

Shareholder Activism in REITs

David H. Downs
dhdowns@vcu.edu

Miroslava Straska
mstraska@vcu.edu

Gregory Waller
hgwaller@vcu.edu

School of Business and The Kornblau Institute
Virginia Commonwealth University

This version: January 2016

Abstract (Working Version):

We examine shareholder activism – specifically, its determinants, wealth effects, and real consequences – in Real Estate Investment Trusts (REITs). Conventional wisdom suggests that shareholder activism in REITs occurs less frequently than in other publicly-traded firms. This belief is plausible because most REITs are thought to be protected against hostile takeovers and because the potential for undervaluation in REITs is thought to be limited. The potential gains to shareholder activists who advocate for governance, operational, or strategic changes are thus thought to be smaller when targeting REITs. We find, however, that the conventional wisdom does not hold. Specifically, we show that REITs are as likely to be targeted by shareholder activists as other public firms. We also find that the average short-term gains around activist events in REITs are significantly positive and similar to the gains experienced by other public firms. The rest of our results can be summarized as follows. We find that REIT activist targets are more likely to be subsequently taken over than other comparable REITs and that only the activist targets that are ultimately taken over experience significantly positive long-term returns, on average. We do not find evidence of any significant changes in performance, leverage, payout, or investment in the REIT activist targets that are not ultimately taken over. Collectively, our results are best described as consistent with the view that the positive short-term gains to shareholder activism in REITs reflect the expectation of an increased takeover likelihood of activist target firms.

Shareholder Activism in REITs

This version: January 2016

Abstract (Working Version):

We examine shareholder activism – specifically, its determinants, wealth effects, and real consequences – in Real Estate Investment Trusts (REITs). Conventional wisdom suggests that shareholder activism in REITs occurs less frequently than in other publicly-traded firms. This belief is plausible because most REITs are thought to be protected against hostile takeovers and because the potential for undervaluation in REITs is thought to be limited. The potential gains to shareholder activists who advocate for governance, operational, or strategic changes are thus thought to be smaller when targeting REITs. We find, however, that the conventional wisdom does not hold. Specifically, we show that REITs are as likely to be targeted by shareholder activists as other public firms. We also find that the average short-term gains around activist events in REITs are significantly positive and similar to the gains experienced by other public firms. The rest of our results can be summarized as follows. We find that REIT activist targets are more likely to be subsequently taken over than other comparable REITs and that only the activist targets that are ultimately taken over experience significantly positive long-term returns, on average. We do not find evidence of any significant changes in performance, leverage, payout, or investment in the REIT activist targets that are not ultimately taken over. Collectively, our results are best described as consistent with the view that the positive short-term gains to shareholder activism in REITs reflect the expectation of an increased takeover likelihood of activist target firms.

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, predominantly 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, 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 activism generally agrees that the 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

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

increased over time. While Bebchuk, Brav, Jackson and Jiang (2013) report 757 interventions by activist hedge funds in 1994-2000, they report 1,283 such interventions in the more recent 2001-2007 period.

Although shareholder activists seem to play a prominent role in shaping the operation of public corporations today, conventional wisdom seems to be that the activists take only a back stage in affecting REITs.² 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.³ 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, all REIT management teams are essentially fully 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.

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

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

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.⁴ Additionally, because REITs are required to pay out 90% of annual income as dividends, 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 it might be difficult to derive additional value from improved governance in REITs. For both these reasons, shareholder activists may have less opportunity for economic gain by pushing for 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 over the past year is that of CommonWealth REIT, in which two activist investors, Corvex Management LP and Related Fund Management LLC, succeeded in the fight to remove the company's entire board.⁵ 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;⁶ Midvale hedge fund seeking to oust the management and replace

⁴ See "Activist Explores a New Frontier: Property" Wall Street Journal, 12/2/2014.

⁵ See "Corvex, Related Call for Earlier CommonWealth REIT Special Meeting" Wall Street Journal 3/25/2014.

⁶ See "Bulldog Targets REITs For Shakeup After Javelin Win" Bloomberg, 1/16/2014.

<http://www.bloomberg.com/news/2014-01-16/bulldog-targets-reits-for-shakeup-after-javelin-win-mortgages.html>

the board of Anworth Mortgage Asset Corp;⁷ and Orange Capital hedge fund urging Strategic Hotels and Resorts to sell the company.^{8,9}

In this research, we first examine the extent to which REITs are likely to become an activist target. Our results indicate that, in contrast to the conventional wisdom, REITs are as likely to be targeted by shareholder activists as other publicly traded firms. This result is important because it warrants further investigation of shareholder activism in REITs. We then address several other questions. Are the gains that accrue to REIT shareholders similar to the gains accrued by shareholders of other types of activist targets? What are the determinants of the likelihood of an activist campaigns in REITs? What are the sources of gains attributed to the activist campaign? Are there measurable real consequences to shareholder activism in REITs?

Our results can be summarized as follows. We document that, similar to other public firms, the most frequent campaigns in REITs are described as seeking to maximize shareholder value. The top two “value” demands of the activists are (i) the sale, merger, or liquidation of the target company or (ii) the review of strategic alternatives. The top “governance” demand is to obtain board seats for the activist. A typical REIT target of shareholder activism in our sample has lower relative valuations (market-to-book of assets), lower accounting performance (return on assets), higher cash, and lower prior abnormal returns. Our REIT targets thus can be described as relatively cheap “value” firms with weaker performance. We also find that equity REITs are targeted more often than mortgage REITs.

⁷ See “Activist U.S. Fund Seeks Board Ouster at Anworth REIT” Bloomberg, 4/17/2014.

<http://www.bloomberg.com/news/2014-04-17/activist-u-s-fund-seeks-board-ouster-at-anworth-reit-mortgages.html>

⁸ 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.

⁹ Additional examples of older activist campaigns are discussed in “Activists Come Back to REITs” Wall Street Journal, 2/13/2008.

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 report that the average long-term gains measured in the period from one month prior to one year after the event are not statistically significant with REITs. Thus, an activist campaign in a typical REIT does not seem to result in a long-term gain for shareholders. This result suggests that it is unlikely that we observe any measurable improvements in long-term operating performance in a typical REIT target and we, indeed, do not find such improvements. We also fail to find significant changes in leverage, investment or payout around activist events or any relation between these changes and the abnormal returns.

In the last part of our paper we examine the hypothesis that the significant short-term gains around activist events are the result of the market expectation of an increased likelihood of takeover. Under this hypothesis, the market believes that activist targets are more likely takeover candidates, because activists tend to force target firms into a takeover (Greenwood and Schor, 2009). Consistent with this hypothesis, we find that, among REIT firms, activist targets are more likely to be taken over, after controlling for other observable REIT characteristics. Additionally, we find that the long-term returns for the subset of REITs that are ultimately acquired are significantly positive. Our results are thus best described as consistent with the view that the short-term gains to REITs from shareholder activism reflect market expectations about increased takeover likelihood.

Our research contributes to the literature in at least two 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 becoming 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 have to oblige by 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 reasons provide some motivations for using REITs as a useful laboratory.

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 preliminary results and outline future research agenda; 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 but the role and identity of the activist investors have 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).

Here we focus on the research that examines the most recent wave of activism, the wave that started early in the last decade with the rise of hedge funds as corporate activists. Hedge funds are better positioned than traditional mutual and pension funds in pursuing activist agendas because they are not subject to regulations that govern mutual and pension funds. Hedge funds can hold highly concentrated positions in a small number of companies, and they can use leverage and derivatives to extend their reach. Additionally, highly incentivized hedge fund managers face few conflicts of interests because they are not beholden to the management of the firms whose shares they hold.

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 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, 2014; 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 until after activism (Brav, et al., 2008; Bebchuk, et al., 2014), 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 Shor (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.

3. Data Sources and Sample Description

We obtain our initial data on 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.¹⁰

The SharkRepellent data includes information on the date the campaign was announced, 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 in 2006-2014. We then exclude the campaigns that were launched solely by corporations to avoid confusing corporate crossholding and acquisitions with shareholder activism from portfolio and individual investors. Activism by labor unions and religious groups is also excluded 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 reduces the sample to 4,145 campaigns. We then match all events to CRSP and Compustat and keep only those events where we can find identifying information in both databases. This further reduces the sample to 3,590 events. One hundred and one (101) of those events are launched against REITs. REITs are identified using the CRSP Ziman REIT database.

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 non-REIT and for REIT targets. For non-REIT targets, the

¹⁰ SharkRepellent uses several criteria to identify the members of this group. The group composition changes whenever SharkRepellent considers the change appropriate.

number of activist campaigns first increases from 2006 to 2007, then decreases until 2009, and since then steadily increases and by 2014 almost reaches the 2006 levels. The trend is similar for REIT targets except the decrease in the number of campaigns in 2009-2011 seems to be more pronounced. This is understandable 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 for REITs, 33% aim to maximize shareholder value and for non-REITs this proportion is 29%. The other most common campaign types in REITs are the campaigns against a merger, campaigns that seek board representation, 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 101 REIT activist campaigns, 80 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. In REITs, value demands are more frequent than governance demands, and in non-REITs, governance demands are more frequent. Examining the success rates, we observe that activists tend to be less successful in obtaining their demands in REITs in comparison to non-REITs. Thirty five percent (35%) 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 50.5%.

In Table 2, we summarize other activist campaign characteristics and some characteristics of the target firms separately for REITs and non-REITs. 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 1.16 in REITs and 1.2 in non-REITs. Forty eight (48) percent of the activist campaigns in REITs are launched by hedge funds. This proportion is 52% 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 investment adviser and not a hedge fund, is one of the top 50 most active activist investors in the database. On average, activists hold 7.1% (8.8%) of target shares in REITs (non-REITs). An average campaign lasts approximately 171 (161) days and about 23% (20%) of the campaigns in REITs (non-REITs) involve proxy fights. With \$378 million in market capitalization, the median target REIT firm is larger than the median target non-REIT firm with the size of \$265 million. Target REIT firms are less likely to have a classified board (36% vs. 45%), and they are more likely to be incorporated in Maryland (74% vs. 5%). The incidence of poison pills is similar in REIT vs. non-REIT targets (30% vs. 27%). In summary, in most respects, the activist campaigns launched against REIT targets appear similar to those launched against non-REIT targets.

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.¹¹ We then match the Compustat panel to the CRSP Ziman REIT database to obtain REIT identification. The characteristics of the Compustat panel firms are summarized in Table 3.

As evidenced from that table, REIT firms are different from non-REIT firms 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 seem to be little difference in the frequency with which REITs are targeted by activist investors. Specifically, REIT firms experience at least one activist campaign in 4.8% of firm-years while the frequency in non-REITs is 4.7% per firm-year. When only campaigns by activist hedge funds are considered, REIT firms are targeted in 2.35% firm-years while non-REIT firms in 2.67% firm-years. The difference between the activist frequencies is not statistically different when comparing REITs and non-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 for REITs and non-REITs. We first extend this analysis and examine whether this

¹¹ We have not yet matched the panel of Compustat firms to CRSP, though we plan on doing so to be able to control for prior stock performance.

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 any given year and equals zero otherwise. The dependent variable in columns (1) and (2) considers all types of activist campaigns; in columns (3) and (4) only the campaigns launched by hedge funds are considered. Columns (1) and (3) report coefficient estimates, columns (2) and (4) report marginal effects. All regressions use robust standard errors clustered by firms and include fiscal year indicators.

The estimates and marginal effects are of similar statistical significance across all columns and suggest that the likelihood of being a target in an activist campaign first increases then decreases with size, decreases with market-to-book ratio and sales growth, increases in cash-to-assets ratio and R&D-to-assets, and decreases in dividend yield. These results are similar to those reported in Brav et al. (2008), although they estimate their probit model on the 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 REIT firms is insignificant suggesting that the likelihood of being a target of an activist campaign does not differ for REIT firms after controlling for the observable determinants of such likelihood.

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 (2) we use the same control variables as in Table 4. In columns (3) and (4) we include additional variables, some of which are REIT specific. Specifically, we include abnormal stock performance in the prior fiscal year. The abnormal performance is calculated as the buy-and-hold stock return minus buy-and-hold value weighted CRSP-Ziman REIT index. We also include measures of insider ownership (ownership of officers and directors), institutional ownership and institutional ownership concentration,

measured as the Herfindahl–Hirschman Index of institutional ownership, 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 not self-managed (i.e., externally managed). The data on insider ownership come from Capital IQ, institutional ownership from Thomson Reuters' database of 13f holdings, REIT specific data from SNL Financial. The dependent variable equals 1 if the REIT is a target of an activist campaign in the next fiscal year. In Table 5, we only report the results for activist campaigns launched by all activist types but note that the results using campaigns launched by hedge funds produce similar results.

As in the whole sample of firms, the likelihood of an activist campaign directed at a REIT decreases in relative valuation (market-to-book) and increases in cash-to assets. The likelihood also decreases in profitability (ROA), the abnormal 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 whole sample of 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. None of the ownership characteristics appear to be significantly related to the likelihood of an activist campaign.

4.2 Short-term and Long-term Market Reaction to the Announcements of Activist Campaigns

As discussed in the introduction, the conventional wisdom today seems to be 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 for 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. Third, in measuring the abnormal gains for REITs we replace the value-weighted CRSP index return with the value-weighted CRSP-Ziman REIT index.

We measure and report the abnormal returns for initial activist events only. Initial activist events are defined as the events not preceded by any other activist events in the prior 365 days. Some companies in the sample are subject to more than one activist event, and for some companies, the multiple activist events are relatively close together and related to the initial activist event. Thus it is likely that the initial event contains the most information and so does the market reaction to this event. The sample period in this analysis is reduced to 2006-2013 as we cannot observe (do not have data to calculate) long-term abnormal returns for events announced in 2014.

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 month of the announcement date. 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 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 but the statistical significance is weaker. This is understandable as the sample size of activist events in REITs is much smaller. Nevertheless, the market reaction to the activist campaigns in REITs does not statistically differ from the market reaction launched in non-REITs. Thus we find no evidence that 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 CAR of 3.76% in an 11-day window for non-REITs and 6.62% for REITs. In the 41-day window, we report average BHAR of 5.55% for non-REITs and 4.23% 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 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 non-REITs, the average market response for REITs is insignificant using all ways of calculating abnormal returns and the averages we report are negative in magnitude. Thus, we conclude that an average activist target that is a REIT does not see significantly positive abnormal return in the longer-term.

4.3 Changes in Accounting Performance and Real Variables in REITs

Given that we find no statistically positive impact on REIT stock prices in the longer-term, one would not expect to find any improvements in performance. Nevertheless, we collect data and calculate various measure of accounting performance one year prior and one year following the activist event, including operating return on assets, net return on assets, funds from operations relative to assets, and all profit variables scaled alternatively by revenue. In unreported results, we do not find any significant changes in these variables. We also do not find any significant changes in payouts, shares outstanding, leverage, or investment measures that are equity REIT specific. Additionally, we do not find any meaningful correlations between the changes and the short-term or long-term abnormal returns reported in Table 6. Thus we turn to examining the hypothesis that the positive short-term returns we observe for REITs reflect an increase in the market expectation of the takeover likelihood of the activist target firm.

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

If improvement in operating performance or changes in real variables do not explain the positive short-term gains around the announcement of activist events in REITs, then these gains may instead be derived from an increased likelihood that the targets of activist campaigns will be taken over and a takeover premium realized. This hypothesis holds under two conditions. 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 used when examining the likelihood of an activist campaign in Table 5 and report the results in Table 7. The dependent variable in these regressions 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 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 used in Table 5 to explain activist campaigns. All regressions use robust standard errors clustered by firms and include fiscal year indicators.

The results indicate that activist campaigns launched at REITs are, indeed, associated with an increased likelihood that the firm is eventually taken over. Marginal effects indicate that an activist campaign increases this likelihood by 6 to 7.5%. Thus, controlling for other potential determinants of a takeover, activists seem to matter for takeover likelihood. This result is consistent with that of Greenwood and Schor (2009), which suggests that activists have the ability to force target firms into a takeover. In our REIT sample, the other independent variables that seem to matter for takeover likelihood are size, return on assets, whether the firm is an equity REIT and abnormal returns in the prior fiscal year.

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 8. Among non-REITs, the short term gains are positive and significant for firms that are acquired within 18 months and firms that are not. However, the returns to the firms that are acquired,

especially in the longer 41-day window, are decidedly larger than the gains to firms that are not acquired. Examining the long-term returns in non-REITs, we observe that the returns to the firms that are acquired are positive and large, reflecting the takeover premium. The returns to the firms that are not acquired are not significant.

The results for REITs are similar, albeit statistically weaker. As for non-REITs, we observe statistically positive short-term returns for both sub-groups: targets that are acquired with 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 these returns are significantly positive using the measures of abnormal return based on the CRSP index as the market index, but not significant when using the CRSP-Ziman REIT index as the market index. We also find that BHAR for REITs that are not eventually acquired are significantly negative and that the difference between the BHAR for the acquired firms and not acquired firms is statistically significant. This difference is similar in magnitude when the abnormal returns are measured as CARs but is not statistically significant. Nevertheless, the overall evidence 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 are insignificant or negative 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) where the sample includes only hedge fund campaigns in 1993-2006. Thus, it seems that their explanation for abnormal returns to activism holds beyond their sample period and after including other types of activists (i.e., investment advisors, private equity funds, etc.). The evidence in this section also suggests that, similar to non-REITs,

the short-term gains to activism in REITs might reflect the expectation of higher acquisition likelihood.

5. Conclusion

In this paper, we examine the incidence and wealth effects of shareholder activist campaigns in REITs and the possible sources of those gains. Conventional wisdom suggests that activist campaigns in REITs are rare events. This conventional wisdom is plausible for two reasons. First, REITs are thought to be well protected from hostile takeovers. Second, it might be relatively difficult to create value in REITs that operate as relatively transparent companies whose values are relatively easy to assess.

Our results indicate that this conventional wisdom does not hold for our sample of activist campaigns in REITs from 2006-2014. Specifically, we find that REITs are as likely to be subjects of activist campaigns as non-REITs and 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 for both REIT and non-REIT firms are decidedly positive. Our further analysis shows that these positive short-term gains are unlikely to result from improvements in operational efficiency, performance, investment, capital structure or payout policies as we find no evidence of significant changes in these measures around activist events. Further, for the whole sample of REITs there is no evidence of positive average long-run returns and the changes in the various measures are not correlated with long-run returns.

More importantly, we present two pieces of evidence that suggest that the positive short-run returns most likely reflect the expectation that activist targets may ultimately be taken over

and the anticipated takeover premia realized. Specifically, we document that the REIT targets of activist attacks are more likely than other similar REIT firms to be acquired within 18 months of an activist campaign and that the long-term average returns to the target firms that are ultimately acquired are, on average, positive.

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 likely source of the positive announcement returns to shareholders of firms targeted by activists arises from the expectation of a sale of the firm.

References

- 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. 2014. "The long-term effects of hedge fund activism." *Columbia Law Review* 114, forthcoming.
- 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.
- 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.
- Eichholtz, P.M.A. and N. Kok. 2007. "The EU REIT and the Internal Market for Real Estate." Working Paper. Maastricht University.
- 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.

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.

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.

Figure 1 – Activist Campaign Distribution

The distribution of sample activist campaigns by year. The sample contains 3,590 activist campaigns from SharkRepellent that also have data on CRSP and Compustat. The campaigns launched solely by corporations, religious groups or labor unions, or any combination of these types of activists an activist group, are excluded.

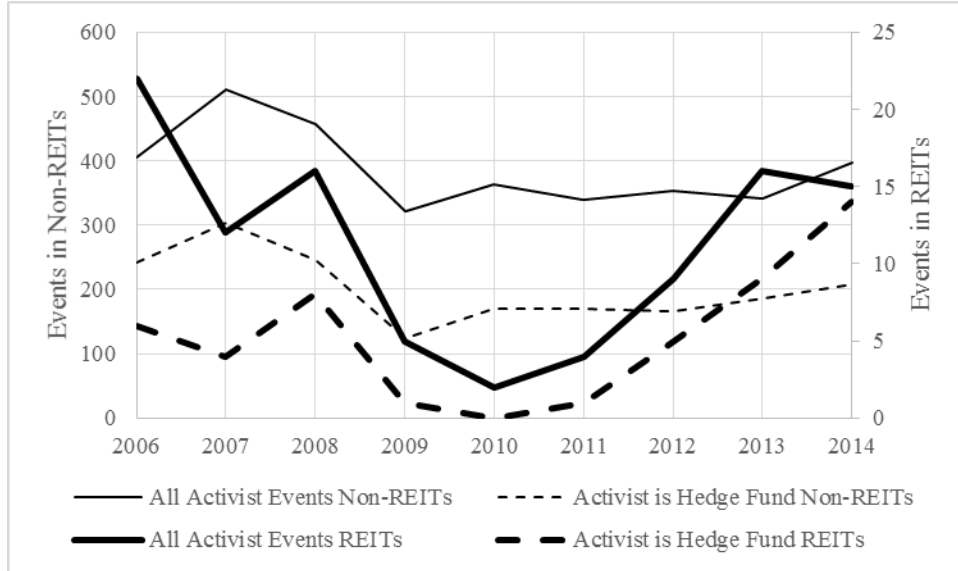


Table 1 – Activist Campaign Distributions

Panel A shows the distribution of sample activist campaigns by year. The sample contains 3,590 activist campaigns from SharkRepellent that also have data on CRSP and Compustat. 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. Panel B shows the distribution of sample activist campaigns by primary type, as identified by SharkRepellent. Panel C shows the distribution of sample activist campaigns 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.

	Panel A			
	All Activist Events		Activist Group Includes Hedge Fund	
	REITs	non-REITs	REITs	non-REITs
2006	22	406	6	241
2007	12	511	4	304
2008	16	456	8	245
2009	5	322	1	124
2010	2	363	0	170
2011	4	340	1	170
2012	9	353	5	167
2013	16	341	9	186
2014	15	397	14	208
Total	101	3,489	48	1,815

Table 1 - continued

Primary Campaign Type	Campaigns in:		non-REITs	
	N	[%]	N	[%]
Maximize Shareholder Value	33	32.7	1,013	29.0
Vote/Activism Against a Merger	14	13.9	254	7.3
Board Representation	13	12.9	707	20.3
Board Control	12	11.9	196	5.6
Vote For a Stockholder Proposal	8	7.9	304	8.7
13D Filer - No Publicly Disclosed Activism	6	5.9	562	16.1
Hostile/Unsolicited Acquisition	4	4.0	58	1.7
Support Dissident Group in Proxy Fight	4	4.0	70	2.0
Vote For a Management Proposal/Support Management	3	3.0	36	1.0
Remove Director(s), No Dissident Nominee to Fill Vacancy	2	2.0	19	0.5
Vote Against a Management Proposal	2	2.0	122	3.5
Enhance Corporate Governance	-		110	3.2
Public Short Position/Bear Raid	-		26	0.8
Remove Officer(s)	-		12	0.3
Total	101	100.0	3,489	100.0

Table 1 - continued

Panel C:

Campaigns with:	Campaigns in:		non-REITs	
	N	[%]	N	[%]
Value Demand(s)	57	56.4%	1,510	43.3%
Governance Demand(s)	37	36.6%	1,654	47.4%
Value or Governance Demand(s)	80	79.2%	2,526	72.4%
Success In at Least One Value Demand	19	33.3%	662	43.8%
Success In at Least One Governance Demand	12	32.4%	714	43.2%
Success In at Least One Demand	28	35.0%	1,275	50.5%
Value Demand Types and Occurrence				
Seek Sale/Merger/Liquidation	23		584	
Review Strategic Alternatives	21		501	
Block Merger/Agitate for Higher Price (Target)	11		223	
Return Cash via Dividends/Buyback	9		357	
Other Capital Structure Related, Increase Leverage, etc.	7		148	
Potential Acquisition (Friendly and Unfriendly)	7		133	
Breakup Company, Divest Assets/Divisions	5		233	
Block Acquisition/Agitate for Lower Price (Acquirer)	3		31	
Other	1		192	
Governance Demand Types and Occurrence				
Board Seats (activist group)	25		999	
Remove Takeover Defenses	6		234	
Other Governance Enhancements	5		378	
Remove Director(s)	4		112	
Add Independent Directors	3		153	
Compensation Related Enhancements	1		214	
Remove Officer(s)	0		105	
Social/Environmental/Political Issues	0		105	

Table 2 – Activist Campaign Characteristics

Summary of activist campaign characteristics. The sample contains 3,590 activist campaigns from SharkRepellent that were launched in 2006-2014 and also have data on CRSP and Compustat. 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. All variables are taken from SharkRepellent and are self-explanatory.

Activist Campaigns with non-REIT Targets (n=3,489)				
	Average	5th Percentile	Median	95th Percentile
Number of Activists in Activist Group	1.20	1	1	2
Activist Group Includes (Is) Hedge Fund	0.52			
Activist Group Ownership at Announcement [%]	8.77	1.0	6.7	23.2
Activist Campaign Length [days]	161	2	96	536
Activist Initiates Proxy Fight	0.20			
Target Market Cap at Announcement [\$ million]	7,928	19	265	26,846
Target Classified Board	0.45			
Target Poisson Pill	0.27			
Target Incorporated Maryland	0.05			
Target Incorporated Delaware	0.61			

Activist Campaigns with REIT Targets (n=101)				
	Average	5th Percentile	Median	95th Percentile
Number of Activists in Activist Group	1.16	1	1	2
Activist Group Includes (Is) Hedge Fund	0.48			
Activist Group Ownership at Announcement [%]	7.08**	0.5	5.8	16.8
Activist Campaign Length [days]	171	1	100	480
Activist Initiates Proxy Fight	0.23			
Target Market Cap at Announcement [\$ million]	1,783	35	378**	7,536
Target Classified Board	0.36*			
Target Poisson Pill	0.30			
Target Incorporated Maryland	0.74***			
Target Incorporated Delaware	0.09***			

Table 3 – Panel Sample Characteristics

Panel sample characteristics by REITs and non-REITs. REITs are identified using the CRSP Ziman REIT database. The panel contains all US Compustat firm-years from 2005-2013 with data available to calculate market capitalization and total assets. 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 (book value of assets + market value of equity minus book value of equity and deferred taxes) 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. 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.

	Non-REITs (1) (55,597 firm-years)	REITs (2) (1,533 firm-years)
Proportion of firm-years subject to any activist event	0.0471	0.0483
hedge fund activist event	0.0267	0.0235
Market Value of Equity (MVE)	4,214 [250]	2,394*** [1,049]***
log(MVE)	5.49 [5.52]	6.72*** [6.96]***
Market-to-Book Assets (Q)	5.43 [1.39]	1.28*** [1.19]***
Sales Growth 1 Year	0.195 [0.070]	0.236** [0.075]
Net Income/Assets (ROA)	-0.434 [0.011]	0.007*** [0.012]
Cash/Assets	0.213 [0.110]	0.046*** [0.022]***
Dividend Yield	0.013 [0.000]	0.061*** [0.051]***
Debt/Assets	0.370 [0.154]	0.550*** [0.542]***
R&D/Assets	0.064 [0.000]	0.000*** [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. The dependent variable in columns (1) and (2) equals 1 if the firm is subject to at least one activist campaign launched by any type of activist during the fiscal year. The dependent variable in columns (3) and (4) equals 1 if the firm is subject to at least one activist campaign launched by a hedge fund during the fiscal year. All accounting and market variables are described in Table 2 and are from the end of the fiscal year immediately preceding the activist campaign event. REIT indicator equals 1 for all firms-years classified as REITs by the CRSP Ziman REIT database and equals zero otherwise. Robust standard errors clustered by firms are in parentheses below coefficient estimates or below marginal effects. Marginal effects 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

	All Activist Events		Activist is Hedge Fund	
	(1)	(2)	(3)	(4)
	Coefficients	Marginal Effects	Coefficients	Marginal Effects
log(MVE)	0.178*** (0.028)	0.018*** (0.003)	0.346*** (0.035)	0.022*** (0.002)
log(MVE) squared	-0.012*** (0.003)	-0.001*** (0.000)	-0.028*** (0.003)	-0.002*** (0.000)
Market-to-Book (Q)	-0.110*** (0.013)	-0.011*** (0.001)	-0.112*** (0.018)	-0.007*** (0.001)
Sales Growth 1 Year	-0.095*** (0.022)	-0.010*** (0.002)	-0.089*** (0.028)	-0.006*** (0.002)
ROA	0.014 (0.040)	0.001 (0.004)	-0.034 (0.037)	-0.002 (0.002)
Cash/Assets	0.297*** (0.064)	0.030*** (0.007)	0.248*** (0.076)	0.016*** (0.005)
Dividend Yield	-2.362*** (0.485)	-0.239*** (0.049)	-3.439*** (0.699)	-0.216*** (0.045)
Debt/Assets	0.074 (0.046)	0.007 (0.005)	0.064 (0.052)	0.004 (0.003)
R&D/Assets	0.249** (0.101)	0.025** (0.010)	0.373*** (0.115)	0.023*** (0.007)
REIT Indicator	0.002 (0.077)	0.000 (0.008)	-0.020 (0.088)	-0.001 (0.005)
Year Dummies	Yes	Yes	Yes	Yes
Pseudo R-squared	0.028		0.045	
Observations	51,552	51,552	51,552	51,552

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. The dependent variable equals 1 if the firm is subject to at least one activist campaign launched by any type of activist during the fiscal year. The Abnormal Return 1 Year is the buy-and-hold stock return minus the buy-and-hold value-weighted CRSP-Ziman REIT index return during the prior fiscal year. Insider Ownership is the percentage ownership by officers and directors. Institutional Ownership is the percentage ownership of all institutional 13f holders. Institutional Ownership Concentration is the Herfindahl-Hirschman index of institutional holdings. UPREIT, Maryland, and Not-Self-Managed indicators equal one if the SNL Financial reports that the REIT is organized as an UPREIT, is incorporated in Maryland, and is not self-managed; and equals zero otherwise. All other accounting and market variables are described in Table 2 and are from the end of fiscal year immediately preceding the activist campaign event. Equity REIT indicator equals 1 for all firm-years classified as Equity REITs by the CRSP Ziman REIT database and equals zero otherwise. Robust standard errors clustered by firms are in parentheses below coefficient estimates or below marginal effects. Marginal effects 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 5 – continued

	All Activist Events			
	(1)	(2)	(3)	(4)
	Coefficients	Marginal Effects	Coefficients	Marginal Effects
log(MVE)	-0.051 (0.191)	-0.005 (0.018)	-0.268 (0.251)	-0.023 (0.022)
log(MVE) squared	0.000 (0.017)	0.000 (0.002)	0.016 (0.018)	0.001 (0.002)
Market-to-Book (Q)	-0.674* (0.367)	-0.062* (0.036)	-0.850** (0.424)	-0.072* (0.037)
Sales Growth 1 Year	-0.003 (0.003)	-0.000 (0.000)	-0.003 (0.007)	-0.000 (0.001)
ROA	-1.691** (0.844)	-0.156** (0.076)	-3.381** (1.325)	-0.288*** (0.111)
Cash/Assets	2.315** (0.937)	0.213** (0.087)	2.482** (1.185)	0.211** (0.101)
Dividend Yield	-0.008 (0.232)	-0.001 (0.021)	-0.883* (0.458)	-0.075* (0.039)
Debt/Assets	0.392 (0.383)	0.036 (0.035)	-0.116 (0.461)	-0.010 (0.039)
Equity REIT Indicator	0.360* (0.197)	0.028** (0.014)	0.597** (0.258)	0.040** (0.016)
Abnormal Return 1 Year			-0.529*** (0.184)	-0.045*** (0.017)
Insider Ownership			-0.013 (0.013)	-0.001 (0.001)
Institutional Ownership			-0.321 (0.370)	-0.027 (0.031)
Inst. Own. Concentration			-1.108 (0.730)	-0.094 (0.063)
UPREIT Indicator			-0.365 (0.232)	-0.034 (0.024)
Maryland Indicator			0.140 (0.202)	0.011 (0.015)
Not-Self-Managed Indicator			0.014 (0.241)	0.001 (0.021)
Year Dummies	Yes	Yes	Yes	Yes
Pseudo R-squared	0.086		0.117	
Observations	1,436	1,436	1,238	1,238

Table 6 –Abnormal Returns for Initial Activist Campaigns

Daily and monthly abnormal returns around the announcement of activist campaigns. The sample contains 2,275 initial activist campaigns from SharkRepellent launched in 2006-2013 that also have data on CRSP and Compustat. Initial campaigns are defined as the campaigns launched against a target firm that are not preceded by any other campaigns in the same target firm in the past 365 days. 2,219 initial campaigns are launched against non-REIT firms, 56 against REIT firms. 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. 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 (no such statistical difference is observed in the sample).

Table 6 – continued

	Initial Activist Events		
	non-REITs	REITs	Difference
	n=2219	n=56	
Panel A: Daily Returns			
CAR {-5, +5}	3.76% ^a	6.62% ^b	2.86%
	[2.13%] ^a	[3.94%] ^b	[1.81%]
w/REIT index		6.90% ^b	
		[2.37%] ^b	
CAR {-20, +20}	5.39% ^a	8.87% ^b	3.31%
	[3.51%] ^a	[5.31%] ^a	[1.80%]
w/REIT index		7.92% ^b	
		[5.79%] ^b	
BHAR {-20, +20}	5.55% ^a	4.23%	-1.32%
	[2.07%] ^a	[3.34%] ^b	[1.27%]
w/REIT index		3.96%	
		[3.86%]	
Panel B: Monthly Returns			
CAR {-1, +12}	5.71% ^a	-7.09%	-12.80%
	[5.65%] ^a	[1.69%]	[-3.96%]
w/REIT index		-9.30%	
		[-0.08%]	
BHAR {-1, +12}	7.24% ^a	-6.33%	-13.57%
	[-0.05%]	[-3.32%]	[-3.37%]
w/REIT index		-4.46%	
		[-5.66%]	

Table 7 –Likelihood of Takeover for Activist Targets

Probit model for the likelihood that a REIT firm is taken over within two years from the end of the fiscal year. The panel contains REIT firm-years on Compustat in 2005-2013 with data available to calculate market capitalization and total assets. REITs are identified using the CRSP Ziman REIT database. 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. All other accounting and market variables are described in Table 2 and Table 5. Robust standard errors clustered by firms are in parentheses below coefficient estimates or below marginal effects. Marginal effects 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 7 – continued

	All Activist Events			
	(1)	(2)	(3)	(4)
	Coefficients	Marginal Effects	Coefficients	Marginal Effects
Activist Campaign Indicator	0.516** (0.241)	0.060* (0.036)	0.688** (0.304)	0.075* (0.046)
log(MVE)	0.516* (0.287)	0.045* (0.026)	0.272 (0.623)	0.020 (0.046)
log(MVE) squared	-0.040* (0.023)	-0.003* (0.002)	-0.030 (0.045)	-0.002 (0.003)
Market-to-Book (Q)	-0.317 (0.266)	-0.028 (0.024)	-0.157 (0.379)	-0.012 (0.028)
Sales Growth 1 Year	-0.007 (0.061)	-0.001 (0.005)	-0.058 (0.098)	-0.004 (0.007)
ROA	-1.625* (0.943)	-0.143* (0.083)	-3.745 (3.341)	-0.277 (0.241)
Cash/Assets	0.728 (0.983)	0.064 (0.088)	1.018 (1.459)	0.075 (0.110)
Dividend Yield	0.304 (0.406)	0.027 (0.036)	0.850 (0.601)	0.063 (0.044)
Debt/Assets	0.186 (0.551)	0.016 (0.048)	-0.707 (0.768)	-0.052 (0.058)
Equity REIT Indicator	0.582** (0.293)	0.041** (0.016)	-0.021 (0.351)	-0.002 (0.026)
Abnormal Return 1 Year			-0.762* (0.427)	-0.056* (0.034)
Insider Ownership			-0.034 (0.023)	-0.003 (0.002)
Institutional Ownership			0.328 (0.505)	0.024 (0.038)
Inst. Own. Concentration			-1.523 (1.732)	-0.112 (0.127)
UPREIT Indicator			0.333 (0.234)	0.023 (0.016)
Maryland Indicator			-0.006 (0.271)	-0.000 (0.020)
Not-Self-Managed Indicator			0.069 (0.259)	0.005 (0.020)
Year Dummies	Yes	Yes	Yes	Yes
Pseudo R-squared	0.197		0.220	
Observations	1,436	1,436	1,130	1,130

Table 8 –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 with 18 months from an initial activist campaign. The sample contains 2,275 initial activist campaigns from SharkRepellent launched in 2006-2013 that also have data on CRSP and Compustat. Initial campaigns are defined as the campaigns launched against a target firm that are not preceded by any other campaigns in the same target firm in the past 365 days. 2,219 initial campaigns are launched against non-REIT firms, 56 against REIT firms. 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. 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.

	Initial Activist Events					
	non-REITs			REITs		
	Delisted n=532	Other n=1682	Difference	Delisted n=12	Other n=44	Difference
Panel A: Daily Returns						
CAR {-5, +5}	4.74% ^a [1.53%] ^a	3.45% ^a [2.45%] ^a	-1.29%* [0.92%]**	5.06% ^c [2.24%]	7.05% ^c [5.00%] ^b	1.99% [2.76%]
w/REIT index				4.73% ^c [1.56%]	7.50% ^c [3.39%] ^c	2.77% [1.83%]
CAR {-20, +20}	13.22% ^a [7.35%] ^a	2.89% ^a [2.45%] ^a	-10.34%*** [-4.90%]***	7.44% ^b [6.07%] ^c	9.26% ^c [4.80%] ^b	1.82% [-1.27%]
w/REIT index				6.48% ^b [7.74%]	8.32% ^c [5.30%] ^c	1.84% [-2.14%]
BHAR {-20, +20}	13.70% ^a [7.08%] ^a	2.95% ^a [1.06%] ^a	-10.75%*** [-6.02%]***	7.72% ^b [6.50%] ^c	3.28% [3.12%]	-4.44% [-3.38%]
w/REIT index				6.77% ^b [8.17%]	3.19% [3.72%]	-3.58% [-4.45%]
Panel B: Monthly Returns						
CAR {-1, +12}	26.90% ^a [21.02%] ^a	-0.68% [0.46%]	-27.58%*** [-20.55%]***	12.97% ^b [9.71%] ^b	-12.68% [-7.25%]	-25.65% [-16.96%]
w/REIT index				9.01% [3.85%]	-14.30% [-4.02%]	-23.31% [-7.87%]
BHAR {-1, +12}	27.94% ^a [18.92%] ^a	0.99% [-6.94%] ^a	-26.94%*** [-25.87%]***	14.70% ^b [10.31%] ^b	-12.20% ^c [-14.60%] ^c	-26.91%** [-24.91%]***
w/REIT index				10.33% [3.67%]	-8.49% [-11.87%]	-18.83%* [-8.2%]***