with activists and director turnover	73
3.4.4. CEO turnover and outside directors	76
3.5. Voting in director elections	77
3.5.1. Determinants of shareholder support	77
3.5.2. Do shareholder votes matter for board turnover?	79
3.6. Directorships on other boards	81
3.7. Analysis of individually targeted directors	84
3.8. Additional analyses	86
3.8.1. Within-firm analyses	86
3.8.2. Propensity score matching	90
3.9. Conclusion	93
4. Activist Directors: Determinants and Consequences	95
4.1. Introduction	95
4.2. Institutional background and prior literature	99
4.2.1. Illustrative cases	99
4.2.2. Causes and consequences of hedge fund activism	101
4.2.3. Other shareholder activism	103
4.2.4. Director elections and proxy fights	104
4.2.5. Specialist outside directors	105
4.3. Data and descriptive statistics	106
4.3.1. Activism events	106
4.3.2. Activist directors	107
4.3.3. Activist holdings	108
4.3.4. Director characteristics	108
4.3.5. Other data	110
4.4. Activist target selection	111
4.5. Activist holding periods	115
4.6. Stock returns	117
4.7. Firm outcomes	120
4.7.1. Profitability	120
4.7.2. Divestiture and acquisitions	123
4.7.3. CEO turnover and compensation	124

4.7.4. Capital structure and payouts	126
4.7.5. Investment	127
4.8. Conclusion	129
Bibliography	131
Appendix A: Descriptive statistics by sample	136
Appendix B: Variable definitions	137
Appendix C: Activism classification – examples	139
Appendix D: Identification of targeted directors – examples	141

LIST OF TABLES

Table 2.1. Shareholder activism events	19
Table 2.2. Takeover defense measures	22
Table 2.3. Activist target selection	26
Table 2.4. Activist demands and success rates	32
Table 2.5. Defense measures and activist demands	33
Table 2.6. Probability of removing defense measures	35
Table 2.7. Probability of sale of the target	36
Table 2.8. Changes in financial policies by defense measure	38
Table 2.9. Probability of poison pill adoption	44
Table 2.10. Poison pill adoption and activism consequences	46
Table 3.1. Descriptive statistics	60
Table 3.2. Effect of shareholder activism on director turnover	67
Table 3.3. Effect of shareholder activism on director turnover	74
Table 3.4. Shareholder activism and director elections	79
Table 3.5. Shareholder activism, director elections, and director turnover	81
Table 3.6. Impact of shareholder activism on other directorships	82
Table 3.7. Impact of shareholder activism on individually targeted directors	84
Table 3.8. The effect of proxy fights on directorships: Within-firm analysis	88
Table 3.9. Propensity score matching analysis	91
Table 4.1. Activism events	107
Table 4.2. Activist directors	108
Table 4.3. Director characteristics	109
Table 4.4. Activist target selection	113
Table 4.5. Activist holding periods	116
Table 4.6. Stock returns	118
Table 4.7. Operating performance	122
Table 4.8. Divestiture and acquisitions	124
Table 4.9. CEO turnover and compensation	125
Table 4.10. Capital structure	127
Table 4.11. Investment	128

LIST OF FIGURES

Figure 2.1. Activism events by year	20
Figure 2.2. Takeover defenses by year	23

CHAPTER 1

INTRODUCTION

Corporate governance is a mechanism that helps investors monitor and hold managers accountable in the existence of agency problems coming from separation of ownership and control (Shleifer and Vishny, 1997). Examples of these corporate governance mechanisms include internal corporate governance mechanisms such as the board of directors and external corporate governance mechanisms such as the market for corporate control.

Recently, a new force has become a big stimulus to corporate governance environment – shareholder activism. Shareholder activism, mainly driven by hedge funds, has gained lots of traction from the media as well as the academic literature. Activists generally buy stakes in undervalued firms and push for improvement in performance and governance. If management resists, they would convince other shareholders to side with them to push for changes further. In the end, when the value is unleashed, they sell their stakes and leave.

Many studies have looked at the types of firms being targeted for activism and what happens to activism targets. In these essays, I focus on the relation between shareholder activism and corporate governance, mainly the board of directors and takeover defense measures put in place to protect the management.

In the first essay, “Takeover defenses in the era of shareholder activism,” I examine the interplay between takeover defenses and shareholder activism. Using a comprehensive sample of shareholder activism events between 2006 and 2014, I find a differential impact of takeover defense measures on the likelihood of being targeted for activism; a dual-class structure or a staggered board deters activism, whereas firms with a poison pill in place are more likely to

become targets. Activists are more likely to demand removal of takeover defense measures and/or sale of the target firm if the firm has a staggered board or a poison pill in place, suggesting that when takeover defenses block the market for corporate control, activists promote changes through their interventions. I also find that target firms with takeover defenses are more likely to remove those defenses and to be acquired following activism, which suggests that activism can act as an antidote to takeover defenses. Finally, while many target firms adopt a poison pill in response to activist approaches, I do not find evidence that it makes for an effective defense.

In the second essay, “Consequences to Directors of Shareholder Activism,” co-authored with Ian D. Gow and Suraj Srinivasan, we examine how shareholder activist campaigns affect the careers of directors of the targeted firms. Using a comprehensive sample of shareholder activism between 2004 and 2012, we find that directors are almost twice as likely to leave over a two-year period if the firm is the subject of a shareholder activist campaign. We examine a broad class of shareholder activism including proxy contests. While proxy contests sometimes succeed in replacing directors, they are costly and they rarely succeed in getting a majority of shareholder support. Our evidence suggests that director turnover takes place following shareholder activism even without shareholder activists engaging in, let alone winning, proxy contests. Performance-sensitivity of director turnover is also higher in the presence of shareholder activism, even when such activism does not result in a proxy fight. We find evidence of activism being associated with lower shareholder support in director elections and with both activism and lower shareholder support being incrementally associated with director turnover. In contrast to prior research, we find that director election results matter for director retention: directors are more likely to leave in the year following activism when they receive lower shareholder support. Overall, our evidence

suggests that shareholder activism is associated with greater accountability for independent directors of US firms.

In the third essay, “Activist directors - determinants and consequences,” also co-authored with Ian D. Gow and Suraj Srinivasan, we examine the determinants and consequences of hedge fund activism with a focus on activist directors, i.e., those directors appointed in response to demands by activists. Using a sample of 2,765 activism events over the period 2004-2015, we identify 1,369 activist directors. We find that activists are more likely to gain board seats at smaller firms and those with weaker stock price performance. Activists remain as shareholders longer when they have board seats, with holding periods consistent with conventional notions of “long-term” institutional investors. As in prior research, we find positive announcement-period returns of around 4-5% when a firm is targeted by activists, and a 1.1% increase in return on assets over the subsequent one to five years. We find that activist directors are associated with significant strategic and operational actions by firms. We find evidence of increased divestiture, decreased acquisition activity, higher probability of being acquired, lower cash balances, higher payout, greater leverage, higher CEO turnover, lower CEO compensation, and reduced investment. With the exception of the probability of being acquired, these estimated effects are generally greater when activists obtain board representation, consistent with board representation being an important mechanism for bringing about the kinds of changes that activists often demand.

CHAPTER 2

TAKEOVER DEFENSES IN THE ERA OF SHAREHOLDER ACTIVISM

2.1. Introduction

This essay examines the interplay between takeover defense measures and shareholder activism. While defense measures have evolved to protect companies from the threat of hostile takeovers, they can potentially play an important role in shareholder activism campaigns led by hedge funds and other investors. Such campaigns have become a significant phenomenon in recent years. While shareholder activists attempt to bring about changes at target firms with their significant ownership and specific plans, boards and management often resist these demands and seek to defend their strategies and existing governance mechanisms. In fact, many companies now adopt defense measures traditionally used to prevent hostile takeovers as protection from hedge fund activists. In this essay, I examine how these defense measures now play a role in shaping activism.

I focus on three defense mechanisms which are most relevant to shareholder activism: dual-class shares, staggered boards, and poison pills (Gill et al., 2014; Schulte, Roth, and Zabel, 2014).¹ In a multi-class (mostly dual-class) capital structure,² insiders can hold shares with majority voting power, making it almost impossible for minority shareholders, including activists, to win a proxy contest. A staggered board acts to prevent activists from gaining control of a board in a single election □ historically, no activist or hostile bidder has ever won two consecutive elections (Gill et

¹ My interviews with legal and strategic advisors involved on the side of both activists and boards suggest that both sides consider takeover defenses in the context of their decision to target companies or how to prevent the company from being approached by activists, in deciding the tactics during the campaign and in the likelihood of success.

² I use the term “dual-class” for all multi-class capital structures.

al., 2014). A poison pill is designed to limit activist influence over a firm by preventing the activists from acquiring more than a specified percentage of the shares.

Using a sample of 1,845 publicly disclosed activism events involving hedge fund activists and other major shareholders that commenced between 2006 and 2014, I examine the dynamics between takeover defenses and shareholder activism by answering the following questions: (1) What is the effect of each takeover defense on target selection? (2) What is the effect of takeover defenses on activist demands? (3) What is the effect of shareholder activism on a company's existing takeover defenses and takeover probabilities? (4) Do companies adopt a poison pill in response to activism and is it an effective defense against activists?

The first set of empirical tests examines how the three defense measures—dual-class shares, a staggered board, and a poison pill—are associated with activists' decisions to target companies. For activists, target selection is a function of (a) the extent of potential valuation gains arising from undervaluation, or opportunities for improvement in the target company and (b) the probability of successfully bringing about desired changes in the target company. In this context, takeover defenses can have two opposing effects on activists' target selection. On one hand, prior research suggests that takeover defense measures are associated with management entrenchment, itself a possible cause of the undervaluation. Activists are likely to consider how much improvement they can bring to a firm, and firms with entrenched managers hold the promise of higher returns. Activists can also use the presence of takeover defenses as a public relations tool, emphasizing the entrenchment of the board and management in order to convince other shareholders to take the activists' side in a proxy fight.

On the other hand, defense mechanisms can deter activism by lowering the probability of success and increasing the costs for activists. The activists' expected costs increase if the defense

mechanisms lower their chances of success, thus reducing their expected returns. Therefore, just as takeover defense measures deter takeover attempts, they can discourage attempts to engage in activism campaigns.

The effectiveness of the defense mechanisms against activism varies, given that they have distinct characteristics. A dual-class structure can block activist influence and a chance to win a proxy fight, as management or management-friendly shareholders own the majority of voting power in most cases. Since activists are likely to end up in a proxy contest that is practically impossible to win, a dual-class structure can provide an effective defense against activists. A staggered board can increase costs for activists by restricting the pool of directors that they can target to one third of the board. In addition, an activist is required to hold onto shares for at least two years to make a credible threat that it would control the board, which would be costlier and riskier for the activist.

While dual-class structures and staggered boards have characteristics that make activism more difficult, poison pills may be less effective at preventing activism. Most activists do not intend to take over the firm; rather they seek support from other shareholders in enacting their policies. Given that activists do not need to own a majority of voting rights by themselves, a poison pill that limits their ownership is unlikely to prevent them from gathering support from other shareholders. In summary, the presence of defense measures is likely to be a signal of undervaluation, but whether they limit the success of activism is an empirical question.

My first empirical analysis provides evidence that having a staggered board or dual-class shares is associated with a lower likelihood of being targeted for activism, while having a poison pill is associated with a higher likelihood of being approached by activists. This result is consistent

with the differential effectiveness of each defense measure as a deterrent against shareholder activism.

Second, I examine the types of demands that activists make to boards of target firms with any of the three defense measures in place. If an activist believes that a target is undervalued due to the presence of defense mechanisms, the activist will likely seek to remove such defense mechanisms and improve corporate governance. Furthermore, if an activist believes that a company is an attractive takeover target, but defense measures are blocking the market for corporate control, the activist will demand that the board seek a potential acquirer. I find that, when defense mechanisms are in place, not only do activists ask for their removal, but they also demand that the target firm sell itself as a whole or in parts, often referred to as exploring “strategic alternatives.” This evidence is consistent with the failure of the market for corporate control and activism arising to address frictions in the market for corporate control associated with takeover defenses.

Third, I analyze whether activists succeed in repealing takeover defenses and removing frictions in the market for corporate control. If activist campaigns are effective, takeover defenses are likely to be removed and target firms sold. My findings suggest that, even after controlling for the recent trend towards removing poison pills and staggered boards, an activism campaign is followed by a higher likelihood of removal of a staggered board and a poison pill within two years. In addition, I find an increase in the probability of takeover within two years for the sample of target firms, despite having a staggered board or a poison pill in place. I also find that financial leverage increases and capital expenditures decrease following activism, but do not find that the effect differs according to the existence of defense measures.

Lastly, I study defensive responses to activism by target firms and their effects on activism outcomes. I test how often boards adopt a poison pill in response to an activism announcement and how that response varies with the activist's equity stake and demands. I focus on poison pill adoption because, unlike the other defenses, a poison pill can easily be adopted without shareholder approval when a firm is faced with the threat of activism (Coates, 2000). I find that, controlling for other factors, the announcement of activism increases the likelihood of poison pill adoption by 6.2%. I also find that a board's decision to adopt a poison pill is positively related to the percentage of activist ownership, demand for board seats, and demand for sale of the target. However, I do not find evidence that these poison pills adopted in response to shareholder activism are a successful defense against activist demand. I observe that the likelihood of takeover or CEO turnover is no lower in cases where companies adopted a poison pill compared to ones where they did not.

This study contributes to our understanding of defense mechanisms and their role in shareholder activism. There is a large stream of literature on takeover defenses that examines the effects of defense measures on firm performance, valuation, and the probability of takeover. There is also an emerging stream of research on shareholder activism that studies the determinants and consequences of this new phenomenon. However, these studies have neglected to consider the effects of defense measures on shareholder activism – and especially their effects on activist target selection. Brav et al. (2008) show that poor corporate governance is associated with a higher likelihood of being targeted for activism, but they do not examine which particular defenses matter most and whether the presence or absence of defense measures affects the interaction between the

target firms and activists. My results show that the effect of a poison pill differs from those of dual-class shares and a staggered board.³

This study also contributes to the literature on the effect of institutional investors' direct intervention on corporate governance and firm outcomes (Edmans, 2013). It provides evidence that shareholder activism can function to reduce friction in the market for corporate control associated with takeover defenses that might otherwise entrench managers and boards altogether. While hostile takeovers have become rare due to the availability of poison pills and other defensive measures, activism has become a new force in the market for corporate control. Activists target firms that are undervalued, in part because their management is protected by the defense measures in place, and attempt to promote changes in the defense measures themselves and push for sale of the targets. Activism thus potentially improves corporate governance of the target firm and opens up the possibility of improving the market for corporate control.

The rest of the essay proceeds as follows: Section 2.2 describes the prior literature on shareholder activism and takeover defenses. Section 2.3 describes the data and offers descriptive statistics. Section 2.4 examines the role of takeover defenses on activist target selection. Section 2.5 examines the relation between defense measures and activist demands and outcomes. Section 2.6 examines the board adoption of a poison pill in response to activism and the effectiveness of adopting a poison pill as a defensive strategy. Section 2.7 concludes the analysis.

2.2. Prior research and institutional setting

2.2.1. Shareholder activism

³ Boyson and Pichler (2014) examine poison pill adoptions during activism, but do not examine a) the effect of having a poison pill on target selection or b) the two other defense measures covered in this study.

It is common these days to see headlines about companies being targeted by shareholder activists. Activists, mainly driven by hedge funds, buy stakes in firms that they deem undervalued and push for improvement in performance and governance. Gantchev (2013) describes shareholder activism as a sequential process. Activists initially attempt friendly negotiations with management, as a hostile campaign is costly. However, when they cannot reach an agreement, they often end up in a proxy fight, in which the activists seek board representation to pass their proposals. In such circumstances, it is crucial for the activists to convince other shareholders to side with them.

Many recent studies have examined the new phenomenon of hedge fund activism. Brav et al. (2008), Klein and Zur (2009), and Gow et al. (2014) identify several firm characteristics that are associated with the likelihood of being targeted for activism. In general, smaller firms (small market capitalization), undervalued firms (high book-to-market), poorly performing firms (low growth or low returns) and firms in which leverage or dividend payout is low are associated with a higher likelihood of being targeted for activism (Brav et al., 2010). The present analysis hypothesizes that another factor affecting this likelihood is the presence of one of the three defense measures.

Prior studies have generally found positive consequences of shareholder activism. Brav et al. (2008), Klein and Zur (2009), and Gow et al. (2014) find a positive and significant stock market reaction to announcements of activism campaigns. Studies have also investigated reasons for these positive returns. Klein and Zur (2009) find that activists' ability to transfer wealth from debtholders to stockholders generates positive returns as activists demand reductions in a target firm's cash holdings and increases in its leverage. Bebchuk et al. (2013) also find increases in operating performance, such as return on assets, both in the short and long run. Greenwood and Schor (2009) emphasize activists' ability to force target firms into takeovers as a source of shareholder gains. I

contribute to the literature by providing evidence that activists also bring changes to those firms with defense measures, such as the removal of the defense measures themselves and a drive towards more takeover activities.

2.2.2. Takeover defenses

Takeover defenses have been developed to protect companies from outside pressures, especially hostile takeover attempts by corporate raiders. Examples of takeover defenses include a dual-class capital structure, a staggered board, and a poison pill.

2.2.2.1. Dual-Class shares

A dual-class capital structure is a type of stock structure that involves two or more classes of stocks, such as Class A and B shares. These different classes of stocks have different voting rights; for example, the superior class would have ten votes per share, while the inferior class has one vote per share. The superior class with higher voting rights is owned by management or management-friendly investors, and is usually not publicly traded (Gompers et al., 2010). This structure limits the level of influence the non-management shareholders can have on the management or insiders. Gompers et al. (2010) find that insiders on average hold 60% of the voting rights compared to 40% of the cash-flow rights in dual-class firms. Even though the management does not actually own a majority of shares, it can still hold voting control with a majority of voting rights. This arrangement effectively prevents the management from losing any kind of proxy contest. Therefore, a corporate raider or even an activist would be reluctant to target these firms. The New York Stock Exchange (NYSE) and NASDAQ do not allow a dual-class capital structure to be introduced at a post-IPO stage.

2.2.2.2. Staggered Board

A staggered board is a type of board structure in which only a fraction (usually a third) of directors are elected each year. For example, if a board consists of nine directors, three directors would be elected for a term of three years. When a staggered board is in place, it takes at least two years for any hostile bidder or dissident to control the board. This structure thus effectively prevents a potential acquirer from taking control of the board and delays takeover attempts. Bebchuk et al. (2002) point out that neither a hostile bidder nor an activist has ever won two successive elections in a staggered board.

While it is not impossible, it is difficult to introduce a staggered board following a company's IPO. Doing so requires shareholder approval, and it is highly likely that institutional investors would disapprove the proposal. ISS and Glass Lewis also oppose proposals to stagger a board, while they support proposals to de-stagger a board.

2.2.2.3. Poison Pill

A poison pill, more formally called a shareholder rights plan, gives all current shareholders with the exception of a potential acquirer the right to buy an extra share at a discounted price. A poison pill is triggered when the potential acquirer holds more than the threshold level of stocks in a firm (typically 15-20%). It prevents a potential acquirer, or a corporate raider, from accumulating more than a threshold ownership level, since holding more than this level would dilute its ownership, typically by half. Historically, a poison pill has been the most powerful tool against any hostile takeover attempt (Catan and Kahan, 2015).

A special kind of poison pill has been developed recently in response to the popularity of hedge fund activism—*the 13D poison pill*. Such a poison pill is triggered if an activist shareholder, who files a Schedule 13D with the SEC, gains more than 10 percent ownership, while a passive shareholder, who files a Schedule 13G, can hold up to 20 percent before the poison pill is triggered.⁴ The 13D pill is specifically designed to limit activists’ influence, since their maximum ownership is limited to 10 percent. In this study, I examine whether these poison pills are effective against activists.

Unlike a dual-class capital structure or a staggered board structure, a poison pill requires minimal effort to adopt or repeal. It does not need approval from shareholders; it can be instituted at a board meeting. More and more firms, therefore, are repealing their poison pill and instead waiting until a poison pill becomes necessary to adopt one, commonly called a “shadow pill” (Coates, 2000).

2.2.2.4. Takeover defenses and consequences

Ambrose and Megginson (1992) and Bebchuk et al. (2002) find that poison pills and staggered boards reduce the likelihood of a takeover. These defenses can be beneficial for shareholders if the board has adopted them to increase its bargaining power with potential acquirers, which would increase the control premium received by shareholders.

However, they can also be harmful to shareholders if they have been adopted to personally benefit the board or specific managers—for example, by allowing them to retain their positions as top executives (Ruback, 1988). Prior research suggests that these takeover defense measures are

⁴ Under Rule 13D, an investor with ownership of stock over 5% of the company needs to file a Schedule 13D with the SEC. The information has to be disclosed within 10 days of the transaction. Schedule 13G, which is shorter than Schedule 13D, can be used if an investor’s ownership of stock is over 5% of the company, but the owner does not intend to actively get involved with the management.

indeed associated with management entrenchment and firm undervaluation. Malatesta and Walking (1988) and Ryngaert (1988) find negative market reactions to announcements of poison pills, which the authors attribute primarily to management entrenchment.⁵ Bebchuk and Cohen (2005) and Cohen and Wang (2013) find lower value associated with staggered boards while Masulis et al. (2007) find more value-destroying acquisitions by firms with staggered boards.⁶ Gompers et al. (2010) find that firm value decreases with higher voting rights held by insiders in dual-class firms. While existing research has mainly focused on the effect of defense measures on takeover activities and valuation outcomes, this study addresses the interplay between defense measures and shareholder activism, which can potentially affect each other.

Prior research has developed measures that, using multiple takeover defense provisions, can comprehensively capture the quality of corporate governance. Gompers et al. (2003) created the shareholder rights index, called the G-Index, based on 24 provisions. Bebchuk et al. (2009) created a sub-index of the G-Index, called the Entrenchment Index (E-Index), focusing on (a) supermajority voting requirements for charters, bylaws, and mergers, (b) classified boards, (c) poison pills, and (d) golden parachutes. However, these indices do not capture the effects of individual measures on the quality of corporate governance, and there is no single “best” measure of corporate governance since firms’ circumstances vary (Bhagat et al., 2008). For this reason, Cremers and Ferrell (2014) look at the effects of individual takeover defenses in their examination of firm values.

⁵ Brickley et al. (1994), however, show that "the average stock-market reaction to announcements of poison pills is positive when the board has a majority of outside directors and negative when it does not." Comment and Schwert (1995) also find that poison pills increase takeover premiums without decreasing takeover likelihood.

⁶ On the other hand, other papers have found opposite results. Faleye (2007), for example, found higher bid premiums for firms with staggered boards and firms with poison pills.

Brav et al. (2008) include the G-index in one of their models of activist target selection so as to see how a firm's governance characteristics are associated with the likelihood of activism. While they find that a higher G-index (that is, lower governance quality) is associated with a higher likelihood of activism, the model sheds no light on which defenses matter in which direction in the context of shareholder activism. Instead of looking at an aggregated measure, I focus separately on the three specific provisions—dual-class capital structure, staggered board, and poison pill—which are most relevant to boards and activists during an activism campaign.⁷

2.2.3. Takeover defenses and shareholder activism

Activists investigate potential target companies and assess the probability of bringing about positive changes given the potential opposition from management, the board, and other investors. After careful assessment, they will engage in a campaign only if the expected returns outweigh the expected costs. Takeover defenses can have two opposing effects on this decision-making process. On one hand, as prior literature suggests, firms protected by takeover defenses are likely to be the very firms that are undervalued, and are thus more likely to be targeted by activists. If defense measures are a signal of entrenched management or weak governance, activists may be able to add value by negotiating changes such as replacing management or removing the defense mechanisms. Furthermore, the presence of takeover defenses can be a useful public relations tool against management. Proxy advisory services such as Institutional Shareholder Services (ISS) and Glass-

⁷ There also exist shareholder-friendly mechanisms that can help activists. The ability to call a special meeting can be used by activists to initiate an activism campaign at any time they want instead of waiting for a regular shareholder meeting, which only happens once a year. Action by written consent can be used by activists to pass some shareholder proposals with a certain level of shareholder consent without holding a shareholder meeting. These mechanisms enable an activist to bring a surprise attack against the target firm. However, because I have found their effects to be insignificant, I do not discuss or report their results.

Lewis (GL) are generally against takeover defenses, and powerful takeover defense measures such as poison pills are often considered harmful to shareholders.

On the other hand, defense measures can deter activist approaches if they reduce activists' expected returns by increasing the cost and decreasing the probability of success. Activists need to invest resources and energy into each campaign when faced with opposition from management and the board (Gantchev, 2013), and if the probability of success decreases due to takeover defenses, their expected costs will be higher and expected return lower. Thus, just as takeover defense measures deter takeover attempts, they can also discourage attempts to engage in activism campaigns.

Each of the three takeover defense measures examined in this study has been effective against hostile takeover attempts by corporate raiders in different ways. However, despite their efficacy in preventing hostile takeovers, the effectiveness of the defense measures in the context of shareholder activism may differ. What might have been a powerful defense against corporate raiders may not be a strong defense against shareholder activists. With a dual-class capital structure, management or management-friendly shareholders often own the majority of voting rights. For this reason, if management or the board disagrees with an activist's thesis and plan, it would be practically impossible for the activist to win a proxy fight to force changes on management. This means that a dual-class voting structure is ex-ante likely to preclude an activist fund from engaging in a campaign, making it a powerful defense against shareholder activism.

A staggered board can also be an effective defense against shareholder activism. On a staggered board, only one-third of the directors are replaced in each election. This means that even the best possible outcome—winning one-third of the seats—would not give the activists enough leverage to take control of the firm. Also, a staggered board makes it harder for activists to replace

the directors they consider the weakest or poorest-performing, since those directors may not be up for election that year. If the most talented and best-performing directors are up for election, it would be much more difficult to convince other shareholders to vote for the activists' candidates. It is therefore more difficult for an activist to make a credible threat to gain control of the board. Such a threat can itself be a powerful tool for an activist, as illustrated by Starboard's campaign against Darden Restaurants. Starboard waged a proxy fight against Darden and successfully replaced the entire board, winning all Darden's board seats. Had a staggered board been in place, Starboard would have been unable to make this change in a single year, and may not have even opted to initiate the campaign.

A poison pill, on the other hand, may not be an effective defense against shareholder activism. While a poison pill can limit the percentage of shares an activist can own in a target firm, it does not prevent an activist from winning a proxy contest. When management or the board disagrees with the activist's agenda, activists can convince other shareholders to side with them to win a proxy contest. The possibility of gaining support from other shareholders can therefore limit the effectiveness of a poison pill as a defense.

Overall, while all three measures are likely to be an indicator to an activist of potential value to be unlocked, the effectiveness of each defense measure is likely to be differentially associated with the probability that activists will achieve their objectives. This situation raises the empirical question of how each of the takeover defenses is differentially associated with the likelihood of activism. I examine the following aspects of this question about activism and defense measures. First, what is the effect of each takeover defense on target selection? Second, what is the effect of takeover defenses on activist demands? Third, what is the effect of shareholder activism on a company's existing takeover defenses and takeover probabilities? And fourth, do

companies adopt a poison pill in response to activism, and if so, is it an effective defense against activists?

2.3. Data and descriptive statistics

2.3.1. Activism events

My data on shareholder activism come from the FactSet SharkWatch database, which contains information on activism events—primarily in the United States—including the types of demand the activists made and whether they resulted in success. I include all publicly disclosed activism events that started in the period of 2006–2014 in the United States. I exclude corporate control contests initiated by another corporation and target firms that are investment trusts or mutual funds; I also exclude activism consisting only of routine shareholder proposals submitted under Rule 14a-8. The resulting sample consists of 1,845 activism events (see Table 2.1), primarily conducted by hedge fund activists or other major shareholders (i.e., Schedule 13D filers).

Panel A of Table 2.1 presents the number of activism events by year. While there are more activism events during the period of financial crisis, there is a consistent stream of events throughout the sample period (see Figure 2.1). Panel B of Table 2.1 presents the number of activism events by industry. 13% of the target firms were from the business-to-business service industry and 8% and 7% of the targets were from the banking and electronic equipment industry, respectively. The proportion is consistent with the percentage of firms found in each industry for the population of listed firms in the United States. Panel C of Table 2.1 presents the number of activism events by state of incorporation. The largest percentage (i.e., 62%) of target firms were incorporated in Delaware, consistent with the percentage of firms incorporated in Delaware in the population.

TABLE 2.1. Shareholder activism events**Panel A. Activism events by year**

This panel presents the number of activism events by year (Source: FactSet SharkWatch).

Year	Events	Percent
2006	258	14%
2007	305	17%
2008	252	14%
2009	133	7%
2010	174	9%
2011	167	9%
2012	205	11%
2013	182	10%
2014	169	9%
Total	1,845	100%

Panel B. Activism events by industry

This panel presents the number of activism events by Fama-French 48 industry (Source: FactSet SharkWatch).

Industry	Events	Percent
Business Services	231	13%
Banking	145	8%
Electronic Equipment	121	7%
Retail	119	6%
Pharmaceutical Products	116	6%
Communication	81	4%
Computers	75	4%
Restaurants, Hotels, Motels	75	4%
Petroleum and Natural Gas	73	4%
Trading	68	4%
Medical Equipment	48	3%
Machinery	45	2%
Personal Services	44	2%
Consumer Goods	42	2%
Healthcare	39	2%
Insurance	38	2%
Wholesale	33	2%
Transportation	32	2%
Chemicals	29	2%
Entertainment	26	1%
Others	365	20%
Total	1,845	100%

TABLE 2.1. Shareholder activism events (Continued)

Panel C. Activism events by state

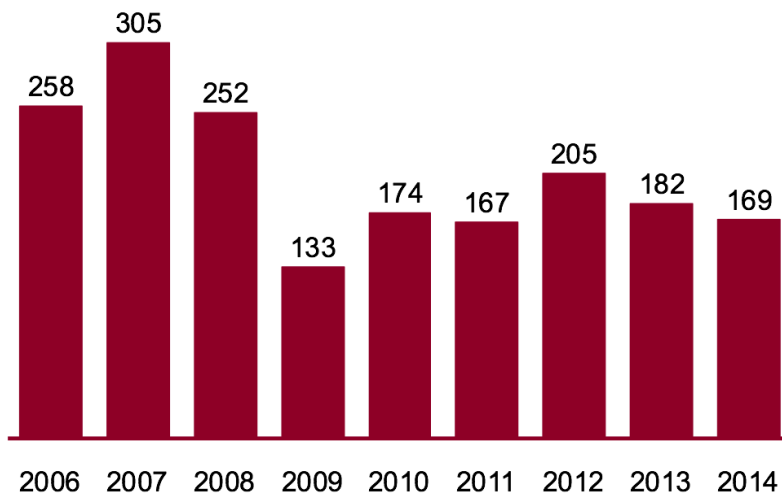
This panel presents the number of activism events by state of incorporation (Source: FactSet SharkWatch).

State of incorporation	Events	Percent
Delaware	1144	62%
Maryland	79	4%
New York	50	3%
California	45	2%
Ohio	44	2%
Pennsylvania	41	2%
Indiana	40	2%
Nevada	37	2%
Washington	36	2%
Minnesota	36	2%
Florida	33	2%
Massachusetts	28	2%
New Jersey	25	1%
Virginia	22	1%
Wisconsin	19	1%
Texas	19	1%
Others	147	8%
Total	1,845	100%

FIGURE 2.1. Activism events by year

Activism events over time

Annual events, 2006-2014



2.3.2. Defense measures

My data on defense measures come from the FactSet SharkRepellent database, which contains information on each firm's use of such measures as poison pills, staggered boards, and unequal voting structures. It also provides a detailed history of charter and bylaw changes and poison pill replacements and amendments.

Descriptive statistics on takeover defense measures by year (see Panel A of Table 2.2) show that two of the three defense measures that I focus on have been widely used: from 2006 to 2013, 52.5% of the firms in the sample had a staggered board and 23.0% had a poison pill. In contrast, only 8.2% of the firms had a multi-class capital structure. Figure 2.2 shows a decreasing trend of having a staggered board or a poison pill over the sample period; while 58.1% of the firms had a staggered board and 32.6% had a poison pill in 2006, those percentages had dropped to 42.6% and 15.6%, respectively, by 2013.⁸ Panels B and C of Table 2.2 look at the activism and non-activism samples, separately. Univariately, we see that fewer companies in the activism sample have a staggered board whereas more companies in the activism sample have a poison pill (See Figure 2.2).

2.3.3. Other variables

Consistent with prior literature (Brav et al., 2008; Gow et al., 2014), I control for the following variables when examining the relation between takeover defenses and shareholder activism: firm performance (*Size-adj. return*, *Return on assets*, *Sales growth*), firm size (*Market value*), book-to-market ratio (*Book-to-market*), leverage (*Leverage*), cash holdings (*Cash*),

⁸ In the meantime, a Factiva search provides anecdotal evidence for the increasing use of poison pill against activism campaigns. While search result numbers decrease over time for the keyword "poison pill" by itself, the combined results for the keywords "poison pill" and "activism" increase year by year.

TABLE 2.2. Takeover defense measures

This table presents the number of firms with each takeover defense measure in place by year (source: FactSet SharkRepellent). The sample in Panel A contains all firm-years between 2006 and 2013. The sample in Panel B contains all firm-years with activism. The sample in Panel C contains all firm-years without activism.

Panel A: All firm-years

Year	<u>Dual-class</u>		<u>Staggered board</u>		<u>Poison pill</u>	
	Percent	Count	Percent	Count	Percent	Count
2006	7.7%	258	58.2%	2,272	32.6%	1,273
2007	7.5%	244	57.2%	2,169	28.9%	1,097
2008	7.8%	245	56.2%	2,018	26.5%	953
2009	7.9%	244	55.3%	1,923	23.8%	828
2010	8.2%	254	52.4%	1,778	21.2%	720
2011	8.6%	266	50.1%	1,666	19.6%	653
2012	8.8%	272	46.4%	1,518	17.6%	575
2013	9.1%	293	42.2%	1,400	15.7%	522
Total	8.2%	2,076	52.5%	14,744	23.6%	6,621

Panel B: Activism sample

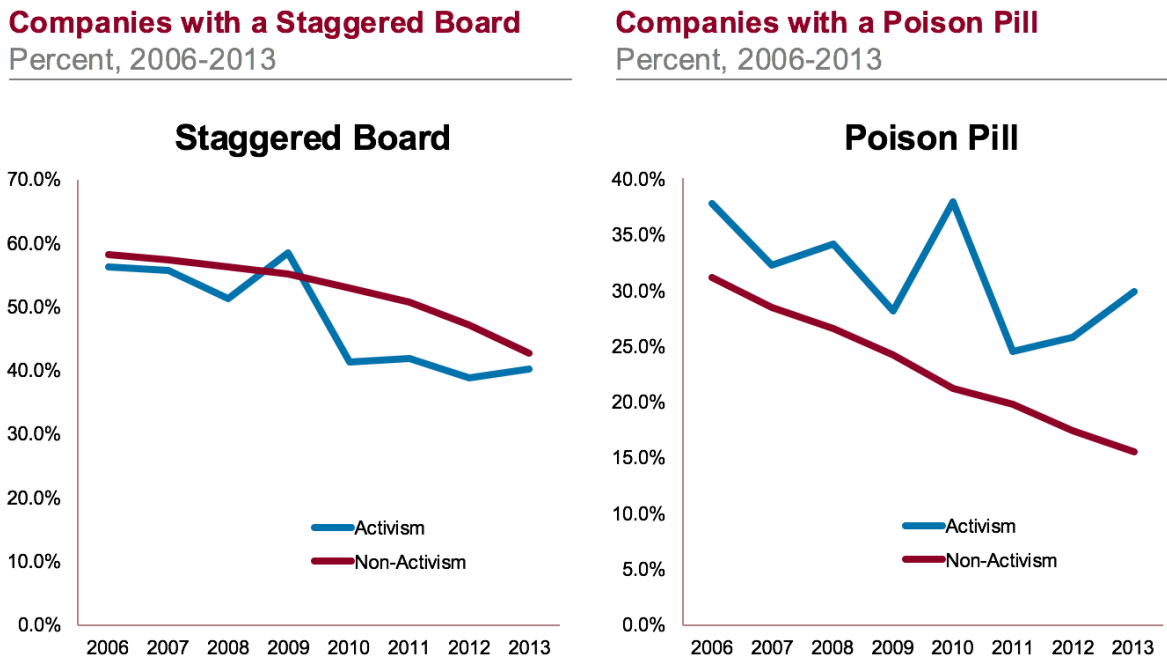
Year	<u>Dual-class</u>		<u>Staggered board</u>		<u>Poison pill</u>	
	Percent	Count	Percent	Count	Percent	Count
2006	6.2%	13	56.3%	121	44.2%	95
2007	5.5%	9	58.0%	98	36.1%	61
2008	7.4%	7	53.6%	52	39.2%	38
2009	7.6%	8	56.9%	62	24.8%	27
2010	1.8%	2	43.8%	49	36.6%	41
2011	8.0%	12	38.8%	57	21.1%	31
2012	4.3%	6	40.3%	56	20.9%	29
2013	8.5%	11	46.2%	61	19.7%	26
Total	6.2%	68	49.6%	556	31.1%	348

Panel C: Non-activism sample

Year	<u>Dual-class</u>		<u>Staggered board</u>		<u>Poison pill</u>	
	Percent	Count	Percent	Count	Percent	Count
2006	7.8%	245	58.3%	2,151	31.9%	1,178
2007	7.6%	235	57.2%	2,071	28.6%	1,036
2008	7.8%	238	56.3%	1,966	26.2%	915
2009	7.9%	236	55.2%	1,861	23.8%	801
2010	8.5%	252	52.7%	1,729	20.7%	679
2011	8.7%	254	50.6%	1,609	19.6%	622
2012	9.0%	266	46.6%	1,462	17.4%	546
2013	9.1%	282	42.0%	1,339	15.6%	496
Total	8.3%	2,008	52.6%	14,188	23.3%	6,273

dividend payout ratio (*Dividend*), the number of analysts covering the firm (*Analyst*), institutional holdings (*Institutional holdings*), and history of the firm (*Firm age*). I also control for governance characteristics such as the board size (*Board size*) and the percentage of outside directors (*Outside directors*).

FIGURE 2.2. Takeover defenses by year



2.4. Takeover defenses and activist target selection

2.4.1. Empirical analysis

To examine how each of the takeover defense measures in place is differentially associated with the probability of being targeted for activism, I estimate the following specification for all firm-years in my sample:

$$Pr(\text{Activism}) = F(\text{Dual-class, Staggered board, Poison pill, Controls, Year fixed effects, Industry fixed effects}), \quad (1)$$

where the dependent variable, *Activism*, equals one if a firm was the target of an activist campaign during the year, and the main variables, *Dual-class*, *Staggered board*, and *Poison pill*, equal one if a firm had each defense measure in place at the beginning of each year.

Panel A of Table 2.3 presents the results from estimating Equation (1) as a linear probability model, in which the sample is all firms listed on both CRSP and Compustat between 2006 and 2014. The findings are similar when I run logistic regression models.⁹ The dependent variable measures whether an activist targeted a given firm during each fiscal year. All control variables are measured at the fiscal year-end of the previous year to control for the effects of financial position, operating performance, and other governance characteristics in the previous year. The status of each takeover defense is also measured at the fiscal year-end of the previous year (i.e., at the beginning of the year). For example, if an activist filed a Schedule 13D on May 12, 2012, I measure whether each takeover defense was in place as of December 31, 2011. Because a poison pill can be adopted without shareholder approval, boards can adopt one whenever there are suspicious stock-trading activities. If a board suspects that an activist is approaching the firm, it might preemptively adopt a poison pill, which can result in reverse causality; that is, adoption of a poison pill would not cause activism, but rather activism would cause the adoption of a poison pill. Therefore, I exclude observations in which a poison pill was adopted within the three months preceding the announcement of an activism event.

Columns (1) through (3) separately examine the effect of having a dual-class capital structure (*Dual-class*), a staggered board structure (*Staggered board*), and a poison pill (*Poison pill*), respectively, on the probability of being targeted for activism (*Activism*). The negative coefficients for *Dual-class* in Column (1) and *Staggered board* in Column (2) imply a decrease of

⁹ For ease of interpretation of the regression results, I report only the results from using linear probability models.

1.3 and 0.6 percentage points, respectively, in the likelihood that a firm with those defenses will be targeted. On the other hand, the positive coefficient for *Poison pill* in Column (3) implies an increase of 1.3 percentage points in the likelihood that a firm with a poison pill will be targeted for activism.

Column (4) includes all three defense measures in one regression in order to control for the effect of each takeover defense on the others. The effects are consistent with those reported in Columns (1) through (3). Given that about 4.5% of the sample is targeted for activism, the existence of defense measures is not only statistically but also economically significantly associated with the probability of being targeted for shareholder activism. The estimates in Column (4) suggest that having a dual-class capital structure or a staggered board is associated with a 30% decrease or a 13% decrease in the likelihood of being targeted for activism, whereas having a poison pill is associated with a 30% increase in the likelihood of being targeted for activism. These results suggest that the three defense measures have differential effectiveness on shareholder activism.

I also test whether the effectiveness estimates of the defense mechanisms are statistically distinguishable from each other. The estimate for *Poison pill* is statistically different from that for *Dual-class* as well as from *Staggered board* (F-stat of 16.43 and 15.39, respectively). However, while a difference in the coefficients is visible (0.57) between *Dual-class* and *Staggered board*, they are not statistically distinguishable from each other (F-stat = 0.86, p-value = 0.35).

Beyond the potential ineffectiveness of the poison pill as a defense device against activists, plausible explanations for the attraction effect of poison pills include its signaling of managerial entrenchment and its usefulness as a public relations tool against management during the activism

TABLE 2.3. Activist target selection

Panel A: Baseline regressions

This panel presents linear probabilities model results where the dependent variable is an indicator for being targeted for activism. The sample includes firm-years with and without activism. I calculate *Analyst*, the number of analyst forecasts for each firm-year, using data from I/B/E/S. I derive the proportion of the firm's outstanding stock held by institutions (*Institution*) using data from WhaleWisdom. Data for three-month stock market performance (*Size-adj. return*) come from CRSP. The following variables come from Compustat: *Market value*, the logged value of market capitalization; *Book-to-market*, market capitalization divided by the book value of common equity; *Leverage*, the sum of long-term debt and current liabilities divided by the sum of long-term debt, current liabilities, and the book value of common equity; *Payout*, the ratio of the sum of dividends and repurchases to earnings before interest, tax, depreciation, and amortization (EBITDA); *Return on assets*, EBITDA divided by the lagged total assets; and *Sales growth*, sales divided by lagged sales. I count the number of years the firm has been on CRSP for *Firm age*. From BoardEx and Equilar, I obtain the following variables: *Board size*, the number of directors on the board, and *Outside percent*, the percentage of outside directors. Values in parentheses are standard errors clustered by firm. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) Activism	(2) Activism	(3) Activism	(4) Activism	(5) Activism
Dual-class	-1.336** (0.539)			-1.338** (0.536)	-1.331** (0.536)
Staggered board		-0.592* (0.309)		-0.768** (0.309)	-0.760** (0.309)
Poison pill			1.274*** (0.412)	1.351*** (0.414)	1.107*** (0.425)
Pill adopted < 1 year					3.399** (1.483)
Cash	2.007* (1.069)	2.050* (1.066)	2.039* (1.066)	2.044* (1.067)	2.024* (1.063)
Analyst	0.081** (0.039)	0.083** (0.039)	0.083** (0.039)	0.079** (0.039)	0.081** (0.039)
Institutional holdings	2.516*** (0.716)	2.646*** (0.716)	2.451*** (0.722)	2.433*** (0.718)	2.442*** (0.716)
Size-adj. return	-1.947*** (0.623)	-1.959*** (0.623)	-1.974*** (0.630)	-1.998*** (0.629)	-2.013*** (0.631)
Market value	-1.766*** (0.448)	-1.854*** (0.445)	-1.726*** (0.447)	-1.713*** (0.446)	-1.806*** (0.445)
Book-to-market	2.088*** (0.432)	2.048*** (0.432)	2.046*** (0.430)	2.052*** (0.430)	1.927*** (0.417)
Leverage	1.609** (0.627)	1.550** (0.629)	1.550** (0.627)	1.539** (0.628)	1.534** (0.624)
Dividend	-0.969 (0.737)	-0.934 (0.735)	-0.851 (0.735)	-0.863 (0.737)	-0.856 (0.734)
Return on assets	-0.653 (0.921)	-0.736 (0.923)	-0.681 (0.923)	-0.630 (0.921)	-0.311 (0.835)
Sales growth	-0.216 (0.428)	-0.175 (0.428)	-0.159 (0.428)	-0.167 (0.428)	-0.119 (0.413)
Firm age	0.056*** (0.012)	0.054*** (0.012)	0.054*** (0.012)	0.050*** (0.012)	0.051*** (0.012)

TABLE 2.3. Activist target selection (Continued)

Board size	-0.047 (0.081)	-0.051 (0.080)	-0.057 (0.080)	-0.040 (0.080)	-0.027 (0.087)
Outside directors	5.411*** (1.695)	6.111*** (1.696)	5.687*** (1.693)	5.219*** (1.695)	5.255*** (1.790)
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.016	0.016	0.016	0.017	0.017
Num. obs.	22,295	22,295	22,295	22,295	22,295

F-Test of Column (4)

	F-stat	P-value
<i>Dual-class = Poison pill</i>	16.43	0.000***
<i>Staggered board = Poison pill</i>	15.39	0.000***
<i>Dual-class = Staggered board</i>	0.86	0.354

Panel B: Propensity score matching

This panel presents results from analysis using propensity score matching. Coefficients represent the estimated effect on *Activism*, an indicator for shareholder activism during the year. One control firm was selected for each treated firm, using propensity scores in Column (1), while multiple control firms within a caliper of 0.0001 could be selected for each treatment firm via radius matching in Column (2). Propensity scores are estimated using a logistic regression in which the dependent variable is an indicator for takeover defenses and the independent variables are the controls reported in Panel A. *** (**, *) indicates significance at the 1% (5%, 10%) level. Standard errors are in parentheses.

	(1) Activism	(2) Activism (radius matching: caliper = 0.0001)
Dual-class	-0.988 (0.741)	-1.005* (0.565)
Num. obs. (Treatment)	1,923	1,509
Staggered board	-0.973*** (0.403)	-1.045*** (0.337)
Num. obs. (Treatment)	10,998	10,180
Poison pill	1.194*** (0.498)	1.669*** (0.415)
Num. obs. (Treatment)	5,443	4,918

TABLE 2.3. Activist target selection (Continued)**Panel C: Defense measures and size**

This panel presents a linear regression in which the dependent variable is an indicator for being targeted for activism. The sample includes firm-years with and without activism. *Market value* is the logged value of market capitalization. Other controls include the control variables reported in Panel A. Values in parentheses are standard errors clustered by firm. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) Activism	(2) Activism	(3) Activism	(4) Activism
Dual-class	-3.847 (3.183)			-3.348 (3.118)
Staggered board		2.875** (1.379)		2.336* (1.370)
Poison pill			3.886** (1.731)	3.306* (1.730)
Market value × Dual-class	0.847 (1.062)			0.687 (1.041)
Market value × Staggered board		-1.221*** (0.455)		-1.093** (0.452)
Market value × Poison pill			-0.935 (0.576)	-0.699 (0.576)
Market value	-1.932*** (0.444)	-1.419*** (0.503)	-1.563*** (0.469)	-1.212** (0.516)
Other controls	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Adj. R ²	0.016	0.016	0.016	0.017
Num. obs.	22,295	22,295	22,295	22,295

campaign, especially given the current trend of repealing poison pills. Most companies with poison pills have been rescinding and putting them on the shelf (Coates, 2000), as we have seen in Figure 2. Unlike a dual-class structure or a staggered board, a poison pill is easily repealed, as doing so requires only board approval. Therefore, the presence of a poison pill is entirely dependent on the willingness of the board. Some boards, however, have not caught up on this trend and still retain poison pills from years ago. Activists are in the business of shaking up weak boards and correcting poor performance and/or undervaluation rooted in board and management entrenchment; a legacy poison pill gives a signal to activists that they might have found a good target.

Moreover, a poison pill can be a good public relations tool against the target firm. A poison pill is often portrayed as harmful to shareholders, and proxy advisory services such as Institutional Shareholder Services (ISS) and Glass-Lewis (GL) generally oppose the measure, especially when it lasts for more than a year without shareholder approval. Therefore, the presence of a poison pill can help activists convince other investors to side with them against entrenched (and presumably underperforming) management if it comes to a proxy fight.

Additionally, the recent adoption of a poison pill can signal to activists that the firm may recently have been or is likely to be a takeover target and that there is an opportunity to push it into a takeover deal. As stated above, many companies still have a poison pill “on the shelf,” which means that their boards can adopt it in the event of a threat. Therefore, if a board has recently adopted a poison pill, it probably experienced—or at least sensed—a takeover threat. I examine whether recently adopted poison pills are associated with the probability of activism because there is a high potential for future takeover attempts and management resistance to them. In Column (5) of Panel A of Table 2.3, I include an indicator for a poison pill adopted less than a year before the year-end. I find that the coefficient for *Pill adopted < 1 year* is positive and significant, suggesting that activists are more likely to target firms that have adopted a poison pill most recently. This, in turn, implies that activists might believe that other investors are interested in a takeover and therefore might intervene in order to take advantage of the opportunity.¹⁰

The coefficients for the control variables are consistent with the results found in prior studies. Higher cash holdings, a higher number of analysts covering the firm, and higher institutional ownership are associated with a higher likelihood of activism, while higher market value and stock market performance are associated with a lower likelihood of activism.

¹⁰ As discussed earlier, in order to control for a potential threat of activism, I do not include any poison pill that was adopted within three months prior to the activism announcement.

I use a propensity score matching procedure to ensure that my results are not driven by significant differences between the firms with and without defense measures. Overall, the results in Panel B of Table 2.3 show once again that while a poison pill is associated with a higher likelihood of being targeted for activism, a staggered board is associated with a lower likelihood. In order to achieve better covariate balance, I impose a caliper (radius) of 0.0001 in Column (2); the differences in the control variables between the treatment and control samples are insignificant. The results are consistent, and I additionally find that a dual-class structure is also associated with a lower likelihood of being targeted.

2.4.2. Cross-sectional variation: size

I next examine the circumstances under which takeover defenses matter in activists' target selection. The importance of takeover defenses can vary depending on firm characteristics. I therefore use a cross-sectional test to examine the circumstances under which a given takeover defense would matter more in the context of target selection and in which direction.

I specifically investigate whether larger firms with takeover defenses are less likely than smaller firms with takeover defenses to be targeted for activism. An activist would have to acquire a large number of shares to become a threat to management. Activists hold onto shares for 2-3 years on average (Gow et al., 2014b), as it is very costly for them to hold a large amount of shares in one firm for a longer time. Holding onto shares is especially costly in the case of target firms with staggered boards, because it generally takes a long time for activists to gain a significant number of board seats. It costs them even more to hold onto significant ownership of stocks when the target firm is large. Therefore, the larger the firm, the more powerful the defense effect of a staggered board and the less likely it is to become a target. Consistent with this hypothesis, Column

(1) and Column (4) of Panel C of Table 2.3 show that the coefficient for the interaction between *Market value* and *Staggered board* is negative and significant. The coefficient for *Market value* is negative and significant, suggesting that the size of the firm is negatively associated with the likelihood of activism.¹¹ I do not, however, find significant interaction effects between *Market value* and *Dual-class* or *Poison pill*.

2.5. Takeover defenses and activist demand and outcomes

2.5.1. Activist demand

Having established the circumstances under which activists are likely to target companies, I now examine what types of demand activists are most likely to make when target firms have defense measures in place. In general, takeover defenses block the market for corporate control; firms that otherwise would be targets for takeover due to poor management performance are protected and the management is more likely to be entrenched. Firms with strong defense measures are therefore more likely than firms with weaker defense measures to receive demands to remove them so as to improve governance of the target and also improve its performance.

If takeover defenses have been blocking the functioning of the market for corporate control, activists would not only demand removal of those defenses, but also directly demand the sale of the target. Indeed, Karpoff et al. (2015) find that staggered boards and unequal voting structures do deter takeovers, though they find mixed evidence for poison pills. It makes sense, then, for activists to demand a sale of the company, as they can then obtain their returns more quickly and reliably. Therefore, I predict that activists are more likely to demand that a target firm seek a potential acquirer if the firm has takeover defenses in place than otherwise.

¹¹ Note that the positive and significant coefficients for *Staggered board* are due to the existence of interaction terms. The mean value of *Market value* is 2.8, so the average effect of *Staggered board* is still negative and significant.

I focus on the sample of activist target firms and examine what kinds of activist demand and future outcomes are associated with defense mechanisms in place prior to an activism campaign. The FactSet SharkWatch database provides data on the types of demand activists make for the majority of activism campaigns as well as whether those demands were successfully implemented. Table 2.4 describes the types of demands for the sample firms. The most popular demand is board representation (*Board seat*), followed by looking for opportunities to sell the target (*Sale of target*) and finding strategic alternatives¹² (*Strategic alternatives*). The success rates for *Board seat*, *Strategic alternatives*, and *Sale of target* are 64%, 38%, and 23%, respectively. The rate of 23% represents a high degree of success, considering the low frequency of mergers in a given year.

TABLE 2.4. Activist demands and success rates

This table presents the types of demand activists have made for 1,354 events (source: FactSet SharkWatch). Multiple demands can be made for each activism event. *Demand / Success* reports the probability of activist demand being met by the boards successfully.

	(1) Demand (N)	(2) Demand (%)	(3) Success (N)	(4) Demand / Success
Board seat	724	53%	462	64%
Sale of target	433	32%	98	23%
Strategic alternatives	336	25%	127	38%
Payout	226	17%	97	43%
Other governance	200	15%	75	38%
Divestiture	157	12%	68	43%
Remove defense	146	11%	44	30%
Compensation	133	10%	25	19%
Block sale of target	106	8%	59	56%
Add independent director	96	7%	40	42%
Leverage	74	5%	15	20%
Remove director	70	5%	26	37%
Remove officer	67	5%	27	40%
Block acquisition	15	1%	9	60%
Total activism events	1,354			

¹² The term “strategic alternatives” is commonly used by activists to broadly demand mergers, acquisitions or divestitures.

TABLE 2.5. Defense measures and activist demands

This table presents results from reverse regressions without an intercept, in which each takeover defense measure is regressed on types of activist demand. Dependent variables are indicators for existence of dual-class shares, staggered board, and poison pill, respectively, for columns (1) through (3).

	(1) Dual-class	(2) Staggered board	(3) Poison pill
Remove defense	0.050 [*] (0.027)	0.253 ^{***} (0.046)	0.334 ^{***} (0.043)
Sale of target	-0.000 (0.016)	0.057 (0.038)	0.132 ^{***} (0.035)
Strategic alternatives	0.051 ^{***} (0.018)	0.458 ^{***} (0.048)	0.223 ^{***} (0.044)
Block sale of target	0.112 ^{**} (0.044)	0.024 (0.062)	-0.048 (0.045)
Block acquisition	-0.089 (0.086)	-0.166 (0.135)	-0.041 (0.124)
Divestiture	-0.011 (0.020)	-0.020 (0.046)	0.063 (0.042)
Board seat	-0.041 ^{***} (0.014)	-0.010 (0.030)	0.004 (0.025)
Payout	0.011 (0.021)	-0.027 (0.041)	-0.034 (0.032)
Leverage	-0.005 (0.033)	0.059 (0.067)	-0.001 (0.051)
Remove director	0.060 (0.042)	-0.044 (0.072)	-0.040 (0.059)
Add independent director	0.020 (0.030)	-0.045 (0.054)	0.071 (0.049)
Remove officer	-0.029 (0.028)	-0.057 (0.069)	0.028 (0.060)
Compensation	-0.025 (0.022)	0.059 (0.053)	0.049 (0.044)
Other governance	0.025 (0.023)	-0.047 (0.041)	-0.032 (0.035)
Adj. R ²	0.081	0.476	0.352
Num. obs.	1,166	1,163	1,354

Activists tailor their demands to the target firm's problems and consider whether existing takeover defenses are at least one of the causes of undervaluation. Therefore, I examine how the three takeover defenses, when already in place, relate to the types of demand activists make. Table 2.5 describes which of the demands is significantly associated with each defense measure. The

results from estimating the reverse regression without an intercept¹³ show that all three defense measures are significantly associated with demands for *Removal of takeover defense* and *Strategic alternatives*. Furthermore, *Poison pill* is associated with demand for *Sale of target*, which suggests that a poison pill might have been blocking the market for corporate control, leading to seek its removal. Also, *Dual class* is negatively associated with demand for *Board Seat*, which implies that dual-class structure is such a powerful mechanism that activists do not think it would be possible to get a board seat. Overall, the results suggest that having defense mechanisms in place is associated with defense-related and takeover-related demands.

2.5.2. Activism outcomes

2.5.2.1. Removal of defense measures

Having demanded removal of takeover defenses and sale of the target, do activists bring about real changes? Here I examine whether takeover defenses are more likely to be removed and whether the target is more likely to be taken over despite having defense measures following activist intervention.

Table 2.6 presents results from estimating the following equation:

$$\Pr(\text{Removal of takeover defense in year } t + 2) = F(\text{Activism, Controls}) \quad (2)$$

where the dependent variable is an indicator for takeover defense measures in place in the two years following the activism event ($t + 2$). The samples for each analysis are firms that have, respectively, a dual-class capital structure, a staggered board, and a poison pill. Coefficients for *Activism_t* in Columns (1) and (2) are positive and significant, suggesting that activism is associated with a higher likelihood of removal of staggered boards and poison pills.

¹³ I do not include an intercept so that all demands are present in the table of results.

TABLE 2.6. Probability of removing defense measures

This table examines the likelihood of rescinding each of the three takeover defenses. The sample consists of firms with dual-class shares, a staggered board, and a poison pill in year t for columns (1), (2) and (3), respectively. The dependent variables are indicators for the particular takeover defense in place as of year $t + 2$. Controls include the control variables reported in Panel A of Table 2.3. Values in parentheses are standard errors clustered by firm. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) Dual-class removal _{t+2}	(2) Staggered board removal _{t+2}	(3) Poison pill removal _{t+2}
Activism	0.042 (0.043)	0.113*** (0.024)	0.055* (0.033)
Sample	Dual-class _t	Staggered board _t	Poison pill _t
Controls	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Adj. R ²	0.026	0.062	0.047
Num. obs.	1,572	10,436	4,963

Specifically, a staggered board is 11.3 percentage points more likely to be de-staggered and a poison pill is 5.5 percentage points more likely to be repealed in the following two years after a firm is the target of activism. In other words, shareholder activism is associated with removing the takeover defenses that have been documented to entrench managers and thus is associated with improvement in shareholder rights and positive changes in corporate governance. In contrast, a dual-class structure seems rigid and is unlikely to change following activism campaigns.

2.5.2.2. Takeover probabilities

To test whether takeover probabilities increase after shareholder activism, I estimate the following model:

$$Pr(\text{Sale of target by year } t + 2) = F(\text{Activism, Dual-class, Staggered board, Poison pill, Controls}) \quad (3)$$

where the dependent variable is an indicator for sale of the target within two years from the year-end. Control variables include performance variables that can affect both the probability of being

targeted for activism and the probability of being taken over by another firm (Palepu, 1986; Ambrose and Megginson, 1992).

TABLE 2.7. Probability of sale of the target

This table examines the likelihood of being taken over for firms with each of the three takeover defenses in place. Controls include the control variables reported in Panel A of Table 2.3. Values in parentheses are standard errors clustered by firm. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1)	(2)	(3)	(4)	(5)
	Takeover _(t, t+2)	Takeover _(t, t+2)	Takeover _(t, t+2)	Takeover _(t, t+2)	Takeover _(t, t+2)
Dual-class	-0.034*** (0.008)	-0.031*** (0.008)	-0.032*** (0.008)	-0.032*** (0.008)	-0.031*** (0.008)
Staggered board	-0.010** (0.005)	-0.010** (0.005)	-0.008* (0.005)	-0.010** (0.005)	-0.008* (0.005)
Poison pill	-0.000 (0.006)	-0.001 (0.006)	-0.001 (0.006)	-0.002 (0.006)	-0.001 (0.006)
Pill adopted < 1 year	0.062*** (0.018)	0.058*** (0.018)	0.058*** (0.018)	0.058*** (0.018)	0.049*** (0.018)
Activism		0.119** (0.014)	0.131** (0.018)	0.116** (0.016)	0.131** (0.020)
Activism × Dual-class		-0.021 (0.049)			-0.025 (0.050)
Activism × Staggered board			-0.029 (0.026)		-0.032 (0.026)
Activism × Poison pill				0.005 (0.029)	-0.002 (0.030)
Activism × Pill adopted < 1 year					0.109 (0.087)
Controls	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.029	0.036	0.036	0.036	0.036
Num. obs.	22,338	22,338	22,338	22,338	22,338

F-Test of Column (5)

	F-stat	P-value
Activism + Dual-class + (Activism × Dual-class)	2.35	0.126
Activism + Staggered board + (Activism × Staggered board)	16.73	0.000***
Activism + Poison pill + (Activism × Poison pill)	17.42	0.000***

Table 2.7 presents the results from estimating the model above. The coefficients for $Activism_t$ in Columns (2) through (5) are positive and significant, suggesting that the firms targeted

by activists are 11.6 to 13.1 percentage points more likely to be taken over in the two years following activism. In order to test whether activism has incremental effects for firms with a poison pill, a staggered board or a dual-class capital structure, I interact $Activism_t$ with each takeover defense indicator. None of the interaction effects are significant, suggesting that activism has no incremental effect on the takeover probability of firms with these three defenses. However, F-tests on activism estimates for the poison pill and staggered board samples suggest that firms with these defense mechanisms are more likely to be taken over in the two years following activism despite having the defense in place. Consistent with Greenwood and Schor (2009), shareholder activism plays a role in improving the market for corporate control. These results apply even to firms with a poison pill and/or a staggered board. In contrast, I do not find evidence that activism is associated with higher likelihood of takeover when a dual-class structure is in place, suggesting the power of a dual-class structure as a defense mechanism.

2.5.2.3. *Financial policies*

Table 2.8 examines changes in financial policies and capital expenditures around activism. Prior literature has found that activism generally reduces agency costs as evidenced by increased leverage and reduced capital expenditures (Brav et al., 2010; Klein and Zur, 2009), and that defense measures are associated with a higher probability of management entrenchment. If activists are successful at bringing about positive changes to the target firms, it is possible that the effects would be larger for the firms with defense mechanisms, as these firms are more likely to have entrenched managers with potentially more room for improvement in these areas. However, it might be difficult to bring about these changes in the short-term when defense mechanisms

Table 2.8. Changes in financial policies by defense measure

Panel A: Leverage

This panel examines changes in leverage ratio at target firms. *Pre-activism*, *Activism* and *Post-activism* are indicators for the two years prior to, the year of, and the two years following activism announcement, respectively. I divide these indicators into two by the existence of each defense measure. F-tests (A) and (B) examine whether differences in coefficients between *Pre-activism* and *Post-activism* are statistically significant for each subsample with or without a takeover defense. F-test (C) examines whether there is difference in the effect of activism on the dependent variable between the activism sample with and without a defense measure. Values in parentheses are standard errors clustered by firm. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) Leverage		(2) Leverage		(3) Leverage
Dual class		Staggered board		Poison pill	
Pre-activism	0.105* (0.058)	Pre-activism	0.004 (0.015)	Pre-activism	-0.002 (0.017)
Dual class		Staggered board		Poison pill	
Activism	0.077* (0.046)	Activism	0.017 (0.015)	Activism	0.041** (0.019)
Dual class		Staggered board		Poison pill	
Post-activism	0.152** (0.064)	Post-activism	0.033* (0.017)	Post-activism	0.084*** (0.020)
Non-dual class		Non-staggered board		No poison pill	
Pre-activism	-0.005 (0.010)	Pre-activism	0.000 (0.014)	Pre-activism	0.003 (0.013)
Non-dual class		Non-staggered board		No poison pill	
Activism	0.019* (0.010)	Activism	0.029** (0.013)	Activism	0.014 (0.012)
Non-dual class		Non-staggered board		No poison pill	
Post-activism	0.037*** (0.012)	Post-activism	0.051*** (0.015)	Post-activism	0.019 (0.014)
Market value	0.027*** (0.005)	Market value	0.027*** (0.005)	Market value	0.027*** (0.005)
Industry fixed effects	Yes	Industry fixed effects	Yes	Industry fixed effects	Yes
Year fixed effects	Yes	Year fixed effects	Yes	Year fixed effects	Yes
Adj. R ²	0.199	Adj. R ²	0.198	Adj. R ²	0.199
Num. obs.	22961	Num. obs.	22961	Num. obs.	22961
	ΔCoeff. (P-value)		ΔCoeff. (P-value)		ΔCoeff. (P-value)
(A) Dual class	0.047 (0.352)	(A) Staggered board	0.029* (0.094)	(A) Poison pill	0.086*** (0.000)
Post – Pre		Post – Pre		Post – Pre	
(B) Non-dual class	0.042*** (0.001)	(B) Non-staggered board	0.051*** (0.002)	(B) No poison pill	0.022 (0.265)
Post – Pre		Post – Pre		Post – Pre	
(C) Dual class		(C) Staggered		(C) Poison	
vs. Non-dual class	0.005 (0.918)	vs. Non-staggered	-0.022 (0.367)	vs. No poison pill	0.064** (0.011)
Post – Pre		Post – Pre		Post – Pre	

Table 2.8. Changes in financial policies by defense measure (Continued)

Panel B: Capital expenditure

This panel examines changes in capital expenditure at target firms. *Pre-activism*, *Activism* and *Post-activism* are indicators for the two years prior to, the year of, and the two years following activism announcement, respectively. I divide these indicators into two by the existence of each defense measure. F-tests (A) and (B) examine whether differences in coefficients between *Pre-activism* and *Post-activism* are statistically significant for each subsample with or without a takeover defense. F-test (C) examines whether there is difference in the effect of activism on the dependent variable between the activism sample with and without a defense measure. Values in parentheses are standard errors clustered by firm. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) Capex		(2) Capex		(3) Capex
Dual class		Staggered board		Poison pill	
Pre-activism	-0.004 (0.010)	Pre-activism	0.005 (0.004)	Pre-activism	0.001 (0.005)
Dual class		Staggered board		Poison pill	
Activism	-0.007 (0.011)	Activism	-0.004 (0.004)	Activism	-0.005 (0.005)
Dual class		Staggered board		Poison pill	
Post-activism	-0.022** (0.010)	Post-activism	-0.010** (0.005)	Post-activism	-0.013** (0.005)
Non-dual class		Non-staggered board		No poison pill	
Pre-activism	0.006* (0.003)	Pre-activism	0.006 (0.004)	Pre-activism	0.008** (0.004)
Non-dual class		Non-staggered board		No poison pill	
Activism	-0.003 (0.003)	Activism	-0.003 (0.004)	Activism	-0.003 (0.003)
Non-dual class		Non-staggered board		No poison pill	
Post-activism	-0.011*** (0.003)	Post-activism	-0.013*** (0.004)	Post-activism	-0.011*** (0.004)
Market value	-0.018*** (0.002)	Market value	-0.018*** (0.002)	Market value	-0.018*** (0.002)
Industry fixed effects	Yes	Industry fixed effects	Yes	Industry fixed effects	Yes
Year fixed effects	Yes	Year fixed effects	Yes	Year fixed effects	Yes
Adj. R ²	0.425	Adj. R ²	0.425	Adj. R ²	0.425
Num. obs.	23078	Num. obs.	23078	Num. obs.	23078
	ΔCoeff. (P-value)		ΔCoeff. (P-value)		ΔCoeff. (P-value)
<u>(A) Dual class</u>	-0.018** (0.016)	<u>(A) Staggered board</u>	-0.015*** (0.010)	<u>(A) Poison pill</u>	-0.014* (0.051)
Post – Pre		Post – Pre		Post – Pre	
<u>(B) Non-dual class</u>	-0.017*** (0.000)	<u>(B) Non-staggered board</u>	-0.019*** (0.000)	<u>(B) No poison pill</u>	-0.019*** (0.000)
Post – Pre		Post – Pre		Post – Pre	
<u>(C) Dual class</u>		<u>(C) Staggered</u>		<u>(C) Poison</u>	
<u>vs. Non-dual class</u>	-0.001 (0.906)	<u>vs. Non-staggered</u>	0.004 (0.644)	<u>vs. No poison pill</u>	0.005 (0.587)
Post – Pre		Post – Pre		Post – Pre	

protect management and boards at the same time. Therefore, I examine the effect of activism on the financial policies of targeted firms with and without defense measures.

In Table 2.8, *Pre-activism*, *Activism* and *Post-activism* are indicators for the two years prior to, the year of, and the two years following the activism announcement, respectively. I divide these indicators into two by the existence of each defense measure.¹⁴ Dependent variables are *Leverage* and *Capital expenditure*, respectively, for Panels A and B. The coefficients for these indicators show the level of the dependent variable in each period compared to the control sample (i.e. non-activism years). The F-test between *Pre-activism* and *Post-activism* shows the significance of the difference between periods before and after activist intervention. Lastly, the F-test between the activism sample with a takeover defense and the one without shows the difference in the effect of activism on the dependent variable between the activism sample with and without the defense measure.

As reported in Panel A of Table 2.8, leverage increases by 2.9% for the sample with a staggered board and by 5.1% for firms without a staggered board. Leverage also increases by 8.6% for firms with a poison pill, but not for firms without a poison pill. The increases in leverage are not significantly different between the subsamples (Poison pill vs. No poison pill, Staggered board vs. No staggered board, Dual class vs. No dual-class) except for the poison pill sample; the increase in the leverage ratio following activism is significantly larger for the sample with a poison pill in place than for the sample without.

I find similar effects with capital expenditure, except for the opposite sign. Panel B of Table 2.8 reports that capital expenditure significantly decreases by 1.4% - 1.9% for each category of the

¹⁴ For instance, *Staggered board Pre-activism* is an indicator for firms with a staggered board during the two years prior to the activism announcement.

activism sample. However, the reduction in capital expenditure is not significantly different between the subsamples with and without each defense measure.

2.6. Board response to shareholder activism

2.6.1. Poison pill adoption

In this last section, I study whether target firms without a poison pill adopt one in response to an activist approach. Many studies have focused on poison pills (with their more formal name “shareholder rights plans”) since Marty Lipton of Wachtell, Lipton, Rosen & Katz invented the measure in 1982 in response to the wave of takeovers by corporate raiders. A poison pill makes it costly for a potential acquirer to own more than the threshold level that triggers the pill, which would typically dilute that acquirer’s ownership by half. A flip-in poison pill, in particular, is so powerful that no company with one in place has ever been acquired (Catan and Kahan, 2015). This powerful defense tool is now being adopted by boards to thwart activists. For example, when Daniel Loeb of Third Point approached Sotheby’s in 2013, asking for changes in strategy and leadership, Sotheby’s responded by adopting a poison pill, limiting activist ownership to no more than 10 percent.¹⁵ Here I test whether such cases happen frequently.

For a sample of firms without a poison pill in place, I test whether having an activism event during the year is associated with adopting a poison pill. Column (1) of Table 2.9 shows the positive and significant coefficient for *Activism*; controlling for other factors, firms that are targeted by activists are 6.2 percentage points more likely to adopt a poison pill than firms that are not.

¹⁵ Despite this effort, Loeb eventually gained three seats on Sotheby’s board.

Although poison pills may not be a good defense mechanism against activism, as discussed, there are several reasons why boards still might want to adopt one in response to activism. First, even though activists do not typically intend to take over the company, a board may want to rule out the possibility, especially when activists are capable of such actions. It is also helpful to limit activists' influence through stock ownership in preparation for a potential proxy fight. Second, poison pills prevent multiple activists from forming a group (a method called "wolf-packing"¹⁶). Finally, poison pills that include derivative-based positions in the definition of the term "beneficial ownership" can prevent activists from using derivatives to accumulate ownership.¹⁷

Despite the poison pill's success against takeovers, however, it is not clear whether this method can successfully defend management against activists. As discussed earlier, most activists are not seeking control, unlike corporate raiders. Rather, they seek to change the management or the strategy of the target, often by obtaining seats on the board. The threat of diluting ownership does not necessarily prevent activists from achieving these goals. If activists can convince other shareholders to vote for their director nominees or to vote against management in shareholder elections, then a poison pill would not matter. Also, as powerful as the poison pill is in deterring hostile takeovers, shareholders do not universally welcome it. Sikes et al. (2014) show a significant negative market reaction to poison pill adoptions related to net operating losses (NOLs). They find that investors appreciate a poison pill only when it is truly adopted to protect against NOLs and not to entrench management. The same logic seems applicable to activism, especially because activism brings more investor scrutiny and shareholder

¹⁶ This is when a number of hedge funds with relatively small stakes in the target corporation communicate informally and share strategies and goals for an activism campaign (Latham and Watkins, 2014).

¹⁷ Activists do not have to disclose their derivative positions until their physical stock ownership crosses five percent, whereupon they must file a Schedule 13D (Latham and Watkins, 2014).

attention to the board and management behavior; the board would adopt a poison pill only if it believed it necessary to protect legitimate shareholder value.

Therefore, I predict that a board is more likely to adopt a poison pill when it believes that the benefits outweigh the costs; for example, when activists make demands related to potential (hostile) takeovers and when activists are thought to be a real threat to the company due to their large ownership.

In the following regression model, I focus only on the activism sample and investigate the circumstances under which boards adopt poison pills to thwart activists.

$$Pr(\textit{Poison pill adoption}) = F(\textit{Activist ownership, Activist demands, Controls}) \quad (4)$$

It does not make sense for a board to adopt a poison pill whenever activists approach the company. Doing so could worsen the situation if shareholders are opposed to such adoption. Rather, it will adopt the poison pill if it sees the activists as a real threat and believes that a poison pill would defend it from the threat. Column (2) of Table 2.9 shows that higher activist ownership is associated with a higher likelihood of poison pill adoption; boards see a greater threat of takeover and thus are more likely to consider the poison pill as a remedy. Activist demands to seek an acquirer or to remove defense measures are also positively associated with poison pill adoption. These demands are all directly associated with a takeover attempt and adopting a poison pill signals the board's resistance. A merger-related demand by an activist is associated with a 14 percentage-point increase in the likelihood of adopting a poison pill. Also, activist demand for executive turnover is associated with a 14.1 percentage-point increase in the probability of adopting a poison pill. On the other hand, when activists want to block an acquisition, I find a negative association with the probability of adopting a poison pill.

TABLE 2.9. Probability of poison pill adoption

This table presents results from regression analyses in which the dependent variable is an indicator for adoption of a poison pill. Column (1) looks at all firm-years; Column (2) looks at the activism sample. Controls include the control variables reported in Panel A of Table 2.3. Values in parentheses are standard errors clustered by firm in Column (1). *** (** , *) indicates significance at the 1% (5%, 10%) level.

	(1) Adoption of poison pill	(2) Adoption of poison pill (activism sample)
Activism	0.062 ^{***} (0.009)	
Dual-class	-0.004 [*] (0.002)	-0.070 ^{**} (0.035)
Staggered board	0.000 (0.001)	0.004 (0.022)
Activist ownership		0.006 ^{***} (0.002)
Merger-related demand		0.140 ^{***} (0.028)
Block-merger-related demand		0.046 (0.035)
Block-acquisition-related demand		-0.111 [*] (0.059)
Demand for divestiture		-0.014 (0.033)
Demand for board seat		0.046 ^{**} (0.023)
Demand to remove director		0.080 (0.063)
Demand to remove officer		0.141 ^{**} (0.071)
Demand to remove defense		0.221 ^{***} (0.060)
Controls	Yes	Yes
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Adj. R ²	0.020	0.232
Num. obs.	20,035	611

2.6.2. Effectiveness of poison pill adoption

I also examine how poison pill adoption is associated with eventual outcomes for activism targets. If adoption thwarted activists, there would be less likelihood of takeover, CEO turnover, or board seats granted to activists. However, if it were not so effective, for the reasons mentioned

in the previous section, its relation with such outcomes would be insignificant. I also investigate shareholder perceptions of poison pill adoptions by examining shareholder support in director elections. Poison pill adoption does not have to be approved by shareholders, but if they disagree with the board, their dissatisfaction could be reflected in director elections.

My test examines whether poison pill adoption around activism is associated with (1) whether a firm is less likely to be taken over, (2) whether a board seat is less likely to be granted or won, (3) whether CEO turnover is less likely, and (4) whether shareholder support during director elections is affected. The main variables of interest are *Pill adopted*, an indicator for a firm that adopted a poison pill after an activism announcement, and *Pill in force*, an indicator for a firm that already had a poison pill in place before an activism announcement. I estimate the following equation and the results are presented in Table 2.10.

$$\textit{Activism outcomes} = F(\textit{Pill adopted}, \textit{Takeover defenses}, \textit{Controls}) \quad (5)$$

Columns (3) and (5) of Table 2.10 suggest that poison pill adoption (*Pill adopted*) is positively associated with gaining board seats and CEO turnover. However, as reported in Table 2.9, boards seem more likely to adopt a poison pill the greater the activists' ownership and the more extensive their demands. Therefore, these positive coefficients might reflect the power that activists have over the target firm, which leads to the adoption of poison pills.

Column (7) of Table 2.10 shows that poison pill adoption is not welcomed by other shareholders. *Pill adopted* is associated with a 3.8% decrease in the average support for directors up for election. In Columns (2), (4), (6), and (8) of Table 2.10, I interact poison pill status with staggered board status (*Staggered board* \times *Pill adopted* and *Staggered board* \times *Pill in force*) and find that having a staggered board can weaken the effect of poison pill adoption, while poison pill adoption is associated with lower shareholder support for directors only if a staggered board is in

place. This suggests that while a staggered board plays a powerful role in protecting management, shareholders become more sensitive to the likelihood of management entrenchment when a firm has both a staggered board and a poison pill in place when activists approach.

TABLE 2.10. Poison pill adoption and activism consequences

This table presents results from regression analyses in which the sample consists of activism targets and the dependent variables are *Sale of the target*, an indicator for takeover within two years of activism, *Board seat granted*, an indicator for any board seat granted to activists, *CEO turnover*, an indicator for CEO turnover within two years of activism, and *Average votes (%)*, an average percentage of shareholder votes for directors in director elections. Controls include the control variables reported in Panel A of Table 2.3. *** (*, *) indicates significance at the 1% (5%, 10%) level.

	(1) Sale of the target	(2) Sale of the target	(3) Board seat granted	(4) Board seat granted	(5) CEO turnover (t, t+2)	(6) CEO turnover (t, t+2)	(7) Average votes (%)	(8) Average votes (%)
Dual-class	-0.116*** (0.044)	-0.117*** (0.044)	-0.083* (0.047)	-0.083* (0.046)	-0.083 (0.057)	-0.097* (0.057)	0.025 (0.021)	0.026 (0.021)
Staggered board	-0.045* (0.024)	-0.075** (0.029)	-0.028 (0.025)	0.000 (0.031)	-0.003 (0.040)	-0.020 (0.053)	-0.028*** (0.010)	-0.030** (0.012)
Pill adopted	-0.012 (0.044)	-0.033 (0.061)	0.204*** (0.054)	0.323*** (0.071)	0.223** (0.097)	0.304** (0.117)	-0.038** (0.018)	-0.003 (0.020)
Pill in force	-0.030 (0.027)	-0.054 (0.036)	0.104*** (0.030)	0.090** (0.039)	0.002 (0.052)	-0.072 (0.070)	-0.035*** (0.012)	-0.050*** (0.015)
Pill in force < 1 year	0.095* (0.054)		-0.142*** (0.055)		-0.135 (0.082)		-0.010 (0.024)	
Staggered board × Pill adopted		0.048 (0.088)		-0.274** (0.107)		-0.240 (0.200)		-0.067* (0.036)
Staggered board × Pill in force		0.084* (0.051)		-0.026 (0.054)		0.077 (0.100)		0.024 (0.022)
Proxy fight							-0.042** (0.019)	-0.042** (0.019)
Activist ownership							-0.022 (0.107)	-0.044 (0.104)
Proxy fight × Activist ownership							0.132 (0.197)	0.116 (0.195)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.078	0.077	0.070	0.070	0.297	0.295	0.091	0.095
Num. obs.	1,307	1,307	1,362	1,362	390	390	840	840

Overall, I do not find evidence that a poison pill adopted in response to activism is an effective defense mechanism. This is not surprising given my prior finding that a poison pill does

not deter activists from targeting the firm. Together these findings imply that a poison pill does not serve a defensive purpose.

2.7. Conclusion

I have examined the interplay between takeover defense measures, which have existed for more than thirty years and have been at the core of the corporate governance environment, and shareholder activism, a new stimulus to the corporate governance environment. While one of the main goals of shareholder activism is to improve target firms' corporate governance, takeover defense measures are important factors when choosing a target as well as important outcome measures to investigate.

I first examine how different defense measures are associated with activist target selection and find that a staggered board and a dual-class structure deter activists from targeting the company. I argue that the deterrent effect of a staggered board comes from the fact that it not only makes it more difficult for activists to control the board, but prevents them from targeting poorly performing directors for replacement during a proxy fight. On the other hand, I find that a poison pill that is already in force does not deter activists, but rather attracts them. I argue that this is because the poison pill signals poor board engagement and entrenched management, especially in this era of repealing poison pills. It can also be used as a public relations tool against management during an activism campaign. Furthermore, if a poison pill has been recently adopted, it signals a potentially better takeover opportunity.

I next examine the types of demand activists make and the resulting outcomes in relation to defense measures. When defense measures are already in place, activists are more likely to demand their removal and push for a takeover in the case of a poison pill. This suggests that

activists act as an antidote to poison pills and other defense measures and make efforts to strengthen the market for corporate control. Do activists achieve what they wanted to achieve? The outcome results suggest that targets with a staggered board and a poison pill are more likely to remove those measures following activism and are more likely to be taken over in the two years following activism than non-targeted firms with the same defenses. It is unclear whether the removal of takeover defenses and advocating a takeover are necessarily value-maximizing for companies or shareholders, but activism reduces managerial control and creates new options for investors and management. I also report an increase in leverage ratio and a decrease in capital expenditure following activism, but do not find significant difference between targets with and without defense measures in place.

In the last section, I find that the percentage of activist ownership and activist demands for merger- or takeover-defense-related demands are associated with a higher likelihood of poison pill adoption following activist engagement. However, it is not clear whether a poison pill provides a successful defense for such firms.

Takeover defenses are still important and relevant factors in the era of shareholder activism with differential effectiveness as a defense. Overall, I contribute to the literature on the effects of shareholder activism on corporate governance and firm performance by providing evidence that activists seek to improve corporate governance and revive the market for corporate control.

CHAPTER 3

CONSEQUENCES TO DIRECTORS OF SHAREHOLDER ACTIVISM

3.1. Introduction

We examine career consequences for directors when firms are subject to activist shareholder interventions. Activism by hedge fund and other investors to improve governance and performance of companies has become a significant phenomenon in recent years. Many recent papers (e.g., Brav et al., 2008; Bebchuk et al., 2013) examine the performance consequences of such activism with a focus on identifying whether and how hedge fund activism improves firm performance. Our focus is on the consequences for the board of directors, a group that occupies a central place in corporate governance and in interactions with shareholders involved in activism.

We use a sample of 1,490 activism events comprising all publicly disclosed shareholder activism conducted by hedge funds or other major shareholders between 2004 and 2012 to examine a number of different consequences for directors.¹⁸ First, we examine director turnover at firms subject to activism, including the effect of settlement with activists and the impact of activism on the performance-sensitivity of director turnover. Next, we examine whether activism is associated with reduced shareholder support in director elections and the relation between activism, shareholder support in director elections, and subsequent departure of directors. Finally, we examine changes in the number of board positions held by directors at other public firms as a proxy for reputational effects of shareholder activism.

Our paper contributes to the literature in a number of ways. First, we provide evidence that an important class of shareholder activism is associated with career costs for directors, even when

¹⁸ “Major shareholders” being defined as those that own more than five percent of shares and file a Form 13D with the Securities and Exchange Commission.

such activism does not result in a proxy contest or even relate to demand for board representation. While proxy contests rarely succeed in getting a majority of shareholder support (Bebchuk, 2007), Fos and Tsoutsouras (2014) show that proxy contests are associated with director turnover. This result is to be expected since proxy contests explicitly target incumbent directors with activists proposing an alternate slate of candidates. Consistent with Fos and Tsoutsouras (2014), we find that directors targeted by activists in proxy fights are significantly more likely to leave the board after the activism event: 21.4 percent of directors are no longer on the board of targeted firms at the end of the year after the activism is initiated compared to 12.5 percent for non-targeted firms.

However, proxy contests represent just 25% of the events in the total set of activist contests that we study, and those that proceed to contested elections are just 8%. Among the larger set of activism events that do not lead to a proxy fight, we find that even when activists target firms without any board-related demands, director turnover is 15.7% by the end of the second year after the activism is initiated. And when activists seek board representation without it leading to a proxy contest, turnover is 20.7%, essentially similar to the 21.4% when proxy contests do occur. Thus, our results complement those of Fos and Tsoutsouras (2014) by showing that shareholder activism is associated with higher levels of director turnover even when such activism does not involve proxy contests, let alone proxy contests that get majority shareholder support. These higher departure rates hold for both inside and independent directors. All these results hold after controlling for firm performance and other factors driving director turnover and activism.

Second, we provide evidence on the complex nature of negotiations between shareholders (including activists) and firms. Gantchev (2013) models an activism campaign as a sequential multi-period game involving escalating costs to the activist and provides empirical estimates of the costs of each stage. By providing evidence of increased levels of director turnover in categories

of activism that fall short of proxy contests, or even observable demands for board representation, our paper provides evidence consistent with the existence of the kind of complex process modeled by Gantchev (2013). For example, we show that director turnover is actually higher when firms settle with activists than when activists cease campaigns, but indistinguishable from turnover from proxy contest that actually proceed to shareholder votes.

Third, we provide evidence on the interplay between activism and other dimensions of director accountability. We show that activism is associated with higher levels of performance sensitivity of director turnover suggesting higher director accountability for poor firm performance. Greater turnover sensitivity to poor firm performance occurs even when such activism does not involve a proxy contest.

Fourth, we provide new evidence on director elections - we find that shareholders penalize directors with lower support in director elections when the firm is targeted by activists but that the effect is relatively limited. We find that directors receive 8.6 percent negative vote in the year of activism and 8.1 percent in the year after activism compared with less than 6 percent for non-targeted firms. One plausible explanation for this seemingly small effect is that many activism events are settled, perhaps when anticipated shareholder support is even lower than in cases that go to election.

We also find that negative votes in director elections (i.e., votes withheld from a director or votes for a rival candidate) are associated with director turnover. This is in contrast to Cai et al. (2009) who, using a sample of director elections from 2003 and 2004, do not find an association between a measure of negative votes and director turnover. This suggest that, in the context of activism, directors heed the message in the negative vote and resign their position, though it is unclear what compels them to do so given that they still receive majority support in most cases.

Finally, our paper also adds to the body of research that examines labor market consequences of director performance. Empirical research has provided evidence consistent with the Fama and Jensen (1983) conjecture that the market for directorships rewards or penalizes director performance (e.g., Srinivasan, 2005; Fich and Shivdasani, 2007). Prior research has considered directorships as an indication of director prestige (Fich and Shivdasani, 2007; Yermack, 2004), suggesting that if being targeted by activists were viewed as an indication of poor director performance, directors would lose seats on other boards. We find no evidence of an impact of activism on director reputation as reflected in directorships on other boards. Even directly targeted directors experience no loss in other directorships and this apparent non-effect holds for both inside and independent directors. In this regard, our results stand in contrast to those in Fos and Tsoutsoura (2014), who find evidence of other directorships being affected by proxy fights; this difference is likely due to difficult-to-reconcile differences in measurement of outside directorships and sample period.

While our results are robust to a variety of control variables and to using a propensity score matched sample, there are some caveats we should point out. First, it is difficult to draw unequivocally causal inferences from our results because activists do not select target firms at random. It is possible that activists target those firms possessing unobserved characteristics associated with director turnover. To partially address this concern, we conduct within-firm analyses comparing directors that are individually targeted by activists with directors who are not. We believe causal inference is more appropriate with these tests (see Table 3.8), which provide results that are consistent with our main analyses. Second, even if the causal explanation is valid, it is difficult to discern from public data the precise mechanism through which activism causes director turnover. A director who leaves the board in response to activist demands for his or her

departure is difficult to distinguish empirically from one who leaves the board because the activism imposes additional personal costs on directors. Third, our paper does not speak to the optimality of activist-driven director turnover. While prior research has found evidence consistent with increased performance-sensitivity increasing firm value (Weisbach, 1988) and we find evidence of shareholder activism being associated with greater performance sensitivity of director turnover, it is difficult to conclude from our evidence whether turnover following activism is optimal. However, whether departure is voluntary, optimal, or otherwise, our evidence does suggest that activism is associated with career consequences for directors.

The rest of the essay proceeds as follows. Section 3.2 describes features of shareholder activism campaigns and the prior literature. Section 3.3 describes our data and descriptive statistics. Section 3.4 discusses director turnover in targeted companies. Section 3.5 examines voting results. Section 3.6 examines reputational impact on other boards. Section 3.7 examines consequences to directors targeted individually by activists. Section 3.8 provides additional analyses and Section 3.9 concludes.

3.2. Prior research and institutional setting

3.2.1. Director turnover

Prior papers provide evidence that directors lose their positions when firms experience financial crises or financial misconduct. For instance, greater director turnover is observed in firms subject to securities litigation (Romano, 1991; Brochet and Srinivasan, 2013), firms in financial distress (Gilson, 1990), companies that report accounting restatements (Srinivasan, 2005), and firms that backdated options (Ertimur et al. 2012).¹⁹ Overall, the evidence points to higher board

¹⁹ In contrast with these papers, other papers find that director turnover is unchanged after fraud (Agarwal, Jaffe, and Karpoff, 1999) and after litigation (Fich and Shivdasani, 2007).

turnover after poor performance, consistent with directors being held accountable for monitoring failures. While prior papers examine board turnover, they do not explore the mechanism that brings this about. We identify shareholder activism as one such mechanism and seek to understand the effect of different kinds of direct shareholder action on director turnover.

While we focus on director turnover at firms targeted by activist shareholders, we also examine directors' reputational consequences by looking at the effect of shareholder activism on directorships at other firms. Our paper is therefore related to the literature on director reputation, which shows that directors incur labor market penalties when they are perceived as weak monitors (Srinivasan, 2005; Fich and Shivdasani, 2007).

3.2.2. Effect of shareholder votes and institutional shareholder activism

Prior research has found that shareholders use voting in director elections as a way to communicate dissatisfaction with performance. Cai, Garner, and Walking (2009) find that directors receive fewer votes after a securities lawsuit and when the director serves on the board of another firm that faces a shareholder lawsuit. Ertimur, Ferri, and Maber (2012) find that compensation committee members of option backdating firms receive fewer votes than other directors in these firms.²⁰

Grundfest (1993) suggests that directors value their reputation as monitors and therefore respond to negative shareholder votes even when such votes are not binding. Consistent with this, prior literature provides evidence consistent with shareholder voting having some efficacy in bringing about changes in corporate policy. Del Guercio, Seery, and Woidtke (2008) provide evidence that firms respond to "vote no" campaigns by activist institutional investors by improving

²⁰ Yermack (2010) contains a comprehensive review of the larger shareholder voting literature.

operating performance, increasing CEO turnover-performance sensitivity, and making governance changes. Ertimur et al. (2010) find that CEOs who receive excess pay and are targeted by “vote no” campaigns subsequently receive lower compensation.

While prior research suggests directors heed the message conveyed by these campaigns, it is not clear that directors are more likely to leave the board in the face of weak shareholder support. Under a plurality-voting system, a director is elected even if minority of investors vote in his or her favor since shareholders can only withhold votes and cannot vote against a director. Consistent with such voting being ineffective, Cai et al. (2009) find no relationship between the percent of withheld votes and subsequent director turnover. In contrast, Fischer et al. (2009) find that board-level shareholder approval is negatively associated with board-level turnover, albeit using a much smaller sample. While under a majority-voting regime a director is not elected unless a majority of votes are cast in their favor, Ertimur et al. (2013) find that votes withheld are not related to director turnover even under that regime. Even when directors fail to win a majority vote, which is itself a rare occurrence, turnover is infrequent and is not related to the voting outcome, regardless of the election standard. We add to this literature by examining how shareholder activism and shareholder voting coexist in affecting director turnover and, by providing evidence that shareholder voting has a significant effect on board turnover. Our results can help explain why directors are responsive to shareholder concerns expressed by votes in director elections.

3.2.3. Director elections and proxy fights

The apparent ineffectiveness of uncontested elections has led to the concern that the only way for shareholders to remove underperforming directors is to initiate a proxy solicitation campaign in a contested election. Contested elections are contests between the incumbent set of

directors put forward by the company and a dissident slate nominated by an outside investor. Dodd and Warner (1983) provide early evidence consistent with proxy fights being value-creating for shareholders. They find a statistically significant positive share price effect associated with a proxy contest regardless of whether the contest was successful or not. However, a number of studies find limits to the effectiveness of proxy contests. While Mulherin and Poulsen (1998) find evidence “that proxy contests create value” using a sample of 270 proxy contests covering 1979–1994, they also find that “the bulk of the wealth gains stemming from firms that are acquired.” Pound (1988) identifies cost of waging a proxy contest and management incumbency as impediments to successful proxy fights. More recently, Bebchuk (2007) claims that shareholders’ power to replace the board is largely a “myth,” due to free-rider issues associated with investing in costly proxy contests. We contribute to this debate by providing evidence consistent with directors being held accountable for firm performance in the presence of shareholder activism, even when such activism does not involve a proxy contest.

3.2.4. Hedge fund and other institutional activism

Over the last decade, the phenomenon of shareholder activism has been driven in large part by activist hedge funds. Brav, Jiang, and Kim (2010) identify structural benefits enjoyed by hedge funds—such as fewer regulations and better incentives—that have allowed them to be more active than mutual funds or pension funds in pursuing governance changes in companies.

While hedge fund activism is a recent phenomenon, a body of prior research has examined the effect of shareholder activism by pension and labor union funds. Early research focused on the activities of pension plans, such as CalPERS (Smith, 1996) and TIAA-CREF (Carleton, Nelson, and Weisbach, 1998). While pension plans have typically focused on governance changes

generally proposed as 14a-8 shareholder proposals, hedge funds often seek to make more wide-ranging changes to the firms they target (see Appendix C for examples). One conclusion from research on pension plan activism is that activist shareholders and firms often reach agreement without a formal 14a-8 proposal being voted upon – for instance Carleton, Nelson, and Weisbach (1998) find that TIAA-CREF is able to reach agreements with targeted companies 95 percent of the time and in over 70 percent of cases without a shareholder vote on the proposal. In the UK, Becht et al. (2008) study a mutual fund (Hermes) and find that this fund acts “predominantly through private interventions.” This is consistent with our finding that activism is associated with board turnover, even when there is no formal proxy fight.

While our paper is similar in some respects to Fos and Tsoutsoura (2014), it also differs in a number of respects. First and most importantly, while Fos and Tsoutsoura (2014) focus exclusively on proxy contests, we examine other forms of shareholder activism and find that these are also associated with director turnover. Director turnover in the context of proxy contests should be less surprising, whereas our finding that director turnover accompanies hedge fund activism provides a broader context for understanding how board governance is shaped by activism. In addition, we examine voting outcomes and performance sensitivity of director turnover. In these regards, our paper complements and extends the findings of Fos and Tsoutsoura (2014). Finally, Fos and Tsoutsoura (2014) find that other directorships decline for directors targeted in proxy fights relative to their non-targeted colleagues on the same boards, while we do not find evidence of this effect in our sample.²¹

Our paper also relates to Gantchev (2013), who models activism as a sequential decision process with activism potentially escalating from negotiations with management and requests for

²¹ We discuss our attempt to reconcile our results with theirs in Section 8.1 below.

board representation to, ultimately, proxy contests. A key element of the analysis in Gantchev (2013) is an estimate of \$10.71 million as the cost of a typical proxy contests, an amount equal to two-thirds of the gross returns from an activism campaign. Focusing on director turnover, our paper complements Gantchev (2013) by showing that activists appear to effect change without pursuing costly proxy contests.

Prior research suggests that hedge fund activists typically target smaller firms, value-oriented firms (low market-to-book), and firms with sound operating cash flows but low sales growth, leverage and dividend payouts (Brav et al., 2010). This evidence motivates us to introduce firm-level covariates to control for factors causing firms to be targeted by activist investors.

3.3. Data and sample description

Our analysis uses data on directors, firms, and activism events. Each of these is described in turn.

3.3.1. Directorship data

Our sample consists of all directorships held in firms in the Equilar database for fiscal years ending between January 1, 2004 and December 31, 2012. The data in Equilar comprises directors of every company that files both an annual report and an annual proxy statement (forms 10-K and DEF 14A, respectively) with the SEC. This database provides us with names and other director characteristics. Drawing on data from both Equilar and BoardEx (another widely used board of director database), we construct an identifier for each director that allows us to track directors across firms and over time.

3.3.2. Firm-level data

Most firm-level financial data come from Compustat and CRSP. Our source for data on voting is ISS Voting Analytics, which provides data about matters voted on at shareholder meetings between 2001 and 2012 for a sample that roughly corresponds to the Russell 3000 index. We get analyst coverage from I/B/E/S and institutional ownership data from WhaleWisdom, which provides comprehensive coverage of 13F and 13F/A filings.

3.3.3. Activism events

Our data on activism comes from the FactSet SharkWatch database, which contains information on shareholder activism events, primarily in the United States. From SharkWatch, we collect information on all publicly disclosed activism events that commenced in the period 2004–2012, where the event is not a corporate control contest initiated by another corporation and the targeted firm is incorporated in the United States and is not an investment trust or mutual fund. This provides us with 1,490 activism events, which are primarily conducted by hedge fund activists or other major shareholders (i.e., 13D filers). Note that this does not include activism consisting only of routine shareholder proposals submitted under Rule 14a-8.

We classify these 1,490 activism (*Targeted Firm*) events into three mutually exclusive subcategories: *Targeted Firm – Non-Board*, *Targeted Board – Non-Proxy*, and *Targeted Board – Proxy*. All activism events not related to a demand for board representation are classified as *Targeted Firm – Non-Board*. We classify as *Targeted Board – Non-Proxy* all events identified by SharkWatch as relating to “Board Representation,” “Board Control,” “Remove Director(s),” or “Withhold Vote for Director(s),” but which do not result in a formal declaration of a contested director election (proxy fight). We classify as *Targeted Board – Proxy* as activism events that

resulted in a declared proxy fight. This is measured as both (i) activism events involving filings on forms DEFC14A and PREC14A and (ii) cases where the dissident publicly disclosed that it delivered formal notice to the company that it intends to solicit proxies from stockholders. Appendix B provides definitions of all variables used in the analysis. Appendix C provides examples of activism events in each of the above categories.

Table 3.1. Descriptive statistics

Panel A: Activism events by year

This panel reports number of activism events by year. Our sample of targeted firms comes from FactSet SharkRepellent. Activism events that do not involve board related demands by the activist are classified as *Targeted Firm – Non-Board*. *Targeted Board – Non-Proxy* are board of directors related activism events identified by SharkRepellent as relating to “Board Representation,” “Board Control,” “Remove Directors(s),” or “Withhold Vote for Director(s)” but that do not lead to a declared proxy contest. *Targeted Board – Proxy* are declared proxy contests including both (i) activism events involving filings on forms DEFC14A and PREC14A and (ii) activism events where the dissident publicly disclosed that it delivered formal notice to the company that it intends to solicit proxies from stockholders. *Proxy Fight Went to Election*, a subset of *Targeted Board – Proxy*, are those declared proxy contests that went to a shareholder vote. We match data on directorships in Equilar (sourced from proxy filings) with activism events that begin in the twelve-month period after proxy filings.

Year	Activism events matched to Equilar				
	Targeted Firm	Targeted Firm – Non-Board	Targeted Board – Non-Proxy	Targeted Board – Proxy	Proxy Fight Went to Election
2004	67	32	7	28	10
2005	126	72	18	36	9
2006	229	137	31	61	17
2007	291	200	38	53	22
2008	256	147	40	69	26
2009	131	69	22	40	15
2010	158	92	30	36	12
2011	142	75	27	40	10
2012	90	52	24	14	0
Total	1,490	876	237	377	121

Panel B: Director observations by year and activism category

	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
Targeted Firm	586	1,116	1,950	2,556	2,230	1,133	1,437	1,200	813	13,021
Targeted Firm – Non-Board	286	651	1,128	1,734	1,269	619	863	628	496	7,674
Targeted Board – Non-Proxy	72	150	268	328	351	179	273	216	210	2,047
Targeted Board – Proxy	228	315	554	494	610	335	301	356	107	3,300

Table 3.1. Descriptive statistics (Continued)**Panel C: Director departure**

We classify directorship-year observations on Equilar into categories based on activism related to the firm in the subsequent year ($t + 1$). See Panel A for explanation of the classification of activism events. *Non-Targeted Firm* comprises all firms in Equilar database that were not targeted by activists.

	Year t	$t+1$	$t+2$	$t+3$	$t+4$	$t+5$
Non-Targeted Firm	0.000	0.070	0.125	0.166	0.199	0.223
Targeted Firm	0.000	0.118	0.180	0.209	0.215	0.214
Targeted Firm – Non-Board	0.000	0.107	0.157	0.185	0.190	0.186
Targeted Board – Non-Proxy	0.000	0.136	0.209	0.221	0.246	0.252
Targeted Board – Proxy	0.000	0.132	0.214	0.256	0.256	0.258

Panel D: Shareholder support in director elections

Against Votes represents the percentage of votes against the director in director elections, calculated as (votes against + votes withheld) divided by (votes for + votes against + votes withheld). *ISS Against* represents an unfavorable recommendation by Institutional Shareholder Services (ISS) for each individual director nominee. See Panel A for explanation of the classification of activism events. *Non-Targeted Firm* comprises all firms in Equilar database that were not targeted by activists.

	Against Votes $_t$	Against Votes $_{t+1}$	Against Votes $_{t+2}$	ISS Against $_{t+1}$	ISS Against $_{t+2}$
Non-Targeted Firm	0.052	0.054	0.057	0.104	0.103
Targeted Firm	0.075	0.086	0.081	0.138	0.135
Targeted Firm – Non-Board	0.073	0.076	0.081	0.110	0.143
Targeted Board – Non-Proxy	0.079	0.100	0.092	0.120	0.118
Targeted Board – Proxy	0.080	0.096	0.072	0.207	0.125

Panel E: Number of directorships in other firms

The panel indicates the number of directorships a director has with companies other than the company of interest each year. See Panel A for explanation of the classification of activism events.

	Year t	$t+1$	$t+2$	$t+3$	$t+4$	$t+5$
Non-Targeted Firm	0.610	0.592	0.583	0.571	0.560	0.546
Targeted Firm	0.688	0.679	0.653	0.630	0.608	0.579
Targeted Firm – Non-Board	0.734	0.729	0.713	0.685	0.653	0.620
Targeted Board – Non-Proxy	0.649	0.625	0.570	0.546	0.545	0.516
Targeted Board – Proxy	0.605	0.593	0.565	0.554	0.539	0.519
Year-on-year ratio (Non-Targeted)		0.970	0.985	0.979	0.981	0.975

Of the total sample of 1,490 events, 614 events are board-related (377 as *Targeted Board – Proxy* and 237 *Targeted Board – Non-Proxy*) and the remaining 876 relate to other campaigns by shareholders. Table 3.1 Panel A provides a distribution of the sample by year and by category. We observe no particular time series patterns in the nine years of data for any of the subgroups except for a slightly higher overall rate of activism in 2007 and 2008. There are no specific patterns in the activism subcategories. Nevertheless, we include year fixed effects in all our multivariate tests to account for any year specific effects. Several of our analyses use director-firm-years as the units of observation and Table 3.1 Panel B provides the number of such observations by year and category of activism.

Table 3.1 Panel C provides univariate statistics on director turnover on the board for the five years after shareholder activism. As a benchmark, in the measurement window that we use for our multivariate tests (two-year window from t to $t + 2$), we observe a director turnover rate of 12.5 percent for firms that are not targeted for any form of activism (*Non-Targeted Firm*) that remain in our sample for that period. The comparable turnover rate for companies targeted for shareholder activism (*Targeted Firm*) is significantly higher at 18.0 percent in the two-year period that includes the initiation of the activism and the year following it. For non-proxy fight, board-related activism (*Targeted Board – Non-Proxy*), 20.9 percent of directors leave in two years. Proxy fights (*Targeted Board – Proxy*) also see greater director turnover with a 21.4 percent departure rate. We explore these results further using multivariate regressions of director departure in the next section.

Table 3.1 Panel D presents univariate statistics for voting support in director elections for the year prior to activism (t) to the year after initiation of activism ($t + 2$). *Against Votes* represents the percentage of votes from director election voted “against” each director, calculated for

uncontested elections as (voted against + voted withheld) divided by (voted for + voted against + voted withheld). For contested elections, the calculation is similar, but we treat votes for one director as votes against the rival director. *ISS Against* represents an unfavorable voting recommendation for each individual director nominee by Institutional Shareholder Services (ISS), a leading proxy advisory firm. The average director in a firm not targeted for activism (*Non-Targeted Firm*) receives 5.4 percent negative votes from shareholders and an unfavorable ISS recommendation in 10.4 percent of cases. Levels of negative votes and recommendations are higher for targeted companies. The average level of negative votes for directors of targeted firms (*Targeted Firm*) is 8.6 percent in the year of activism and 8.1 percent in the year after activism suggesting a continued negative sentiment against directors. The negative votes are 10.0 percent and 9.2 percent in years $t + 1$ and $t + 2$, respectively, for non-proxy, board-related activism (*Targeted Board – Non-Proxy*) and 9.6 percent and 7.2 percent for proxy fight events (*Targeted Board – Proxy*). The lingering negative effect against directors of targeted firms is explored in our multivariate regression analysis.

In Table 3.1 Panel E, we provide univariate statistics for other directorships of our sample directors. The average director in a non-targeted firm has 0.610 directorships in other firms. This number reduces over next five years to 0.546. Other directorships of directors in targeted firms display a somewhat similar decline over time and this pattern is repeated in each category of targeted firms. While the univariate statistics do not suggest a pattern of differential impact between targeted and non-targeted firms, we explore the impact of activism on other directorships in a multivariate regression framework in section 3.6.

3.4. Director turnover in targeted companies

In this section, we discuss our analyses of the relationship of shareholder activism and director turnover.

3.4.1. Shareholder activism and director turnover

We first examine how shareholder activism affects director turnover in target companies estimating the following specification for all director-firm-years in our sample.

$$Departure_{(t, t+2)} = F(\textit{Targeted Firm} - \textit{Non-Board}, \textit{Targeted Board} - \textit{Non-Proxy}, \textit{Targeted Board} - \textit{Proxy}, \textit{firm controls}, \textit{director controls}, \textit{year fixed effects}), \quad (1)$$

where the dependent variable, $Departure_{(t, t+2)}$, takes the value 1 if a director of the firm in year t is no longer on the board in year $t + 2$. *Targeted Firm – Non-Board* takes the value 1 for all directors of a firm that is the target of a non-board related activism event in year $t + 1$. We classify activism events in which the activist seeks either the removal of existing directors or appointment of new ones into two groups—those that result in a declared proxy fight (*Targeted Board – Proxy*) and those that do not, due to settlement with the activist or the activist dropping its demands (*Targeted Board – Non-Proxy*). Declared proxy fights do not necessarily result in contested elections—the company and dissident might settle before going to a vote even after a proxy fight is initiated. The benchmark group consists of director-firm-years in the Equilar database related to firm-years where the firms were not targeted by activists.

We also include firm, director, and activism characteristics as controls. Poor firm performance has been shown to be an important cause of director turnover (Gilson, 1990; Yermack, 2004). Brav et al. (2008) identify several firm characteristics that distinguish activism targets from other firms. We include these variables in the regression model so as to control for

firm characteristics associated with activism. Firm-level controls include firm performance (*Ind. Adj. Return, ROA, Sales Growth*), log of market capitalization for firm size (*Market Value*), book-to-market ratio (*Book-to-Market*), leverage (*Leverage*), dividend payout ratio (*Dividend*), the number of analysts covering the firm (*Analyst*) and percent of shares held by institutional investors (*Institution*).

Director characteristics include director age (*Age*), director tenure (*Tenure*) as we expect age and tenure to be positively associated with director turnover. We identify directors that are on the audit (*Audit Committee*) and compensation committees (*Compensation Committee*) as these directors are more likely to play a prominent role on the board (Yermack, 2004). We include year fixed effects to control for unobserved time-related effects. All standard errors are clustered at the firm level.²²

We examine director departure over a two-year period including the activism event. This allows us to examine up to two nomination cycles for companies with unitary boards. While directors in companies with staggered boards typically serve three-year terms and are not up for nomination within two years, this does not prevent these directors from leaving boards before their tenure is up. Ertimur, Ferri, and Maber (2012) also use a two-year measurement window, arguing that the effect of a shareholder campaign dissipates over time and longer time windows increase the likelihood of unrelated events affecting director turnover.

Table 3.2 presents the results of an OLS regression of Equation 1. We tabulate an OLS regression for ease of interpretation of coefficients. (Note that all inferences are identical when we conduct a logit regression). Table 3.2 Panel A presents results for all directors—*independent, inside, and related or “gray”* directors. Column 1 of Panel A presents results for all firms, including

²² Clustering by both firm and director does not change our inferences.

firms that disappear from Equilar because they were acquired or delisted (went private, bankrupt, etc.). In this analysis, directors can lose their positions either by leaving the board or by the firm ceasing to be a public company. Column 1 results suggest that directors in firms targeted by activist shareholders are more likely to lose their board seats in the two-year period immediately following activism—the coefficient on *Targeted Firm* is positive and significant (coefficient = 16.23, p-value <0.01).

Columns 2 and 3 of Panel A include only firms that continue to exist in year $t + 2$; in this way, the analysis focuses on the likelihood of directors leaving boards of firms that continue to exist as public firms. The effect of being a director of a targeted company continues to remain positive and significant (coefficient on *Targeted Firm* = 8.88, p-value <0.01). A coefficient lower in magnitude than that reported in Column 1 is expected, as prior research (Greenwood and Schor, 2009) has shown that a consequence of activism is increased probability of takeover and this is clearly one way in which board turnover can occur. However, the results in Column 2 suggest that directors face a significantly higher likelihood of turnover even when the company continues to exist. The OLS coefficient estimate implies an increase of 8.9 percentage points in the likelihood that a director will leave the board when the firm is targeted, which is a 71% increase over the 12.5 percent rate for non-targeted firms reported in Panel C of Table 3.1. The signs of the coefficients on control variables are as expected; e.g., directors are less likely to leave in better-performing firms (both ROA and stock returns) and in larger firms. Directors on the compensation or audit committees are less likely to leave the board. Older directors are more likely to turnover.

Table 3.2. Effect of shareholder activism on director turnover

Panel A: Entire sample

The table presents results from OLS regressions where the dependent variable is $Departure_{(t, t+2)}$, i.e., an indicator for the director leaving the board of the firm by year $t + 2$ (i.e., the year after the activism event, if any). Column 1 presents OLS results for all directors where the firm is present in year $t + 2$ in the Equilar database. Columns 2 through 5 exclude observations where the firm is not in Equilar in year $t + 2$, presumably due to bankruptcy, delisting, mergers, etc. All variables are defined in Appendix B. All regressions include year fixed-effects and robust standard errors (in parentheses) clustered at the firm level. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) All directors, all firms	(2) All directors	(3) All directors	(4) Departure ($t, t+1$)	(5) Departure ($t+1, t+2$)
Targeted Firm	16.23*** (1.38)	8.88*** (0.90)			
Targeted Firm – Non-Board			6.67*** (1.10)	4.48*** (0.84)	2.19*** (0.70)
Targeted Board – Non-Proxy			9.97*** (1.75)	4.85*** (1.22)	5.11*** (1.37)
Targeted Board – Proxy			12.77*** (1.53)	3.14*** (1.01)	9.63*** (1.18)
Control Variables					
Ind. Adj. Return	-1.68*** (0.25)	-0.77*** (0.14)	-0.75*** (0.14)	-0.35*** (0.11)	-0.41*** (0.08)
ROA	-11.30*** (1.35)	-7.50*** (0.84)	-7.49*** (0.84)	-3.66*** (0.48)	-3.83*** (0.46)
Sales Growth	0.84 (0.54)	0.88*** (0.32)	0.90*** (0.32)	0.25 (0.21)	0.66*** (0.21)
Market Value	-9.31*** (0.48)	0.00 (0.28)	0.01 (0.28)	-0.20 (0.16)	0.21 (0.14)
Book-to-Market	3.08*** (0.54)	1.04*** (0.35)	1.02*** (0.35)	0.59*** (0.21)	0.43** (0.20)
Leverage	4.69*** (0.86)	0.75 (0.50)	0.78 (0.50)	0.36 (0.29)	0.43 (0.26)
Dividend	-18.87* (10.72)	0.75 (6.27)	1.11 (6.27)	3.84 (4.01)	-2.73 (3.40)
Analyst	0.14*** (0.05)	0.03 (0.03)	0.03 (0.03)	0.02 (0.02)	0.01 (0.01)
Institution	0.13 (0.25)	1.74*** (0.19)	1.73*** (0.19)	0.83*** (0.11)	0.90*** (0.10)
Age	0.21*** (0.02)	0.31*** (0.02)	0.31*** (0.02)	0.16*** (0.01)	0.15*** (0.01)
Tenure	-0.05** (0.02)	0.08*** (0.02)	0.08*** (0.02)	0.05*** (0.01)	0.03*** (0.01)
Audit Committee	-3.03*** (0.23)	-3.86*** (0.21)	-3.86*** (0.21)	-2.62*** (0.13)	-1.24*** (0.11)
Compensation Committee	-0.99*** (0.23)	-1.28*** (0.21)	-1.27*** (0.21)	-1.16*** (0.13)	-0.11 (0.11)

Table 3.2. Effect of shareholder activism on director turnover (Continued)

Independent Director	-2.50 ^{***} (0.37)	-2.39 ^{***} (0.31)	-2.40 ^{***} (0.31)	-1.03 ^{***} (0.19)	-1.37 ^{***} (0.16)
Adj. R ²	0.08	0.02	0.02	0.01	0.01
Num. obs.	297,202	245,774	245,774	245,774	245,774

F-Test for Column (3)

H₀: Targeted Firm – Non-Board = Targeted Board – Non-Proxy for All Directors

$$F\text{-stat} = 2.76, Pr(>F) = 0.10^*$$

H₀: Targeted Board – Non-Proxy = Targeted Board – Proxy for All Directors

$$F\text{-stat} = 1.66, Pr(>F) = 0.20$$

H₀: Targeted Firm – Non-Board = Targeted Board – Proxy for All Directors

$$F\text{-stat} = 12.48, Pr(>F) = 0.00^{***}$$

Panel B: Independent and inside directors

The table presents results from OLS regressions where the dependent variable is $Departure_{(t,t+2)}$, i.e., an indicator for the director leaving the board of the firm by year $t + 2$ (i.e., the year after then activism event, if any) with the sample partitioned into independent and inside directors, as classified by Equilar (no results are provided for related directors). Columns 1 and 4 present results for directors where year $t + 2$ is covered by Equilar, even when the firm is not on Equilar in year $t + 2$, presumably due to bankruptcy, delisting, mergers, etc.. The remaining columns include only observations where the firm is in the Equilar database in $t + 2$. Control variables include all variables in Panel A of Table 2 and are suppressed for parsimony. All regressions include year fixed-effects and robust standard errors (in parentheses) clustered at the firm level. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) Independent directors, all firms	(2) Independent directors	(3) Independent directors	(4) Inside directors, all firms	(5) Inside directors	(6) Inside directors
Targeted Firm	16.30 ^{***} (1.43)	8.29 ^{***} (0.93)		16.54 ^{***} (1.84)	11.81 ^{***} (1.62)	
Targeted Firm – Non-Board			6.73 ^{***} (1.16)			7.65 ^{***} (1.87)
Targeted Board – Non-Proxy			7.87 ^{***} (1.84)			16.44 ^{***} (3.64)
Targeted Board – Proxy			11.57 ^{***} (1.61)			18.67 ^{***} (2.92)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.09	0.03	0.03	0.09	0.03	0.03
Num. obs.	211,696	174,858	174,858	53,691	44,146	44,146

Table 3.2. Effect of shareholder activism on director turnover (Continued)

F-Test for Column (3) of Table 3.2 Panel B

H_0 : Targeted Firm – Non-Board = Targeted Board – Non-Proxy for All Directors

$$F\text{-stat} = 0.31, Pr(>F) = 0.58$$

H_0 : Targeted Board – Non-Proxy = Targeted Board – Proxy for for All Directors

$$F\text{-stat} = 2.65, Pr(>F) = 0.10$$

H_0 : Targeted Firm – Non-Board = Targeted Board – Proxy for All Directors

$$F\text{-stat} = 6.78, Pr(>F) = 0.01^{***}$$

F-Test for Column (6) of Table 2 Panel B

H_0 : Targeted Firm – Non-Board = Targeted Board – Non-Proxy for All Directors

$$F\text{-stat} = 4.96, Pr(>F) = 0.03^{**}$$

H_0 : Targeted Board – Non-Proxy = Targeted Board – Proxy for for All Directors

$$F\text{-stat} = 0.26, Pr(>F) = 0.61$$

H_0 : Targeted Firm – Non-Board = Targeted Board – Proxy for All Directors

$$F\text{-stat} = 11.48, Pr(>F) = 0.00^{***}$$

Column 3 presents results using a finer classification of activism events. We find not only that directors from targeted firms are more likely to leave their company, but directors are also incrementally more likely to leave if their company is targeted by activists not seeking board representation or the removal of directors: the coefficients on *Targeted Firm – Non-Board*, *Targeted Board – Non-Proxy*, and *Targeted Board – Proxy* are all positive and significant and the coefficients are progressively higher (coefficients of 6.67, 9.97 and 12.77, respectively, with p-values < 0.01 in each case). Surprisingly, the coefficients on *Targeted Board – Non-Proxy* and *Targeted Board – Proxy* are not statistically distinguishable from each other (F-stat of 1.66, p-

value = 0.20), suggesting that directors on boards targeted by activism resulting in a formal proxy fight have no greater likelihood of leaving than directors in firms with board-related activism that does not reach that level. In short, these results show that directors in firms targeted by shareholder for activism campaigns face increased likelihood of leaving the board of targeted firms, even when the activism is not explicitly directed at board representation and does not result in a proxy fight.

In untabulated analysis, we include an indicator variable *SharkWatch50*, which identifies activism by the top 50 hedge fund activists (classified by FactSet based on the number of publicly disclosed campaigns waged and size of companies targeted). This set includes noted activist hedge funds such as Pershing Square, Relational Investors, Third Point, and Icahn Enterprises. Overall, 501 of the 1,490 events include *SharkWatch50* hedge funds as part of the dissident group. We use this classification to examine if outcomes are different when the activism is directed by these prominent activists. While we might expect that activism by more prominent investors would result in higher levels of turnover due to these investors being taken more seriously, we do not find evidence supporting this in our analysis; in fact, the coefficient on *SharkWatch50* is negative and equal to -2.83 (p-value < 0.10) suggesting that turnover is less likely in these cases. We also interacted *SharkWatch50* with the activism classification variables, but found no statistically significant effects.

In columns 4 and 5, we divide $Departure_{(t, t+2)}$ into $Departure_{(t, t+1)}$ and $Departure_{(t+1, t+2)}$, separately looking at directors who leave in year $t + 1$ (Column 4) and year $t + 2$ (Column 5), respectively. We do this to identify to what extent directors leave before the first election (t to $t + 1$) when activism is announced and the extent to which directors leave after the first election ($t + 1$ to $t + 2$). Note that the coefficient on the activism variables in Column 3 will be the sum of the coefficients on the same variable in columns 4 and 5. The significant and positive coefficients on

all activism classifications suggest directors involved in activism events leave in the year of, as well as in the year after, activism.

The results in Columns 4 and 5 highlight that much director turnover occurs before the annual meeting in the year of the activism event—i.e., in the period $(t, t + 1)$ —especially when the activism does not involve a proxy fight. The positive and significant coefficient in Column 4 ($Departure_{(t, t+1)}$) for *Targeted Board – Non-Proxy* is consistent with board seats being granted to dissidents as part of settlement negotiation with the activist investors thereby preventing a proxy fight; in such cases, some incumbent directors would step down as part of the settlement. Some proxy fights likely represent cases where the firm and the activist did not reach a settlement and the activist escalated to a formal proxy fight. While turnover is greater in the period $(t + 1, t + 2)$ for proxy fights, there is some increased turnover in the period $(t, t + 1)$ as well, consistent with directors yielding board seats prior to a vote when confronted with a potential proxy fight. Separating director turnover into two periods shows that a significant amount of turnover occurs concurrently with activism likely as a conflict-avoidance mechanism.

In Panel B of Table 3.2 we separate the sample into independent directors and inside directors to examine possibly differential effects of activism on the two groups. Columns 1 through 3 present coefficient estimates for the sample of independent directors and Columns 4 through 6 for inside directors (“gray” or affiliated directors are dropped from the sample). In general, the results are very similar to those reported in Panel A of Table 3.2, so we focus on the differences. The estimated impact of being targeted is greater for inside directors (coefficient on *Targeted Firm* = 11.81, p-value < 0.01) than for independent directors (coefficient = 8.29, p-value < 0.01); the difference is statistically significant (p-value < 0.05). The coefficients between insider directors

and independent directors are different in a statistically significant way when we examine by activism types as well except for cases of *Targeted Firm – Non-Board*.

3.4.2. *Shareholder activism and performance sensitivity of director turnover*

We next examine if activism increases the sensitivity of director turnover to poor firm performance. Prior literature (e.g., Weisbach, 1988) suggests that increased turnover-performance sensitivity can be viewed as a positive governance effect. In Panel A of Table 3.3, we examine the effect of activism on the performance sensitivity of director turnover. As the measure of performance, we use industry-adjusted returns over the twelve-month period ending four months after the fiscal year-end (i.e., the approximate time of the annual shareholder meeting). By extending the returns into the fiscal year after the activism event, if any, we pick up performance that is observed by shareholders and thus plausibly affects voting at the annual meeting.

We find that performance sensitivity is significantly increased by shareholder activism: the coefficients on *Ind. Adj. Return* interacted with *Targeted Firm* is negative and significant (p-value < 0.01). In the presence of activism, a one percentage-point decrease in industry-adjusted is associated with an incremental increase in the probability of turnover of all directors of 2.79% (p-value < 0.01) and 2.44% and 3.19% for independent and inside directors, respectively). We also examine performance sensitivity effects for for each classification of activism events (*Targeted Firm – Non-Board*, *Targeted Board – Non-Proxy*, and *Targeted Board – Proxy*) and, while the coefficients are all negative, they are most often not statistically significantly different from zero or from each other.²³ Overall, the results in Panel A of Table 3.3 suggest that shareholder activism

²³ Note that the effects are generally not significant when the sample includes firms that are delisted. This presumably reflects the fact that directors' loss of such board seats is a function of acquisitions, etc., rather than of performance.

is a mechanism for enhancing board accountability for poor performance even when it does not involve a proxy fight.

3.4.3. *Settlements with activists and director turnover*

In Panel B of Table 3.3, we examine the effect of settlements with activists on director turnover. We define settlements as cases where board seats were granted, but the activism did not proceed to a contested election (i.e., a proxy fight). We distinguish between activism events with and without formal proxy filings. In the former category of events, we find differences in coefficients between settled (*Non-Proxy – Settled*) and non-settled (*Non-Proxy – Not Settled*) cases ($6.06 = 12.09 - 6.03$, p-value < 0.10). For cases with formal proxy filings, we distinguish cases that were not settled (*Proxy – Not Settled*), from cases that were settled before the shareholder meeting (*Proxy – Settled*) and cases that went to election (*Proxy – Went to Election*). The difference in the coefficient estimates for the first two cases is positive and significant as well (*Proxy – Settled* less *Proxy – Not Settled* = $13.18 - 4.97 = 8.21$, p-value < 0.05), suggesting that settlement with activists is positively associated with turnover of directors. However, there is no significant difference between *Proxy – Settled* and *Proxy – Went to Election* ($14.91 - 14.33 = 0.58$, p-value = 0.87). Overall, these coefficients are consistent with boards deciding to settle in cases where they are less likely to prevail in a proxy fight and with contested elections in proxy fights being just the tip of the iceberg in terms of driving director turnover.

Table 3.3. Effect of shareholder activism on director turnover

Panel A: Impact of activism on performance-sensitivity

The table presents results from OLS regressions where the dependent variable is $Departure_{(t,t+2)}$, i.e., an indicator for the director leaving the board of the firm by year $t + 2$ (i.e., the year after then activism event, if any). *Ind. Adj. Return* is the industry-adjusted return, calculated as raw return minus the return for the relevant Fama/French 48-industry portfolio, over the 12-month period ending 4 months after the fiscal year-end (i.e., the approximate time of the annual meeting). Control variables include all variables in Panel A of Table 2 and are suppressed for parsimony. All regressions include year fixed-effects and robust standard errors (in parentheses) clustered at the firm level. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1)	(2)	(3)	(4)	(5)	(6)
	All	All	Independent	Independent	Inside	Inside
	directors	directors	directors	directors	directors	directors
Targeted Firm	8.84 ^{***}		8.31 ^{***}		11.82 ^{***}	
	(0.85)		(0.90)		(1.52)	
Targeted Firm – Non-Board		6.85 ^{***}		6.91 ^{***}		7.90 ^{***}
		(1.04)		(1.13)		(1.77)
Targeted Board – Non-Proxy		8.18 ^{***}		6.35 ^{***}		12.85 ^{***}
		(1.78)		(1.88)		(3.76)
Targeted Board – Proxy		12.46 ^{***}		11.46 ^{***}		18.26 ^{***}
		(1.68)		(1.85)		(2.97)
Targeted Firm × Ind. Adj. Return	-2.79 ^{***}		-2.44 ^{***}		-3.19 ^{**}	
	(0.81)		(0.88)		(1.44)	
Targeted Firm – Non-Board × Ind. Adj. Return		-2.23 ^{***}		-2.05 ^{**}		-2.27 [*]
		(0.74)		(0.80)		(1.34)
Targeted Board – Non-Proxy × Ind. Adj. Return		-9.61 ^{**}		-8.86 [*]		-18.32 [*]
		(4.90)		(5.15)		(10.05)
Targeted Board – Proxy × Ind. Adj. Return		-2.31		-1.50		-1.81
		(4.16)		(5.07)		(5.86)
Ind. Adj. Return	-1.07 ^{***}	-1.07 ^{***}	-0.83 ^{***}	-0.83 ^{***}	-1.95 ^{***}	-1.95 ^{***}
	(0.19)	(0.19)	(0.19)	(0.19)	(0.44)	(0.44)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.02	0.02	0.03	0.03	0.03	0.03
Num. obs.	255,031	255,031	181,196	181,196	45,964	45,964

Table 3.3. Effect of shareholder activism on director turnover (Continued)

Panel B: Impact of settlement

The table presents results from OLS regressions where the dependent variable is $Departure_{(t,t+2)}$, i.e., an indicator for the director leaving the board of the firm by year $t + 2$ (i.e., the year after the activism event, if any). *Non-Proxy – Settled* and *Proxy – Settled* are indicators for non-proxy fight and proxy fight events, respectively, where an activism event resulted in a board seat for dissidents, but did not go to shareholder election. *Non-Proxy – Not Settled* and *Proxy – Not Settled* are indicators for non-proxy fight and proxy fight events, respectively, where an activism event did not result in any board seat for dissidents. *Proxy - Went to Election* is an indicator variable for those proxy fights that went to election. All activism classification variables are mutually exclusive. All columns exclude observations when the firm is not on Equilar in year $t + 2$, due to bankruptcy, delisting, mergers, etc. Column 1 presents results for all directors, Column 2 presents results for independent directors and Column 3 presents results for inside directors. Control variables include all variables in Panel A of Table 2 and are suppressed for parsimony. All regressions include year fixed-effects and robust standard errors (in parentheses) clustered at the firm level. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) All directors	(2) Independent directors	(3) Inside directors
Targeted Firm – Non-Board	6.67 ^{***} (1.10)	6.73 ^{***} (1.16)	7.65 ^{***} (1.87)
Non-Proxy – Not Settled	6.03 ^{**} (2.47)	5.96 ^{**} (2.76)	8.82 (5.37)
Non-Proxy – Settled	12.09 ^{***} (2.26)	8.86 ^{**} (2.37)	21.17 ^{***} (4.67)
Proxy – Not Settled	6.65 ^{***} (2.05)	4.97 ^{**} (2.11)	14.94 ^{***} (5.18)
Proxy – Settled	14.33 ^{***} (2.32)	13.18 ^{***} (2.41)	20.81 ^{***} (4.31)
Proxy – Went to Election	14.91 ^{***} (2.88)	13.99 ^{***} (3.11)	18.82 ^{***} (5.19)
Equality of coefficients: p-values			
Non-Proxy – Settled = Non-Proxy – Not Settled	0.07 [*]	0.42	0.08 [*]
Proxy – Settled = Proxy – Not Settled	0.01 ^{**}	0.01 ^{***}	0.39
Proxy – Went to Election = Proxy – Settled	0.87	0.84	0.76
Proxy – Went to Election = Proxy – Not Settled	0.01 ^{**}	0.01 ^{**}	0.59
Controls	Yes	Yes	Yes
Adj. R ²	0.02	0.03	0.03
Num. obs.	245,774	174,858	44,146

Table 3.3. Effect of shareholder activism on director turnover (Continued)

Panel C: Impact of CEO turnover

The table presents results from OLS regressions where the dependent variable is $Departure_{(t,t+2)}$, i.e., an indicator for the director leaving the board of the firm by year $t + 2$ (i.e., the year after then activism event, if any). All columns exclude observations where the firm is not on Equilar in year $t + 2$, presumably due to bankruptcy, delisting, mergers, etc. Column 1 and 2 presents results for independent directors. Control variables include all variables in Panel A of Table 2 and are suppressed for parsimony. All regressions include year fixed-effects and robust standard errors (in parentheses) clustered at the firm level. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) Independent directors	(2) Independent directors
Targeted Firm	6.56 ^{***} (0.91)	
Targeted Firm – Non-Board		5.33 ^{***} (1.12)
Targeted Board – Non-Proxy		6.81 ^{***} (1.88)
Targeted Board – Proxy		8.98 ^{***} (1.57)
CEO Turnover	5.39 ^{***} (0.50)	5.39 ^{***} (0.50)
Targeted Firm × CEO Turnover	8.09 ^{***} (2.98)	
Targeted Firm – Non-Board × CEO Turnover		7.53 [*] (4.21)
Targeted Board – Non-Proxy × CEO Turnover		3.64 (5.56)
Targeted Board – Proxy × CEO Turnover		10.39 ^{**} (4.55)
Controls	Yes	Yes
Adj. R ²	0.03	0.03
Num. obs.	174,858	174,858

3.4.4. CEO turnover and outside directors

One possible reason for outside director turnover is CEO turnover. A new CEO may seek to replace outside directors associated with prior management. To the extent that CEO turnover is associated with activism, the effect of activism on outside directors may simply reflect this association. To account for this possibility, we include a CEO turnover indicator as control in all

our regressions involving outside directors and find that its inclusion does not affect inferences. In Panel C of Table 3.3, we also interact CEO turnover with activism indicators. If activism is having an effect on outsider director turnover through the channel of CEO turnover, we expect the coefficients on these interactions to be positive. The coefficient on *CEO Turnover* interacted with *Targeted Board – Proxy* is 10.39 (p-value < 0.05), which is significantly greater than the coefficient on *CEO Turnover* alone. This suggests that outside director turnover following activism is not simply a function of CEO turnover and is consistent with activism leading to increased turnover of both CEOs and outside directors.

3.5. Voting in director elections

In this section we discuss how shareholder activism affects voting in director elections. We also assess the effect of voting on director turnover to relate the voting results to the findings in the previous section.

3.5.1. Determinants of shareholder support

Shareholders can express displeasure with directors by withholding votes or, if applicable, by voting for an alternative candidate. We examine the effect on activism campaign on director election using the following model.

$$\begin{aligned} \textit{Against Votes \%} = F(\textit{Targeted Firm – Non-Board}, \textit{Targeted Board – Non-Proxy}, \\ \textit{Targeted Board – Proxy}, \textit{firm controls}, \textit{director characteristics}, \textit{activism characteristics}, \textit{year fixed effects}) \end{aligned} \quad (2)$$

The dependent variable is the extent of negative voting received by the director (*Against Votes*). Firm-level controls include industry-adjusted return, return on assets, sales growth, market value, book-to-market ratio, leverage, dividend payout ratio, the number of analysts, and

institutional ownership percentage. Director-level controls include director age, director tenure, director shareholding, and audit and compensation committee position. We include voting recommendations by ISS (*ISS Against_{t+1}*), since ISS vote recommendation has been shown to have a significant influence on director elections (Cai et al., 2009).²⁴

In our first analysis we examine shareholder votes in the year of the activism campaign. Columns 1 to 3 of Table 3.4 present results of regressions with a dependent variable *Against Votes_{t+1}*, the percentage of votes against the director in elections in the year of the shareholder activism. Columns 1 and 2 present results when the sample includes all directors and columns 3 and 4 (5 and 6) present results for independent (inside) directors. As expected, directors in targeted firms receive more negative votes than directors of firms that are not targeted. This is a significant increase over the mean negative vote for directors of non-targeted firms of about 5.4 percent (see Table 3.1 Panel D). These effects exist after controlling for unfavorable ISS recommendation (*ISS Against_{t+1}*) and votes against the director in the previous year (*Against Votes_t*), which is the year prior to activism, if any.

While meaningful, the extent of the negative vote is unlikely to directly lead to director turnover, e.g., by denying a majority for firms with majority-voting policies. But our results are consistent with either activists targeting firms whose shareholders are dissatisfied with their directors or the activists influencing shareholder perceptions of director performance. Interestingly, the effects are observed for all kinds of activism and there is no statistically significant difference between *Targeted Firm – Non-Board* and *Targeted Board – Non-Proxy* cases.²⁵

²⁴ Inferences are unaffected when *ISS Against_{t+1}* is omitted.

²⁵ We would have expected a greater level of negative voting in the cases involving proxy fights due simply to the existence of alternative candidates for shareholders to vote for.

Table 3.4. Shareholder activism and director elections

The table presents results from OLS regressions where the dependent variable is *Against Votes*_{*t*+1}, the percentage votes against the director in director elections in the year of activism (*t* + 1), if any. Columns 2, 4, and 6 include *Against Votes*_{*t*}, shareholder opposition for the director in the year before activism, and *ISS Against*_{*t*+1}, an indicator for an ISS recommendation to withhold votes from a director in year *t* + 1. Columns 1 and 2 present results for all directors, Columns 3 and 4 present results for independent directors and Columns 5 and 6 present results for inside directors. Firm-level controls are industry-adjusted return, return on assets, sales growth, market value, book-to-market ratio, leverage, dividend payout ratio, the number of analysts, and institutional ownership. Director-level controls are director age, director tenure, and audit and compensation committee position. All variables are defined in Appendix B. Controls are suppressed for parsimony. All regressions include year fixed-effects and robust standard errors (in parentheses) clustered at the firm level. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent Variable: <i>Against Votes</i> _{<i>t</i>+1}					
	All directors	All directors	Ind. directors	Ind. directors	Inside directors	Inside directors
Targeted Firm – Non-Board	5.49*** (0.57)	3.28*** (0.59)	4.28*** (0.61)	2.63*** (0.67)	6.88*** (0.83)	3.18*** (0.78)
Targeted Board – Non-Proxy	1.92*** (0.45)	1.67*** (0.52)	2.02*** (0.47)	1.59*** (0.52)	1.69*** (0.60)	1.43* (0.75)
Targeted Board – Proxy	4.31*** (1.00)	3.25*** (1.25)	4.50*** (1.06)	2.87** (1.22)	3.74*** (1.34)	3.44** (1.54)
<i>Against Votes</i> _{<i>t</i>}	3.84*** (0.71)	4.26*** (1.08)	4.04*** (0.79)	4.18*** (1.19)	3.90*** (1.11)	3.97*** (1.43)
<i>ISS Against</i> _{<i>t</i>+1}		35.46*** (1.85)		34.36*** (2.06)		38.73*** (3.17)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.04	0.16	0.05	0.14	0.02	0.20
Num. obs.	131,297	80,591	97,199	59,376	22,964	14,572

3.5.2. Do shareholder votes matter for board turnover?

In this sub-section we relate negative votes in director elections to director departure in the year after the vote. Prior research suggests that, while negative votes are not large in magnitude, directors appear to heed the message they deliver. Shareholder dissatisfaction expressed via negative votes is associated with subsequent governance and performance changes by firms, consistent with directors responding to shareholder disapproval. Cai, Garner, and Walking (2009) document a decrease in excess CEO compensation in the year following a higher negative vote for the compensation committee directors. They also find that the likelihood of CEO turnover

increases when independent directors receive lower votes. Interestingly, Cai, Garner and Walking (2009) do not find an effect of votes against directors on director turnover. Fischer, Gramlich, Miller, and White (2009) show that firms whose directors receive fewer votes are more likely to experience subsequent CEO turnover and to hire an outside CEO. These firms also subsequently exhibit lower excess CEO compensation and make better acquisition and spin-off decisions. Ertimur, Ferri, and Muslu (2011) show that excess CEO compensation declines following “vote no” campaigns.

We extend our voting results and findings in the prior literature by examining whether negative votes are associated with subsequent director turnover in the presence of activism. Results of this analysis are presented in Table 3.5, where the dependent variable is the director turnover in the year after shareholder activism. Column 1 presents results from the specification used in Panel A of Table 3.2 with $Departure_{(t,t+2)}$ as the dependent variable, but with the sample restricted to the cases where we have data on voting in year $t + 1$. Columns 2, 3 and 4 present results for all directors, independent directors and insider directors, respectively. The main variable of interest is $Against\ Votes_{t+1}$, which is the percentage of negative votes in the year of activism. The positive and significant coefficients on $Against\ Votes_{t+1}$ in all three columns show that directors, both independent ones and insiders, are less likely to depart if they receive greater support. While activism itself contributes to the greater extent of negative vote in year $t + 1$, the effect of activism on director turnover exists even after controlling for the effect of negative shareholder votes.²⁶

²⁶ Inferences are identical when we run logit regressions.

Table 3.5. Shareholder activism, director elections, and director turnover

The table presents results from OLS regressions where the dependent variable is $Departure_{(t,t+2)}$, i.e., an indicator for the director leaving the board of the firm by year $t + 2$ (i.e., the year after the activism event, if any). Classification into independent and inside directors comes from Equilar (no results are provided for related directors). $Against\ Votes_{t+1}$ represents shareholder opposition for the director in the year of activism. Columns 1 and 2 study all directors while Column 3 focuses on independent directors and Column 4 focuses on insider directors. We include all control variables from Panel A of Table 2 but these are not tabulated for parsimony. All regressions control for year fixed-effects and robust standard errors (in parentheses) clustered at the firm level. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) All directors	(2) All directors	(3) Independent directors	(4) Inside directors
Targeted Firm – Non-Board	2.84** (1.17)	2.69** (1.17)	2.71** (1.29)	4.70* (2.67)
Targeted Board - Non-Proxy	5.79** (2.92)	5.50* (2.93)	3.01 (3.07)	14.66** (6.02)
Targeted Board - Proxy	9.91*** (2.88)	9.57*** (2.85)	9.99*** (3.21)	5.67 (4.96)
Against $Votes_{t+1}$		7.81*** (1.61)	7.29*** (1.74)	15.86*** (4.47)
Controls	Yes	Yes	Yes	Yes
Adj. R2	0.01	0.01	0.01	0.02
Num. obs.	100,688	100,688	73,718	17,811

3.6. Directorships on other boards

We extend our voting and director turnover results to other directorships of directors subject to shareholder activism. The impact of activism in the targeted firm on other directorships allows us to examine the reputational impact on directors of targeted firm and inform the literature on reputational penalties for directors. Fama (1980) and Fama and Jensen (1983) posit that firm performance affects directors' reputations as corporate stewards, which are rewarded or penalized in the market for directorships. Prior papers have found evidence that directors lose their positions on other boards when they serve as directors of firms experiencing a financial crisis or financial misconduct (e.g., Srinivasan, 2005; Fich and Shivdasani, 2007; Ertimur, Ferri and Maber, 2012).

As before, directors in firms in the Equilar database with no shareholder activism provide the baseline. We use the following regression specification.

$$\text{Other Boards}_{t+2} = F(\text{Targeted Firm} - \text{Non-Board}, \text{Targeted Board} - \text{Non-Proxy}, \text{Target Board} - \text{Proxy}, \text{firm controls}, \text{director characteristics}, \text{activism characteristics}, \text{year fixed effects}) \quad (3)$$

The dependent variable is the number of other directorships held in year $t + 2$ by a director who was on the board in year t . The independent variables are as defined earlier.

Table 3.6. Impact of shareholder activism on other directorships

The table presents results from OLS regressions where the dependent variable is *Other Boards* _{$t+2$} , which is the number of directorships a director has with firms other than the firm of interest in year $t + 2$ (i.e., the year after then activism event, if any). Columns 1 and 2 present results for all directors. Columns 3 and 4 present results for independent directors and Columns 5 and 6 present results for inside directors. Firm-level controls include industry-adjusted return, return on assets, sales growth, market value, book-to-market ratio, leverage, dividend payout ratio, the number of analysts, and institutional ownership. Director-level controls include director age, director tenure, and audit and compensation committee position. All variables are defined in Appendix B. All regressions include year fixed-effects and robust standard errors (in parentheses) clustered at the firm level. *** (**, *) indicates significance at the 1% (5%, 10%) level. Intercept is not tabulated.

	(1) All directors	(2) All directors	(3) Ind. directors	(4) Ind. directors	(5) Inside directors	(6) Inside directors
Other Boards _{t}	0.76*** (0.00)	0.76*** (0.00)	0.76*** (0.00)	0.77*** (0.00)	0.74*** (0.01)	0.75*** (0.01)
Targeted Firm – Non-Board	0.04*** (0.01)	0.02** (0.01)	0.05*** (0.01)	0.03** (0.01)	0.02 (0.02)	-0.01 (0.02)
Targeted Board – Non-Proxy	-0.04*** (0.01)	-0.03* (0.02)	-0.03* (0.02)	-0.03 (0.02)	-0.03 (0.02)	0.01 (0.03)
Targeted Board – Proxy	-0.00 (0.01)	0.01 (0.01)	-0.00 (0.01)	0.01 (0.02)	0.01 (0.02)	-0.02 (0.02)
Departure _{$(t, t+2)$}		0.00 (0.00)		-0.00 (0.00)		0.05*** (0.01)
Targeted Firm – Non-Board × Departure _{$(t, t+2)$}		0.02 (0.02)		0.04 (0.02)		0.04 (0.04)
Targeted Board – Non-Proxy × Departure _{$(t, t+2)$}		-0.01 (0.02)		0.01 (0.03)		-0.10** (0.05)
Targeted Board – Proxy × Departure _{$(t, t+2)$}		-0.02 (0.02)		-0.03 (0.02)		0.02 (0.04)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.67	0.67	0.68	0.69	0.57	0.58
Num. obs.	309,265	307,773	217,780	216,882	57,609	57,171

Table 3.6 presents results of an OLS regression of Equation 3. As before, we present results for the full board (Column 1 and 2), independent directors (Column 3 and 4) and inside directors (Column 5 and 6). In columns 1, 3, and 5, we find limited evidence of activism being associated with loss of seats on other boards. We find a small positive effect for all directors and independent directors for *Targeted Firm – Non-Board* and a small negative effect for all directors and independent directors for *Targeted Board – Non-Proxy*. One possible explanation for a positive coefficient is that independent directors have increased availability for other directorships when they lose a board seat and are more likely to lose a board seat when the firm is targeted. To account for this possibility, we include an indicator for departure from the targeted board— $Departure_{(t, t+2)}$ —and interact this with the activism indicators. These results are in columns 2, 4, and 6. The coefficient on $Departure_{(t, t+2)}$ for independent directors (Column 3) is not economically nor statistically significant. For inside directors (Column 4), the coefficient on $Departure_{(t, t+2)}$ (coef. = 0.05, p-value < 0.01) plausibly reflects executives gaining other board seats when they lose their positions *independent* of activism, but we find limited effects of activism when the executive loses his or her seat (e.g. *Targeted Board – Non-Proxy* \times $Departure_{(t, t+2)}$, coef. = -0.10, p-value < 0.05). The statistically insignificant coefficients on *Targeted Firm – Non-Board* \times $Departure_{(t, t+2)}$ and *Targeted Board – Non-Proxy* \times $Departure_{(t, t+2)}$ in Column 4 provide no evidence for the notion that activism could lead to more directorships at other firms when it results in loss of a board seat for an independent director. Overall, Table 3.6 provides no evidence of directors bearing reputational costs through loss of other directorships following shareholder activism.

3.7. Analysis of individually targeted directors

In this section we examine the consequences for the directors who are specifically targeted by shareholder activism involving proxy fights. We identify directors as targeted directors (*Targeted Board – Proxy – Targeted Director*) if they are either (i) explicitly named as a target by activists or, (ii) when activists do not explicitly identify the directors they seek to replace, those directors that are up for election during an activism year. Appendix D provides examples of each type.

Table 3.7. Impact of shareholder activism on individually targeted directors

Panel A: Effects on director turnover

The table presents results from OLS regressions where the dependent variable is $Departure_{(t+1, t+2)}$, i.e., an indicator for the director who was on the board in year $t + 1$ leaving the board by year $t + 2$ (i.e., the year after the activism event, if any). *Targeted Board – Proxy – Targeted Director* is an indicator for targeted directors who are either (i) up for election during an activism year when dissidents do not explicitly identify the directors they seek to replace or (ii) explicitly named as a target by activists. *Targeted Board – Proxy – Non-Targeted Director* is an indicator for the rest of directors in *Targeted Board – Proxy*. Observations where the firm is not on Equilar in year $t + 2$, presumably due to bankruptcy, delisting, mergers, etc. are excluded. We include all control variables from Panel A of Table 2 but these are not tabulated for parsimony. All regressions include year fixed-effects and robust standard errors (in parentheses) clustered at the firm level. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) All directors	(2) Independent directors	(3) Inside directors
Targeted Firm – Non-Board	1.90*** (0.70)	2.13*** (0.80)	1.50 (1.11)
Targeted Board – Non-Proxy	5.06*** (1.37)	4.87*** (1.51)	7.29*** (2.75)
Targeted Board – Proxy	7.08***	7.11***	6.02***
– Non-Targeted Director	(1.08)	(1.22)	(2.20)
Targeted Board – Proxy	21.34***	18.88***	34.66***
– Targeted Director	(3.71)	(4.11)	(7.34)
Controls	Yes	Yes	Yes
Adj. R ²	0.01	0.01	0.01
Num. obs.	245,774	174,858	44,146

Table 3.7. Impact of shareholder activism on individually targeted directors (Continued)

Panel B: Other directorships

The table presents results from OLS regressions where the dependent variable is how many directorships a director has with firms other than the firm of interest in year $t + 2$ (i.e., the year after then activism event, if any). *Targeted Board – Proxy – Targeted Director* is an indicator for targeted directors who are either (i) up for election during an activism year when dissidents do not explicitly identify the directors they seek to replace or (ii) explicitly named as a target by activists. *Targeted Board – Proxy – Non-Targeted Director* is an indicator for the rest of directors in *Targeted Board – Proxy*. Columns 1 and 2 present results for all directors. In Columns 2, 4, and 6 we include interaction variables with $Departure_{(t,t+2)}$, i.e., an indicator for the director leaving the board of the firm by year $t + 2$ (i.e., the year after the activism event, if any). Columns 3 and 4 present results for independent directors and Columns 5 and 6 present results for inside directors. All control variables from Table 6 are included but not tabulated for parsimony. All regressions include year fixed-effects and robust standard errors (in parentheses) clustered at the firm level. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) All directors	(2) All directors	(3) Ind. directors	(4) Ind. directors	(5) Inside directors	(6) Inside directors
Other Boards	0.76*** (0.00)	0.76*** (0.00)	0.76*** (0.00)	0.77*** (0.00)	0.74*** (0.01)	0.75*** (0.01)
Targeted Firm – Non-Board	0.04*** (0.01)	0.02** (0.01)	0.05*** (0.01)	0.03** (0.01)	0.02 (0.02)	-0.01 (0.02)
Targeted Board – Non-Proxy	-0.04*** (0.01)	-0.03* (0.02)	-0.03* (0.02)	-0.03 (0.02)	-0.03 (0.02)	0.01 (0.03)
Targeted Board – Proxy	-0.00 (0.01)	0.01 (0.02)	-0.00 (0.01)	0.01 (0.02)	-0.01 (0.02)	-0.03 (0.03)
– Non-Targeted Director						
Targeted Board – Proxy	0.01 (0.02)	0.02 (0.03)	-0.01 (0.03)	-0.02 (0.04)	0.04 (0.05)	0.07 (0.07)
– Targeted Director						
Departure _(t,t+2)		0.00 (0.00)		-0.00 (0.00)		0.05*** (0.01)
Targeted Firm – Non-Board		0.02 (0.02)		0.04 (0.02)		0.04 (0.04)
× Departure _(t,t+2)						
Targeted Board – Non-Proxy		-0.01 (0.02)		0.00 (0.03)		-0.10** (0.05)
× Departure _(t,t+2)						
Targeted Board – Proxy		-0.03 (0.02)		-0.03 (0.03)		0.03 (0.04)
– Non-Targeted Director						
× Departure _(t,t+2)						
Targeted Board – Proxy		-0.01 (0.04)		0.02 (0.05)		-0.08 (0.08)
– Targeted Director						
× Departure _(t,t+2)						
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R ²	0.67	0.67	0.68	0.69	0.57	0.58
Num. obs.	309,265	307,773	217,780	216,882	57,609	57,171

Panel A of Table 3.7 presents results from a regression analogous to those in Panel A of Table 3.2. We focus on $Departure_{(t+1, t+2)}$ as the dependent variable, as a director generally needs to be on the board at the time of activism (year $t + 1$) to be explicitly or implicitly targeted, so turnover of targeted directors is only possible from $t + 1$. The coefficient on *Targeted Board – Proxy – Targeted Director* is large and significant (21.34, p-value < 0.01), which suggest that the targeted directors are 21 percentage points (19 and 35 percentage points for independent and inside directors, respectively) more likely to leave the board by the year after activism than non-targeted directors ($21.34 - 7.08 = 14.26$, p-value < 0.01).

Panel B of Table 3.7 presents regressions analogous to those in Table 3.6, where the dependent variable is $Other\ Boards_{t+2}$. We find no evidence that directors suffer reputational consequences from being individually targeted.

In short, Table 3.7 presents evidence consistent with consequences for individually targeted directors being greater in terms of loss of seats on the targeted firm, but provides no evidence of reputational consequences in the form of loss of directorships on other boards.

3.8. Additional analyses

In this section we provide additional tests of our prior results using within-firm analysis and a propensity score matched sample.

3.8.1. Within-firm analyses

One issue with our results is that activists are unlikely to target firms at random and it is difficult to control for all determinants of activists' targeting decisions, as it is likely that some of these are not observable by us. If some of these omitted determinants are correlated with director turnover, our estimates will be biased. With a view to address this concern, we examine directors

on boards of two distinct sets of firms. The first set of firms comprises those with staggered boards and the second set comprises non-staggered boards.

The presence of a staggered board means that only some directors will be nominated for election during the activism event and we find that it is these nominated directors that are targeted by activists (see Example 2 of Appendix D for an instance of this). This gives rise to within-firm variation in whether an individual director was targeted that is plausibly exogenous, as there is no reason to expect that the class of directors up for election in the year of activism to be inherently different from the other classes of directors.²⁷ Estimating a regression using such firms and including firm-year fixed effects allows us to estimate the effect of being a targeted director independent of any characteristics that led the firm to be targeted in the first place. As such, estimated coefficients from this regression are more plausibly capturing the causal effect of activism. We use ISS Voting Analytics to identify directors who were subject to a director election in the year of activism ($t + 1$).

Panel A of Table 3.8 presents these results. Columns 1 to 3 present results for sample firms that have staggered boards. Columns 1 and 2 include firm and firm and year fixed effects, respectively. We find that directors of targeted firms (*Targeted Firm*) are more likely to leave their boards within three months of the shareholder meeting when the firm is subject to activism (coefficient = 2.67 in Column 1, p-value < 0.01). Further, we find that being up for election (*Up for Election*) is positively associated with director turnover; directors up for election are more likely to have left the board within three months following shareholder meetings (coefficient = 3.95 in column 1, p-value < 0.01). In Column (3), we include firm-year fixed effects and the coefficient on *Targeted Firm* \times *Up for Election* remains positive and significant. This suggests

²⁷ The possibility that the timing of activism is prompted by the identity of directors up for election in that year is one caveat to our analysis.

that the director turnover result is simply not a function of being up for election but it is an effect related to activism.

To complete the picture, we also consider directors on non-staggered boards and again include firm-year fixed effects to isolate the impact on targeted directors independent of firm-characteristics. Columns 4, 5, and 6 present these results where we regress director turnover on *Targeted Director*. Given that all directors are up for election in each year, activists who seek board positions through proxy fights generally explicitly identify the directors who their candidates would replace (e.g., Example 1 of Appendix D). Columns 4, 5, and 6 include firm, firm and year, and firm-year fixed effects, respectively. Estimates in Columns 4 and 5 show that our earlier results from Table 3.7 are robust to the inclusion of firm and firm and year fixed effects. In column (6) we find that explicitly targeted directors are indeed the ones who are more likely to turn over (coefficient 10.39, p-value < 0.05) than their peers (i.e., directors at the same firm in the same year) who were not targeted. As explicitly targeted directors are deliberately selected by activists, they are plausibly the ones most likely to suffer broader reputational consequences from being targeted.

Table 3.8. The effect of proxy fights on directorships: Within-firm analysis

Panel A: Effects on director turnover

This table reports results from OLS regression where the dependent variable is *Departure in 3 months*, i.e., an indicator for the director leaving the board of the firm by 3 months from shareholder meeting date following activism (i.e., the year after the activism event). Sample comprises director-years of firms with staggered boards for the first three columns and director-years of firms with non-staggered boards for the last three columns. *Up for Election* indicates that the director was up for director election according to ISS Voting Analytics in year $t + 1$. *Targeted Director* indicates that the director was targeted by activists due to being explicitly targeted by activists. Numbers in parentheses are robust standard errors. *** (**, *) indicates significance at the 1% (5%, 10%) level.

Table 3.8. The effect of proxy fights on directorships: Within-firm analysis (Continued)

	Staggered boards			Non-staggered boards		
	(1) Departure in 3 months	(2) Departure in 3 months	(3) Departure in 3 months	(4) Departure in 3 months	(5) Departure in 3 months	(6) Departure in 3 months
Targeted Firm	2.67 ^{***} (0.83)	3.20 ^{***} (0.81)		4.60 ^{***} (0.70)	6.22 ^{***} (0.68)	
Up for Election	3.95 ^{***} (0.19)	3.64 ^{***} (0.17)	3.48 ^{***} (0.13)			
Targeted Firm × Up for Election	3.11 ^{**} (1.43)	3.20 ^{**} (1.41)	3.17 ^{***} (1.05)			
Targeted Director				8.15 [*] (4.34)	8.24 [*] (4.37)	10.39 ^{**} (4.04)
Fixed effects	Firm	Firm & Year	Firm-Year	Firm	Firm & Year	Firm-Year
Adj. R ²	0.18	0.33	0.67	0.16	0.27	0.59
Num. obs.	106,974	106,974	106,974	106,123	106,123	106,123

Panel B: Other directorships

This table reports results from OLS regression where the dependent variable is *Other Boards*_{*t*+2}, which is the number of directorships a director has with firms other than the firm of interest in year *t* + 2 (i.e., the year after then activism event, if any). Sample comprises director-years of firms with staggered boards for the first three columns and director-years of firms with non-staggered boards for the last three columns. *Up for Election* indicates that the director was up for director election according to ISS Voting Analytics in year *t* + 1. *Targeted Director* indicates that the director was targeted by activists due to being explicitly targeted by activists. Numbers in parentheses are robust standard errors. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	Staggered boards			Non-staggered boards		
	(1) Other Boards _{<i>t</i>+2}	(2) Other Boards _{<i>t</i>+2}	(3) Other Boards _{<i>t</i>+2}	(4) Other Boards _{<i>t</i>+2}	(5) Other Boards _{<i>t</i>+2}	(6) Other Boards _{<i>t</i>+2}
Other Boards	0.75 ^{***} (0.00)	0.75 ^{***} (0.00)	0.76 ^{***} (0.00)	0.75 ^{***} (0.00)	0.75 ^{***} (0.00)	0.76 ^{***} (0.00)
Targeted Firm	-0.02 (0.02)	-0.01 (0.02)		0.02 (0.01)	0.03 ^{**} (0.01)	
Up for Election	0.01 ^{***} (0.00)	0.01 ^{***} (0.00)	0.01 ^{**} (0.00)			
Targeted Firm × Up for Election	-0.01 (0.02)	-0.01 (0.02)	0.00 (0.02)			
Targeted Director				0.04 (0.06)	0.04 (0.06)	0.00 (0.08)
Fixed effects	Firm	Firm & Year	Firm-Year	Firm	Firm & Year	Firm-Year
Adj. R ²	0.72	0.72	0.74	0.70	0.70	0.73
Num. obs.	100,617	100,617	100,617	95,427	95,427	95,427

In Panel B of Table 3.8 we examine the impact of activism on other directorships of targeted directors using the same fixed effects design as discussed in Panel A results above. For staggered boards (columns 1 to 3) we find no effect on targeted firm directors or for the interaction of targeted firm with directors up for election (*Targeted Firm* × *Up for Election*). Similarly, we find no effect on these variables in non-staggered boards (columns 4 to 6). These results suggest that there is no reputational impact on other directorships from activism consistent with our results in Table 3.6 and Panel B of Table 3.7.

While consistent with our earlier results, these inferences are quite different from those in Fos and Tsoutsoura (2014), who find evidence consistent with directors' seats on other boards being negatively affected by proxy fights in which they are up for election. Our analysis suggests that these differences in inferences are not attributable to research design, but are possibly attributable to differences in sample period and data source (i.e., Fos and Tsoutsoura (2014) use BoardEx, which includes unlisted and non-profit boards).²⁸

3.8.2. Propensity score matching

To confirm that our results are not driven by significant differences between targeted and non-targeted firms that are not effectively controlled for in a linear regression framework, we employ a propensity score matching procedure to achieve covariate balance between the treatment (targeted) and control (non-targeted) firms. We create a control sample of directors whose firms were not targeted, but comparable on all observed covariates to a treatment sample of directors

²⁸ The average number of other directorships in Fos and Tsoutsoura (2013) is 2.2, which is significantly greater than our 0.613 for non-targeted firms and 0.689 for firms targeted for shareholder activism. This difference is likely attributable to Fos and Tsoutsouras's inclusion of directorships in private companies. We follow most prior research in considering only public companies, as this is where the reputational effect is expected to be stronger. Our numbers are fairly consistent with prior research. For example, Fich and Shivdasani (2007) report 0.95 other directorships for a sample of sued firms in 2002, and Ertimur et al. (2012) report 0.797 other directorships for their sample of firms.

whose firms were targeted by activists. We first use a logit regression using the control variables from Table 3.2 to estimate the probability (propensity score) that a firm would be targeted by an activist ($\Pr(\textit{Targeted Firm})$) and match each targeted firm with a non-targeted firm from the same year with the nearest propensity score. Then we compare the difference in outcome variables (in particular, $\textit{Departure}_{(t, t+2)}$, $\textit{Other Boards}_{t+2}$) for the treatment and control firms. We verify that difference in means for each covariate after the match is insignificant, implying covariate balance between the treatment and control samples.

Table 3.9. Propensity score matching

Panel A: Effect of shareholder activism on director turnover

The table presents results from analysis using propensity score matching. Coefficients represent estimated effect on $\textit{Departure}_{(t, t+2)}$, i.e., an indicator for the director leaving the board of the firm by year $t + 2$ (i.e., the year after the activism event, if any) of being targeted by activists in the respective category relative to directors at non-targeted firms. One control firm is selected for each treated firm using propensity scores and exact matching on years. Propensity scores are estimated using a logit regression where the dependent variable is an indicator for being targeted and the independent variables are the controls reported in Panel A of Table 2. *** (**, *) indicates significance at the 1% (5%, 10%) level. Standard errors are in parentheses.

	(1)	(2)	(3)
	All directors	Independent directors	Inside directors
Targeted Firm	0.089 ^{***}	0.081 ^{***}	0.127 ^{***}
	(0.006)	(0.007)	(0.016)
N (Treatment)	8,015	5,840	1,336
Targeted Firm – Non-Board	0.067 ^{**}	0.064 ^{**}	0.071 ^{**}
	(0.008)	(0.009)	(0.020)
N (Treatment)	4,520	3,237	790
Targeted Board – Non-Proxy	0.105 ^{***}	0.081 ^{***}	0.154 ^{***}
	(0.016)	(0.017)	(0.045)
N (Treatment)	1280	947	201
Targeted Board – Proxy	0.131 ^{***}	0.106 ^{***}	0.165 ^{***}
	(0.012)	(0.014)	(0.033)
N (Treatment)	2215	1,656	345
Targeted Director	0.137 ^{***}	0.104 ^{***}	0.167 ^{***}
	(0.029)	(0.032)	(0.071)
N (Treatment)	423	328	60

Table 3.9. Propensity score matching (Continued)

Panel B: Effect of shareholder activism on other directorships

The table presents results from analysis using propensity score matching. Coefficients represent estimated effect on how many directorships a director has with firms other than the firm of interest in year $t + 2$ (i.e., the year after then activism event, if any) of being targeted by activists in the respective category relative to directors at non-targeted firms. One control firm is selected for each targeted firm using propensity scores and exact matching on years. Propensity scores are estimated using a logit regression where the dependent variable is an indicator for being targeted and the independent variables are the controls reported in Panel A of Table 2. *** (**, *) indicates significance at the 1% (5%, 10%) level. Standard errors are in parentheses.

	(1) All directors	(2) Independent directors	(3) Inside directors
Targeted Firm	0.007 (0.013)	0.003 (0.016)	0.039 (0.023)
N (Treatment)	11,714	8,561	1,957
Targeted Firm – Non-Board	0.006 (0.018)	0.028 (0.021)	0.033 (0.031)
N (Treatment)	6,934	5,025	1,194
Targeted Board – Non-Proxy	-0.005** (0.031)	-0.031 (0.037)	0.058 (0.052)
N (Treatment)	1,754	1,301	274
Targeted Board – Proxy	0.022 (0.024)	0.030 (0.030)	-0.006 (0.046)
N (Treatment)	3,026	2,235	489
Targeted Director	0.011 (0.048)	-0.051 (0.061)	0.201*** (0.079)
N (Treatment)	703	514	144

Results for director turnover are presented in Panel A of Table 3.9. Consistent with our results in Panel A of Table 3.2, directors of targeted firms have higher likelihood of leaving the board of a targeted firm (estimated effect of 0.089, p-value < 0.01) than directors of matched firms, the estimated effect increases as the activism becomes more board-related (estimated effects for *Targeted Board – Non-Proxy* and *Targeted Board – Proxy* of 0.105 and 0.131 respectively, both with p-values < 0.01) and targeted at individual directors (coefficient = 0.137, p-value < 0.01).

Results for other directorships are presented in Panel B of Table 3.9. These are consistent with those found in Panel B of Table 3.7. When the number of directorships held by a director on other boards is the outcome, the differences in means are small and statistically insignificant, consistent with our earlier results.

3.9. Conclusion

We examine career consequences for directors when firms are subject to activist shareholder interventions. First, we study director turnover on the board of the firm subject to activism, including whether activism increases director turnover-performance sensitivity. Next, we examine voting outcomes for directors in elections to assess if shareholders express their displeasure through their votes. We then examine the role of voting in precipitating departures of targeted directors. Finally, we examine reputational consequences of shareholder actions by looking at changes in the number of board positions held by directors at other public firms.

Our results suggest that directors exit the board at higher rates when their firms are targeted for shareholder actions: 18.0 percent of directors are no longer on the boards of firms targeted for shareholder activism at the end of the year after the activism event compared to 12.5 percent for firms that are not targets of activism. Unsurprisingly, directors targeted by activists in proxy fights are significantly more likely to leave the board after the activism event. We find that directors not directly targeted by dissident shareholders are also likely to leave the board, as are directors at targeted firms even when no board-related demands are made as part of the activism, let alone a formal proxy fight. All these results hold after controlling for factors driving director turnover and targeting by activists. The increased turnover exists for both inside and independent directors.

Activism is associated with higher performance sensitivity of director turnover, with the association between industry-adjusted stock returns and director turnover being greater when a

firm is targeted by activists. We also find that shareholder voting matters for director turnover. Directors that receive a greater negative vote percentage in the year of shareholder activism are less likely to remain on the board in the year after activism. This finding may provide some relief to skeptics who worry that shareholder voting is ineffective in disciplining directors: Directors appear to heed the message in the negative vote and resign, though it is unclear what compels them to do so given that they receive majority support in most cases.

Director reputation as measured by number of directorships at other firms is not associated with activism. Neither proxy fights nor other forms of shareholder activism have any apparent association with the number of other directorships in the year after the activism event. Even directly targeted directors experience no loss in directorships and the lack of association holds for both inside and independent directors.

Our paper provides evidence consistent with shareholder activism imposing career costs on directors, even when such activism is not directed explicitly at board representation and does not result in a proxy contest. Evidence from prior research suggests that proxy contests are not an effective mechanism for disciplining boards since they rarely succeed in getting a majority of shareholder support. Our results suggest that activists need not even engage in, let alone win, proxy contests to remove directors. Overall, our results are consistent with shareholder activism increasing board turnover and accountability for poor performance, but we do not find evidence of broader reputational consequences.

CHAPTER 4

ACTIVIST DIRECTORS: DETERMINANTS AND CONSEQUENCES

4.1. Introduction

Hedge fund activism has become a significant phenomenon in recent years. This kind of activism differs from more traditional forms of shareholder activism, such as shareholder proposals filed under SEC Rule 14a-8, both in the nature of the activists, as well as in the scale and type of intervention. More traditional activism has often been initiated by pension funds and individual activists (sometimes called “gadflies”) with relatively weaker incentives to generate higher returns by influencing the management of a firm. In contrast, as pointed out by Brav, Jiang and Kim (2010), hedge funds have stronger incentives to produce higher returns, fewer conflicts of interest, and “much more flexibility to intervene in the invested companies.” (Brav et al. 2010, p.187). These differences appear to have led to hedge fund activists making a broader range of demands and adopting a wider range of tactics to have those demands met than traditional shareholder activists.

One approach used by hedge fund activists to influence companies, in which they have invested, is to seek to join the board of directors of these companies. But this is not costless. First, there are direct costs associated with getting on the board, which Gantchev (2013) finds to be significant. Second, by joining the board the activists (or their nominees) stake their reputations by taking on a role in implementing their demands. Third, board positions also come with fiduciary responsibilities towards all shareholders. Given the additional cost and commitment required of activists that get board representation—and the tendency for such investors to take “long-term” positions when they do so—studying the actions of firms with such directors can provide new insight into the motives and effects of hedge fund activists.

Hedge fund activism is not without its critics. Some have argued that hedge fund activism is potentially harmful due to the possibility that the activist interests are “not necessarily aligned with the interests of long-term investors” (Stringe Jr, 2014). Given the potentially greater influence that activists have when they get in the boardroom, by focusing on such cases, our paper aims to deepen our understanding of the effects of hedge fund activism.

Our paper addresses a number of questions related to activist directors. First, we focus on the circumstances surrounding the appointment of activist directors to the board. When do activists seek board representation? And when are they successful in obtaining it? How do activist directors differ from other directors? Second, what impact do activists have when they get on the board? Does their impact differ from that of other cases of activism? Finally, is there evidence of short-termism?

Our sample of 2,756 activism events comprises all activism events targeted at US companies from 2004 to 2015.²⁹ In each case, we code whether the activist made demands for board representation and whether the activist obtained seats on the board. We identify 1,369 directors who were appointed to the board in response to activist demands. With regard to the first set of questions, we find, consistent with prior research, that activists tend to target firms with more institutional shareholders, smaller market capitalization, and worse recent stock performance. Additionally, conditional on being targeted by activists, we find that activists are more likely to demand board representation when the firm has worse performance, less leverage and is smaller. With regard to performance, we find evidence that board representation is demanded at firms with worse stock market performance, but with higher institutional ownership; this is consistent with board representation being sought for objectives other than reversing poor operating performance.

²⁹ We additionally require that the target firm is matched to CRSP, is not an investment trust or mutual fund, and that the event is not a control contests involving another corporation.

But we also find that firms with older directors and with staggered boards are more likely to be targeted. Conditional on a firm being targeted for activism, we find little that explains when activists get board seats.

We describe the characteristics of activist directors and compare them with new directors appointed at other firms.³⁰ We find that activist director characteristics differ according to whether the director is affiliated with activists or not. Activist-affiliated directors (i.e., employees or principals of members of the activist group) are about 9 years younger than other new directors and much less frequently female. Activist directors are appointed to key committees just as often as other new directors, suggesting that they quickly move into key board positions. About 40 percent (541 of 1,369) of activist directors are directly employed at the activist hedge fund; the rest (828) appear to be unaffiliated directly to the hedge fund despite being sponsored by the activist for the board position.

Using methods that account for censoring, we find that activists hold stock in a target firm for a median of about 2.3 years when their demands do not include board representation, and that this increases to 3.5 years in cases where the activists obtain board representation. Greater than a three-year holding period implies that these activists can be considered as “long-term” investors.³¹

We then examine a number of possible consequences of activist directors for the firms whose boards they join. Consistent with prior research, we find significant risk-adjusted returns around the announcement of activism, with size-adjusted returns from -20 to +20 trading days around the announcement ranging from 5% to 14%. We find no evidence of a market reaction at the appointment of activist directors, perhaps reflecting the difficulty of identifying precisely when

³⁰ Gow, Shin and Srinivasan (2014) shows that activism is often associated with departure of incumbent directors.

³¹ As discussed in Section 5, pension funds have a typical duration of 2 years and investor relation professionals consider a horizon of more than 2.8 years to warrant the label “long-term.”

the market learns about activist board appointments. Looking beyond positive announcement-period returns, operating performance seems to improve, with return on assets increasing by 1-2% over the five years after activism. In terms of underlying actions, we find evidence of increased divestiture, decreased acquisition activity, higher probability of being acquired, lower cash balances, higher payout, greater leverage, higher CEO turnover, lower CEO compensation, and lower capital expenditure, research and development. With the exception of the probability of being acquired, the estimated effects are generally greater when activists obtain board representation (though not always statistically so), consistent with board representation being an important mechanism for bringing about the kinds of changes that activists often demand.

The primary goal of our paper is to contribute to the understanding of the increasingly important phenomenon of hedge fund activism. Overall, we find that activist directors are associated with significant strategic and operational actions by firms. While the observational data available to us do not permit unequivocal causal inferences, the associations we document appear consistent with hedge fund activists having an impact, especially when they obtain board representation.

The breadth and depth of these apparent effects suggest that, when activists get board representation, their impact is not simply about the “ability of activists to force target firms into a takeover” (Greenwood and Schor, 2009, p.362). However, even if given a causal interpretation, it is unclear whether all of these effects are beneficial to shareholders. For instance, while our evidence is consistent with activist directors playing a significant role in curbing expenditures on capital and research and development (R&D), it is unclear whether this reflects curtailment of excessive investments or, as critics of activists might suggest, underinvestment with a focus on the short term. However, the relatively long-term holding period in cases where activists become

directors, positive stock market effect, and long-term operating performance improvements seem inconsistent with activist directors being short-termist.

The rest of the essay proceeds as follows. Section 4.2 describes features of shareholder activism campaigns and related literature. Section 4.3 describes our data and descriptive statistics. Section 4.4 examines the circumstances in which activists seek and obtain board representation. Section 4.5 examines the association with activist board representation and activist holding periods. Section 4.6 examines stock returns for activism targets with and without board-related demands and for firm where activists get board representation. Section 4.7 examines the association between activist directors and firm outcomes, such as operating performance, investment behavior and CEO incentives. Section 4.8 concludes.

4.2. Institutional background and prior literature

In this section we discuss institutional details and related research. We first provide some illustrative examples of activist engagements with companies to provide a flavor of the wide variety of tactics and strategies employed by activists, the types of demands made, and outcomes that are associated with activism. These examples show how seeking directorships in target firms is an important element of the activist approach.

4.2.1. Illustrative cases

In some cases, activists make pointed demands that yield swift reaction from the target firms. For example, on June 6, 2012, Becker Drapkin Management LP filed a 13D reporting a 5% stake in Tuesday Morning Corporation. In a letter to the board, Becker Drapkin complained that the company's performance had suffered since Kathleen Mason became CEO in 2000, and that

shareholder representation on the board was necessary to instill accountability. Later that same day, the company announced the departure of Kathleen Mason as president and CEO and that it had commenced a search for a new CEO. On June 26, 2012, Becker Drapkin disclosed that it was engaged in discussions with the company regarding board representation. On July 2, 2012, the company announced the appointment of two representatives of Becker Drapkin to the board, that it would work with Becker Drapkin to add two additional independent directors, and Becker Drapkin agreed to standstill provisions lasting two years.³²

In other cases, board demands emerge only after continued poor performance and resistance to the activist's demands. For example, on June 28, 2007, Barington Capital Group L.P. sent a letter to the Chairman and CEO of Dillard's Inc. requesting a meeting to discuss measures to achieve better financial performance and operational efficiency. After this request was declined, on August 30, 2007, Barington sent yet another letter to the board expressing disappointment with the company's poor operating performance and poor corporate governance. On January 29, 2008, Barington jointly filed a 13D with the Clinton Group and RJG Capital Management, LLC, asking for a review of executive pay and measures to improve performance and enhance corporate governance. The dissident group gave formal notice to the company of its intent to nominate directors for the upcoming election on March 19, 2008. On April 1, 2008, Dillard's settled with Barington and other dissidents and nominated two candidates proposed by the dissident group for election to the board of directors.

Another example is Blockbuster Inc. which was the target of prominent activist Icahn Associates Corp. This event started on April 7, 2005, when Carl Icahn disclosed that he had requested Blockbuster extend the deadline for nominating directors for election at the company's

³² Material in this subsection draws primarily from synopses provided by StreetEvents.

2005 annual meeting. The company rejected the request and on April 8, 2005, Icahn sent formal notice that he was nominating himself and two others for election to Blockbuster's board. In his communications with stockholders, Icahn criticized Blockbuster's compensation practices and management's business plan and stated that if elected his nominees would bring discipline to the "spending spree." Icahn also stated that he believed the company should put itself up for sale. At the annual meeting, Icahn received 63% of the votes cast and his two other nominees received 68% of the votes cast.

Following these illustrative examples, we examine several outcomes in activist director companies. These include firm performance outcomes measured using stock returns and accounting performance; governance outcomes such as CEO turnover and CEO compensation; strategic outcomes such as divestitures and acquisitions; financial policy outcomes such as leverage and payouts; and investment policy decisions such as capital expenditures, research and development, and advertising. While we examine these outcomes in the context of activist directors, prior papers have examined some of these outcomes in the context of hedge fund activism in general. We discuss this research next.

4.2.2. Causes and consequences of hedge fund activism

The phenomenon of shareholder activism that we examine is driven in large part by activist hedge funds over the last decade. Brav, Jiang, Partnoy and Thomas (2008) identify structural benefits enjoyed by hedge funds—such as fewer regulations and better incentives—that have allowed such funds to be more active in pursuing governance changes in companies than mutual fund or pension managers. Like prior research (Brav et al. 2008), the ultimate source for much of the data we use to identify activism events comes from 13D filings with the SEC. According to

the SEC, “when a person or group of persons acquires beneficial ownership of more than 5% of a voting class of a company’s equity securities registered under Section 12 of the Securities Exchange Act of 1934, they are required to file a Schedule 13D with the SEC.”³³ This filing should be made within 10 days of the trade date of the securities transaction triggering the requirement to file. If a shareholder has not “acquired the securities with any purpose, or with the effect of, changing or influencing the control of the issuer,” then a more abbreviated filing on Form 13G may be used.³⁴ As hedge fund activists when launching a campaign look to change or influence the target and quite often exceed the 5% threshold, 13D filings are a typical concomitant of such campaigns.

In terms of firm characteristics that attract activist hedge fund attention, prior research suggests that hedge fund activists typically target smaller firms, value-oriented firms (low market-to-book), and firms with sound operating cash flows but low sales growth, leverage and dividend payouts (Brav et al. 2010). This evidence motivates us to use firm-level covariates to control for factors causing firms to be targeted by activist investors. Gantchev (2013) models activism as involving a sequence of decisions beginning with broad activist demands, followed by demands for board representation, then threatened, then actual, proxy contests. Gantchev (2013) estimates costs associated with these stages using a system of recursive logistic regressions and finds that such costs reduce activist returns by more than two-thirds, but net returns are not negative. Our paper complements Gantchev (2013) by providing evidence on the kinds of actions facilitated by escalation of activism to the level of obtaining board representation.

³³ <https://www.sec.gov/answers/sched13.htm>, accessed 2014-05-26.

³⁴ <http://www.sec.gov/divisions/corpfin/guidance/reg13d-interp.htm>, accessed 2014-05-26. Also see SEC Rule 13d-1(c)(1).

In terms of consequences, prior research (see Brav et al. 2008, Klein and Zur 2009, Greenwood and Schor 2009) finds a positive stock price reaction of about five percent to the announcement of activist campaigns, typically centered around the 13D announcement dates. Greenwood and Schor (2009) find that the positive market reaction arises from cases where the activists are able to force the target firms to be sold following the activist campaign. They find no significant market reaction at the 13D filing date for firms that are not acquired ex-post. Klein and Zur (2009) suggests that one source of shareholder gains is the transfer of wealth from debtholders to stockholders. This likely occurs because activists demand reduction in cash holdings and increase in leverage in target firms. Brav et al. (2008) and Bebchuk et al. (2013) also find that operating performance as measured by return on assets is higher in the three to five-year period following the launch of activism. The mechanisms that drive possible performance improvements in firms that continue to be independent have not been explored much in research with the exception of Brav et al. (2013). Using plant-level information from the US Census Bureau they find that the average target firm improves production efficiency in the three years after the activist engagement. Employees exhibit increase in labor productivity but a stagnation in wages. In related research, Brav et al. (2014) find that targets of hedge fund activism exhibit reduction in research and development spending but an increase in innovation output suggesting an improvement in innovation efficiency. Our paper complements this research by identifying a role for activist directors in the changes brought about by activism thereby identifying a mechanism by which activists carry out the changes they demand.

4.2.3. Other shareholder activism

While hedge fund activism is a relatively recent phenomenon, a body of prior research has examined the effect of shareholder activism by pension and labor union funds. Early research focused on the activities of pension plans, such as CalPERS (Smith 1996) and TIAA-CREF (Carleton, Nelson and Weisbach 1998). While pension plans have typically focused on governance changes generally proposed as part of 14a-8 shareholder proposals, hedge funds often seek to make more wide-ranging changes to the firms they target. One conclusion from research on pension plan activism is that activist shareholders and firms often reach agreement without a formal 14a-8 proposal being voted upon—for instance, Carleton et al. (1998) find that TIAA-CREF is able to reach agreements with targeted companies 95 percent of the time and in over 70 percent of cases without a shareholder vote on the proposal. In the UK, Becht, Franks, Mayer and Rossi (2010) study a mutual fund (Hermes) and find that this fund acts—predominantly through private interventions. This is consistent with our finding that activists often obtain board representation without a formal proxy fight.

4.2.4. Director elections and proxy fights

The routine mechanism for someone to become a director is to be nominated for election by the incumbent board. Unless invited onto the board, the only way for activist shareholders to obtain board representation is to initiate a proxy solicitation campaign in a contested election. Contested elections are contests between the incumbent set of directors put forward by the company and a dissident slate nominated by an outside investor. Dodd and Warner (1983) provide early evidence consistent with proxy fights creating value for shareholders. They find a statistically significant positive share price effect associated with a proxy contest regardless of whether the contest was successful or not. However, a number of studies find limits to the effectiveness of

proxy contests. While Mulherin and Poulsen (1998) find evidence “that proxy contests create value” using a sample of 270 proxy contests covering 1979–1994, but they also find that “the bulk of the wealth gains stemming from firms that are acquired.” Pound (1988) identifies cost and management incumbency as impediments to successful proxy fights. More recently, Bebchuk (2007) claims that shareholders’ power to obtain board representation is largely a “myth” due to free-rider issues associated with investing in costly proxy contests. While activist directors often join boards as a result of a proxy contest, the majority of activist directors in our sample join through negotiation with the incumbent board. We contribute to this debate by providing evidence consistent with an important class of investors being able to get board representation even absent a contested election.

4.2.5. Specialist outside directors

Our paper is also related to prior literature that examines the impact of specialist directors, such as financial experts, since activist directors are often associated with hedge funds or are unaffiliated directors selected for particular expertise. DeFond, Hann, and Hu (2005) find a positive stock price reaction when directors with accounting expertise are appointed to the audit committee. Guner, Malmendier, and Tate (2008) find evidence consistent with bankers influencing financing and investing decisions, but perhaps in ways that reflect conflicts of interests. Huang, Jiang, Lie and Yang (2014) find that firms with investment bankers on their boards make more acquisitions and experience higher takeover announcement returns and pay lower premiums than other firms.

Overall, this literature shows that directors bring specific types of expertise to boards and firms appear to use this expertise. One difference of our paper from this research stream is that we

examine a class of directors that are not voluntarily invited by the boards that they join. Even in cases that do not involve a proxy fight, activist directors join boards as a result of a negotiated outcome between the activist and the incumbent board and management. Given that activist directors join the board for a specific activist purpose, their role on the board is likely to be different from that of other directors.

4.3. Data and descriptive statistics

4.3.1. Activism events

Our data on activism events come from the FactSet SharkWatch database, which contains information on shareholder activism events, primarily in the United States and generally involving hedge fund activists. From SharkWatch, we collect information on all publicly disclosed activism events that commenced between January 1, 2004 and December 31, 2015 where the target firm is matched to CRSP, is incorporated in the United States, and is not an investment trust or mutual fund, and where the event is not a control contest involving another corporation. This provides us with 2,756 activism events. Note that our sample consists only of those events with no pending action and does not include activism consisting only of shareholder proposals submitted under Rule 14a-8. Table 4.1 provides details of the number of activism events over our sample period. We divide the 2,756 activism events into three mutually exclusive categories: *Activist director* events in which an activist won board representation (746 events), *Board demand* events in which the activist sought, but did not win, board seats (627 events), and *Non-board activism* events in which activists targeted the firm, but board representation was neither sought nor obtained (1,383 events).

Table 4.1. Activism events

Table presents number of activism events by year. *Activism* refers to activism events in any of the following three mutually exclusive categories: *Non-board activism* refers to the number of non-board related activism events. *Board demand* refers to the number of activism events where activists demanded, but did not win, board seats. *Activist director* refers to activism events where activists were granted one or more board seats.

Year	Activism	Non-board activism	Board demand	Activist director
2004	104	46	30	28
2005	194	91	58	45
2006	315	163	73	79
2007	365	209	82	74
2008	332	165	83	84
2009	175	86	55	34
2010	207	121	39	47
2011	211	95	55	61
2012	245	135	50	60
2013	235	122	38	75
2014	209	85	36	88
2015	164	65	28	71
Total	2,756	1,383	627	746

4.3.2. Activist directors

For each activism event in which SharkWatch indicated that the activist obtained board representation, we used proxy statements (DEF 14A) and current filings (Form 8-K, Item 5.02) to collect names of the directors who were appointed as a result of the activist campaign. We also collected appointment dates and basic biographical details. We then examined subsequent SEC filings to determine whether and, if so, when the director subsequently left the board during our sample period. We classified directors into two categories. The *Affiliated* category comprises directors that we identified as employees or principals of the members of the activist group, and *Unaffiliated* covers the rest. Table 4.2 provides the yearly distribution of *Affiliated* and *Unaffiliated* directors. Of 1,369 activist directors appointed as the result of activism campaigns in our sample, 541 are *Affiliated* and 828 are *Unaffiliated*. For illustration, in the Blockbuster case discussed in Section 4.2, Carl Icahn is clearly an affiliated director, while the other two nominees, “veteran entertainment industry executives” Edward Bleier and Strauss Zelnick, are unaffiliated.

Table 4.2. Activist directors

Table presents number of activist directors by year. *Activist directors* are directors who were appointed to the board in response to demands by activists. *Affiliated (Unaffiliated)* indicates activist directors who are (are not) employees or principals of a member of the dissident group. *Elected* indicates that the director was elected by shareholders through a shareholder vote. *Settled* indicates that the director was appointed to the board without a shareholder vote.

Year	Activist director	Affiliated	Unaffiliated	Elected	Settled
2004	56	21	35	14	42
2005	86	36	50	16	70
2006	151	61	90	37	114
2007	140	68	72	44	96
2008	149	62	87	42	107
2009	59	26	33	17	42
2010	82	36	46	15	67
2011	103	39	64	31	72
2012	124	45	79	17	107
2013	153	47	106	59	94
2014	168	59	109	30	138
2015	98	41	57	6	92
Total	1,369	541	828	328	1,041

4.3.3. Activist holdings

To identify activist holdings of the stock of targeted firms, we use data from WhaleWisdom, which provides comprehensive coverage of SEC Form 13F and 13F/A filings related to holdings in at quarter-ends from 2001 onward.³⁵ These filings are required on a quarterly basis for investors having more than \$100 million in assets under management. We find that 1,373 (50.31%) of the activism events in our sample are associated with an activist that files on Form 13F.

4.3.4. Director characteristics

Our director-level data come from BoardEx.³⁶ BoardEx database comprises directors of every company that files both an annual report and an annual proxy statement (SEC Forms 10-K and DEF 14A, respectively). For each director on a company's board, BoardEx provides director-

³⁵ See www.whalewisdom.com.

³⁶ BoardEx is an executive compensation and corporate governance data firm.

level information such as committee memberships, gender, age, equity holding, etc. Panel A of Table 4.3 presents director characteristics for each classification of directors. While we have data on 426,891 directors since 2004, the more appropriate comparison group for activist directors, for whom we present data in their first year on the board, is their fellow new directors. We identify 34,204 directors as new directors. We identify 727 activist directors (of our full sample of 1369) on BoardEx; we find that some activist directors leave within a year (e.g., if the firm is acquired) and BoardEx appears not to capture most such directors, as they often do not appear in the proxy statement (DEF 14A).

Table 4.3. Director characteristics

This table presents descriptive statistics for directors. Panel A presents data on directors matched to BoardEx. *N* refers to the number of observations. Age refers to mean age of directors in each category. Values for *Female*, *Comp*, *Audit* are means of indicator variables for being female, being a member of the audit committee, being a member of the compensation committee, being a member of the nominating committee, and being designated a financial expert of the audit committee, respectively. Panel A includes all directors, with *Activist directors* relating to activist directors in their first year on their respective boards. Panel B presents data on all activist directors (i.e., no requirement for BoardEx match). *Tenure* is measured in days and is censored for directors still active on February 29, 2016.

Panel A: Director characteristics by activism classification

Category	N	Audit	Comp	Nom	Listed	Unlisted	Female	Age
All directors	426,891	0.56	0.52	0.46	2.11	2.37	0.10	60.32
New directors	34,024	0.55	0.43	0.35	2.01	2.27	0.14	55.45
Activist directors	727	0.47	0.49	0.43	1.82	2.22	0.03	51.92
Affiliated directors	278	0.37	0.51	0.45	2.01	2.30	0.01	46.32
Unaffiliated directors	449	0.53	0.48	0.43	1.71	2.18	0.05	55.35

Panel B: Activist director tenure

Category	N	Left board	Tenure	Still active	Tenure
Unaffiliated directors	828	343	746	485	1,079
Affiliated directors	541	236	724	305	1,243

In general, the unaffiliated directors are similar to other new directors on most dimensions except that there is a noticeably smaller number who are female (0.05 versus 0.10). However,

affiliated directors (i.e., employees or principals of members of the activist group) appear different; they are younger (46 years of age) and rarely female (0.01). While activist directors appear more likely to become members of the compensation or nomination committee in their first year of service (0.49 or 0.43, respectively) versus (0.43 or 0.35, respectively, for directors not associated with activism campaigns), they are less frequently added to the audit committee (0.47), especially affiliated directors (0.37), than non-activism directors (0.55).³⁷

Panel B of Table 4.3 presents data on the tenure of activist directors. About 60% of both affiliated and unaffiliated activist directors remain on their respective boards at the time of our data collection (February 2016). Affiliated (unaffiliated) directors who have left their respective boards, did so after being on the board for 724 (746) days on average (i.e., they remained on the board for about two years). In many cases, their departure was associated with the company being acquired, going private, or going bankrupt. Affiliated and unaffiliated activist directors who are still on their respective boards in February 2016 have an average tenure of about three or more years. There is no apparent difference between affiliated and unaffiliated directors in these tenure statistics.

4.3.5. Other data

Data on divestitures and acquisitions as used in Table 4.8 come from Capital IQ and CRSP. In Tables 4.4 and 4.8–4.11, we use a number of controls drawn from several sources. We calculate *Analyst*, the number of analyst forecasts for each firm-year using data from IBES. We derive the proportion of the firm’s outstanding stock held by institutions (*Institutional*) using data from

³⁷ SEC rules require a company to disclose whether it has at least one “audit committee financial expert” serving on its audit committee, and if so, the name of the expert and whether the expert is independent of management. See <http://www.sec.gov/rules/final/33-8177.htm>.

WhaleWisdom. Data on stock market performance come from CRSP and Ken French's website. The following variables come from Compustat: *Market value*, the value of market capitalization; *Book-to-market*, market capitalization divided by the book value of common equity; *Leverage*, sum of long-term debt and current liabilities divided by sum of long-term debt, current liabilities and the book value of common equity; *Payout*, the ratio of the sum of dividends and repurchases divided to EBITDA); *ROA*, EBITDA divided by the lagged total assets; *Sales growth*, Sales divided by lagged sales. From BoardEx, we get the following variables: *Num. directors*, the number of directors on the board; *Outside percent*, the percentage of outside directors; *Age*, the average age of directors on the board; *Tenure*, the average years of directorship on the board; and, *Staggered board*, an indicator for a classified board.

4.4. Activist target selection

Prior research suggests that hedge fund activists typically target smaller firms, value-oriented firms (low market-to-book), and firms with sound operating cash flows but low sales growth, leverage and dividend payouts (Brav et al., 2010). We extend this analysis to our sample and additionally examine whether the factors that are associated with activists seeking, or getting, board representation differ from those associated with activism in general.

We first examine the circumstances in which firms find themselves as the targets of activists. Panel A of Table 4.4 reports the results of logistic regressions where the dependent variables are indicators for activism and the sample is the universe of firm-years meeting our sample requirements for the years 2004 to 2015.

The first column looks at the probability of being targeted for any kind of activism event, the second column examines the determinants of an activist making demands for board

representation, and the third column examines the determinants of an activist getting representation on a firm's board.³⁸ Consistent with prior research (Brav et al. 2008), we find that size-adjusted returns and growth are negatively associated with being targeted by activists, consistent with activists targeting poorly performing firms. Also, consistent with prior research, we find that smaller companies are more likely to be targeted. However, the significantly positive coefficient on *Outside percent* is difficult to explain in the same way, as this measure is suggested by some to be a proxy for *good* governance (Bhagat and Bolton 2008). We also see evidence that activists are more likely to target firms with greater portion of their shares held by institutional investors, consistent with these investors being more open to supporting activists.

In Panel B of Table 4.4, we focus on activism events in examining two questions. First, given that a firm has been targeted by activists, what are the factors that are associated with the activist demanding board seats? Second, given that an activist has demanded board seats, what factors are associated with the activist's demands being met? We find evidence that conditional on selecting a firm as a target, an activist is more likely to demand board representation when the firm is smaller, and when leverage is lower. In the second column, we see that performance and leverage are still negatively associated with getting a board seat conditional on asking for one. We also see evidence that activists are more likely to get board representation when targeting firms with greater portion of their shares held by institutional investors, consistent with these investors being more open to supporting activist candidates. We see some evidence staggered boards prevent activists from getting board representation (coef. -0.211 , $p > 0.10$), suggesting that the effect observed in Column (3) of Panel A may arise due to deterrence of activism entirely.

³⁸ Note that, in contrast to our other analyses, for the purpose of this table, our activism indicators are not mutually exclusive. That is, Activism includes cases in any of the categories Non-board activism, Board demand, and Activist director, while Board demand includes cases of Activist director as well as cases where the board demands are not successful.

Table 4.4. Activist target selection

All regressions in this table include the following controls measured for the prior fiscal year-end: *Analyst*, the number of analyst forecasts for each firm-year (I/B/E/S); *Institutional*, the proportion of the firms outstanding stock held by institutions; *Size-adj. ret.*, twelve-month size-adjusted returns calculated as raw return over a year minus return for the size-matched decile provided by CRSP; *Market value*, the value of market capitalization; *Book-to-market*, market capitalization divided by the book value of common equity; *Leverage*, sum of long-term debt and current liabilities divided by sum of long-term debt, current liabilities and the book value of common equity; *Payout* the ratio of the sum of dividends and repurchases divided to EBITDA); *ROA*, EBITDA divided by the lagged total assets; *Sales growth*, Sales divided by lagged sales; *Num. directors*, the number of directors on the board; *Outside percent*, the percentage of outside directors; *Age*, the average age of directors on the board; *Tenure*, the average years of directorship on the board; *Staggered board*, indicator for staggered board. All controls are winsorized at the 1% and 99% levels. Values in parentheses are standard errors clustered by firm. *** (**, *) indicates significance at the 1% (5%, 10%) level.

Panel A: Activism, board demands and activist directors

Panel A presents logit regression where the dependent variables are indicators for being targeted for activism in any category (*Non-board activism*, *Board demand*, or *Activist director*, column 1), being the target of an activist demanding or getting board seats (*Board demand* or *Activist director*, Column 2) and activists getting board seats (*Activist director*, Column 3). Sample includes firm-years with and without activism.

	Dependent variable:		
	Activism (1)	Board demand (2)	Activist director (3)
Analyst	0.020** (0.008)	0.018* (0.011)	0.008 (0.012)
Inst	1.187*** (0.156)	1.495*** (0.184)	1.727*** (0.225)
Size-adj. ret	-0.487*** (0.101)	-0.603*** (0.123)	-0.770*** (0.167)
Market value	-0.434*** (0.102)	-0.699*** (0.112)	-0.526*** (0.132)
Book-to-market	0.117* (0.066)	0.033 (0.073)	0.012 (0.091)
Leverage	0.288** (0.141)	0.038 (0.151)	-0.137 (0.185)
Payout	-0.289 (0.217)	-0.347 (0.270)	-0.610 (0.373)
ROA	0.235 (0.158)	0.123 (0.188)	-0.050 (0.229)
Sales growth	-0.173* (0.095)	-0.188 (0.116)	-0.331** (0.163)
Num. directors	-0.035** (0.018)	-0.039* (0.023)	-0.040 (0.027)
Outside percent	1.116*** (0.428)	1.902*** (0.589)	2.111*** (0.732)
Age	0.029*** (0.008)	0.035*** (0.010)	0.049*** (0.012)
Tenure	-0.011 (0.010)	-0.004 (0.012)	-0.019 (0.013)

Table 4.4. Activist target selection (Continued)

Staggered board	-0.188*** (0.072)	-0.274*** (0.089)	-0.331*** (0.109)
Pseudo-R ²	0.221	0.235	0.238
Observations	37,801	36,998	36,998

Panel B: Activism, board demand and activist director (activism only)

Panel B presents logit regression where the dependent variables are indicators for activist demanding or getting board seats (*Board demand* or *Activist director*, Column 1) and activists getting board seats (*Activist director*, Column 2) conditional on the firm being targeted by activists.

	Dependent variable:	
	Board demand (1)	Activist director (2)
Analyst	0.004 (0.012)	-0.010 (0.013)
Inst	0.361 (0.254)	0.740*** (0.273)
Size-adj. ret	-0.240* (0.141)	-0.313** (0.152)
Market value	-0.409*** (0.134)	-0.151 (0.135)
Book-to-market	-0.098 (0.117)	-0.139 (0.121)
Leverage	-0.344* (0.182)	-0.441** (0.189)
Payout	-0.087 (0.286)	-0.296 (0.318)
ROA	-0.540 (0.499)	-0.664 (0.487)
Sales growth	-0.073 (0.135)	-0.252 (0.179)
Num. directors	-0.013 (0.031)	-0.011 (0.032)
Outside percent	1.846** (0.732)	1.507* (0.789)
Age	0.014 (0.014)	0.027* (0.014)
Tenure	0.018 (0.018)	-0.008 (0.017)
Staggered board	-0.205* (0.117)	-0.211* (0.123)
Sample	Activism	Activism
Pseudo-R ²	0.776	0.702
Observations	1,600	1,600

4.5. Activist holding periods

We next examine whether the category of activism is associated with the length of time the activist holds the stock. We use 13F filing data to determine when an activist acquires and disposes of stock. Because 13F filings are quarterly, our measures of holding period (expressed in days) have some measurement error. We examine three holding periods: *Entry–Exit*, which runs from the first date on which the stock was held to the last date the stock was held; *Annc–Exit*, which runs from the date on which activism was first announced (typically with a 13D filing) to exit; and *Appt–Exit*, which runs from the first appointment of an activist director through to the date of exit.³⁹

One issue with measuring holding periods is that censoring is significant in our sample. This occurs because many of the activism campaigns in our sample are recent and the activist continues to hold stock at the time we measure the holding period. Thus to estimate the association between activism category and holding period, we use censored median regression (Portnoy 2003). Table 4.5 presents these results. We find that, relative to *Activism* without board demands, *Board demand* events have holding periods that are a half year shorter. Turning to *Activist director* cases, we find a highly significant incremental holding period of 455 days from entry to exit and 523 days from announcement of activism to exit.⁴⁰ While the estimated median holding period for *Activism* events is 822 days (i.e., about 2.3 years), the equivalent for *Activist director* events is 1,277 days (i.e., about 3.5 years). From announcement to exit, *Activist director* activists hold the stock for 956 days (2.6 years) and for 667 days (1.8 years) from first appointment of an activist director.

³⁹ We measure the exit date as the record date of the first 13F filing in which the stock is no longer part of the activist's portfolio.

⁴⁰ This is consistent with *Activist director* having a shorter period from entry to announcement of activism.

Table 4.5. Activist holding periods

Table presents results of censored median regression analysis of holding period (days) on activism category. *Entry–exit* refers to the time (in days) between the record date of the first filing by the activist where the target stock is listed in the activist’s portfolio through to the record date of the first filing where it is not (exit date) *Annc–exit* refers to the time between announcement of activism and the exit date. *Appt–exit* refers to the time between the first activist director appointment and the exit date. *** (**, *) indicates significance at the 1% (5%, 10%) level.

Regression coefficients			
	Entry–exit	Annc–exit	
Intercept	822.443*** (2.699)	432.753*** (22.520)	
Board demand	-184.000*** (46.958)	-26.362 (36.262)	
Activist director	455.000*** (95.826)	523.672*** (42.460)	

Implied median holding periods (days)			
	Entry–exit	Annc–exit	Appt–exit
Non-board activism	822	433	
Board demand	638	406	
Activist director	1,277	956	667

To put these statistics into perspective, it is helpful to consider some benchmarks. Cremers et al. (2013) examine the holding period of various kinds of investors. They examine four categories of investors (banks, pension funds, investment companies, and others) and find that pension funds have the longest duration at 2 years. They also examine the holdings of some institutional investors and provide only one example of an investor with a duration greater than three years, namely the well-known long-term investor, Berkshire Hathaway, which had a duration of between 3 and 4 years during our sample period. Another reference point is provided by the Beyer et al. (2014) survey of investor relation professionals, who consider 2.8 years as a cutoff beyond which investors can be considered “long-term” investors. These benchmarks suggest the three-year holding period of activists getting representation on boards provides them with a relatively long investment horizon.

4.6. Stock returns

We follow prior research in examining the impact of activism on stock returns, but examine whether stock market reactions to activism differ by the three categories of activism: *Activism*, *Board demand*, and *Activist director*.

We begin by looking at short-window returns around the announcement of activism. Because prior research has documented a run-up in the 10 days prior to the public announcement of activism and some drift thereafter, we follow Brav et al. (2008) in using a window beginning 20 days before and ending 20 days after the announcement of activism. For short-window tests, we consider raw, market-adjusted, and size-adjusted returns (R , R^{MKT} , and R^{SZ} , respectively). Results are reported in Panel A of Table 4.6. Consistent with prior research, (Brav et al. 2008), we find significant announcement-period returns for activism events, with market-adjusted returns ranging from 5.7% to 15.6% for the three categories. The returns for *Activist director* is significantly higher than the others. Note that while the market would not know which category the activism would ultimately fall into at the time of the announcement of activism, it might have affected the likelihood of winning a board seat for activists. We get very similar results when we consider returns windows such as $(-10, +10)$ and $(-1, +1)$ days.

In Panel B of Table 4.6, we examine the market reaction around the appointment of activist director. We do not find any significant market reaction around this date, perhaps due to the difficulty in measuring exactly when the market learned about the appointment in many cases. Because we did not find any reaction around this date, we partition Activist director cases into large and small investments using a cut-off of \$100 million, denoted $Invest < \$100m$ and $Invest > \$100m$, respectively. This allows for the possibility that the market may react more to activism

when the activist's stake is higher. However, the results in Panel B suggest the opposite; that we see more significant market reaction for $Invest < \$100m$.

Table 4.6. Stock returns

Table presents returns by category of activism where R , R^{MKT} , R^{SZ} denote raw, market-adjusted, and size-adjusted returns respectively. R^{FFV} (R^{FFE}) denotes value-weighted (equal-weighted) Fama-French three-factor adjusted returns. *** (**, *) indicates significance at the 1% (5%, 10%) level.

Panel A: Days -20 to +20 around announcement of activism

	Dependent variable:		
	R (1)	R^{MKT} (2)	R^{SZ} (3)
Non-board activism	0.067*** (0.008)	0.057*** (0.008)	0.058*** (0.008)
Board demand	0.060*** (0.015)	0.051*** (0.014)	0.051*** (0.014)
Activist director	0.172*** (0.058)	0.156*** (0.052)	0.143*** (0.044)
Observations	2,160	2,160	2,160

Panel B: Days -1 to +1 around appointment

	Dependent variable:		
	R (1)	R^{MKT} (2)	R^{SZ} (3)
Invest. > \$100m	0.001 (0.005)	0.002 (0.004)	0.003 (0.004)
Invest. < \$100m	0.009** (0.004)	0.010*** (0.004)	0.010*** (0.004)
Observations	641	641	641

Panel C: From activism announcement (month t) to month $t + 12$

	Dependent variable:				
	R (1)	R^{MKT} (2)	R^{SZ} (3)	R^{FFV} (4)	R^{FFE} (5)
Non-board activism	0.138*** (0.020)	0.067*** (0.018)	0.067*** (0.018)	0.058*** (0.020)	0.053*** (0.019)
Board demand	0.243*** (0.059)	0.165*** (0.056)	0.140*** (0.053)	0.154*** (0.058)	0.151*** (0.057)
Activist director	0.084*** (0.022)	-0.002 (0.020)	-0.010 (0.020)	-0.010 (0.020)	-0.011 (0.020)
Observations	2,050	2,050	2,047	1,946	1,946

Table 4.6. Stock returns (Continued)

Panel D: From activism announcement (month t) to month $t + 36$

	<i>Dependent variable:</i>				
	R (1)	R^{MKT} (2)	R^{SZ} (3)	R^{FFV} (4)	R^{FFE} (5)
Non-board activism	0.277*** (0.038)	0.106*** (0.035)	0.076** (0.035)	0.071* (0.038)	0.057 (0.038)
Board demand	0.378*** (0.071)	0.176*** (0.065)	0.117* (0.063)	0.150** (0.067)	0.138** (0.066)
Activist director	0.235*** (0.047)	0.029 (0.042)	-0.008 (0.043)	0.012 (0.043)	0.002 (0.043)
Observations	1,677	1,677	1,676	1,597	1,597

Panel E: From activist appointment date (month t) to month $t + 12$

	<i>Dependent variable:</i>				
	R (1)	R^{MKT} (2)	R^{SZ} (3)	R^{FFV} (4)	R^{FFE} (5)
Invest. > \$100m	0.132*** (0.040)	0.027 (0.035)	0.014 (0.034)	-0.005 (0.036)	-0.007 (0.035)
Invest. < \$100m	0.099*** (0.031)	-0.002 (0.027)	-0.012 (0.027)	-0.011 (0.028)	-0.017 (0.027)
Observations	550	550	549	534	534

Panel F: From activist appointment date (month t) to month $t + 36$

	<i>Dependent variable:</i>				
	R (1)	R^{MKT} (2)	R^{SZ} (3)	R^{FFV} (4)	R^{FFE} (5)
Invest. > \$100m	0.391*** (0.089)	0.118 (0.082)	0.068 (0.081)	0.057 (0.084)	0.041 (0.084)
Invest. < \$100m	0.288*** (0.063)	0.057 (0.055)	0.027 (0.056)	0.007 (0.053)	-0.006 (0.052)
Observations	397	397	396	387	387

In Panels C and D of Table 4.6, we examine returns over the 12-month and 36-month periods from the announcement of activism. Due to the greater importance of controlling for risk over longer periods, we also consider Fama-French abnormal returns, using both equal-weighted and value-weighted returns for the associated benchmark portfolios. While we see some large, statistically significant returns for *Non-board activism* and *Board demand*, we do not find significant returns for *Activist director*, which is in contrast to the short-term results.

One issue with interpreting the returns for the activist director cases is that the director appointments generally occur well after the announcement of activism events. Thus we consider longer-window returns for activist director cases beginning from the appointment of these directors to the board. Results are reported in Panels E (12-month returns) and F (36-month returns) of Table 4.6. In general, we do not find non-zero risk-adjusted returns over either period for either category.

4.7. Firm outcomes

While stock market reaction provides a useful measure for evaluating the impact of activists, it is not without issues. First, we need to identify the time at which the market learned about the prospect of activist involvement. Second, we need the market to estimate the impact of activism in an unbiased manner and impound this estimate into price promptly. Finally, even if these difficulties are addressed, the stock market reaction does not provide insight into *how* activists affect corporate policy and firm value. In this section, we examine the impact of activists, especially activist directors, on a number of outcomes, with a focus on outcomes that are commonly sought by activists.

4.7.1. Profitability

We first examine the association between activism and operating performance. Our empirical approach follows that of Bebchuk et al. (2013), which is a modification of the approach used in Brav et al. (2008). Thus we measure operating performance as return on assets calculated as earnings before interest, taxes, depreciation, and amortization (Compustat item *oibdp*) divided by lagged total assets (*at*). For each firm-year t , we construct indicators for activism in year $t + s$

where $s \in \{-3, \dots, +5\}$, where, for example, $Activist_{t-3}$ takes the value 1 for $t = 2004$ and a given firm if an activism campaign began in 2007.

We estimate three models. Following Bebchuk et al. (2013), all models include year fixed effects, market value, and firm age, and indicators for activism. Following, Bebchuk et al. (2013), models (A) and (B) add industry and firm fixed effects, respectively. To examine a possible incremental effect of an activist getting board representation, Model (C) refines model (B) by including indicators for activist director appointments in years ranging from three years prior ($Activist\ director_{t-3}$) to five years subsequent ($Activist\ director_{t+5}$).

Table 4.7 presents results. The quantities presented in the table represent estimates of the impact of activism and activist directors, and are calculated as the difference between the estimated coefficients on the respective activism indicators for years $t + s$ and t , where $s \in \{1, \dots, 5\}$. With model (A), we find significant increases in ROA for years $t + 3$ to $t + 5$. Once we add firm fixed effects, i.e., in models (B) and (C), we find statistically significant increases in ROA in all five years. These effects are economically significant, with the five-year increase in ROA exceeding 1.1% in both models.

Looking at the incremental effect of getting an activist candidate on the board, we do not detect a statistically significant effect. The incremental effects are statistically indistinguishable from zero. If an incremental effect does exist, our failure to detect it statistically may be attributed to a lack of power stemming from a small number of observations (e.g., we have just 40 observations with $Activist\ director_{t+5}$ equal to one) and multicollinearity between our activism indicators (in many cases, the activist director is appointed in the same year that the activist campaign commences).

Table 4.7. Operating performance

Table presents estimates of the impact of activism on return on assets over 5 years after the announcement of activism. The empirical approach follows that of Bebchuk et al. (2013). We regress return on assets on indicators for activism events in any of the three categories, including *Board demand* and *Activist director*, ranging from three years prior ($Activism_{t-3}$) to five years subsequent ($Activism_{t+5}$). We estimate three models. Following Bebchuk et al. (2013), all models include year fixed effects, market value, and firm age, and indicators for activism. Models (A) and (B) add industry and firm fixed effects, respectively. Model (C) also adds firm fixed effects, as well as indicators for activist director appointments in years ranging from three years prior ($Activist\ director_{t-3}$) to five years subsequent ($Activist\ director_{t+5}$). The quantities presented in the table represent estimates of the impact of activism and activist directors, and are calculated as the difference between the estimated coefficients on the respective activism indicators for years $t + s$ and t , where $s \in \{1, \dots, 5\}$. Numbers in parentheses are heteroscedasticity-robust standard errors. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	(1) Activism	(2) Activism	(3) Activism	(4) Activist director
$ROA_{t+1} - ROA_t$	0.006 (0.007)	0.005* (0.003)	0.005* (0.004)	0.001 (0.007)
$ROA_{t+2} - ROA_t$	0.008 (0.007)	0.010** (0.005)	0.010** (0.005)	-0.004 (-0.011)
$ROA_{t+3} - ROA_t$	0.011* (0.008)	0.016*** (0.005)	0.016*** (0.005)	-0.006 (-0.015)
$ROA_{t+4} - ROA_t$	0.012* (0.008)	0.011** (0.005)	0.012** (0.006)	-0.005 (-0.012)
$ROA_{t+5} - ROA_t$	0.024*** (0.010)	0.011* (0.008)	0.011* (0.008)	0.005 (0.013)
Model:	(A)	(B)	(C)	(C)
Fixed effects:	Industry, year	Firm, year	Firm, year	Firm, year

Number of observations with activism indicator equal to 1

	Activism	Activist director
Year _{t-3}	1,032	237
Year _{t-2}	1,080	242
Year _{t-1}	1,117	245
Year _t	1,132	248
Year _{t+1}	913	159
Year _{t+2}	763	111
Year _{t+3}	584	79
Year _{t+4}	431	56
Year _{t+5}	342	40

Having demonstrated an effect of activism on operating performance, we next turn to a range of other outcomes that activists often seek to influence more directly. The examples discussed above in Section 4.2 suggest that activists often seek to influence corporate policy or decisions on a wide range of matters. They include matters related to mergers and acquisitions

(including divestitures of businesses), CEO turnover and compensation, capital structure (including cash holdings and dividend payout), and investment policy.

4.7.2. *Divestiture and acquisitions*

The first set of outcomes we examine relate to mergers and acquisitions. The examples discussed above suggest that one concern activists have is with excessive spending on acquisitions by target firms. Thus, the first outcome we consider is *Acquisition*, an indicator for whether the firm completed any acquisitions in the two years after a given fiscal year. Greenwood and Schor (2009, p.362) suggest that announcement returns associated with activism “are largely explained by the ability of activists to force target firms into a takeover.” Thus one outcome we consider, *Acquired*, is an indicator for whether the firm was acquired in the two years after a given fiscal year. Finally, often activists urge firms to divest businesses. Thus our third outcome is *Divestiture*, an indicator for whether the firm divested significant assets in the two years after a given fiscal year. We regress these indicators on industry and year dummies as well as the following controls (as described in Section 4.3), *Analyst*, *Institutional*, *Market value*, *Book-to-market*, *Leverage*, *Payout*, *ROA*, *Sales growth*, *Outside percent*, *Age*, *Tenure*, and *Staggered board*.

Table 4.8 presents these results. Examining the first column in Table 4.8, we see all three categories of activism are associated with significantly lower probability of acquisitions (coefs. -0.066 to -0.074). On the other hand, activism is positively associated with being acquired (coefs. 0.016 to 0.121), but the association is strongest when activism is in the category *Non-board activism* and lower when an activist director is appointed (the difference between *Non-board activism* and the other two forms of activism is statistically significant at the 5% level). Finally,

divestitures are associated with activism of the forms *Board demand* and *Activist director* (coefs. 0.076 and 0.069).

Table 4.8. Divestitures and acquisitions

Table presents regressions of outcome variables on firm-year level activism indicators. Acquisition indicates the firm completed acquisitions within two years after year t . Acquired indicates delisting within two years of year t with CRSP delisting code $dlstcd \in [200, 399]$. Divestiture indicates the firm completed divestitures and spinoffs within two years of year t . Regressions include industry and year fixed effects and the following controls (Control variables are measured for the fiscal year-end of year t): *Total assets*, book value of total assets; *Analyst*, number of analyst forecasts for each firm-year (I/B/E/S); *Institutional*, proportion of the firm's outstanding stock held by institutions; *Size-adj. ret.*, twelve-month size-adjusted returns; *Market value*, the value of market capitalization; *Book-to-market*, market capitalization divided by the book value of common equity; *Leverage*, ratio of debt to debt plus book value of common equity; *Payout*, the ratio of the sum of dividends and repurchases divided to EBITDA; *ROA*, EBITDA divided by the lagged total assets; *Sales growth*, sales divided by lagged sales; *Num. directors*, the number of directors on the board; *Outside percent*, the percentage of outside directors; *Age*, the average age of directors; *Tenure*, the average tenure of directors; *Staggered board*, indicator for staggered board. All controls and *CEO comp* are winsorized at the 1% and 99% levels. Values in parentheses are standard errors clustered by firm. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	Dependent variable:		
	Acquisition (1)	Acquired (2)	Divestiture (3)
Non-board activism	-0.066*** (0.020)	0.121*** (0.018)	0.026 (0.019)
Board demand	-0.067** (0.033)	0.113*** (0.026)	0.076*** (0.029)
Activist director	-0.074*** (0.027)	0.016 (0.015)	0.069*** (0.024)
Observations	36,908	36,588	36,908
Adjusted R ²	0.145	0.035	0.180
F-test for equal coefficients (p-values)			
Board demand = Activist director	0.855	0.001	0.853
Non-board activism = Activist director	0.798	0.000	0.135
Non-board activism = Board demand	0.990	0.783	0.139

4.7.3. CEO turnover and compensation

We next consider the association of activism with CEO turnover and compensation. We conjecture that activists may seek CEO turnover and may also seek to alter the level or structure of CEO compensation. While it seems plausible that activists would seek to decrease CEO

compensation, it is unclear whether they would reduce the percentage of compensation that is variable or increase it to enhance performance sensitivity.

We code the indicator *CEO turnover* equal to 1 if the CEO at the end of year t is no longer the CEO (but the company still exists) in year $t + 2$. For total CEO pay, we regress total CEO compensation in year $t + 2$ on controls, including CEO compensation in year t , and indicators for each category of activism. To assess change in performance-based compensation, we regress the proportion of CEO compensation that is variable (i.e., not salary) on its lagged value, controls, and activism indicators. We regress these variables on their lagged (year t) values, industry and year dummies as well as the following controls (as described in Section 4.3), *Analyst*, *Institutional*, *Market value*, *Book-to-market*, *Leverage*, *Payout*, *ROA*, *Sales growth*, *Outside percent*, *Age*, *Tenure*, and *Staggered board*.

Table 4.9. CEO turnover and compensation

Table presents regressions of variables on firm-year level activism categorical variables. *CEO exit* indicates a change in CEO between the end of year t and the end of year $t + 2$. *CEO comp_{t+2}* is log of total CEO compensation in year $t + 2$. *Perf comp* is the percentage of CEO compensation that not salary. Controls are as described in Table 8. Values in parentheses are standard errors clustered by firm. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	Dependent variable:		
	CEO exit _(t+1,t+2) (1)	CEO comp _{t+2} (2)	Perf comp _{t+2} (3)
Non-board activism	0.047 (0.031)	-0.029 (0.045)	-0.015 (0.018)
Board demand	0.042 (0.046)	-0.136** (0.059)	-0.054* (0.029)
Activist director	0.128** (0.052)	-0.112** (0.055)	-0.021 (0.021)
Dep. Var. _t	-0.007 (0.012)	0.466*** (0.012)	0.125* (0.065)
Observations	16,185	18,491	18,497
Adjusted R ²	0.037	0.716	0.161
F-test for equal coefficients (p-values)			
Board demand = Activist director	0.185	0.763	0.359
Non-board activism = Activist director	0.168	0.234	0.848
Non-board activism = Board demand	0.936	0.139	0.246

Results of our analysis are presented in Table 4.9. We find no statistically significant association between *Non-board activism* nor *Board demand* and CEO turnover. However, we find positive associations between CEO turnover and *Activist director* (coef. 0.128, $p < 0.05$). We find negative associations between CEO compensation and *Board demand* (coef. -0.136 , $p < 0.05$) as well as *Activist director* (coef. -0.112 , $p < 0.05$). These results point to a higher degree of monitoring and consequences to CEOs in the presence of activist directors. Finally, we see weak evidence of reduction in the proportion of compensation that is non-salary associated with *Board demand* (coef. -0.054 , $p < 0.10$), but not with *Non-board activism* and *Activist director*.

4.7.4. Capital structure and payouts

Among the most common demands activists make are requests for firms to increase the payment of dividends, reduce cash holdings, and to increase leverage. In Table 4.10, we examine the association between activism and measures of cash holding, leverage, and shareholder payout (dividends and share repurchases). As outcome variables we consider *Cash*, calculated as the ratio of total cash and short-term investments to the book value of total assets; *Leverage*, measured as the ratio of book value of debt to the sum of the book value of debt and equity; and, *Payout*, measured as the ratio of total dividends and share repurchases to EBITDA for the two years after year t . We regress these variables on their year- t values, industry and year dummies as well as the following controls (as described in Section 4.3), *Analyst*, *Institutional*, *Market value*, *Book-to-market*, *Leverage*, *Payout*, *ROA*, *Sales growth*, *Outside percent*, *Age*, *Tenure*, and *Staggered board*.

We find that *Board demand* (coef. -0.041 , $p < 0.01$) and *Activist director* (coef. -0.017 , $p < 0.10$) are associated with reduced cash holdings. We find that leverage is associated with both *Non-board activism* (coef. 0.022, $p < 0.01$) and *Activist director* (coef. 0.020, $p < 0.05$). Finally,

Board demand (coef. 0.147, $p < 0.01$) and *Activist director* (coef. 0.092, $p < 0.05$) are associated with increased payout. Overall, the evidence in Table 4.10 points to activist directors being associated with the kinds of capital structure and payout changes demands frequently demanded by activists.

Table 4.10. Capital structure

Cash is calculated as the ratio of total cash and short-term investments to the book value of total assets. *Leverage* is measured as the ratio of book value of debt to the sum of the book value of debt and equity. *Payout* is measured as the ratio of total dividends and share repurchases to EBITDA for the two years after year t . Controls are as described in Table 8. Values in parentheses are standard errors clustered by firm. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	Dependent variable:		
	Cash (1)	Leverage (2)	Payout (3)
Non-board activism	0.008 (0.007)	0.022*** (0.007)	-0.043 (0.054)
Board demand	-0.041*** (0.009)	0.004 (0.008)	0.147*** (0.044)
Activist director	-0.017* (0.010)	0.020** (0.009)	0.092** (0.036)
Dep. var. _{t}	0.907*** (0.014)	0.892*** (0.008)	0.360*** (0.014)
Observations	31,231	31,228	29,957
Adjusted R ²	0.595	0.856	0.275
F-test for equal coefficients (p-values)			
Board demand = Activist director	0.048	0.185	0.308
Non-board activism = Activist director	0.027	0.825	0.031
Non-board activism = Board demand	0.000	0.081	0.005

4.7.5. Investment

Finally, we examine the association between activism and three areas of spending commonly regarded as investment: capital expenditures, research and development (R&D), and advertising. We measure investment using the following proxies: *CapEx*, measured as the ratio of capital expenditure for two years after announcement of activism to the lagged book value of total assets; *R&D*, measured as the ratio of total R&D expenditure for two years after announcement of

activism to the lagged book value of total assets; and, *Advertising*, measured as the ratio of advertising expenditure for three years after announcement of activism to the lagged book value of total assets. We regress these variables on their year-*t* values, industry and year dummies as well as the following controls (as described in Section 4.3), *Analyst*, *Institutional*, *Market value*, *Book-to-market*, *Leverage*, *Payout*, *ROA*, *Sales growth*, *Outside percent*, *Age*, *Tenure*, and *Staggered board*.

Results are presented in Table 4.11. We find negative associations between all three categories of activism and capital expenditure, the coefficient on *Activist director* (coef. -0.015 , $p < 0.01$) is more negative than that on *Non-board activism* (coef. -0.009 , $p < 0.01$). Only with *Activist director* do we see a negative association with R&D spending (coef. -0.006 , $p < 0.05$).

Table 4.11. Investment

Table presents regressions of variables on firm-year level activism categorical variables. *CapEx* is measured as the ratio of capital expenditure for two years after announcement of activism to the lagged book value of total assets. *R&D* is measured as the ratio of total R&D expenditure for two years after announcement of activism to the lagged book value of total assets. *Advertising* is measured as the ratio of advertising expenditure for two years after announcement of activism to the lagged book value of total assets. Controls are as described in Table 8. Values in parentheses are standard errors clustered by firm. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	Dependent variable:		
	CapEx (1)	R&D (2)	Advertising (3)
Non-board activism	-0.009** (0.004)	-0.002 (0.002)	-0.001 (0.001)
Board demand	-0.014** (0.007)	-0.004 (0.005)	-0.001 (0.002)
Activist director	-0.015*** (0.004)	-0.006** (0.003)	-0.001 (0.001)
Dep. var. _t	1.614*** (0.035)	2.129*** (0.032)	2.018*** (0.020)
Observations	31,274	31,274	31,274
Adjusted R ²	0.714	0.859	0.887
F-test for equal coefficients (p-values)			
Board demand = Activist director	0.884	0.688	0.813
Non-board activism = Activist director	0.307	0.152	0.750
Non-board activism = Board demand	0.556	0.703	0.683

Overall, the evidence in Table 4.11 is consistent with activist directors playing a significant role in curbing expenditures on capital, R&D, and advertising. However, it is unclear whether this reflects curtailment of excessive investments or, as critics of activists might suggest, underinvestment and a focus on the short term.

4.8. Conclusion

In recent years, the phenomenon of hedge fund managers attempting to actively intervene in the governance of firms they invest in has gained prominence. These fund managers often layout an investment thesis regarding their target firms and vigorously engage with their targets to realize their thesis.

Instead of passively waiting for an investment hypothesis to validate itself (like most institutional fund managers do), activist hedge fund managers often demand seats on the board of their targets as a mechanism to effect change in investee firms and thereby actively control the outcome of their investment. While attaining directorship might not be the end goal, it is perhaps the stick that activists use to force companies to take their demands seriously. Given the importance that the demand for board positions has in the activist game plan, we examine hedge fund activism thorough the lens of activist directors, i.e., cases where candidates sponsored by the activists become directors of the target companies.

We find that activists are more likely to gain board seats at smaller firms and those with weaker stock price performance. As in prior research, we find positive announcement-period returns of around 5–14% when a firm is targeted by activists, including in cases where the activists ex-post gain board seats, and a 1–2% increase in return on assets over the subsequent one to five years. When they have board seats, activists remain as shareholders long enough to be considered

long-term investors by conventional standards, with holding periods averaging more than three years. The long-term shareholding combined with positive stock-price and operating performance effects suggests that the short-termism concern often expressed in the context of hedge fund activists may be less apparent in cases when activists become directors.

Activist directors appear to be associated with significant strategic and operational changes in target firms. We find evidence of increased divestiture, decreased acquisition activity, higher probability of being acquired, lower cash balances, higher payout, greater leverage, higher CEO turnover, lower CEO compensation, and reduced investment. With the exception of the probability of being acquired, the estimated effects are generally greater when activists obtain board representation, consistent with board representation being an important mechanism for bringing about the kinds of changes that activists often demand.

Our results do not allow us to conclude that these actions themselves are value-enhancing even if they are concomitant with better operating performance and stock returns. Moreover, the data available to us do not permit causal inferences. Despite these limitations, the range of associations that we document suggest that gaining board positions is an important mechanism that allows hedge fund activists to have an impact in ways that line up with the demands that they make of companies.

BIBLIOGRAPHY

- Agrawal, A., Jaffe, J., and Karpoff, J., 1999. Management turnover and governance changes following the revelation of fraud. *Journal of Law and Economics*. 42, 23–56.
- Bebchuk, L., 2005. The case for increasing shareholder power. *Harvard Law Review*. 118, 833–917.
- Bebchuk, L.A., 2007. The myth of the shareholder franchise. *Virginia Law Review*. 93, 675–732.
- Bebchuk, L.A., Brav, A., and Jiang, W., 2013. The long-term effects of hedge fund activism. Working paper.
- Bebchuk, L., Cohen, A., 2005. The costs of entrenched boards. *Journal of Financial Economics*. 78, 409–433.
- Bebchuk, L., Cohen, A., Ferrell, A., 2009. What matters in corporate governance. *Review of Financial Studies*. 22, 783–827.
- Becht, M., Franks, J., Mayer, C., and Rossi, S., 2010. Returns to shareholder activism: Evidence from a clinical study of the Hermes UK Focus Fund. *Review of Financial Studies*. 23, 3093–3129.
- Beyer, A., Larcker, D. F. and Tayan, B.: 2014, 2014 study on how investment horizon and expectations of shareholder base impact corporate decision-making, Technical report.
- Bhagat, S. and Bolton, B.: 2008, Corporate governance and firm performance, *Journal of Corporate Finance*. 14, 257–273.
- Brav, A., Jiang, W., and Kim, H., 2010. Hedge fund activism: A review. *Foundations and Trends in Finance*. 4, 185.
- Brav, A., Jiang, W., Kim, H., 2015. Recent Advances in Research on Hedge Fund Activism: Value Creation and Identification. *Annual Review of Financial Economics*. 7, 579–595.
- Brav, A., Jiang, W., Partnoy, F., and Thomas R., 2008. Hedge fund activism, corporate governance, and firm performance. *Journal of Finance*. 63, 1729–75.
- Brav, A., Jiang, W. and Tian, X.: 2014, Shareholder power and corporate innovation: Evidence from hedge fund activism, SSRN Electronic Journal.
- Brickley, J. a., Coles, J.L., Terry, R.L., 1994. Outside directors and the adoption of poison pills. *Journal of Financial Economics*. 35, 371–390.

- Brochet, F., and Srinivasan, S., 2014. Accountability of independent directors: Evidence from firms subject to securities litigation. *Journal of Financial Economics*. 111, 430–449.
- Cai, J., Garner, J., Walkling, R., 2009. Electing directors. *Journal of Finance*. 64, 2389–2421.
- Carleton, W. T., Nelson, J. M., and Weisbach, M. S., 1998. The influence of institutions on corporate governance through private negotiations: Evidence from TIAA-CREF. *The Journal of Finance*. 53, 1335–1362.
- Catan, E., Kahan, M., 2015. The Law and Finance of Anti-Takeover Statutes. Working Paper.
- Coates, J., 2000. Takeover defenses in the shadow of the pill: a critique of the scientific evidence. *Texas Law Review*. 79, 271.
- Coffee, J.C., Palia, D., 2014. The Impact of Hedge Fund Activism: Evidence and Implications. Working Paper.
- Cohen, A., Wang, C., 2013. How do staggered boards affect shareholder value? Evidence from a natural experiment. *Journal of Financial Economics*. 110, 627–641.
- Comment, R., Schwert, G.W., 1995. Poison or placebo? Evidence on the deterrence and wealth effects of modern antitakeover measures. *Journal of Financial Economics*. 39, 3–43.
- Core, J.E., Guay, W.R., Rusticus, T.O., 2004. Does weak governance cause weak stock returns? An examination of firm operating performance and investors' expectations. *Journal of Finance*. 61, 655–687.
- Cremers, M., Ferrell, A., 2014. Thirty Years of Shareholder Rights and Firm Value. *Journal of Finance*. 69, 1167–1196.
- Cremers, K., Nair, V., 2005. Governance mechanisms and equity prices. *Journal of Finance*. 60, 2859–2894.
- Cremers, M., Pareek, A. and Sautner, Z., 2013, Stock duration and misvaluation, Working paper
- Datta, S., Iskandar-Datta, M., 1996. Takeover defenses and wealth effects on security holders: The case of poison pill adoptions. *Journal of Banking and Finance*. 20, 1231–1250.
- Del Guercio, D., Seery, L., and Woidtke, T., 2008. Do boards pay attention when institutional investor activists just vote no? *Journal of Financial Economics*. 90, 84–103.
- Dodd, P., and J. B. Warner., 1983. On corporate governance. *Journal of Financial Economics*. 11, 401–438.
- Edmans, A., 2014. Blockholders and Corporate Governance. *Annual Review of Financial Economics*. 6, 23–50.

- Ertimur, Y., Ferri, F., Maber, D., 2012. Reputation penalties for poor monitoring of executive pay: Evidence from option backdating. *Journal of Financial Economics*. 104, 118–144.
- Ertimur, Y., Ferri, F., Muslu, V., 2010. Shareholder activism and CEO pay. *Review of Financial Studies*. 24, 535–592.
- Ertimur, Y., Ferri, F., Oesch, D., 2013. Shareholder votes and proxy advisors: Evidence from say on pay. *Journal of Accounting Research*. 51, 951–996.
- Faleye, O., 2007. Classified boards, firm value, and managerial entrenchment. *Journal of Financial Economics*. 83, 501–529.
- Fama, E., 1980. Agency problems and the theory of the firm. *Journal of Political Economy*. 88, 288–307.
- Fama, E., Jensen, M., 1983. Separation of ownership and control. *Journal of Law and Economics*. 26, 301–25.
- Ferris, S., Jagannathan, M., Pritchard, A., 2003. Too busy to mind the business? Monitoring by directors with multiple board appointments. *Journal of Finance*. 58, 1087–1112.
- Fich, E., Shivdasani, A., 2007. Financial fraud, director reputation, and shareholder wealth. *Journal of Financial Economics*. 86, 306–336.
- Fischer, P., Gramlich, J., Miller, B., White, H., 2009. Investor perceptions of board performance: Evidence from uncontested director elections. *Journal of Accounting and Economics*. 48, 172–189.
- Fos, V., Tsoutsoura, M., 2014. Shareholder democracy in play: Career consequences of proxy contests. *Journal of Financial Economics*. 114, 316–340.
- Gantchev, N., 2013. The costs of shareholder activism: Evidence from a sequential decision model. *Journal of Financial Economics*. 107, 610–631.
- Gill, B.S.M., Liekefett, K.H.E., Wood, L., 2014. Structural defenses to shareholder activism. *Review of Securities and Commodities Regulation*. 47, 151–170.
- Gilson, S.C., 1990. Bankruptcy, boards, banks, and bondholders: Evidence on changes in corporate ownership and control when firms default. *Journal of Financial Economics*. 27, 355–88.
- Gompers, P., Ishii, J., Metrick, A., 2003. Corporate governance and equity prices. *Quarterly Journal of Economics*. 118, 107–155.
- Gompers, P., Ishii, J., Metrick, A., 2010. Extreme Governance: An Analysis of Dual-Class Firms in the United States. *Review of Financial Studies*. 23-3, 1051–1088.

- Greenwood, R., and Schor, M., 2009. Investor activism and takeovers. *Journal of Financial Economics*. 92, 362–375.
- Grundfest, J. A., 1993. Just vote no: A minimalist strategy for dealing with barbarians inside the gates, *Stanford Law Review*. 45, 857–937.
- Guner, A. B., Malmendier, U. and Tate, G.: 2008, Financial expertise of directors, *Journal of Financial Economics*. 68, 323–354.
- Huang, Q., Jiang, F., Lie, E. and Yang, K.: 2014, The role of investment banker directors in M&A, *Journal of Financial Economics*. 112, 269–286.
- Jensen, M., 1983. Organization theory and methodology. *Accounting Review*. 56, 319–338.
- Karpoff, J., Schonlau, R., Wehrly., E., 2015. Do takeover defenses deter takeovers? Working Paper.
- Klein, A., Zur, E., 2009. Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors. *Journal of Finance*. LXIV, 187–229.
- Malatesta, P.H., Walkling, R. a, 1988. Poison Pill Securities: Shareholder Wealth, Profitability, and Ownership Structure. *Journal of Financial Economics*. 20, 347–376.
- Masulis, R.W., Wang, C., Xie, F., 2005. Corporate Governance and Acquirer Returns. *Journal of Finance*. 62, 1851–1889.
- Mulherin, J. H., Poulsen, A. B., 1998. Proxy contests and corporate change: implications for shareholder wealth. *Journal of Financial Economics*. 47, 279–313.
- Palepu, K., 1987. Predicting Takeover Targets. *Journal of Accounting and Economics*. 8, 3–35.
- Portnoy, S.: 2003, Censored regression quantiles, *Journal of the American Statistical Association*. 98(464), 1001–1012.
- Pound, J., 1988. Proxy contests and the efficiency of shareholder oversight. *Journal of Financial Economics*. 20, 237–265.
- Romano, R., 1991. The shareholder suit: Litigation without foundation? *Journal of Law, Economics, and Organization*. 7, 55–87.
- Ruback, R., 1988. An Overview of Takeover Defenses and Mergers Acquisitions. In *Mergers and Acquisitions*, edited by A. Auerback. Chicago: University of Chicago Press.
- Ryngaert, M., 1988. The effect of poison pill securities on shareholder wealth. *Journal of Financial Economics*. 20, 377–417.
- Sikes, S.A., Tian, X., Wilson, R., 2014. Investors’ reaction to the use of poison pills as a tax loss preservation tool. *Journal of Accounting and Economics*. 57, 132–148.

- Smith, M. P. 1996. Shareholder activism by institutional investors: Evidence from CalPERS. *Journal of Finance*. 51, 227–252.
- Srinivasan, S., 2005. Consequences of financial reporting failure for outside directors: Evidence from accounting restatements and audit committee members. *Journal of Accounting Research*. 43, 291–334.
- Strine Jr, L. E.: 2014, Can we do better by ordinary investors? A pragmatic reaction to the dueling ideological mythologists of corporate law, *Columbia Law Review*. 449–502.
- Weisbach, M. S. 1988. Outside directors and CEO turnover. *Journal of Financial Economics*. 20, 431–460.
- Yermack, D., 2004. Remuneration, retention, and reputation incentives for outside directors. *Journal of Finance*. 59, 2281–2308.
- Yermack, D., 2010. Shareholder voting and corporate governance. *Annual Review of Finance and Economics*. 2, 103–125.

Appendix A. Descriptive statistics by sample

This table presents the mean value of cash, analyst, institutional holdings, size-adjusted returns, market value, book-to-market ratio, leverage, dividend, return on assets, sales growth, firm age, board size, and percentage of outside directors for firms by the status of activism events and by existence of takeover defense measures (staggered board, poison pill, and dual-class structure).

	(1) Activism		(2) Dual-class		(3) Staggered board		(4) Poison pill	
	No	Yes	No	Yes	No	Yes	No	Yes
Cash	0.195	0.203	0.199	0.157	0.186	0.205	0.190	0.213
Analyst	7.192	7.100	7.176	7.308	7.737	6.623	7.407	6.510
Institutional holdings	0.621	0.648	0.626	0.590	0.628	0.617	0.619	0.634
Size-adj. return	0.007	-0.042	0.005	0.006	0.009	0.002	0.005	0.005
Market value	2.873	2.755	2.859	2.964	2.948	2.786	2.903	2.758
Book-to-market	0.610	0.695	0.614	0.607	0.613	0.615	0.613	0.617
Leverage	0.330	0.337	0.326	0.383	0.338	0.323	0.333	0.323
Dividend	0.104	0.081	0.102	0.110	0.108	0.099	0.112	0.076
Return on assets	0.094	0.088	0.089	0.136	0.103	0.083	0.098	0.077
Sales growth	1.131	1.111	1.132	1.101	1.117	1.143	1.132	1.124
Firm age	19.079	20.394	19.277	17.660	21.574	16.636	18.887	19.916
Board size	8.676	8.456	8.644	8.902	8.716	8.615	8.732	8.463
Outside percent	0.826	0.835	0.830	0.783	0.824	0.828	0.824	0.833
Num. obs.	21,299	996	20,372	1923	11,297	10998	16,852	5443

Appendix B. Variable definitions

Variable	Definition
Classification of activism events	
<i>Targeted Firm</i>	Indicator for firm being targeted by an activism event commencing in a given fiscal year (Source: FactSet SharkRepellent)
<i>Targeted Firm – Non-Board</i>	All activism events that are neither <i>Targeted Board – Proxy</i> nor <i>Targeted Board – Non-Proxy</i>
<i>Targeted Board – Non-Proxy</i>	Activism events not included in <i>Targeted Board – Proxy</i> , but identified by SharkRepellent as relating to “Board Representation,” “Board Control,” “Remove Directors(s),” or “Withhold Vote for Director(s).”
<i>Targeted Board – Proxy</i>	(i) Activism events identified based on SEC filings on Form DEFC14A or PREC14A filed by dissident and (ii) activism events where the dissident publicly disclosed that it delivered formal notice to the company that it intends to solicit proxies from stockholders
<i>Targeted Board – Proxy – Targeted Director</i> (also <i>Targeted Director</i>)	Indicator for a director being either (i) up for election during an activism year when dissidents do not explicitly identify the directors they seek to replace or (ii) explicitly named as a target by activists
<i>Targeted Board – Proxy – Non-Targeted Director</i>	Indicator for a director being involved in a proxy fight (<i>Targeted Board – Proxy</i>), but not being individually targeted by activists
Classification of activism events by settlement (Table 3.3 Panel B)	
<i>Non-Proxy – Settled</i>	Indicator for a non-proxy fight event resulting in a board seat for dissidents, but did not go to shareholder election
<i>Non-Proxy – Not Settled</i>	Indicator for a non-proxy fight event not resulting in board seats for activists
<i>Proxy – Settled</i>	Indicator for a proxy fight event resulting in a board seat for dissidents, but not going to shareholder election
<i>Proxy – Not Settled</i>	Indicator for a proxy fight event not resulting in any board seats for activists
<i>Proxy – Went to Election</i>	Indicator for a proxy fight going to shareholder election
Dependent variables	
<i>Departure_(t, t+2)</i>	Indicator for the director leaving the board of the firm between years t and $t + 2$ (i.e., the year after the activism event, if any)
<i>Against Votes_{t+2}</i>	Percentage of votes against the director in director elections in year $t + 2$ (votes against + votes withheld) / (votes for + votes against + votes withheld)
<i>Other Boards_{t+2}</i>	Number of directorships a director has with companies other than the company of interest in year $t + 2$
Firm controls	
<i>Ind.-Adj. Return</i>	Twelve-month industry-adjusted return, calculated as raw return minus the return for the relevant Fama/French 48-industry portfolio
<i>ROA</i>	EBITDA divided by lagged total assets
<i>Sales Growth</i>	Sales divided by lagged sales
<i>Market Value</i>	Natural log of market capitalization
<i>Leverage</i>	Sum of long-term debt and current liabilities divided by sum of long-term debt, current liabilities and the book value of common equity

Appendix B. Variable definitions (Continued)

Variable	Definition
<i>CEO Turnover</i>	Indicator for CEO Turnover in year $t + 1$
<i>Dividend</i>	Sum of common dividends and preferred dividends divided by earnings before depreciation, interest, and tax
<i>Analyst</i>	Number of analyst forecasts for each firm-year (Source: I/B/E/S)
<i>Institution</i>	Percentage of shares held by institutions (Source: WhaleWisdom)
Director characteristics	
<i>Age</i>	Director's age in year t
<i>Tenure</i>	Number of years a director served on the firm's board at time t
<i>Percent Owned</i>	Number of shares held by a director divided by shares outstanding at fiscal year-end (Source: Equilar)
<i>Audit Committee</i>	Indicator for the director being on the audit committee at time t
<i>Compensation Committee</i>	Indicator for the director being on the compensation committee at time t
<i>Independent Director</i>	Indicator for director being independent
<i>ISS Against_{t+2}</i>	Unfavorable recommendation by Institutional Shareholder Services (ISS) in year $t + 2$ for each individual director nominee
<i>Up for Election</i>	Indicator for the director up for election in year $t + 1$ (Source: ISS Voting Analytics)

Appendix C: Activism classification – examples

Case 1: Firm is targeted for activism but not for board-related issues

(Targeted Firm and Targeted Firm – Non-Board)

Target: Bioenvirion, Inc.

Dissident: Elliott Management Corporation

Dates: 5/30/2007 – 10/4/2007

Proposals/Outcome: Campaign to vote against company's acquisition by Genzyme Corporation for \$5.60 per share. Court granted company's petition to reconvene the special meeting and re-open the polls. At the reconvened special meeting the merger was approved.

Target: 99 Cents Only Stores

Dissident: Akre Capital Management LLC

Dates: 1/4/2008 – 9/18/2008

Proposals/Outcome: Campaign urged board to concentrate resources on markets other than Texas. Company announced on 9-18-2008 it will exit the Texas market.

Case 2. Firm is targeted for a board related issue not resulting in a proxy fight

(Targeted Firm and Targeted Board – Non-Proxy)

Target: American Bank Note Holographics, Inc.

Dissident: Levy, Harkins & Co., Inc.

Dates: 3/30/2007 – 5/24/2007

Proposals/Outcome: Dissident seeking 5 of 5 seats on the company's board and threatened a formal proxy fight if the company failed to address its concerns. Later company settled with the Dissident whereby 2 dissident nominees were appointed on the board.

Target: Exide Technologies

Dissident: Soros Fund

Dates: 12/22/2004 – 4/19/2005

Proposals/Outcome: Dissident met with company to discuss its operating and board concerns. Company appointed one dissident nominee to nine-person board and submitted proposals to declassify the board and to allow 15% of shareholders to call special meetings.

Target: Southwest Gas Corporation

Dissident: GAMCO Asset Management Inc. (2/18/2004 – 5/6/2004)

Proposals/Outcome: Dissident campaign to nominate Salvatore J. Zizza to board. Dissident did not solicit proxies for its nominee, but instead nominated candidate from the floor of the annual meeting. Company's nominees overwhelmingly elected to Board.

Appendix C: Activism classification – examples (Continued)

Case 3. Firm is target of a proxy fight which is settled without going to a shareholder vote
(Targeted Firm, Targeted Board – Proxy and Proxy – Settled)

Target: Alloy, Inc.

Dissident: Becker Drapkin Management LP/Kleinheinz Capital Partners, Inc.

Dates: 3/17/2010 – 7/15/2010

Proposals/Outcome: Proxy fight for three board seats settled. Company increased the size of the board by one seat and appointed a dissident nominee to fill the vacancy.

Target: The Brink's Company

Dissident: MCM Management, LLC

Dates: 11/30/2007 – 5/2/2008

Proposals/Outcome: Proxy fight for four board seats settled, with company agreeing to nominate two dissident representatives at the 2008 annual meeting and announcing plans to spin-off its Home Security Unit.

Case 4. Firm is target of a proxy fight that goes to a shareholder vote
(Targeted Firm, Targeted Board – Proxy and Proxy – Went to Election)

Target: Blockbuster Inc.

Dissident: Icahn Associates Corp.

Dates: 4/8/2005 – 5/11/2005

Proposals/Outcome: Dissident slate elected, winning three of three seats up for election to seven-member board).

Target: Alaska Air Group, Inc.

Dissident: Richard D. Foley/Stephen Nieman/Terry K. Dayton/William Davidge

Dates: 3/20/2006 – 5/16/2006

Proposals/Outcome: Three-person dissident slate defeated (management won all four seats up for election to twelve-person board). Management's proposals to declassify board and remove supermajority vote for mergers was passed and implemented.

Case 5. Firm is target of a proxy fight that is not settled, but does not go to a shareholder vote
(Targeted Firm, Targeted Board – Proxy and Proxy – Not Settled)

Target: Friendly Ice Cream Corporation

Dissident: Biglari Capital Corp.

Dates: 11/8/2006 – 6/17/2007

Proposals/Outcome: Proxy fight to elect two people to the five-person board at the 2007 annual meeting was withdrawn after company agreed to be acquired. Dissident entered into agreement to vote for the merger.

Appendix D: Identification of targeted directors – examples

In some proxy fights, dissidents specifically name on DEFC14A filings those directors they seek to replace with their own nominees, in which case we consider these directors as *explicitly targeted*. In other cases, dissident do not specify the directors they are trying to replace, but we infer the targeted directors from proxy filings by management. We recognize those director nominees as *implicitly targeted*.

Example 1: Explicitly Targeted Directors

Target: Lions Gate Entertainment Corp. *Dissident:* Carl C. Icahn *Duration:* 12/6/2010 – 12/14/2010

Excerpt from DEFC14A filed by Carl C. Icahn:

“If no specification is made, your shares will be voted (i) FOR Mr. Jay Firestone; (ii) FOR Dr. Michael Dornemann; (iii) FOR Mr. Christopher J. McGurk; (iv) FOR Mr. Daniel A. Ninivaggi; (v) FOR Dr. Harold T. Shapiro; (vi) FOR the persons who have been nominated by Lions Gate to serve as directors, OTHER THAN Mr. Michael Burns, Mr. Harald Ludwig, Mr. G. Scott Paterson, Mark H. Rachesky, M.D. and Mr. Hardwick Simmons.”

Full list of director nominees from DEFC14A filed by Lions Gate Entertainment Corp.:

Management Nominees	Targeted Director	Management Nominees	Targeted Director
Michael Burns	True	Norman Bacal	False
Harald Ludwig	True	Arthur Evrensel	False
G. Scott Paterson	True	Jon Feltheimer	False
Mark H. Rachesky	True	Frank Giustra	False
Hardwick Simmons	True	Morley Koffman	False
		Daryl Simm	False
		Phyllis Yaffe	False

Example 2: Implicitly Targeted Directors

Target: Target Corp. *Dissident:* Pershing Square LP *Duration:* 4/21/2009 – 5/28/2009

Excerpt from DEFC14A filed by Target Corp.

“Proxies solicited by the Board of Directors will, unless otherwise directed, be voted for the election of four nominees to serve as Class III directors for three-year terms expiring in 2012 and until their successors are elected. The four nominees are Mary N. Dillon, Richard M. Kovacevich, George W. Tamke, and Solomon D. Trujillo. All of the nominees are currently directors and have consented to be named in this proxy statement and to serve if elected.”

Excerpt from DEFC14A filed by Pershing Square LP

“PROPOSAL 2A: To elect William A. Ackman, Michael L. Ashner, James L. Donald and Richard W. Vague as directors of Target Corporation.”

Management Nominees	Targeted Director
Mary N. Dillon	True
Richard M. Kovacevich	True
George W. Tamke	True
Solomon D. Trujillo	True