

Shareholder Activism in REITs

David H. Downs^{*}, Miroslava Straska^{**}, and H. Gregory Waller^{***}

This version: April 1, 2017

Abstract

This paper examines the prevalence, characteristics, determinants, and wealth effects of shareholder activism in REITs. Conventional wisdom suggests that REIT-related activist campaigns occur less frequently because REITs are thought to be protected against hostile takeovers, and the extent of undervaluation in REITs is thought to be limited. We find, however, that the conventional wisdom does not hold for our empirical analysis. Using a sample of 4,119 activist campaigns from 2006 to 2014, 114 of which are launched against REITs, we find that REITs are as likely to be targeted by shareholder activists as other public firms. We also show that the short-term reaction to activism announcements is positive and similar for REITs and non-REITs. Our further results are most consistent with the view that this reaction reflects investors' expectation that an activist target faces an increased takeover likelihood. Our study addresses an existing criticism of the literature by focusing on a relatively homogenous industry where firms face the same regulatory environment and comparable business conditions.

Keywords: Shareholder Activism, Firm Value, REITs, Corporate Control
JEL: G14, G23, G32, G34

Acknowledgements: We thank Brad Case, Chintal Desai, Shaun Bond, Emanuela Giacomini, Wally Boudry, Charles Trzcinka participants at the 2015 AREUEA National Conference, the 2016 ERES Conference, the 2016 AREUEA International Conference, and research seminar participants at Virginia Commonwealth University, and Florida International University for their valuable comments and suggestions. We also thank the VCU Presidential Research Quest Fund and The Kornblau Institute at VCU for financial support.

* David H. Downs (contact author), The Kornblau Institute and the Department of Finance, Insurance & Real Estate, School of Business, Virginia Commonwealth University. e-mail: dhdowns@vcu.edu.

** Miroslava Straska, Department of Finance, Insurance & Real Estate, School of Business, Virginia Commonwealth University. e-mail: mstraska@vcu.edu.

*** H. Gregory Waller, Department of Finance, Insurance & Real Estate, School of Business, Virginia Commonwealth University. e-mail: hgwall@vcu.edu

Shareholder Activism in REITs

*“No recent development has influenced firms’ strategic and financial decision-making as profoundly as the surge in shareholder activism following the global financial crisis.”*¹

1. Introduction

In recent years, shareholder activists, often represented by activist hedge funds, have been playing an increasingly important role in the corporate governance landscape. These shareholders, dissatisfied with some aspect of a company’s management or operations, try to bring about change within the company, and, in some cases, agitate firms for a change in corporate control. Examples of activist campaigns include demands for major operational or capital structure changes, changes in business strategy, seeking strategic alternatives, oppositions to proposed corporate transactions, demands for increased payouts to shareholders, or changes in corporate governance, such as elimination of takeover defenses (Brav, Jiang, Partnoy, and Thomas, 2008; Greenwood and Schor, 2009; Gantchev, 2013).

The research on the wealth effects of shareholder activism generally agrees that activism is beneficial to the activist investors. Several recent studies have shown that activists generate significant abnormal returns both in absolute terms and in comparison to non-activist investing (Brav, et al., 2008; Clifford, 2008; Becht, Franks, Mayer, and Rossi, 2008). Perhaps because of this success, the funds under management in activist hedge funds have increased from about \$12 billion in 2003 to about \$112 billion in 2014, with more than 10 activist and multiple-strategy funds managing over \$10 billion each (J.P.Morgan, 2015). The number of campaigns has also increased over time. While Bebchuk, Brav, Jackson and Jiang (2013) report 757 interventions by activist hedge funds between 1994 and 2000, they report 1,283 such interventions in the more recent 2001-2007 period.

¹ The activist revolution: Understanding and navigating a new world of heightened investor scrutiny, J.P.Morgan publication, January 2015.

Although shareholder activists seem to play a prominent role in shaping the operation of public corporations today, the conventional wisdom seems to be that the activists take only a back seat in affecting REITs.^{2,3} This common belief is plausible for at least two reasons. First, managers in a typical REIT are thought to be well protected against hostile bids, making activist attacks less likely.⁴ Capozza and Seguin (2003) argue that because REITs are subject to the IRS's "five or fewer" rule that prohibits five or fewer shareholders from owning 50% or more of a firm,⁵ all REIT management teams are essentially protected from removal by a hostile bidder. Additionally, REITs routinely use so-called excess shareholder provisions, under which voting rights and dividend payments are automatically suspended should a single shareholder's stake exceed some prescribed hurdle, typically 10% (Chan, Erickson and Wang, 2003). Finally, most REITs are incorporated in Maryland, where state law protects them from unsolicited takeover bids.⁶

The second reason for the plausibility of the view that shareholder activism is less prevalent in REITs is the notion that REITs are less likely to be undervalued as a result of inaccurate cash flow forecasts or governance deficiencies. Unlike many firms whose most significant assets are off their books (e.g., human capital or technological advantages), REITs derive their value from real estate assets. In a REIT, at least 75% of the assets must be real estate related and at least 75% of the gross income must be derived from real estate rents or interest on mortgages on real properties. REITs are thus thought to have assets that are easier to value than the assets of firms in other industries as most cash flows depend on relatively predictable changes in rent growth.⁷ In fact, the transparent nature of the underlying real estate assets is

² For example, a Wall Street Journal article from 12/2/2014 titled "Activist Explores a New Frontier: Property" portrays a fund manager Jonathan Litt and his \$100 million hedge fund, Lands and Buildings, as "the REITs sector's only regular activist investor." It quotes Litt saying that "There are just not a lot of people looking to be activist in the space." The article also notes that "Activism isn't new to REITs, but it is rare."

³ Only within the last year or so has the popular press portrayed the degree of shareholder activism directed at REITs as being significant. See "Activist Investors Have a New Favorite Target: REITs" Wall Street Journal, 6/7/2016, and "Meet the Hedge Activist Shaking Up The Market's Best-Performing Asset Class" Forbes, 6/15/2016.

⁴ See "Activists Come Back to REITs" Wall Street Journal, 2/13/2008.

⁵ See Downs (1996) to see how the REIT industry "targeted" institutional investors.

⁶ Hartzell, Sun, and Titman (2006) note that the trust law in Maryland is understood to help insulate firms from the market from corporate control. Hartzell, Kallberg, and Liu (2008) argue that this insulation promotes managerial entrenchment and limits the opportunity of stockholders to realize a takeover premium.

⁷ See "Activist Explores a New Frontier: Property" Wall Street Journal, 12/2/2014.

often cited as the most likely reason for why REIT shareholders realize significantly lower gains from takeovers than shareholders of other firms (Eichholtz and Kok, 2008; Womack, 2012; Mulherin and Womack, 2015).⁸ Additionally, because REITs are required to pay out 90% of their taxable income as dividends (Boudry, 2011), the agency costs of free cash flow (Jensen, 1986), are thought to be less severe in REITs than in other public firms. Indeed, the researchers who find no relation between REIT governance measures and performance explain their findings by the fact that REITs operate in a strict regulatory environment that in itself limits managerial entrenchment (Bianco, Ghosh, Sirmans, 2007; Bauer, Eichholtz, Kok, 2010). This implies that deriving additional value from improved governance in REITs might be difficult.

For both these reasons, shareholder activists may have less opportunity for economic gain by pushing for strategic, operational, or governance changes in REITs in comparison to other public firms. Nevertheless, anecdotal evidence suggests that REITs are not immune from shareholder activism. A prominent case discussed in the media is that of CommonWealth REIT, in which two activist investors, Corvex Management LP and Related Fund Management LLC, succeeded in their fight to remove the company's entire board.⁹ The activists accused managing trustees of excessive compensation and mismanagement that caused CommonWealth to trade below the value of its office-property portfolio. Other recent cases of shareholder activism include Bulldog Investors pressuring Javelin Mortgage Investment Group to significantly repurchase stock;¹⁰ Midvale hedge fund seeking to oust the management and replace

⁸ The difference between takeover premia realized by REIT and non-REIT shareholders is well documented by Mulherin and Womack (2015). In their Appendix table, the authors summarize the results of several prior studies on the topic. On average, the studies report an average abnormal stock return of 7% around takeover announcements for target REIT shareholders as compared to an approximately 21% premium for target shareholders of all types of public firms.

⁹ See "Corvex, Related Call for Earlier CommonWealth REIT Special Meeting" Wall Street Journal 3/25/2014.

¹⁰ See "Bulldog Targets REITs For Shakeup After Javelin Win" Bloomberg, 1/16/2014, www.bloomberg.com/news/.

the board of Anworth Mortgage Asset Corp;¹¹ and Orange Capital hedge fund urging Strategic Hotels and Resorts to sell the company.^{12,13}

Most recently, discussions among REIT professionals seem to suggest that the perception about shareholder activism in REITs may be changing. For example, at the 2017 REITWise Conference, Mark Parrell, Executive Vice President and Chief Financial Officer with Equity Residential moderated a panel that explored the drivers of REIT shareholder activism. In a recorded interview with REIT.com, Mr. Parrell noted that historically investor activism in REITs has been limited due to the size of the industry and the tax rules that apply to REITs. However, he went on to say that “That’s changed. The trend is certainly upwards in terms of activism in our area.”^{14,15} He also stressed the need for REIT managers to better understand the motivations of activist investors.

In an attempt to shed light on this important topic, we examine the extent, characteristics, determinants, and consequences of shareholder activism in REITs and compare them to those in other public firms. If the conventional wisdom holds, we expect to see relatively fewer campaigns in REITs in comparison to other public firms. Our results suggest that the conventional wisdom does not hold. Using a sample of 4,119 activist campaigns from 2006 to 2014, 114 of which are launched against REITs, we find that REITs are as likely to be targeted by shareholder activists as other public firms. This result holds when comparing REITs to all other public firms as well as when comparing REITs to smaller samples matched to REITs on size and value characteristics.

In further analyses, we document that, similar to campaigns in other public firms, the most frequent campaigns in REITs are described as seeking to maximize shareholder value. The top two “value” demands

¹¹ See “Activist U.S. Fund Seeks Board Ouster at Anworth REIT” Bloomberg, 4/17/2014, www.bloomberg.com/news/.

¹² See “Orange Capital, LLC Urges Immediate Sale of Strategic Hotels & Resorts in Letter sent to the Board of Directors” Business Wire available via Factiva, 2/19/2013.

¹³ Additional examples of older activist campaigns are discussed in “Activists Come Back to REITs” Wall Street Journal, 2/13/2008.

¹⁴ Recorded interview available at: <https://www.reit.com/news/videos/reitwise-panel-explores-drivers-reit-shareholder-activism>

¹⁵ See also “Activist Investors Have a New Favorite Target: REITs” Wall Street Journal, 6/7/2016, and “Meet the Hedge Activist Shaking Up The Market’s Best-Performing Asset Class” Forbes, 6/15/2016.

made by activists are (i) the sale, merger, or liquidation of the target company and (ii) the review of strategic alternatives. The top “governance” demand is to obtain board seats for the activist. Value demands occur in activist campaigns aimed at REITs significantly more frequently than governance demands and are also more frequent in comparison to campaigns aimed at non-REIT public firms. In non-REIT public firms, activists seek improvements in governance more often than they push value demands. Interestingly, we also find the reported campaign success rate is significantly lower for activist campaigns in REITs relative to those in non-REITs. These results indicate that activists in REITs see more potential in value-related rather than governance-related improvements but have a harder time pushing their agenda through in REITs relative to non-REITs.

The results from our analysis of the determinants of activism likelihood in REITs show that this likelihood decreases with relative asset valuation (market-to-book of assets), accounting performance (return on assets), and prior abnormal stock returns; and increases in cash. Thus, the REITs that are the targets of activism can be described as relatively cheap “value” firms with weaker performance but with cash on hand. These determinants of activism likelihood are similar to those of non-REITs.

With respect to the gains from activism, we find that, similar to other public firms, shareholders of REITs experience significantly positive average short-term gains around the announcements of activist campaigns. However, we find that the average long-term gains measured in the period from one month prior to one year after the event are not statistically significant for REITs and tend to have a negative sign. Thus, an activist campaign in a typical REIT does not seem to result in a long-term gain for shareholders. This result is somewhat different for non-REITs, where we find that the long-term gains tend to be positive, on average. However, likely due to a much smaller number of observations for REITs, we do not find that the long-term gains in REITs are different from those of non-REITs.

In the next set of results we summarize changes in measurable firm characteristics around activism and examine whether these changes relate to abnormal returns. We find that, similar to non-REITs, REITs experience a decline in profitability, asset growth, and capital investment and an increase in the incidence of stock repurchase plans. We also find that about 24% of non-REIT activist targets and 23% of REIT

activist targets are acquired within 18 months of the initial activist campaign. We find no relation between the changes in firm characteristics and short-term announcement returns. However, we find that the long-term returns in REITs and non-REITs correlate positively and significantly with the change in profitability, asset growth, and with target firm takeover. Because a typical activism target experiences a decrease in profitability and a decrease in asset growth, we hypothesize that it is most likely the expectation that the target firms will be taken over that causes the positive short-term market reaction to shareholder activism announcements.

In the last part of our empirical analysis we examine this hypothesis, which was first introduced in Greenwood and Schor (2009). Under their hypothesis, the returns to activism reflect an increased likelihood that an activist target firm will be taken over at a premium to its current stock price. Consistent with this hypothesis, we find that after controlling for observable firm characteristics, activist target firms -- both REITs and non-REITs -- are more likely to be taken over than firms that are not subject to activist campaigns. Additionally, we find that only the firms that are ultimately acquired realize average abnormal long-run returns that are significantly positive. The average long-run returns for the firms not subsequently acquired are either statistically insignificant or, especially for REITs, significantly negative. These results are best described as consistent with the view that the short-term gains from shareholder activism reflect market expectations about the target firm's increased takeover likelihood.

Our research partially addresses REIT professionals' interest in the motivations and effects of REIT-focused activist investors and it contributes to the academic literature in at least three ways. First, to our knowledge, there is no systematic study that examines the effects of shareholder activism in REITs. The research in mainstream finance excludes REITs from their samples because REITs have their own unique regulatory requirements and our search of the real estate literature on the topic of shareholder activism returned no results. However, research that aids the understanding of how shareholder activists affect REITs seems important given that REITs are increasingly being used as preferred vehicles for investors seeking real estate exposure. Additionally, an increasing number of countries have introduced or

are contemplating REIT-like structures to facilitate capital flows to the real estate sector (Eichholtz and Kok, 2007).

Second, by examining a relatively homogeneous group of firms, we aim to remedy some of the criticism of the existing research on shareholder activism in public firms. Specifically, Coffee and Palia (2014) point out that the control group, i.e. the group of similarly situated firms that do not experience shareholder activism, is not well specified in the existing studies on shareholder activism as it is not similar enough to the treatment group. Our control group is less likely to suffer from this criticism as all REITs are subject to the same regulatory requirements. Additionally, because REITs are relatively transparent, we can obtain more reliable measures of their characteristics, such as valuation through Tobin's Q (Capozza and Seguin, 2003), or investments (Hartzell, Sun, and Titman, 2006). These qualities provide additional motivation for viewing the REIT industry as a useful laboratory.

Third, our results compliment recent work related to REIT M&A activity. Mulherin and Womack (2015) document that competition in the REIT takeover market is more robust than prior studies have suggested. Our finding of robust shareholder activism directed at REITs is consistent with Mulherin and Womack and may suggest an impetus for their findings.

The rest of this paper is organized as follows. In the next section, we summarize the literature on the recent wave of shareholder activism in public firms other than REITs; in Section 3, we summarize our data; in section 4, we present our results; and in section 5, we conclude.

2. Shareholder Activism in Public (non-REIT) Firms

Shareholder activism in the U.S. dates back to the early 1900s, although the role and identity of an activist investor has changed as legal and regulatory regimes have shifted. In the early 1990s, activists were predominantly financial institutions, such as banks, mutual funds, or insurance companies. In the 1940s to 1970s, they were mostly individual investors. The 1980s saw again increased involvement by institutional investors, mainly public pension funds. The 1980s also saw the rise of corporate raiders. In the 1990s, labor

union pension funds played a major role in shareholder activism. Finally, in the early 2000s hedge funds and private equity funds assumed prominence in the activist arena (Gillan and Starks, 2007).

According to a recent PWC Report (2015),¹⁶ shareholder activism today includes activities with varying degrees of assertiveness on the part of the activist investor. On a scale from most assertive to most passive, what are known as “hedge fund” activist campaigns are the most assertive. In these types of campaigns, investors, usually hedge funds or an investor(s) aligned with a hedge fund, attempt to bring about significant change in the target company’s strategy. These changes can include a breakup or sale of the firm, replacement of incumbent management, realization of operating efficiencies or financial restructuring. Moving down the assertiveness spectrum are “vote no” campaigns, where an investor (or group of investors) urges shareholders to withhold their votes from one or more of the board-nominated director candidates; “shareholder proposals” intended to bring about change in the target company’s governance policies or practices, executive compensation plans, or behavior as a corporate citizen; and, on the passive end of the spectrum, activist campaigns that arise from a company’s “say on pay” advisory vote proxy item. These less-assertive campaigns are often sponsored by public or labor pension funds, individual investors, investment managers, religious groups, or coalitions of like-minded investors. One notable exception are “shareholder value” proposals, which are usually sponsored by hedge fund activists.

Most research on the recent wave of activism focuses on hedge funds as activists. This research documents that hedge fund activists tend to target companies typically described as “value” firms, with low market value relative to book value, but profitable and with sound operating cash flows and return on assets (Brav et al., 2008). Target firms also tend to have lower payouts, more takeover defenses, and CEOs who are paid considerably more than peer CEOs. Relatively few targeted companies are large-cap, most have high institutional ownership and high trading liquidity (Brav et al., 2008).

The literature on activism wealth effects generally agrees that activism is beneficial to the activist hedge funds. Several recent studies have shown that activists generate significant abnormal returns both in

¹⁶ See “Shareholder Activism: Who, what, when and how?” March, 2015, www.pwc.com.

absolute terms and in comparison to non-activist investing. Brav, et al. (2008) report that the average hedge fund activist in 2001-2006 earned a 14.3% higher return than a size-adjusted value-weighted portfolio of stocks. Clifford (2008) demonstrates that hedge funds earn significantly higher holding-period returns from activist investing compared to their passive holdings. Becht, et al. (2008) show that activist investments of a U.K. hedge fund significantly outperform the market. Gantchev (2013), however, questions the size of the return reported in these studies because they do not account for the costs associated with activism. He estimates that these costs reduce activist returns by more than two-thirds. He further reports that the net return for an average activist is close to zero and that only the top quartile of activists in his sample earn higher returns on their activist holdings than on their non-activist investments.

The research on the wealth effects in targeted companies generally agrees that, in the short-term and the long-term, activist campaigns bring about significantly positive shareholder gains (Bebchuk, Brav, and Jiang, 2015; Brav et al., 2008; Clifford, 2008; Greenwood and Schor, 2009; Klein and Zur, 2009). This same research, however, often disagrees about the sources of these gains. In their literature review, Coffee and Palia (2014) summarize evidence on four potential sources of these gains: improvements in operating performance, capture of takeover premium, wealth transfers, and reduction in managerial agency problems. They conclude that the evidence is decidedly mixed, especially when it comes to improvements in operating performance or the reduction in managerial agency problems. While some studies report improvements in operating performance from the period prior to after activism (Brav, et al., 2008; Bebchuk, et al., 2015), other studies find no such improvements (Klein and Zur, 2009). Additionally, although many studies report changes in real variables, such as increased payouts and leverage, changes in investment, or CEO turnover after activism, most studies find no relation between these changes and shareholder returns around activism.

If improvements in operating performance or governance changes generally do not drive the positive shareholder gains observed around activist events, then those gains may be capturing an increase in the expected takeover premium. Greenwood and Schor (2009) find positive abnormal returns for targets that are ultimately acquired and zero for those that remain independent after the activist event. They also find that activist targets are more likely to be taken over than similarly situated firms. They conclude that

the shareholder gains around activist events can be largely explained by the ability of activists to force target firms into a takeover. Similarly, Brav et al. (2008) find that the short-term abnormal returns around the activist event are highest when the stated objective is to sell the company.

Overall, the clearest evidence is that there appears to be a positive stock price reaction to activist event announcements. What is less clear is whether this reaction can be attributed to changes in operating performance, changes in real variables, or changes in the acquisition likelihood. Our research objective is to address the mixed results or criticism of the literature on this topic (e.g., Coffee and Palia, 2014), by focusing on the relatively homogenous REIT industry.

3. Data Sources and Sample Description

3.1 Activist Events

We obtain our initial list of shareholder activist campaigns from the FactSet SharkRepellent database. SharkRepellent provides a comprehensive sample of activist events for all publicly listed US firms starting in 2006. Specifically, SharkRepellent includes data on all schedule 13D filings containing activism-related Item 4 (Purpose of Transaction), as well as all 13D filings filed by the members of SharkWatch50 group; the data on proxy fights; the data on exempt solicitation campaigns; and finally the data on any other publicly-announced stockholder campaigns. The SharkWatch50 group is the group of fifty most prominent activists specified by SharkRepellent.¹⁷

The SharkRepellent data includes information on the date the campaign was announced, the date of the initial 13D filing, the identity and the type of the activist investors, the stake the activists hold in the target company, as well as several other descriptive items such as the demands of the activists, the success, the status and the end date of the campaign, and others. We initially obtain the data on all 4,431 activist campaigns in the database from 2006 to 2014. We then exclude the campaigns that were launched solely

¹⁷ SharkRepellent uses several criteria to identify the members of this group. The group composition changes whenever SharkRepellent considers the change appropriate.

by corporations to avoid confusing corporate crossholding and acquisitions with shareholder activism from portfolio and individual investors. We also exclude activism by labor unions and religious groups, as these groups may have different incentives than portfolio investors (Guercio and Woidtke, 2014). We retain all campaigns launched by hedge funds, investment advisers, mutual funds, pension funds, and other institutions. This results in a sample of 4,145 campaigns. We then group the campaigns launched by the same activist group against the same firm into campaign sequences. If the date of the initial 13D filing precedes the announcement date of the first campaign in the sequence, we record the date of the initial 13D filing as an additional event in the sequence.¹⁸

We then match all events to Compustat and keep only those events where we can find identifying information in Compustat. We are able to match target companies in 3,702 activist campaign events recorded on SharkRepellent and additional 417 initial 13D filing events to Compustat. This brings the total number of the events we use for our analysis to 4,119. One hundred and fourteen (114) of those events are launched against REITs. REITs are identified by matching the CRSP Ziman REIT database and the SNL Financial database to Compustat.

Table 1, Panel A, and Figure 1 show the distribution of events over time. We present the information for all events as well as for events where the activist investor, or at least one activist in the group of activist investors, is identified by SharkRepellent as a hedge fund. We also present the information separately for REIT targets and three types of non-REIT targets. The first non-REIT type considered are all non-REIT targets. The second and third types are non-REIT activist targets that are matched to REIT firms. (We describe this procedure in detail in sub-section 3.3.) For REIT targets, the number of activist campaigns

¹⁸ Consider an example of the campaign sequence in AEP industries. SharkRepellent lists two events initiated by KSA Capital Management LLC against the company. The first one, announced on 11/10/2009, is the public letter to management demanding actions to maximize shareholder value. The letter was filed as part of 13D/A. The second campaign, announced on 5/3/2011, is the public statement made by KSA proposing that AEP should be taken private or sold. Both events were preceded by an initial 13D filing on 12/10/2008. Based on prior research (Brav et al., 2008; Greenwood and Schor, 2009), initial 13D filings carry new information and should not be ignored even if there is no hostile Item 4 (Purpose of Transaction). Thus we record the filing on 12/10/2008 as the initial event in the campaign sequence. We point out, however, that our results are very similar to those reported here if we do not record the initial 13D filings as additional events.

starts with a high of 22 in 2006, then non-monotonically decreases until 2009 to 6 and remains low until 2011, when it starts to steadily increase until it reaches 17 in 2013 and 2014. The trend is similar for non-REIT targets except the decrease in the number of campaigns in 2009-2011 is much less pronounced. The sharper decline of activist activity for REITs in 2009-2011 is expected given the uncertainty surrounding real estate and mortgage sectors during and after the financial crisis.

SharkRepellent assigns all activist campaigns into several categories. In Panel B of Table 1, we present the count of campaigns by their primary type category, as defined by SharkRepellent. The campaigns that aim to maximize shareholder value are the most frequent campaign types. Among campaigns launched toward REITs, 28.9% aim to maximize shareholder value. In non-REITs this proportion is 26.9% for all non-REIT targets; and it is 24.4% or 29.9% in matched non-REITs. The other most common campaign types in REITs are campaigns against a merger, campaigns that seek board representation, 13D filings by activists that do not state a specific objective, and campaigns that seek to obtain/change the control of the board.

Shark Repellent also collects information on the specific demands of the activists, if there are any, and the success of those demands. We present summary statistics for the demands in Table 1, Panel C. Among 114 REIT activist campaigns, 85 have some information on specific demands. SharkRepellent categorizes the demands in terms of “value” and “governance.” The top two value demands for REITs and non-REITs are (i) the sale, merger, or liquidation of the target company and (ii) the review of strategic alternatives. The most frequent governance demand is to seek board seats for the activists. Value demands are significantly more frequent in REITs than in non-REITs; governance demands are more frequent in non-REITs, albeit insignificantly. Interestingly, value demands significantly outnumber governance demands in activist campaigns aimed at REITs whereas the opposite is true in the whole sample of non-REITs. Examining the success rates, we observe that activists tend to be significantly less successful in obtaining their demands in REITs in comparison to non-REITs. About 37.7% of the activists in REITs that express some demands observe success in satisfying at least one of those demands. In non-REITs this proportion is 51.3% when all non-REITs are included; and it is 52.4% or 59.3% in matched non-REITs.

In Table 2, we summarize other activist campaign characteristics and some characteristics of the target firms separately for REITs and for the three types of non-REITs. To facilitate better comparison, we present only the statistics for the initial event in the campaign sequence and measure the length of the campaign as the total length of the campaign sequence. Campaign sequence is defined as the campaigns launched by the same activist group against the same target company.¹⁹ On average, there are 1.2 to 1.4 campaign events in the campaign sequence. In the vast majority of the campaigns, we observe a single activist in the activist group: the average number of activists in the group is 1.2 to 1.3. Forty-nine (49) percent of the activist campaigns in REITs are launched by entities that SharkRepellent labels as hedge funds. This proportion is 53% to 56% in non-REITs. It is worth noting, that some non-hedge fund activist investors are among the top activists in SharkRepellent. For example, Bulldog Investors, which SharkRepellent categorizes as an investment adviser and not a hedge fund, is one of the top 50 most prominent activist investors in the database.

On average, at the announcement of the initial campaign, activists hold 7.04% of target shares in REITs. In non-REITs, this holding is 7.3% to 8.38%. An average campaign sequence lasts approximately 264 days and about 19% of the campaign sequences in REITs involve proxy fights. In non-REITs, average campaigns vary from 263 to 293 days and 14% to 17% involve proxy fights. With \$344 million in market capitalization, the median target REIT is larger than the median target non-REIT firm with a size of \$229 million. However, in the samples of matched non-REITs larger firms tend to be targeted. The median target size in the matched samples is \$610 or \$757 million. Target REITs are less likely to have a classified board (33% vs. 43% to 54%), and more likely to be incorporated in Maryland (75% vs. 2% to 4%). The incidence of poison pills is similar in REIT vs. non-REIT targets (24% vs. 22% to 28%).

In summary, in most respects, the activist campaigns launched against REIT targets appear to be similar to those launched against non-REIT targets. The most consistent differences that we observe are in the demands and the success of those demands. Campaigns in REITs are significantly more likely to have

¹⁹ Activist group characteristics are thus constant for every campaign in the sequence and target firm characteristics exhibit little variation.

value demands rather than governance demands and the campaign demands are less likely to succeed. These results suggest that activists in REITs see more potential from pushing for value-related improvements rather than governance-related improvements. However, activists have harder time pushing their agendas through in REITs relative to non-REITs.

3.2 Panel Sample

To judge whether REITs are targeted by shareholder activist to a different degree than other public firms, we match our event data from SharkRepellent to Compustat such that the Compustat data is from the fiscal year ending prior to the event. We include only US firms that have available data on total assets and market capitalization in Compustat. We then match the Compustat panel to the CRSP Ziman REIT database and to the SNL Financial database to obtain REIT identification. The characteristics of the Compustat panel firms are summarized in Table 3.

As evidenced from Columns (1) and (2) of Table 3, REITs are different from non-REITs in a number of characteristics. Specifically, as expected, REITs have lower valuations as measured by the ratio of the market value of assets to book value of assets (an approximation of Tobin's Q calculated as the market value of equity plus book value of assets minus book value of equity and deferred taxes divided by the book value of assets), much lower amounts of cash on hand (scaled by assets), much higher dividend yield, much higher leverage, and no R&D investment. REITs also tend to be larger when size is measured as the log of the market value of equity. However, there seems to be little difference in the frequency with which REITs are targeted by activist investors. Specifically, REITs experience at least one activist campaign in 5.18% of firm-year observations while the frequency for non-REITs is 5.19% per firm-year. When only campaigns by activist hedge funds are considered, REITs are targeted in 2.40% of firm-years while non-REITs in 2.92% of firm-years. The difference between the activist frequencies is not statistically different when comparing REITs and non-REITs.²⁰

²⁰ We obtain similar inferences when we compare the incidence of initial activist campaigns in the activist campaign sequence only.

3.3 Matching Panel Samples

Because we observe significant differences between the subsamples of REIT firms and non-REIT firms, comparing activist event frequencies in those subsamples might not be appropriate. To facilitate a better comparison, we construct matching samples of non-REIT firms that are more similar to REIT firms on the dimensions that are arguably important to shareholder activists. Specifically, we match on size, industry valuation, and the deviation of firm valuation from industry valuation. Our matching procedure is as follows. We first match each REIT firm in each year to a non-REIT firm in the same year such that the market value of equity is in the range from 0.5 to 2 times the REIT's market value of equity. We then select the firms that have median industry market-to-book of assets (Q) within 0.8 to 1.2 times the REIT industry median Q.²¹ Finally, we select a matching firm as the one whose deviation of Q from the industry median matches the closest REIT firm's deviation of Q from the REIT industry median Q.

Our matching procedure follows other similar studies, such as Brav et al. (2008), with one exception. In other studies, activist targets or potential activist targets are matched to similar firms in the same industry. We cannot do this as our matching firms need to be from different industries. We therefore elect to match based on industry median Q and the deviation of firm Q from the industry median. We do not match directly on firm Q without considering its deviation from industry Q because we believe it would be inappropriate. For example, a Q of 1.2 in an industry with a typical Q of 1.4 can represent very different value appreciation potential from a Q of 1.2 in an industry with a typical Q of 2.4.

Using the matching procedure described above, we obtain a one-to-one match for each REIT firm-year observation.²² In our tables, we call this "Matched Non-REITs 1-to-1." The drawback of that sample is that while the panel of REITs has consecutive observations for the same firm over time, the panel of non-REITs does not. We therefore construct an alternative matching sample in which we include all available

²¹ Industries are defined using Fama-French definitions with one exception – REITs are singled out as a separate industry for the purpose of calculating industry medians.

²² If our procedure matches the same non-REIT to two or more REITs, we find additional non-REITs such that we have the same number of distinct firm-year observations for both REITs and non-REITs.

observations for all firms that appear at least once in the Matched one-to-one sample. We call this alternative sample “Matched Non-REITs Panel.”

Columns (3) and (4) of Table 3 provide summary statistics of the matched samples. As expected, the matched samples are more similar to REITs in terms of size and relative value. None of the differences in means and medians of size and relative value measures are significant when comparing REITs and the one-to-one matched sample. Some differences in size and value measures become significant when comparing REITs and the matched panel sample. Nevertheless, the matched panel sample is still more similar to REITs when compared to the sample of all non-REITs. An important observation from Table 3 remains that the frequencies of activist attack in the matched Non-REIT samples are not statistically different from the frequencies observed in REITs.

4. Empirical Results

4.1 The Likelihood of an Activist Campaign

The data in Table 3 suggest that the likelihood of an activist campaign in any given year does not differ between REITs and non-REITs. In this section, we examine whether this likelihood differs after controlling for observable determinants of an activist campaign. Table 4 presents the results of a probit model with the dependent variable equal to 1 if the firm is the subject of at least one activist campaign in the following year and equal to zero otherwise. For comparison, we present the results separately for models that consider campaigns by all types of activists and models that consider only campaigns launched by hedge funds. We report both coefficient estimates and marginal effects. Statistical significance is based on robust standard errors clustered by firms. All regressions include fiscal year indicators.

The results for the whole panel sample, reported in column (1) to (3), suggest that the likelihood of being a target of an activist campaign first increases then decreases with size, decreases with market-to-book ratio (Q) and sales growth, increases in cash-to-assets ratio and leverage (and for hedge fund targets also in R&D-to-assets), and decreases in dividend yield. The estimates also suggest that the likelihood of a

campaign decreases in the target company's excess stock return in the prior year.²³ These results are similar to those reported in Brav et al. (2008), who estimate their probit model on a sample of activist targets and matching firms, where the match is performed based on industry, size, and book-to-market. Most importantly, the coefficient on the indicator that identifies REITs is insignificant suggesting that the likelihood of being a target of an activist campaign does not differ for REITs after controlling for the observable determinants of such likelihood.²⁴

In columns (4) to (7), we re-estimate the probit models using the matched subsamples. The results are largely similar to those reported for the whole sample but the statistical significance of the coefficient estimates weakens, especially in the one-to-one matched sample. The main result, however, remains the same—there appears to be no statistical difference between the likelihood of an activist attack for REITs in comparison to matched firms. The difference is also small in economic terms. Based on marginal effects, the likelihood of an activist attack in REITs in any given year is 0.5% smaller to 0.6% larger, on average, than the likelihood in non-REITs.

In Table 5 we also report results of the probit models estimating the likelihood of an activist campaign in REITs only. In columns (1) and (3) we use the same control variables as in Table 4 and an indicator for Equity REITs. In columns (2) and (4) we include additional REIT-specific variables. Specifically, we include an indicator for whether the REIT is organized as an UPREIT, an indicator for incorporation in Maryland, and an indicator for whether the REIT is externally advised. The REIT specific data is from SNL Financial. The dependent variable equals 1 if the REIT is the target of an activist campaign in the next fiscal year. We report results separately for activist campaigns launched by all activist types and for campaigns launched by hedge funds. However, we note that the estimation of the likelihood of a

²³ Note that the number of observations reduces from column (1) to columns (3) and (5). This is because we require a match to CRSP to calculate the excess return.

²⁴ In an alternative robustness test, which is not tabulated, we use a propensity score matching technique to first identify non-REIT control firms similar to REITs based on log(market capitalization) and relative asset valuation (Tobin's Q). We then estimate the difference in the likelihood of an activist campaign. The results again show that the likelihood of a shareholder activism campaign is not statistically different between REITs and non-REITs.

campaign launched by a hedge fund becomes problematic due to reduced sample size.²⁵ Since the results presented so far are similar when our sample consists of all activist campaigns and only those campaigns where the activist is flagged as a hedge fund, our subsequent analyses use the larger sample of all activist campaigns to ensure we have sufficient sample size.

As in the whole sample of firms, the likelihood of an activist campaign directed at a REIT decreases in relative valuation (Q) and increases in cash-to-assets. The likelihood also decreases in profitability (ROA), the excess return in the prior year, and seems to be significantly higher for equity REITs as compared to mortgage or hybrid REITs. In contrast to the sample of all firms, the size, sales growth, and dividend yield seem to have no impact on being targeted by an activist investor. Thus, it seems that among REITs, cash rich firms with low profitability and valuation seem to be the most likely targets of an activist campaign.

4.2 Short- and Long-term Market Reaction to Activist Campaign Announcements

As discussed in the introduction, a common perception has been that REITs are less likely targets of activism, partly because the gains to the activist from an activist campaign are expected to be small. In the previous section, we obtain results indicating that the likelihood of an activist campaign does not significantly differ between REITs and non-REITs. In this section, we examine whether there are any differences in the short-term and long-term gains realized around the announcement of activist campaigns. We measure the short-term and long-term gains for all firms several ways and over several event windows. First, we measure the gains for all firms as the cumulative abnormal returns (CARs) around the announcement of the activist event with the abnormal returns calculated as the stock return minus the value-weighted CRSP index return. Second, we measure the gains as the buy-and-hold abnormal returns (BHARs) calculated as the buy-and-hold stock return minus the buy-and-hold value-weighted CRSP index return.

²⁵ Specifically, due to relatively few events with hedge fund activists in REITs in some years and due to missing variables for some observations, some year fixed effects drop out of estimation as they predict outcome perfectly.

Third, we replace the value-weighted CRSP index return with the value-weighted CRSP-Ziman REIT index in our calculation of the abnormal gains for REITs.

We measure and report the abnormal returns for a subset of initial activist events defined as follows. First, we identify initial activist events as the initial events in the campaign sequence.²⁶ Of these, we select only those that are not preceded by any other activist events in the prior 365 days. We do so because some companies in the sample are subject to campaigns launched by more than one activist group. Usually, campaigns launched by multiple activist groups within a short period of time are related. Thus it is likely that the initial event not preceded by any other campaign event contains the most information as would the market reaction to this event.²⁷

The results are summarized in Table 6. Panel A reports the short-term market reaction using daily returns over two event windows, $\{-5, +5\}$ and $\{-20, +20\}$, with day zero being the announcement date of the campaign. Panel B reports the long-term market reaction using monthly returns over one event window, $\{-1, +12\}$, with month zero being the announcement-date month.²⁸ As evidenced from the table, the average and median short-term market reaction is positive and statistically significant for REITs and non-REITs in both reported windows when using all but one method for calculating abnormal returns. The returns are not statistically significant for REITs when calculated as BHAR over the 41-day event period using the CRSP-Ziman index as the market index. The CARs for REITs are comparable in size to those of non-REITs, regardless of whether the sample includes all campaigns launched at all non-REITs or only campaigns launched at firms in the matched non-REIT sub-samples. The statistical significance in the smaller samples is weaker, however. Nevertheless, the market reaction to the announcement of an activist campaign in REITs does not statistically differ from the market reaction in non-REITs. Thus we find no evidence that

²⁶ Recall that the campaign sequence contains campaigns launched by the same activist group against the same target firm.

²⁷ Note that the results are similar if we instead measure the market reaction for a subset of campaigns not preceded by any other campaign in the prior 365 days regardless of whether the campaign is an initial campaign in a campaign sequence.

²⁸ We note that the results are similar if, alternatively, we measure long-term returns over a $\{-1, +18\}$ or $\{-1, +24\}$ window.

the short-term value gains around the announcement of an activist campaign are smaller for REITs than they are for non-REITs.

In terms of magnitude, the results are generally consistent with prior studies. For example, we report average CARs of 3.78% in an 11-day window for all campaigns in non-REITs and 6.97% for those in REITs. In the 41-day window, we report average BHARs of 5.65% for non-REITs and 4.81% for REITs. In comparison, Greenwood and Schor (2009) report a CAR of 3.5% in the $\{-10, +5\}$ window, Clifford (2008) reports 3.4% in a $\{-2, +2\}$ window, and Brav, et al., report 7.2% in the $\{-20, +20\}$ window.

Our results for REITs start to differ somewhat from the results for non-REITs when examining the long-term market response to activist campaigns. While we continue to observe a positive average CAR and BHAR over the 14-month window for the sample that includes all non-REIT campaigns, the average market response for REITs is insignificant using all ways of calculating abnormal returns and the averages we report are all negative in magnitude. However, the long run returns are also insignificant in the matched non-REIT samples and the difference in the long-run returns between REITs and non-REITs is never statistically significant at any conventional levels.

4.3 Changes in Accounting Performance and Real Variables around Activist Events and Their Relation to the Market Reaction

In this section, we ask whether shareholder activism targets experience significant changes in performance and real variables from before to after activist campaign announcements, and examine how the changes relate to the abnormal returns we calculated in the previous section. In doing so, we hope to shed light on the sources of value gains from shareholder activism.

We first calculate changes in several observable characteristics from (a) one year before to the year of the event, and (b) from one year before to one year after the event. The observable characteristics we

examine include accounting performance, leverage, capital investment, and shareholder payout.²⁹ We measure performance several ways, including net return on assets, funds from operations relative to assets for REITs, operating return on assets for non-REITs, and the same profit variables scaled alternatively by revenue. Leverage is total debt scaled by total assets. We construct three proxies for capital investment. First is capital expenditures scaled alternatively by assets and by revenues; second is the growth in total assets; third is the growth in the number of real estate properties in the portfolio, which is REIT-specific. We use two measures of payout for non-REITs: dividend yield and repurchase yield, where we scale dividends paid to common stockholders and repurchases of common stock by market capitalization. For REITs, we also use the information from the SNL Financial database indicating whether a firm adopts a formal repurchase plan. For all variables, we calculate unadjusted raw values as well as industry-median-adjusted values. For REITs, we also calculate the values adjusted by the median for a specific REIT property type in a given year. We use the property types as reported in the CRSP Ziman REIT database and, alternatively, as reported in the SNL Financial database.³⁰

The results are reported in Table 7. For brevity, we focus on a parsimonious and illustrative set of measures. The untabulated results are similar to those shown here. As in prior tables, we report the results separately for REIT and non-REIT activist targets. In Panel A, we report the results for REIT targets. In the first three columns, we report variable averages and medians in the three years surrounding the event. In the last two columns we report variable changes from the year before to the year of the event, and from the year before to the year following the event. The results from unadjusted values (top of the table) suggest that REITs targeted by activists experience significant changes in several respects. We observe a decline in median profitability, an increase in average leverage and dividend yield, an increase in the likelihood of having a formal repurchase plan, and a decline in asset growth and real estate portfolio growth.

²⁹ We consider only initial activist events not preceded by any other activist events against the same target firm within the last 365 days. These are the same events for which we calculate the short-term and long-term abnormal stock returns so that we can match the changes in accounting variables to the stock returns.

³⁰ We group property types with very few observations each year into a larger group so that we can estimate industry characteristics more reliably. The property types we use are: Diversified, Healthcare, Industrial/Office, Lodging/Resorts, Mortgage, Residential, Retail, and Specialty/Other.

To isolate the potential effects of activist events from changes in the property markets, we report property-type adjusted values below the unadjusted values. We property-adjust by subtracting the median of the variable value from the unadjusted value. In this analysis, median REITs operating in similar property markets can be thought of as comparison firms. We observe that before the activist attack, the average profitability of activist target firms is below the property median but median profitability is about the same level as the property median. After the attack, the median profitability seems to significantly decline to levels below the industry median. The trend in other property-adjusted values is similar to unadjusted values, but the significance declines. The only other significant results we observe are an increase in average leverage and dividend yield, and a decrease in property portfolio growth. Thus, it seems that a typical activist-targeted REIT experiences a decline in profitability, an increase in payout, and a decrease in portfolio growth.

In Panel B, we report the results for various samples of non-REIT activist target firms. Similar to our analysis of REITs, we report unadjusted and industry-adjusted (instead of property-adjusted) values. Examining the results, we observe similar trends to what we observe for REITs. Specifically, we observe a decline in profitability, an increase in average (but not median) leverage, an increase in repurchases, a decline in capital expenditures, and a decline in asset growth. These results are highly statistically significant for the whole sample of non-REITs. However, in matched subsamples, the results weaken. In the matched non-REIT panel, we still observe a significant decline in profitability, capital investment, and asset growth. Almost nothing is significant in the sample of target firms that were formed using a one-to-one match to the panel of REITs. Nevertheless, the results of this analysis suggest that REITs experience similar changes around activist events to those experienced by non-REITs.

Before examining the relation between abnormal returns and the changes discussed in this section, we draw attention to Table 7 and the notable decrease in observations in the years around an activist event.³¹ This observed decrease is largely due to takeovers of some activist targets after activist events are

³¹ See the maximum number of observations noted in the column headings of Table 7.

announced. To account for these takeovers, we construct an indicator that equals one if the firm is delisted from CRSP due to merger or acquisition within 18 months from the initial announcement of an activist campaign. We observe that approximately 24% of all non-REIT targets and 23% of REIT targets are acquired within this time period. These values are comparable to the 18% reported by Greenwood and Schor (2009) who examine a sample of activist campaigns launched by portfolio investors (mostly hedge funds) in the 1993-2006 time period.

To examine whether the changes in firm characteristics or takeovers explain abnormal returns around activist events, we run a number of regressions with various abnormal return measures on the left-hand side. The independent variables we use are changes in net ROA, leverage, dividend yield, repurchase yield, asset growth rates, and the indicator for whether a firm delists from CRSP within 18 months from the activist event. The changes are measured alternatively from the year prior to the year of the event and from the year prior to the year following the event.

In untabulated results, we find no significant relations between short-term abnormal returns in the $\{-5, 5\}$ event window and the independent variables, and we find very few significant relations between short-term abnormal returns in $\{-20, 20\}$ event window and the independent variables. However, we do find several consistently significant relations between long-term abnormal returns and certain explanatory variables. We report those results in Table 8.

In Table 8, we report the regressions that use only the 14-months $\{-1, 12\}$ cumulative abnormal returns (CARs) as a dependent variable and note that using buy-and-hold abnormal returns produces very similar results. As before, we report the results separately for REITs in Panel A and non-REITs in Panel B. We report results for both unadjusted values of independent variables and property-adjusted values for REITs or industry-adjusted values for non-REITs. Across most estimations reported in Table 8, except for the subsample of non-REITs from the matched one-to-one sample, we consistently find that the 14-month CARs positively correlate with changes in net ROA and with delisting due to takeover. We also find some evidence that the CARs positively correlate with the change in asset growth and negatively correlate with the changes in leverage. For REITs, we also see that the abnormal returns negatively correlate with changes

in dividend yield. We note, however, that this correlation can be mechanical as a decrease in stock price causes an increase in dividend yield if dividends are relatively stable.

Collectively, the results reported in this section offer insight on the sources of the long-run returns around activist announcements in both REITs and non-REITs and why those returns might be small or insignificant, on average. We see that the returns positively correlate with changes in profitability and asset growth. However, since a typical activist target firm observes a decline in these variables around an activism event, the net effect is a lower abnormal return. The only variable that seems to consistently and significantly increase the abnormal return is the incidence of a takeover. Activist targets that are taken over experience significantly higher long-term returns around an activist event than those that are not taken over. If those not taken over experience insignificant or even negative returns (as the constants reported in Table 8, columns 3, suggest), then the small or insignificant overall effect should be of no surprise.

4.4 Shareholder Activism, the Likelihood of Takeover, and the Gains to Activism

In the prior section, we report that the short-term market reaction to the announcement of an activist event does not significantly correlate with changes in accounting performance and other firm characteristics. We also report that a large fraction of activist target firms is taken over within 18 months of the initial activist campaign and that the primary determinant of a positive long-term stock performance around an activist event is the target firm takeover. These results are, so far, most consistent with the hypothesis first introduced in Greenwood and Schor (2009), which suggests that the gains to activism primarily arise from activists' ability to force target firms into a takeover. Under that hypothesis, the positive short-term gains around the announcements of activist events reflect investors' expectation of an increased likelihood that the targets of activist campaigns will be taken over and takeover premiums realized. In this section, we examine whether this hypothesis, tested by Greenwood and Schor on a sample of activist events in 1993-2006, also holds in our sample, and, importantly, in the subsample of REIT targets.

For the hypothesis to be plausible, two conditions must hold. First, activist interventions are a signal that there is an increase in takeover likelihood. Second, when the firms are ultimately taken over, positive

abnormal long-term gains to the shareholders are realized. When they are not taken over, no positive long-term gain is realized.

To examine whether the first condition holds, we perform a probit analysis measuring the likelihood of a takeover as a function of an activist attack and other control variables potentially related to the takeover likelihood. To perform this analysis, we use the same panel data that we use when examining the likelihood of an activist campaign in Table 4. Table 9 reports the results. In Panel A, we estimate the models that use both REIT and non-REIT firms; in Panel B, we use only REIT firms. The dependent variable in these regression models equals one if the firm delists from CRSP within two years from the end of the fiscal year due to merger or acquisition (i.e., delisting codes that start with the digits 2 or 3). The main independent variable, an *Activist Campaign Indicator*, equals one if the firm experiences an activist campaign within two years of the end of the fiscal year. Other control variables include those that we use in our previous analysis to explain the probability of an activist campaign, as well as a measure of ownership by institutional investors. Institutional ownership is included to control for a potential institutional involvement in all firms – not only those targeted by activist investors. All regressions include fiscal year indicators and use robust standard errors clustered by firms to judge statistical significance. Coefficient estimates and marginal effects are reported.

The results in Table 9, Panel A, indicate that the firms that are subject to an activist campaign are indeed more likely to be taken over. The marginal effect estimate on the *Activist Campaign Indicator* in column (1), which uses the full panel sample of firms, suggest that an activist campaign increases the takeover likelihood by about 13%. For comparison, Greenwood and Schor (2009) report that the likelihood of a takeover for activist targets increases by about 11% compared to the likelihood of similarly situated firms. In column (2), we again use the full sample but estimate the likelihood separately for REITs and non-REITs, by including a *REIT Indicator* and an interaction between the *REIT Indicator* and the *Activist Campaign Indicator*. The results show that REITs are significantly less likely to be taken over as compared to non-REITs (at the 10% level). However, we find that activist campaigns increase the likelihood of a takeover for REITs to a similar degree as they do for non-REITs. Finally, in columns (3) and (4), we re-

estimate the model from column (2) but using only REITs and matched non-REITs. The results here again suggest that REITs that are subject to an activist attack face a higher likelihood of a takeover and that this likelihood is similar to that of non-REITs. In economic terms, based on the results in Panel A, the likelihood of a takeover for a REIT is about 11.4% to 14.9% higher if it is a target of an activist attack.

In Panel B of Table 9, we focus specifically on the REITs in our sample and estimate their takeover likelihood. The marginal effects on the *Activist Campaign Indicator* in columns (1) and (2) suggest that an activist campaign is associated with a 10.3% to 14.8% increase in the takeover likelihood for a REIT. Thus, controlling for other potential determinants of a takeover, activists seem to matter for takeover likelihood in both REITs and non-REITs. In our REIT sample, based on the results in Panel B, the only other independent variables that seem to matter for takeover likelihood are dividend yield, leverage, an UPREIT structure, and REIT type. Equity REITs (column 1), UPREITs (column 2), REITs with high dividend yield and lower leverage (column 2), seem to be targeted more often.

To examine whether activist campaigns yield positive gains when the targets are ultimately taken over and no gains when they are not, we perform subsample analyses for the various measures of abnormal returns that we previously report in Table 6. Specifically, we split both REIT and non-REIT samples into subgroups based on whether the target is ultimately taken over within 18 months of the initial activist campaign. The results are reported in Table 10. Among non-REITs, the short-term gains are positive and significant for firms that are acquired within 18 months and for firms that are not acquired. However, the returns to the firms that are acquired, especially in the longer 41-day window, are larger than the gains to firms that are not acquired. This pattern is strongest in the sample that includes all campaigns in non-REITs and in the sample that includes campaigns in non-REITs from the matched panel sample. The pattern is much weaker in the sample that uses campaigns in non-REITs from the matched one-to-one sample. In that sample, there is no difference in the short-term returns for acquired and other firms.

Examining the long-term returns in non-REITs, we observe that the returns to the firms that are acquired are positive and large in two samples, reflecting the takeover premium. The returns to the firms that are not acquired are either insignificant or significantly negative, depending on the measure and the

statistic. We note that in the matched one-to-one subsample, even the long-run returns to acquired firms are insignificant, albeit higher in magnitude than the returns to the firms that are not acquired.

The results for REITs are similar. As in non-REITs, we observe statistically positive short-term returns for both sub-groups: targets that are acquired within 18 months and those that are not. However, there is no statistical difference between the average returns for these sub-groups. In examining long-term returns, we observe that the abnormal returns of target REITs that are ultimately acquired are significantly positive. We also find that the abnormal returns for REITs that are not eventually acquired are significantly negative, except in the case of median CARs, which are insignificant. The differences in abnormal returns for acquired and non-acquired REITs are similar in magnitude to the differences in non-REITs, and are statistically significant in all estimations. The overall evidence thus suggests that while long-term gains tend to be positive for REITs that are acquired within 18 months of an activist campaign, the long-term gains tend to be negative or, at best, insignificant for REITs that are not acquired.

The results we report in this section for non-REITs are similar in magnitude to those reported in Greenwood and Schor (2009). Thus, their explanation for abnormal returns to activism seems to hold beyond their sample period. More important to our research purpose and contribution, the evidence we present here suggests that, similar to non-REITs, the short-term gains to REIT activism reflect the expectation of an increased takeover likelihood.

5. Conclusion

This paper examines the incidence and wealth effects of shareholder activist campaigns in REITs and the possible sources of those gains. While recent accounts in the popular press have suggested REITs may have experienced increased interest from shareholder activists, conventional wisdom has viewed activist campaigns in REITs as rare events. The “rare event” perception was rationalized for two reasons. First, REITs are thought to be well protected from hostile takeovers. Second, it might be difficult for activists to

create or unlock value in REITs given that REITs operate as relatively transparent companies whose underlying values are relatively easy to assess.

Our results indicate that this perceptions is not supported by the data for our sample of activist campaigns in the period from 2006 to 2014. Our empirical design is comprehensive in that we examine REIT targets relative to non-target REITs as well as non-REIT; the latter of which includes a full sample of non-REITs and two sub-samples of non-REITs based on matching with the REIT sample. Specifically, we find that REITs are as likely to be subjects of activist campaigns as non-REITs and that the campaigns directed toward REITs are, in many respects, similar to the campaigns launched against non-REITs. Additionally, the short-term gains around the announcements of activist campaigns launched against both REITs and non-REITs are decidedly positive.

Our further analysis shows that these positive short-term gains are unlikely to result from expected improvements in performance, investment, capital structure or payout policies. Although we find that the long-term gains around activist events correlate positively and significantly with changes in profitability and changes in asset growth, a typical activist target in our sample, REIT or non-REIT, experiences a decline in these variables around an activist event. Rather, our analysis points to the possibility that these positive short-term gains reflect investors' expectation that an activist target faces an increased likelihood of being taken over.

We present two pieces of evidence consistent with this possibility. First, we document that the targets of activist campaigns, whether they be REITs or non-REITs, are more likely than other similar firms to be acquired within 18 months of an activist campaign. Second, we show that the long-term returns to the target firms that are ultimately acquired are, on average, positive. The long-term returns for other firms are either insignificant or, especially in the case of REITs, negative.

Collectively, the evidence in this paper suggests that REITs are as likely to be the focus of shareholder activism as other publicly traded firms and that the activist campaigns launched at REITs are in many respects similar to the activist campaigns launched at non-REITs. The evidence in this paper also suggests that a prominent source of the positive announcement returns to shareholders of firms targeted by

activists arises from an increase in the expectation of a sale of the firm. This evidence is most consistent with that presented in Greenwood and Schor (2009) who examine predominantly hedge fund activist events in an earlier sample period. We validate their conjectures using a different sample period, a more inclusive sample of activist events, and a more homogeneous subsample of REITs where, arguably, both activist target firms and control firms face the same regulatory environment and similar business conditions.

While we are reluctant to speculate about the future of shareholder activism in REITs, our sample and analysis show a consistent difference in the value demands and the success of those demands for REITs relative to non-REITs. Specifically, campaigns in REITs are significantly more likely to have value demands relative to governance-related demands, and the campaign demands for REITs are less likely to succeed as compared to non-REITs. It remains to be seen whether this trend persists and whether shareholder activists continue to target REITs as a profitable strategy.

References

- Banyi, M. L., E. A. Dyi, and K. M. Kahle, 2008. "Errors in estimating share repurchases." *Journal of Corporate Finance* 14, 460-474.
- Bauer, R., P. Eichholtz, and N. Kok. 2010. "Corporate Governance and Performance: The REIT Effect." *Real Estate Economics* 38, 1-29.
- Bebchuk, L., A. Brav, R.J. Jackson, and W. Jiang. 2013. "Pre-Disclosure Accumulations by Activist Investors: Evidence and Policy." *Journal of Corporation Law* 39, 1-34.
- Bebchuk, L., A. Brav, and W. Jiang. 2015. "The long-term effects of hedge fund activism." *Columbia Law Review* 115, 1085-1155.
- Bebchuk, L. A., A. Cohen, and A. Ferrell. 2009. "What Matters in Corporate Governance?" *Review of Financial Studies* 22, 783-827.
- Becht, M., J. Franks, C. Mayer, and S. Rossi. 2008. "Returns to shareholder activism: evidence from a clinical study of the Hermes UK Focus Fund." *Review of Financial Studies* 22, 3093-3129.
- Bianco, C., C. Ghosh and C.F. Sirmans. 2007. "The Impact of Corporate Governance on the Performance of REITs." *The Journal of Portfolio Management*, 33, 175-191.
- Boudry, W.I. 2011. "An Examination of REIT Dividend Payout Policy." *Real Estate Economics* 39, 601-634.
- Brav, A, W. Jiang, F. Partnoy, and R. Thomas. 2008. "Hedge fund activism, corporate governance, and firm performance." *Journal of Finance* 63, 1729-1773.
- Campbell, R.D., C. Ghosh, and C.F. Simians. 1998. "The Great REIT Consolidation: Fact or Fancy?" *Real Estate Finance* 15, 45-54.
- Capozza, D., and P. Seguin. 2003. "Insider Ownership, Risk Sharing, and Tobin's q-Ratios: Evidence from REITs." *Real Estate Economics* 31, 367-404.
- Chan S.H., J. Erickson, and K. Wang. 2003. *Real Estate Investment Trusts: Structure, Performance, and Investment Opportunities*. Oxford, UK: Oxford University Press.
- Chung, R., S. Fung, and S.K. Hung. 2012. "Institutional Investors and Firm Efficiency of Real Estate Investment Trusts." *Journal of Real Estate Finance and Economics* 45, 171-211.
- Clifford, C. 2008. "Value creation or destruction? Hedge funds as shareholder activists." *Journal of Corporate Finance* 14, 323-336.
- Coffee, J.C., and D. Palia. 2014. "The Impact of Hedge Fund Activism: Evidence and Implications." Working Paper. Columbia University.

- Downs, D.H. 1996. "The Value in Targeting Institutional Investors: Evidence from the Five-or-Fewer Rule Change." *Real Estate Economics* 26, 613-649.
- Eichholtz, P.M.A., and N. Kok. 2007. "The EU REIT and the Internal Market for Real Estate." Working Paper. Maastricht University.
- Eichholtz, P.M.A., and N. Kok. 2008. "How does the market for corporate control function for property companies?" *Journal of Real Estate Finance and Economics* 36, 141-163.
- Gantchev, N. 2013. "The cost of shareholder activism: Evidence from a sequential decision model." *Journal of Financial economics* 107, 610-631.
- Gillan S., and L. Starks. 2007. "The Evolution of Shareholder Activism in the United States." *Journal of Applied Corporate Finance* 19, 55-73.
- Greenwood, R., and M. Schor. 2009. "Investor Activism and Takeovers." *Journal of Financial Economics* 92, 362-375.
- Guercio, D.D., and T. Woidtke. 2014. "Do the interests of labor union and public pension fund activists align with other shareholders'? Evidence from the market for directors." Working Paper. University of Oregon.
- Hartzell, J.C., L. Sun, and S. Titman. 2006. "The Effect of Corporate Governance on Investments: evidence from Real Estate Investment Trusts." *Real Estate Economics* 34, 343-376.
- Hartzell, J.C., J.G. Kallberg, and C.H. Liu. 2008. "The Role of Corporate Governance in Initial Public Offerings: Evidence from Real Estate Investment Trusts." *Journal of Law and Economics* 51, 539-562.
- J.P.Morgan. 2015. "The activist revolution: Understanding and navigating a new world of heightened investor scrutiny." J.P.Morgan Corporate Finance Advisory and Mergers & Acquisitions.
- Jensen, M. 1986. "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers." *American Economic Review* 76, 323-329.
- Klein, A., and E. Zur. 2009. "Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors." *Journal of Finance* 64, 187-229.
- Mulherin, J.H., and K.S. Womack. 2015. "Competition, Auctions & Negotiations in REIT Takeovers." *Journal of Real Estate Finance and Economics* 50, 151-180.
- Striwe, N. C., N. B. Rottke, and J. Zietz. 2013. "The Impact of Institutional Ownership on REIT Performance." *Journal of Real Estate Portfolio Management* 19, 17-30.
- Strine, L. 2014. "Can We Do Better by Ordinary Investors? A Pragmatic Reaction to the Dueling Ideological Mythologists of Corporate Law." *Columbia law Review* 114, 449-502.
- Womack, K.S. 2012. "Real Estate Mergers: Corporate Control & Shareholder Wealth." *Journal of Real Estate Finance and Economics* 44, 446-471.

Figure 1 – Activist Campaign Distribution

The distribution of sample activist campaigns by year. The sample contains 4,119 activist campaign events from SharkRepellent with a target firm that could be matched to Compustat. The campaigns launched solely by corporations, religious groups, labor unions, or any combination of these types of activists in an activist group, are excluded. REITs are identified from the CRSP Ziman REIT database and the SNL Financial database.

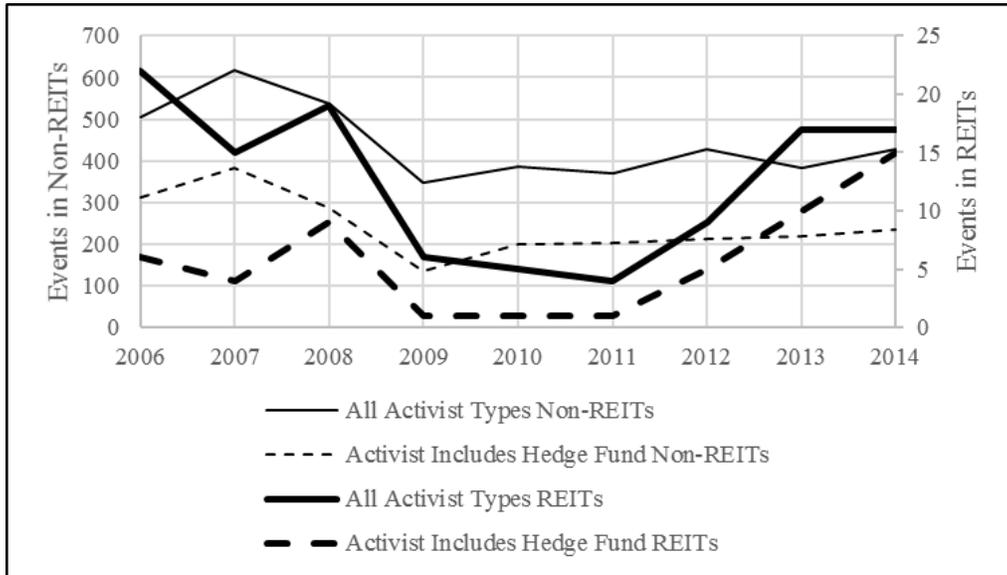


Table 1 – Activist Campaign Events Distributions

Panel A shows the distribution of sample activist campaign events by year. The sample contains 4,119 activist campaign events from SharkRepellent with a target firm that could be matched to Compustat. The campaigns launched solely by corporations, religious groups, labor unions, or any combination of these types of activists in an activist group, are excluded. REITs are identified from the CRSP Ziman REIT database and the SNL Financial database. Matched firms are obtained by matching non-REITs to the REIT panel based on year, size, median industry market-to-book of assets, and the deviation of market-to-book of assets from the industry median. Panel B shows the distribution of sample activist campaign events by primary type, as identified by SharkRepellent. Panel C shows the distribution of sample activist campaign events that list specific value or governance demands as reported in SharkRepellent. Not all sample campaigns list the demands and some sample campaigns may list more than one value or governance demand. *, **, *** in Panel C denote difference between campaign events in REIT and non-REITs or the difference between incidence of value and governance demands at the 10%, 5%, and 1% statistical significance.

Panel A

	All Activist Types				Activist Group Includes Hedge Fund			
	REITs	All non-REITs	Matched non-REITs Panel	Matched non-REITs 1-to-1	REITs	All non-REITs	Matched non-REITs Panel	Matched non-REITs 1-to-1
2006	22	506	62	14	6	313	38	8
2007	15	618	85	18	4	383	51	12
2008	19	538	80	7	9	287	35	5
2009	6	348	44	4	1	134	12	1
2010	5	387	56	3	1	199	31	2
2011	4	369	51	12	1	202	23	8
2012	9	427	63	9	5	214	30	1
2013	17	384	58	14	10	219	34	9
2014	17	428	66	9	15	234	31	2
Total	114	4,005	565	90	52	2,185	285	48

Panel B

Primary Campaign Type	Campaigns in:		All non-REITs		Matched non-REITs Panel		Matched non-REITs 1-to-1	
	N	[%]	N	[%]	N	[%]	N	[%]
Maximize Shareholder Value	33	28.9	1,079	26.9	169	29.9	22	24.4
Vote/Activism Against a Merger	16	14.0	270	6.7	45	8.0	13	14.4
Board Representation	15	13.2	685	17.1	101	17.9	19	21.1
13D Filer - No Publicly Disclosed Activism	14	12.3	1,003	25.0	132	23.4	22	24.4
Board Control	12	10.5	226	5.6	13	2.3	1	1.1
Vote For a Stockholder Proposal	8	7.0	280	7.0	43	7.6	5	5.6
Hostile/Unsolicited Acquisition	4	3.5	66	1.6	11	1.9	1	1.1
Support Dissident Group in Proxy Fight	4	3.5	75	1.9	6	1.1	2	2.2
Vote Against a Management Proposal	3	2.6	110	2.7	20	3.5	1	1.1
Vote For a Management Proposal	3	2.6	29	0.7	1	0.2	-	-
Remove Director(s)	2	1.8	23	0.6	2	0.4	1	1.1
Enhance Corporate Governance	-	-	120	3.0	18	3.2	3	3.3
Public Short Position/Bear Raid	-	-	26	0.6	3	0.5	-	-
Remove Officer(s)	-	-	13	0.3	1	0.2	-	-
Total	114	100.0	4,005	100.0	565	100.0	90	100.0

Table 1 - continued

Panel C:

Campaigns with:	Campaigns in:		REITs		All non-REITs		Matched non-REITs Panel		Matched non-REITs 1-1	
	N	[%]	N	[%]	N	[%]	N	[%]	N	[%]
Value Demand(s)	61	53.51	1,478	36.90 ***	217	38.41 ***	34	37.78 **		
Governance Demand(s)	42	36.84	1,712	42.75	243	43.00	37	41.11		
Value or Governance Demand(s)	85	74.56	2,573	64.24 **	376	66.55 *	59	65.56		
<i>T-test: Value Demand = Governance Demand (p-value)</i>			(0.012)**		(<0.001)***		0.13		0.66	
Success In at Least One Value Demand	19	31.15	635	42.96 *	84	38.71	16	47.06		
Success In at Least One Governance Demand	16	38.10	793	46.32	124	51.03	21	56.76 *		
Success In at Least One Demand	32	37.65	1,321	51.34 **	197	52.39 **	35	59.32 **		
Value Demand Types and Occurrence										
Seek Sale/Merger/Liquidation	25		608		70		10			
Review Strategic Alternatives	21		527		76		11			
Block Merger/Agitate for Higher Price (Target)	13		235		35		12			
Return Cash via Dividends/Buyback	9		377		60		9			
Potential Acquisition (Friendly and Unfriendly)	8		152		17		1			
Other Capital Structure Related, Increase Leverage, etc.	7		174		31		3			
Breakup Company, Divest Assets/Divisions	5		242		50		8			
Block Acquisition/Agitate for Lower Price (Acquirer)	3		35		8		0			
Other	1		35		9		0			
Governance Demand Types and Occurrence										
Board Seats (activist group)	28		1031		144		23			
Remove Takeover Defenses	8		243		44		9			
Other Governance Enhancements	5		402		75		9			
Remove Director(s)	5		128		12		1			
Add Independent Directors	3		170		20		2			
Compensation Related Enhancements	1		237		31		2			
Remove Officer(s)	0		113		13		1			
Social/Environmental/Political Issues	0		105		19		4			

Table 2 – Activist Campaign Characteristics

Summary of activist campaign characteristics. The sample contains 4,119 activist campaign events from SharkRepellent from 2006 to 2014 with a target firm that could be matched to Compustat. The campaigns launched solely by corporations, religious groups, labor unions, or any combination of these types of activists in an activist group, are excluded. REITs are identified from the CRSP Ziman REIT database and the SNL financial database. Matched firms are obtained by matching non-REITs to the REIT panel based on year, size, median industry market-to-book of assets, and the deviation of market-to-book of assets from the industry median. All variables are taken from SharkRepellent and are self-explanatory. If there are multiple campaign events by the same activist group in the same target company, then only the initial campaign is described. Activist Campaign Length is measured from the first announcement date of the initial campaign to the last recorded end date of the last campaign in SharkRepellent. *, **, *** denote difference between initial campaign events in REIT and non-REITs at the 10%, 5%, and 1% statistical significance.

	Initial Activist Campaigns							
	REIT Targets (114 Events, of which 88 Initial)		All non-REIT Targets (4,005 Events, of which 3087 Initial)		Non-REIT Targets from Matched Panel (565 Events, of which 426 Initial)		Non-REIT Targets from Matched Sample 1-to-1 (90 Events, of which 68 Initial)	
	Average	Median	Average	Median	Average	Median	Average	Median
Number of Campaigns By Same Activist Group in Same Target Co.	1.22	1	1.23	1	1.26	1	1.37	1
Number of Activists in Activist Group	1.19	1	1.23	1	1.19	1	1.32	1
Activist Group Includes (Is) Hedge Fund	0.49		0.55		0.53		0.56	
Activist Group Ownership at Announcement [%]	7.04	5.8	8.38*	6.4	7.89	6.1	7.30	6.2
Activist Campaign Length [days]	264	169	278	140	293	147	263	122
Activist Group Initiates Proxy Fight	0.19		0.17		0.14		0.16	
Target Market Cap at Announcement [\$ million]	1,704	344	6,681	229**	2,653	610	3778*	757**
Target Classified Board	0.33		0.43*		0.43*		0.54***	
Target Poison Pill	0.24		0.28		0.27		0.22	
Target Incorporated Maryland	0.75		0.02***		0.04***		0.01***	
Target Incorporated Delaware	0.08		0.65***		0.62***		0.62***	

Table 3 – Panel Sample Characteristics

Panel sample characteristics by REITs and non-REITs. The panel contains all US Compustat firm-years from 2005 to 2013 with data available to calculate market capitalization and total assets. REITs are identified from the CRSP Ziman REIT database and the SNL Financial database. Matched firms are obtained by matching non-REITs to the REIT panel based on year, size, median industry market-to-book of assets, and the deviation of market-to-book of assets from the industry median. A firm-year observation is classified as subject to any activist event (hedge fund activist event) if the firm experiences at least one activist campaign (campaign launched by a hedge fund) during the next fiscal year. All accounting and market variables are from the fiscal year-end immediately preceding the activist campaign event. Market Value of Equity is the end-of-fiscal year stock price times the number of shares outstanding. Market-to-Book is the book value of assets plus market value of equity minus book value of equity and deferred taxes, all divided by book value of assets. Sales Growth is the growth in net sales calculated over the last fiscal year. Net Income is the income before extraordinary items. Assets is the book value of assets. Dividend Yield is the dividend paid to common stockholders divided by the market capitalization. Debt is the long-term plus short-term debt. R&D is the maximum of zero or the reported R&D expense. All ratio variables are winsorized at the 1st and 99th percentiles. Averages are reported with the medians below in brackets. *, **, *** in column (2) indicates that REIT characteristics are significantly different from non-REIT characteristics at the 10%, 5%, and 1% significance level.

	REITs (1) (1,582 firm-years)	All Non-REITs (2) (55,494 firm-years)	Matched Non-REITs Panel (3) (8,977 firm-years)	Matched Non-REITs 1-to-1 (4) (1,582 firm-years)
Proportion of firm-years subject to any activist event	0.0518	0.0519	0.0519	0.0461
hedge fund activist event	0.0240	0.0292	0.0292	0.0240
Market Value of Equity (MVE)	2,362 [1,029]	4,197 *** [240] ***	2,523 [858] ***	2,309 [942]
log(MVE)	6.65 [6.94]	5.46 *** [5.48] ***	6.55 ** [6.75] ***	6.62 [6.85]
Market-to-Book Assets (Q)	1.27 [1.18]	6.20 *** [1.39] ***	1.42 *** [1.16]	1.29 [1.16]
Sales Growth 1 Year	0.238 [0.071]	0.199 ** [0.068]	0.131 *** [0.061] **	0.151 *** [0.068]
Net Income/Assets (ROA)	0.005 [0.012]	-0.498 *** [0.011] **	0.005 [0.025] ***	0.013 * [0.026] ***
Cash/Assets	0.050 [0.022]	0.213 *** [0.110] ***	0.120 *** [0.067] ***	0.110 *** [0.063] ***
Dividend Yield	0.063 [0.051]	0.013 *** [0.000] ***	0.019 *** [0.005] ***	0.020 *** [0.007] ***
Debt/Assets	0.553 [0.544]	0.395 *** [0.155] ***	0.252 *** [0.217] ***	0.262 *** [0.239] ***
R&D/Assets	0.000 [0.000]	0.065 *** [0.000] ***	0.011 *** [0.000] ***	0.009 *** [0.000] ***

Table 4 – Activist Campaign Likelihood for All Firms (REITs and non-REITs)

Probit model for the likelihood that a firm becomes a target of an activist campaign in any given fiscal year. The panel contains all US Compustat firm-years in 2005-2013 with data available to calculate market capitalization and total assets. REITs are identified from the CRSP Ziman REIT database and the SNL Financial database. Matched firms are obtained by matching non-REITs to the REIT panel based on year, size, median industry market-to-book of assets, and the deviation of market-to-book of assets from the industry median. The dependent variable equals 1 if the firm is subject to at least one activist campaign during the next fiscal year. All accounting variables are described in Table 3 and are from the end of the fiscal year immediately preceding the activist campaign event. Prior Year Excess Return is the buy-and-hold stock return minus CRSP value-weighted index return over the fiscal year. All ratio and return variables are winsorized at the 1st and 99th percentiles. REIT Indicator equals 1 for all firm-years classified as REITs by the CRSP Ziman REIT database or by the SNL Financial database and equals zero otherwise. Robust standard errors clustered by firms are in parentheses below coefficient estimates. Marginal effects in brackets below the standard errors reflect the change in the probability of an activist campaign for a one standard deviation change in a continuous variable, or a shift from zero to one for an indicator variable. *, **, *** indicate statistical significance at the 10%, 5%, and 1% significance level.

Table 4 – Continued

	Whole Panel Sample			Matched Panel Sample		Matched Sample 1-to-1	
	All Activist Types		Activist is Hedge Fund	All Activist Types	Activist is Hedge Fund	All Activist Types	Activist is Hedge Fund
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
log(MVE)	0.106*** (0.024) [0.012***]	-0.036 (0.034) [-0.004]	0.195*** (0.037) [0.014***]	-0.011 (0.074) [-0.001]	0.254*** (0.097) [0.014***]	-0.095 (0.120) [-0.009]	0.249 (0.176) [0.013]
log(MVE) squared	-0.008*** (0.002) [-0.001***]	0.002 (0.003) [0.000]	-0.017*** (0.003) [-0.001***]	-0.001 (0.006) [-0.000]	-0.023*** (0.008) [-0.001***]	0.006 (0.010) [0.001]	-0.019 (0.016) [-0.001]
Market-to-Book (Q)	-0.021* (0.011) [-0.002*]	-0.082*** (0.014) [-0.010***]	-0.088*** (0.018) [-0.007***]	-0.159*** (0.058) [-0.015***]	-0.245*** (0.076) [-0.013***]	-0.270* (0.160) [-0.027*]	-0.475** (0.201) [-0.025**]
Sales Growth 1 Year	-0.097*** (0.020) [-0.011***]	-0.066*** (0.021) [-0.008***]	-0.053** (0.026) [-0.004**]	-0.033 (0.049) [-0.003]	0.016 (0.056) [0.001]	-0.023 (0.067) [-0.002]	-0.004 (0.080) [-0.000]
ROA	-0.001 (0.021) [-0.000]	0.069 (0.069) [0.008]	0.015 (0.067) [0.001]	-0.225 (0.179) [-0.022]	-0.307 (0.264) [-0.017]	-0.415 (0.513) [-0.041]	-1.246** (0.627) [-0.066*]
Cash/Assets	0.165*** (0.061) [0.018***]	0.290*** (0.071) [0.035***]	0.257*** (0.082) [0.019***]	0.142 (0.225) [0.014]	0.178 (0.244) [0.010]	0.357 (0.452) [0.035]	0.225 (0.503) [0.012]
Dividend Yield	-2.094*** (0.464) [-0.230***]	-2.309*** (0.477) [-0.276***]	-3.546*** (0.716) [-0.263***]	-1.373* (0.766) [-0.134*]	-2.016* (1.138) [-0.109*]	-0.852 (1.202) [-0.084]	-1.958 (1.738) [-0.104]
Debt/Assets	0.013 (0.025) [0.001]	0.187*** (0.053) [0.022***]	0.165*** (0.061) [0.012***]	0.240** (0.115) [0.023**]	0.439*** (0.129) [0.024***]	0.215 (0.227) [0.021]	0.415* (0.252) [0.022]
R&D/Assets	-0.014 (0.085) [-0.001]	0.131 (0.130) [0.016]	0.298** (0.144) [0.022**]	0.848 (0.733) [0.083]	1.382 (0.866) [0.074]	-0.330 (1.499) [-0.032]	-0.199 (1.852) [-0.011]
Prior Year Excess Return		-0.117*** (0.027) [-0.014***]	-0.154*** (0.034) [-0.011***]	-0.112* (0.061) [-0.011*]	-0.080 (0.085) [-0.004]	-0.302* (0.173) [-0.030*]	-0.308 (0.284) [-0.016]
REIT Indicator	0.053 (0.076) [0.006]	-0.038 (0.077) [-0.004]	-0.067 (0.088) [-0.005]	0.021 (0.088) [0.002]	-0.057 (0.104) [-0.003]	0.012 (0.121) [0.001]	-0.046 (0.142) [-0.002]
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	51,555	42,262	42,262	9,766	9,766	2,931	2,931
Pseudo R-squared	0.014	0.016	0.030	0.019	0.038	0.042	0.080

Table 5 – Activist Campaign Likelihood for REITs

Probit model for the likelihood that a REIT firm becomes a target of an activist campaign in any given fiscal year. The panel contains REIT firm-years on Compustat from 2005-2013 with data available to calculate market capitalization and total assets. REITs are identified using the CRSP Ziman REIT database and the SNL Financial database. The dependent variable equals 1 if the firm is subject to at least one activist campaign during the next fiscal year. The Equity REIT indicator equals 1 for all firm-years classified as Equity REITs by the CRSP Ziman REIT database (or the SNL Financial database if missing in the CRSP Ziman database) and equals zero otherwise. The UPREIT, Maryland, and Not-Self-Advised indicators equal one if SNL Financial reports that the REIT is organized as an UPREIT, is incorporated in Maryland, and is not self-advised; and equal zero if SNL Financial reports otherwise. All other accounting and market variables are described in Table 3 and are from the end of the fiscal year immediately preceding the activist campaign event. Robust standard errors clustered by firms are in parentheses below the coefficient estimates. Marginal effects in brackets below the standard errors reflect the change in the probability of an activist campaign for a one standard deviation change in a continuous variable, or a shift from zero to one for an indicator variable. *, **, *** in indicate statistical significance at the 10%, 5%, and 1% significance level.

Table 5 – continued

	All Types of Activists		Activist Is Hedge Fund	
	(1)	(2)	(3)	(4)
log(MVE)	-0.079 (0.191) [-0.008]	-0.121 (0.188) [-0.011]	0.156 (0.237) [0.008]	0.385 (0.259) [0.018]
log(MVE) squared	0.004 (0.017) [0.000]	0.009 (0.016) [0.001]	0.000 (0.022) [0.000]	-0.016 (0.023) [-0.001]
Market-to-Book (Q)	-0.607* (0.350) [-0.058*]	-0.611* (0.346) [-0.055*]	-1.296*** (0.477) [-0.069**]	-1.315*** (0.501) [-0.063**]
Sales Growth 1 Year	-0.024 (0.081) [-0.002]	-0.026 (0.088) [-0.002]	0.033 (0.089) [0.002]	0.056 (0.096) [0.003]
ROA	-1.424 (0.902) [-0.136]	-2.349** (1.029) [-0.212**]	-4.051*** (1.078) [-0.217***]	-5.498*** (1.245) [-0.262***]
Cash/Assets	2.300*** (0.842) [0.220***]	2.212** (1.027) [0.199**]	2.638** (1.132) [0.141**]	0.350 (1.687) [0.017]
Dividend Yield	-0.277 (1.742) [-0.027]	-0.740 (1.709) [-0.067]	-1.743 (2.187) [-0.093]	-1.491 (2.866) [-0.071]
Debt/Assets	0.403 (0.409) [0.039]	0.273 (0.488) [0.025]	0.845 (0.544) [0.045]	0.694 (0.691) [0.033]
Prior Year Excess Return	-0.623*** (0.219) [-0.060***]	-0.603*** (0.216) [-0.054***]	-0.396 (0.312) [-0.021]	-0.164 (0.383) [-0.008]
Equity REIT Indicator	0.402** (0.203) [0.033**]	0.643** (0.292) [0.044**]	0.355 (0.266) [0.016]	0.653* (0.348) [0.023**]
UPREIT Indicator		-0.339* (0.189) [-0.033]		-0.195 (0.219) [-0.010]
Maryland Indicator		0.177 (0.183) [0.015]		-0.251 (0.193) [-0.013]
Not-Self-Advised Indicator		-0.088 (0.321) [-0.008]		-0.067 (0.261) [-0.003]
Year Dummies	Yes	Yes	Yes	Yes
Observations	1,433	1,394	1,295	1,261
Pseudo R-squared	0.096	0.109	0.143	0.173

Table 6 –Abnormal Returns for Initial Activist Campaigns

Daily and monthly abnormal returns around the announcement of activist campaigns. The sample contains 2,156 initial activist campaigns from SharkRepellent launched between 2006 and 2014 that also have data on CRSP and Compustat. Initial campaigns are the initial campaigns launched by the same activist group against the same target firm that are not preceded by any other campaigns in the same target firm in the past 365 days. 2,096 initial campaigns are launched against non-REITs, 60 against REITs. The campaigns launched solely by corporations, religious groups or labor unions, or any combination of these types of activists in an activist group, are excluded. Matched firms are obtained by matching non-REITs to the REIT panel based on year, size, median industry market-to-book of assets, and the deviation of market-to-book of assets from the industry median. CAR is the cumulative abnormal return where the abnormal return is calculated as the stock return minus the value-weighted CRSP index returns. BHAR is the buy-and-hold abnormal return where the abnormal return is calculated as the buy-and-hold stock return minus the buy-and-hold value-weighted CRSP index return. CRSP index return is replaced with the value-weighted CRSP-Ziman REIT index in the rows indicated as “w/REIT index.” Averages are reported with the medians below in brackets. ^a, ^b, and ^c indicate statistical significance at the 1%, 5%, and 10% level for the test that the abnormal returns equal zero. ***, **, * indicate that the abnormal returns for REITs are different from the abnormal returns for non-REITs at the 1%, 5%, and 10% level.

	Initial Activist Events for				Difference between CARs for REITs and		
	REITs n=60	All non- REITs n=2096	Matched non- REITs Panel n=321	Matched non- REITs 1-to-1 n=57	All non- REITs	Matched non- REITs Panel	Matched non- REITs 1-to-1
Panel A: Daily Returns							
CAR {-5, +5}	6.97% ^b [3.42%] ^a	3.78% ^a [2.51%] ^a	3.90% ^a [2.74%] ^a	4.88% ^a [3.09%] ^b	3.19%* [0.91%]	3.07% [0.68%]	2.09% [0.33%]
w/REIT index	6.78% ^b [1.94%] ^b						
CAR {-20, +20}	8.61% ^b [4.64%] ^a	5.47% ^a [3.77%] ^a	4.05% ^a [4.73%] ^a	6.35% ^b [4.82%] ^a	3.14% [0.87%]	4.56% [-0.09%]	2.26% [-0.18%]
w/REIT index	7.33% ^b [5.59%] ^c						
BHAR {-20, +20}	4.81% [2.79%] ^b	5.65% ^a [2.36%] ^a	3.64% ^a [3.23%] ^a	6.29% ^b [4.90%] ^b	-0.84% [0.43%]	1.17% [-0.44%]	-1.48% [-2.11%]
w/REIT index	4.07% [3.86%]						
Panel B: Monthly Returns							
CAR {-1, +12}	-9.01% [3.64%]	3.61% ^b [6.00%] ^a	0.21% [1.79%]	3.47% [6.84%]	-12.62% [-2.36%]	-9.22% [1.85%]	-12.48% [-3.20%]
w/REIT index	-9.16% [-0.001%]						
BHAR {-1, +12}	-6.28% [-1.79%]	5.42% ^a [-0.01%]	4.10% [-3.42%]	4.36% [4.47%]	-11.70% [-1.78%]	-10.38% [1.63%]	-10.64% [-6.26%]
w/REIT index	-4.52% [-2.63%]						

Table 7 – Activist Target Characteristics Before and After Shareholder Activism Events

Mean and median characteristics and their changes around the initial activist campaigns. The sample contains 2,156 initial activist campaigns from SharkRepellent launched between 2006 and 2014 that also have data on CRSP and Compustat. Initial campaigns are the initial campaigns launched by the same activist group against the same target firm that are not preceded by any other campaigns in the same target firm in the past 365 days. 2,096 initial campaigns are launched against non-REITs, 60 against REITs. The campaigns launched solely by corporations, religious groups, labor unions, or any combination of these types of activists in an activist group, are excluded. Panel A reports the statistics for target REITs, Panel B for non-REITs. Matched firms are obtained by matching non-REITs to the REIT panel based on year, size, median industry market-to-book of assets, and the deviation of market-to-book of assets from the industry median. Year “t” marks the end of the fiscal year during which the initial activist event occurred. Net Income is the income before extraordinary items. Assets is the book value of assets. Debt is long-term plus short-term debt. Dividend Yield is the dividend paid to common stockholders divided by the market capitalization. Repurchase Yield is the repurchases of common stock divided by the market capitalization. Repurchases are estimated as the total value of common and preferred stock purchases minus the decline in the value of preferred stock (Banyi, Dyl, and Kahle, 2008). Asset Growth is the growth in total assets from the prior fiscal year. Repurchase Plan is an indicator that equals one if the firm has a formal repurchase plan. Property Portfolio Growth is the growth in the number of properties held by REIT. All variables are estimated using Compustat, except Repurchase Plan and Property Portfolio Growth, which use data from SNL Financial. Industry-adjusted (property-type-adjusted) values are calculated by subtracting industry (property-type) medians. All ratio variables are winsorized at the 1st and 99th percentiles. ^a, ^b, and ^c indicate statistical significance at the 1%, 5%, and 10% level for the test that the industry-adjusted values or property-type-adjusted values equal zero. ***, **, * indicate that the changes in variables are different from zero at the 1%, 5%, and 10% level. or

Table 7 – continued

Panel A: REITs					
Relative Year	t-1	t	t+1	(t) - (t-1)	(t+1) - (t-1)
<i>Max No. Observations</i>	59	49	44	49	44
<i>Unadjusted Variables</i>					
Net Income/Assets (ROA)	-1.50%	-2.08%	-2.40%	-0.25%	-1.15%
	[0.90%]	[0.39%]	[0.18%]	[-0.18%]	[-1.15%] **
Debt/Assets	56.73%	62.52%	58.08%	3.87% **	-0.08%
	[54.44%]	[58.19%]	[57.40%]	[0.60%]	[0.12%]
Dividend Yield	6.10%	8.19%	6.66%	2.59% **	0.11%
	[5.23%]	[6.47%]	[4.68%]	[0.00%]	[-1.20%]
Repurchase Yield	0.74%	1.82%	0.78%	0.99%	-0.22%
	[0.00%]	[0.00%]	[0.00%]	[0.00%]	[0.00%]
Repurchase Plan Indicator	18.37%	47.50%	37.14%	28.21% ***	21.21% *
	[0.00%]	[0.00%]	[0.00%]	[0.00%] ***	[0.00%] *
Asset Growth 1 Year	12.46%	6.23%	1.68%	-10.43%	-11.59% *
	[3.98%]	[0.02%]	[-3.07%]	[-7.84%] **	[-4.61%]
Property Portfolio Growth	12.27%	1.88%	6.58%	-14.62% ***	-2.78%
	[3.76%]	[0.00%]	[-2.07%]	[-8.18%] **	[-7.19%]
<i>Property-Type-Adjusted Variables</i>					
Net Income/Assets (ROA)	-2.90% ^c	-3.44% ^b	-4.29%	-0.52%	-2.03%
	[-0.01%]	[-0.86%] ^b	[-1.00%] ^a	[-0.41%] *	[-1.15%] **
Debt/Assets	-2.84%	1.45%	3.00%	3.66% *	6.45%
	[0.14%]	[0.51%]	[-0.05%]	[0.97%]	[0.14%]
Dividend Yield	2.49%	6.58% ^c	-0.93%	4.92% *	-3.47%
	[0.37%]	[0.45%] ^c	[-0.15%]	[0.27%]	[-0.73%]
Repurchase Yield	0.71%	1.78% ^c	0.26%	1.05%	-0.56%
	[0.00%]	[0.00%]	[0.00%]	[0.00%]	[0.00%]
Asset Growth 1 Year	1.55%	1.45%	4.04%	-6.40%	0.43%
	[-2.04%]	[-3.93%] ^c	[-4.37%]	[-5.56%]	[1.66%]
Property Portfolio Growth	8.80% ^c	-1.43%	5.97%	-14.68% **	1.06%
	[1.78%]	[-1.83%]	[-2.24%]	[-7.60%]	[-1.90%]

Table 7 – continued

Panel B: Non-REITs															
Relative Year	All Non-REITs					Matched Non-REITs Panel					Matched Non-REITs 1-to-1				
	t-1	t	t+1	(t) - (t-1)	(t+1) - (t-1)	t-1	t	t+1	(t) - (t-1)	(t+1) - (t-1)	t-1	t	t+1	(t) - (t-1)	(t+1) - (t-1)
<i>Max No. Observations</i>	2,044	1,695	1,458	1,695	1,458	314	287	253	287	253	57	46	41	46	41
Unadjusted Variables															
Net Income/Assets (ROA)	-3.26%	-5.81%	-7.31%	-2.22% ***	-3.82% ***	0.13%	-1.44%	-2.14%	-1.39% *	-2.52% **	0.99%	-1.35%	-1.61%	-1.78%	-1.95%
	[1.48%]	[0.52%]	[0.60%]	[-0.62%] ***	[-0.56%] ***	[2.20%]	[1.23%]	[1.11%]	[-0.75%] ***	[-0.82%] ***	[2.42%]	[1.15%]	[0.44%]	[-0.47%]	[-0.82%]
Debt/Assets	20.93%	22.56%	24.12%	1.35% ***	2.35% ***	26.96%	28.36%	29.79%	1.08% **	2.04% **	29.88%	32.91%	34.18%	1.42%	2.07%
	[14.83%]	[16.42%]	[18.20%]	[0.00%]	[0.00%]	[25.78%]	[25.65%]	[28.06%]	[0.00%]	[0.00%]	[29.95%]	[31.63%]	[35.18%]	[0.29%]	[-0.02%]
Dividend Yield	0.96%	1.20%	1.19%	0.18% **	0.07%	1.42%	1.44%	1.24%	0.03%	-0.25%	1.33%	0.92%	1.36%	-0.25%	-0.03%
	[0.00%]	[0.00%]	[0.00%]	[0.00%] ***	[0.00%]	[0.00%]	[0.00%]	[0.00%]	[0.00%]	[0.00%]	[0.00%]	[0.00%]	[0.00%]	[0.00%]	[0.00%]
Repurchase Yield	1.89%	2.48%	2.56%	0.84% ***	0.92% ***	1.97%	2.48%	2.49%	0.58%	0.65%	0.94%	1.79%	1.93%	0.54%	0.86%
	[0.00%]	[0.00%]	[0.02%]	[0.00%] ***	[0.00%] ***	[0.00%]	[0.02%]	[0.11%]	[0.00%]	[0.00%]	[0.03%]	[0.01%]	[0.03%]	[0.00%]	[0.00%]
Capital Expenditures/Assets	4.55%	4.40%	4.15%	-0.37% ***	-0.79% ***	5.50%	5.21%	5.04%	-0.40% **	-0.83% **	5.79%	5.58%	5.23%	-0.60%	-1.53% *
	[2.65%]	[2.56%]	[2.39%]	[-0.03%] ***	[-0.11%] ***	[3.77%]	[3.49%]	[3.42%]	[0.00%]	[-0.04%] **	[3.80%]	[3.56%]	[3.42%]	[0.05%]	[0.00%]
Asset Growth 1 Year	8.56%	5.39%	0.19%	-4.42% ***	-9.00% ***	5.51%	6.11%	0.67%	-0.54%	-5.81% ***	2.84%	4.39%	3.05%	2.05%	0.38%
	[3.28%]	[0.22%]	[-1.25%]	[-2.33%] ***	[-5.17%] ***	[2.21%]	[1.39%]	[-0.96%]	[-2.01%]	[-4.52%] ***	[1.48%]	[2.58%]	[1.03%]	[-2.29%]	[-1.11%]
Industry-Adjusted Variables															
Net Income/Assets (ROA)	-2.52% ^a	-4.99% ^a	-6.37% ^a	-1.83% ***	-3.11% ***	-2.16% ^a	-3.62% ^a	-4.02% ^a	-1.24%	-2.05% *	-1.46%	-3.43% ^b	-3.26% ^b	-1.52%	-1.35%
	[-0.04%]	[-0.52%] ^a	[-0.38%] ^a	[-0.46%] ***	[-0.26%] **	[-0.27%]	[-1.16%] ^a	[-1.05%] ^a	[-0.59%] **	[-0.34%]	[-0.11%]	[-0.88%]	[-0.24%]	[-0.56%]	[-0.48%]
Debt/Assets	5.25% ^a	5.60% ^a	6.40% ^a	0.52% **	1.02% ***	5.58% ^a	6.15% ^a	6.90% ^a	0.40%	0.89%	6.04% ^b	8.38% ^b	9.54% ^a	1.14%	1.72%
	[-0.18%]	[0.10%]	[1.28%] ^b	[-0.33%] ***	[-0.78%] ***	[0.78%]	[2.08%] ^b	[4.01%] ^b	[-0.25%]	[-0.69%]	[5.46%]	[5.39%] ^b	[8.24%] ^c	[0.15%]	[0.03%]
Dividend Yield	0.65% ^a	0.85% ^a	0.81% ^a	0.16% **	0.01%	0.72% ^a	0.75% ^a	0.57% ^a	0.01%	-0.32%	0.41%	-0.08%	0.35%	-0.35%	-0.19%
	[0.00%] ^a	[0.00%] ^a	[0.00%] ^a	[0.00%]	[0.00%]	[0.00%] ^a	[0.00%] ^a	[0.00%] ^a	[0.00%]	[0.00%]	[0.00%]	[0.00%]	[0.00%]	[0.00%]	[0.00%]
Repurchase Yield	1.84% ^a	2.41% ^a	2.49% ^a	0.82% ***	0.89% ***	1.88% ^a	2.34% ^a	2.38% ^a	0.53%	0.63%	0.85% ^a	1.59% ^a	1.70% ^a	0.46%	0.74%
	[0.00%] ^a	[0.00%] ^a	[0.00%] ^a	[0.00%] ***	[0.00%] **	[0.00%] ^a	[0.00%] ^a	[0.06%] ^a	[0.00%]	[0.00%]	[0.03%] ^a	[0.00%] ^b	[0.03%] ^a	[-0.01%]	[0.00%]
Capital Expenditures/Assets	1.35% ^a	1.10% ^a	0.95% ^a	-0.37% ***	-0.70% ***	1.69% ^a	1.39% ^a	1.23% ^a	-0.37% **	-0.72% **	2.37% ^a	2.15% ^b	1.80% ^b	-0.66% *	-1.58% **
	[0.12%] ^a	[0.05%] ^b	[0.00%]	[-0.03%] **	[-0.09%] ***	[0.35%] ^b	[0.13%] ^c	[0.06%]	[0.01%]	[-0.06%]	[0.11%]	[0.60%] ^c	[0.74%] ^c	[-0.03%]	[0.01%]
Asset Growth 1 Year	4.98% ^a	1.95% ^c	-2.44% ^a	-3.26% **	-6.81% ***	1.61%	2.29%	-2.03%	0.06%	-4.42% *	-1.78%	0.52%	1.06%	2.59%	2.55%
	[-1.44%] ^a	[-4.09%] ^a	[-4.32%] ^a	[-2.12%] ***	[-2.67%] ***	[-2.34%] ^a	[-3.33%] ^a	[-3.06%] ^a	[-0.97%]	[-1.13%]	[-1.93%] ^b	[-2.19%]	[-1.31%]	[0.25%]	[1.05%]

Table 8 – Determinants of Abnormal Returns

Ordinary least squares regression of cumulative abnormal returns (CAR) on changes in target firm characteristics. The sample contains 2,156 initial activist campaigns from SharkRepellent launched between 2006 and 2014 that also have data on CRSP and Compustat. Initial campaigns are the initial campaigns launched by the same activist group against the same target firm that are not preceded by any other campaigns in the same target firm in the past 365 days. 2,096 initial campaigns are launched against non-REITs, 60 against REITs. The campaigns launched solely by corporations, religious groups, labor unions, or any combination of these types of activists in an activist group, are excluded. Panel A reports the results for target REITs, Panel B for non-REITs. Matched firms are obtained by matching non-REITs to the REIT panel based on year, size, median industry market-to-book of assets, and the deviation of market-to-book of assets from the industry median. The dependent variable in Panel A is the 14-month CAR calculated as described in Table 6. The dependent variable in Panel B is the 14-month CAR with REIT index instead of the whole market index calculated as described in Table 6. The changes in independent variables are calculated over time periods indicated in the table. Year “t” marks the end of the fiscal year during which the initial activist event occurred. Delisted M&A is an indicator that equals one if the target firm delists due to merger or acquisition from CRSP within 18 months from the initial activist event announcement. All other independent variables are described in Table 7. All ratio and return variables are winsorized at the 1st and 99th percentiles. Coefficient estimates are reported with robust standard errors in parentheses. *, **, *** indicate statistical significance at the 10%, 5%, and 1% significance level.

Panel A					
Sample	REITs				
Dependent Variable	Monthly CAR {-1, +12}		w/REIT Index		
Independent Variables	Unadjusted		Property-Type-Adjusted		
Changes Calculated Over	$\frac{(t+1) - (t-1)}{(1)}$	$\frac{(t) - (t-1)}{(2)}$	(3)	$\frac{(t+1) - (t-1)}{(4)}$	$\frac{(t) - (t-1)}{(5)}$
Δ Net Income/Assets (ROA)	1.154** (0.443)	1.385*** (0.361)		1.382 (0.994)	1.382*** (0.249)
Δ Debt/Assets	0.251 (0.617)	-1.210* (0.677)		0.097 (0.431)	-2.143*** (0.665)
Δ Dividend Yield	-0.924 (0.711)	-2.366*** (0.803)		0.878 (1.064)	-0.993*** (0.211)
Δ Repurchase Yield	-0.031 (1.472)	1.216 (0.974)		-1.279 (2.088)	1.073 (0.929)
Δ Asset Growth 1 Year	0.382*** (0.114)	0.177 (0.174)		0.333** (0.157)	0.209 (0.171)
Delisted M&A	omitted	0.462** (0.172)	0.330*** (0.097)	omitted	0.427** (0.178)
Constant	-0.065 (0.067)	-0.079 (0.080)	-0.167** (0.080)	-0.032 (0.064)	-0.104 (0.089)
Observations	34	40	59	29	36
Adj R-sq	0.447	0.412	0.059	0.405	0.423

Table 8 – continued

Panel B: Non-REITs

Sample Dependent Variable	All Non-REITs Monthly CAR {-1, +12}					Matched Non-REITs Panel Monthly CAR {-1, +12}					Matched Non-REITs 1-to-1 Monthly CAR {-1, +12}				
	Unadjusted		(3)	Industry-Adjusted		Unadjusted		(8)	Industry-Adjusted		Unadjusted		Industry-Adjusted		
	$(t+1) - (t-1)$	$(t) - (t-1)$		$(t+1) - (t-1)$	$(t) - (t-1)$	$(t+1) - (t-1)$	$(t) - (t-1)$		$(t+1) - (t-1)$	$(t) - (t-1)$	$(t+1) - (t-1)$	$(t) - (t-1)$	$(t+1) - (t-1)$	$(t) - (t-1)$	
Changes Calculated Over	(1)	(2)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)	(14)	(15)		
Δ Net Income/Assets (ROA)	0.583*** (0.106)	0.506*** (0.124)		0.573*** (0.103)	0.502*** (0.120)	0.763*** (0.234)	0.905*** (0.323)		0.817*** (0.242)	1.074*** (0.325)	1.881*** (0.471)	1.143 (1.068)		1.710*** (0.411)	1.390 (0.976)
Δ Debt/Assets	-0.455*** (0.129)	-0.672*** (0.212)		-0.349*** (0.130)	-0.566*** (0.195)	-0.980*** (0.319)	-1.219*** (0.468)		-0.821*** (0.297)	-0.961** (0.445)	-1.416 (0.905)	-0.817 (0.920)		-1.431 (0.882)	-1.066 (0.678)
Δ Dividend Yield	-0.148 (0.530)	-0.683 (0.604)		-0.314 (0.545)	-0.831 (0.594)	0.790 (0.781)	-1.603 (1.011)		0.538 (0.844)	-1.095 (0.910)	0.133 (1.135)	-3.683*** (1.269)		0.179 (1.152)	-3.649** (1.402)
Δ Repurchase Yield	0.051 (0.191)	0.199 (0.196)		-0.008 (0.191)	0.185 (0.194)	0.099 (0.531)	-0.978 (0.644)		-0.045 (0.581)	-0.864 (0.633)	-1.168 (1.617)	-3.502 (3.601)		-1.581 (1.830)	-2.554 (3.344)
Δ Asset Growth 1 Year	0.176*** (0.053)	0.024 (0.043)		0.157*** (0.049)	0.027 (0.036)	0.392*** (0.094)	0.226*** (0.068)		0.345*** (0.076)	0.192*** (0.061)	-0.149 (0.289)	-0.310 (0.310)		-0.179 (0.305)	-0.239 (0.291)
Delisted M&A	0.225** (0.089)	0.275*** (0.037)	0.323*** (0.023)	0.238*** (0.088)	0.278*** (0.037)	-0.147 (0.213)	0.205*** (0.075)	0.266*** (0.058)	-0.059 (0.186)	0.231*** (0.073)	0.123 (0.115)	0.224 (0.246)	0.137 (0.112)	0.154 (0.115)	0.197 (0.245)
Constant	0.029** (0.014)	-0.006 (0.015)	-0.043*** (0.015)	0.015 (0.014)	-0.015 (0.015)	0.043 (0.033)	0.008 (0.034)	-0.041 (0.035)	0.018 (0.033)	-0.004 (0.034)	0.130* (0.075)	0.091 (0.072)	0.001 (0.075)	0.118 (0.079)	0.085 (0.074)
Observations	1319	1538	2039	1323	1543	235	263	314	236	264	39	44	57	39	44
Adj R-sq	0.136	0.072	0.061	0.119	0.067	0.223	0.182	0.030	0.189	0.167	0.157	0.145	-0.001	0.105	0.133

Table 9 –Likelihood of Takeover for Activist Targets

Probit model for the likelihood that a firm is taken over within two years from the end of the fiscal year. The panel contains firm-years on Compustat between 2005 and 2013 that also have data available in CRSP. REITs are from the CRSP Ziman REIT database and the SNL Financial database. Matched firms are obtained by matching non-REITs to the REIT panel based on year, size, median industry market-to-book of assets, and the deviation of market-to-book of assets from the industry median. The dependent variable equals 1 if the firm is delisted due to merger or acquisition within two years from the end of the fiscal year. The Activist Campaign indicator equals one if the firm is subject to an activist campaign within the next two fiscal years. Institutional ownership is the percentage of stock held by institutions as reported in 13f filings. All other accounting and market variables are described in Table 3 and Table 5. All ratio and return variables are winsorized at the 1st and 99th percentiles. Panel A reports results for samples that include both, REITs and non-REITs. Panel B reports results for the sample of REITs only. Coefficient estimates and marginal effects are reported. Robust standard errors clustered by firms are in parentheses below coefficient estimates. Marginal effects in brackets below the standard errors reflect the change in the probability of an activist campaign for a one standard deviation change in a continuous variable, or a shift from zero to one for an indicator variable. *, **, *** in indicate statistical significance at the 10%, 5%, and 1% significance level.

Table 9 – continued

Panel A	All Activist Types			
	Whole Panel Sample		Matched Panel Sample	Matched Sample 1-to-1
	(1)	(2)	(3)	(4)
Activist Campaign Indicator	0.652*** (0.032) [0.130***]	0.648*** (0.032) [-0.129***]	0.718*** (0.086) [0.107***]	0.745*** (0.163) [0.130***]
REIT Indicator		-0.144* (0.085) [-0.019*]	0.058 (0.105) [0.006]	-0.176 (0.136) [-0.020]
REIT*Activist Campaign Indicator		0.127 (0.208) [0.020]	0.072 (0.217) [0.007]	0.030 (0.260) [0.004]
log(MVE)	0.165*** (0.037) [0.024***]	0.165*** (0.037) [0.024***]	0.025 (0.110) [0.002]	0.112 (0.179) [0.013]
log(MVE) squared	-0.019*** (0.003) [-0.003***]	-0.019*** (0.003) [-0.003***]	-0.009 (0.008) [-0.001]	-0.015 (0.014) [-0.002]
Market-to-Book (Q)	-0.059*** (0.011) [-0.009***]	-0.060*** (0.011) [-0.009***]	-0.084 (0.061) [-0.008]	-0.057 (0.111) [-0.007]
Sales Growth 1 Year	-0.034 (0.022) [-0.005]	-0.032 (0.022) [-0.005]	-0.005 (0.062) [-0.000]	-0.029 (0.080) [-0.003]
ROA	0.099 (0.068) [0.014]	0.097 (0.068) [0.014]	0.085 (0.287) [0.008]	0.655 (0.590) [0.077]
Cash/Assets	0.211*** (0.066) [0.030***]	0.211*** (0.066) [0.031***]	0.229 (0.238) [0.022]	0.731** (0.369) [0.085**]
Dividend Yield	-1.446*** (0.476) [-0.209***]	-1.238** (0.484) [-0.179**]	0.308 (0.929) [0.029]	1.254 (1.342) [0.146]
Debt/Assets	-0.049 (0.065) [-0.007]	-0.028 (0.067) [-0.004]	0.073 (0.162) [0.007]	0.028 (0.253) [0.003]
Prior Year Excess Return	0.065*** (0.022) [0.009***]	0.066*** (0.022) [0.010***]	0.024 (0.061) [0.002]	0.070 (0.125) [0.008]
Institutional Ownership	0.286*** (0.051) [0.041***]	0.293*** (0.051) [0.042***]	0.333** (0.130) [0.031**]	0.302 (0.193) [0.035]
Year Dummies	Yes	Yes	Yes	Yes
Observations	38,140	38,140	8871	2644
Pseudo R-squared	0.059	0.059	0.068	0.111

Table 9 – continued

Panel B	All Activist Types	
	Only REIT Firms	
	(1)	(2)
Activist Campaign Indicator	0.734*** (0.218) [0.103**]	0.972*** (0.260) [0.148***]
log(MVE)	0.264 (0.273) [0.025]	0.434 (0.383) [0.041]
log(MVE) squared	-0.030 (0.021) [-0.003]	-0.042 (0.028) [-0.004]
Market-to-Book (Q)	-0.100 (0.238) [-0.010]	0.067 (0.300) [0.006]
Sales Growth 1 Year	-0.047 (0.114) [-0.004]	-0.029 (0.118) [-0.003]
ROA	-1.241 (1.337) [-0.118]	-3.679 (2.763) [-0.349]
Cash/Assets	0.253 (0.845) [0.024]	0.512 (1.069) [0.049]
Dividend Yield	4.249 (2.764) [0.403]	10.700*** (2.332) [1.014***]
Debt/Assets	-0.311 (0.545) [-0.029]	-1.085* (0.559) [-0.103*]
Prior Year Excess Return	-0.299 (0.291) [-0.028]	-0.169 (0.300) [-0.016]
Institutional Ownership	0.286 (0.389) [0.027]	0.279 (0.435) [0.026]
Equity REIT Indicator	0.584* (0.336) [0.045**]	0.118 (0.378) [0.011]
Maryland Indicator		-0.074 (0.217) [-0.007]
UPREIT Indicator		0.676** (0.263) [0.057***]
Not-Self-Advised Indicator		-0.406 (0.327) [-0.033]
Year Dummies	Yes	Yes
Observations	1285	1,149
Pseudo R-squared	0.207	0.246

Table 10 –Abnormal Returns by Target Acquisition Outcome

Daily and monthly abnormal returns around the announcement of activist campaigns sorted by whether the activist targets delist from CRSP due to merger or acquisition within 18 months from an initial activist campaign. The sample contains 2,156 initial activist campaigns from SharkRepellent launched between 2006 and 2014 that also have data on CRSP and Compustat. Initial campaigns are the initial campaigns launched by the same activist group against the same target firm that are not preceded by any other campaigns in the same target firm in the past 365 days. 2,096 initial campaigns are launched against non-REITs, 60 against REITs. The campaigns launched solely by corporations, religious groups, labor unions, or any combination of these types of activists in an activist group, are excluded. Matched firms are obtained by matching non-REITs to the REIT panel based on year, size, median industry market-to-book of assets, and the deviation of market-to-book of assets from the industry median. CAR and BHAR are defined in Table 6. The CRSP index return is replaced with the value-weighted CRSP-Ziman REIT index in the rows indicated as “w/REIT index.” Averages are reported with the medians below in brackets. ^a, ^b, and ^c indicate statistical significance at the 1%, 5%, and 10% level for the test that the abnormal returns equal zero. ***, **, * indicate that the abnormal returns for delisted activist targets are different from the abnormal returns for non-delisted activist targets at the 1%, 5%, and 10% level.

Table 10 - continued

	Initial Activist Events											
	REITs			All Non-REITs			Matched Non-REITs Panel			Matched Non-REITs 1-to-1		
	Delisted n=14	Other n=46	Difference	Delisted n=506	Other n=1590	Difference	Delisted n=53	Other n=268	Difference	Delisted n=14	Other n=43	Difference
Panel A: Daily Returns												
CAR {-5, +5}	6.22% ^b [3.49%]	7.20% ^c [3.34%] ^b	0.98% [-0.16%]	3.97% ^a [1.51%] ^a	3.73% ^a [2.94%] ^a	-0.24% [1.43%] ^{***}	5.10% ^a [3.09%] ^c	3.66% ^a [2.55%] ^a	-1.44% [-0.54%]	4.34% ^b [3.82%]	5.06% ^a [2.62%] ^c	0.72% [-1.20%]
w/REIT index	5.46% ^b [1.56%]	7.18% ^c [1.97%]	1.72% [0.41%]									
CAR {-20, +20}	8.95% ^b [6.07%] ^c	8.51% ^c [4.09%] ^c	-0.44% [-1.98%]	13.90% ^a [7.49%] ^a	2.79% ^a [2.64%] ^a	-11.11% ^{***} [-4.85%] ^{***}	12.24% ^a [9.45%] ^a	2.43% ^c [4.09%] ^a	-9.81% ^{***} [-5.36%] [*]	11.07% ^a [9.98%] ^c	4.81% [4.02%] ^c	-6.26% [-5.97%]
w/REIT index	7.67% ^b 7.74%	7.22% [4.52%]	-0.45% [-3.22%]									
BHAR {-20, +20}	9.32% ^b [6.51%] ^c	3.44% [2.04%]	-5.87% [-4.47%]	14.34% ^a [7.51%] ^a	2.89% ^a [0.80%] ^c	-11.44% ^{***} [-6.71%] ^{***}	12.92% ^a [9.90%] ^a	1.80% [2.61%]	-11.13% ^{***} [-7.29%] [*]	11.37% ^b [10.45%] ^c	4.63% [4.13%]	-6.74% [-6.32%]
w/REIT index	8.04% ^b [8.17%]	2.86% [2.71%]	-5.18% [-5.46%]									
Panel B: Monthly Returns												
CAR {-1, +12}	17.55% ^a [11.89%] ^a	-17.1% ^c [-2.61%]	-34.65% ^{**} [-14.50%] ^{**}	28.03% ^a [24.31%] ^a	-4.20% ^b [-1.09%]	-32.22% ^{***} [-25.40%] ^{***}	22.54% ^a [16.50%] ^a	-4.24% [-0.46%]	-26.77% ^{***} [-16.96%] ^{***}	13.79% [14.82%]	0.11% [6.80%]	-13.67% [-8.02%]
w/REIT index	15.59% ^b [8.18%] ^c	-16.69% ^b [-2.73%]	-32.28% ^{**} [-10.91%] ^{**}									
BHAR {-1, +12}	20.14% ^b [9.82%] ^a	-14.3% ^b [-11.14%] ^c	-34.46% ^{***} [-20.96%] ^{***}	28.71% ^a [22.05%] ^a	-2.01% [-10.18%] ^a	-30.72% ^{***} [-32.23%] ^{***}	26.22% ^a [18.17%] ^a	-0.31% [-9.86%] ^a	-26.52% ^{***} [-28.03%] ^{***}	16.05% [14.95%]	0.55% [-3.54%]	-15.50% [-32.15%]
w/REIT index	18.16% ^b [6.97%] ^c	-11.42% ^b [-8.97%] ^c	-29.59% ^{***} [-15.94%] ^{***}									