Institutional Investors and Hedge Fund Activism

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Abstract

Due to their relatively small holdings in target firms, hedge fund activists typically need the cooperation of other investors, such as institutional shareholders, willing to influence the activist's campaign success. Using measures of the likelihood of such investor support, we find the presence of "activism-friendly" institutions is associated with an increased probability of being a target, higher short-term and long term stock returns, and higher operating performance. Overall, our results show that the composition of a firm's institutional ownership has a significant impact on the likelihood of hedge fund activism as well as the value created from the activism.

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1. Introduction

It is often argued that hedge fund activists need support from other target firm shareholders to accomplish their agendas. However, support may not be forthcoming due to the potentially ambiguous relationship between these sets of shareholders. Some large shareholders in the target firms may view hedge fund activism as effective in bringing about change and thus be willing to support the activist through proxy votes and, perhaps more importantly, direct discussions with management and the board. In contrast, other institutional investors may be wary of the activists' aggressive agendas, believing that any short-term gains will be unsustainable.[2]

Brav, Dasgupta and Matthews (2017) provide a theoretical model of the first type of relationship, which they term "wolf packs," in which hedge funds team up with each other or with other types of institutional investors in order to achieve their desired outcomes for a target firm. In particular, in the Brav, Dasgupta and Mathews model, the hedge funds partner with investors who provide support through their "behind the scenes engagement" (McCahery, Sautner and Starks, 2016). An important empirical implication of their model is that the activist hedge funds will be more likely to select a target based on the existence of other institutional investors willing to provide the desired support. While preliminary evidence on the existence of more institutional investors (Brav, et. al., 2008) or more index funds (Appel, et. al. 2017) is suggestive of this support, given the ambiguous relationship between hedge funds and other institutional investors, that is, the diversity in perspective on the benefits of hedge fund activism, not all institutional investors would be willing partners. Thus, not only is the presence of institutional investors in the target important, but also the composition of the institutional

[2] "Activist Investors find Allies in Mutual, Pension Funds," Reuters News, 9 April 2013. The article is available at http://www.reuters.com/article/us-funds-activist-idUSBRE9380DU20130409

investor base, most particularly, whether there exist sufficient institutional shareholders that are friendly to the activists' agenda.

In this paper we address two central questions related to the presence of "activism-friendly" shareholders. First, we consider whether the composition of a firm's institutional ownership is a factor in the hedge fund activists' initial target selection as implied by the theoretical and anecdotal evidence. A further implication of a relationship between hedge funds and other shareholders in the target suggests that the composition of the firm's ownership could also lead to the eventual success or failure of the activist's agenda. Thus, the second question we address is whether the presence of friendly institutional shareholders affects the activism outcome. That is, we test whether having institutional owners more likely to be supportive of the activist leads to a greater likelihood of the target firm management making the changes demanded by the activist and resulting in higher returns. In contrast, if the institutional owners of the target firm are skeptical or antagonistic toward a hedge fund activist (and supportive of management), the activist may find it difficult to bring about the desired changes and achieve success.

In order to test our hypotheses, we need a measure that (1) captures an institutional investor's propensity to support the hedge fund activist and (2) would be observable by hedge fund activists. We develop three novel measures that reflect different aspects of this propensity and have the desired observability property. The first measure derives from the institutional investors' revealed preferences toward supporting the specific target firm's management given their previous proxy voting on that firm. When institutional investors are dissatisfied with a target firm, they are more likely to vote against management (if they do not completely exit the firm by selling their shares). That is, the dissatisfied institutional investors who continue to maintain their stake in the firm could be expected to support an activist.

The second measure of activism-friendly institutions also derives from institutions' voting patterns, but in this case, rather than considering the earlier voting on a specific target firm, we focus on the institution's voting against management of other firms who were previously activism targets. As most institutions tend to vote with management, this measure captures an institution's general preferences regarding the involvement of activists in their portfolio firms. Given that these institutions have revealed their support for activists rather than management, they would seem to be more open to an activist's agenda with another firm.

The third measure designed to detect those institutions that would be more likely to support activists is based on the institution's investment behavior with regard to earlier activism targets. If the institution increased its ownership in earlier targets subsequent to their being targeted, such behavior suggests a positive view on the potential gains from activism and hence they would be more likely to support activists in the future.

The data on targets comes through hand collection of all 13D filings by identified hedge funds from 2004 through 2012. This process results in a sample of 1,183 interventions by 217 hedge fund activists. We first examine whether the presence of activism-friendly institutions increases the likelihood that a firm will be targeted for hedge fund activism.[3] In a matched sample, we find that firms with higher levels of activism-friendly ownership in the pre-event quarter are more likely to be targeted than control firms. Although other institutional ownership is also associated with a higher likelihood of being targeted, the presence of activism-friendly institutional ownership leads to a significantly higher probability of being targeted than does the presence of other institutional owners.

[3] Brav, Jiang, Partnoy, and Thomas (2008) examine firm characteristics that are more likely to be associated with being targeted by hedge funds.

We next use several approaches to test whether the presence of activism-friendly institutions is associated with more successful activism outcomes. To determine whether investors expect the activism to pay off more in the presence of the friendly institutions, we examine short-term returns to the announcement of hedge fund activism, using different trading day windows around the date of the 13D filing. We find that the average cumulative abnormal returns (CARs) are significantly higher for the quartile of activism targets with the highest pre-event activism-friendly institutional ownership relative to the quartile with the lowest level of such shareholders. This result holds for all trading windows and for all three measures of activism-friendly ownership. In multivariate regressions, we control for additional variables including the pre-event ownership of other institutional investors, the pre-event ownership of the activist, firm-level characteristics and other case-specific variables. The level of pre-event activism-friendly ownership remains positive and significantly associated with the announcement period returns to the activism. The effect is economically significant as well. A one standard deviation increase in each of the activism-friendly measures is associated with an increase in the [-2,+20] day CAR by 1.04% to 1.41%, depending on the measure. Moreover, this effect is limited to the presence of the activism-friendly shareholders. Other institutional ownership that is not classified as activism friendly does not have significant coefficients in any of the specifications.

The activism-friendly institutional investors could have a short, rather than long-term, investor horizon. In order to test a corollary of having activism-friendly institutional investors with a long-term rather than short-term focus, we consider whether investors expect the hedge fund activism to add permanent value as well as the short-term value reflected in the previous results. That is, we examine whether any long term returns to the activism are related to the

activism-friendly shareholders as well. To do so, we estimate buy and hold returns and four factor alphas for calendar time portfolios, employing multiple horizons, i.e., 24, 36 and 60 months, and three different benchmarks, i.e., the CRSP value-weighted index, the DGTW portfolios and the Fama-French 48 industry classification. We find that the long-term results are also positively related to the presence of activism-friendly institutions. The results are consistent across all horizons, benchmarks and for all three measures of activism-friendly ownership. Targets in quartiles with the highest activism-friendly ownership have significantly higher buy and hold returns relative to targets in the lowest quartile of activism-friendly ownership. Moreover, alternative potential explanations cannot explain the results. Controlling for other types of institutional ownership, firm and activism-specific variables does not change the results – activism-friendly ownership is positively associated with buy and hold returns while other institutional ownership has no significant impact. A one standard deviation increase in the activism-friendly ownership is associated with an increase in the 36-month buy and hold returns by 7.76% to 15.51%, depending on the benchmarks and measure used. Results are similar though statistically weaker with calendar time alphas.

Finally, we examine the effect of activism-friendly ownership on the target's post event operating performance. Specifically, we estimate abnormal industry-adjusted return on assets (ROA) for the three and five year periods following the activism initiation. We find the operating performance to be significantly higher for targets in the highest quartile of activism-friendly ownership relative to targets in the lowest quartile of these investors. The results are robust to controls for other institutional ownership, firm and activism specific controls. Once again the results are economically significant. A one standard deviation increase in the activism-friendly measure is associated with an increase in abnormal industry-adjusted three-year ROA by 2.12%

to 3.26%, depending on the measure. In summary, we find that targets with higher levels of pre-event activism-friendly ownership have higher value created from the activism, as captured by short-term and long term stock returns as well as operating performance.

If our activism-friendly institutions are indeed interested in helping with the activism, we should find that they remain owners in the firm for a period of time. Thus, we examine whether friendly institutions continue to maintain their presence in support of the activist's agenda after the 13D filing. Our results indicate that the friendly ownership is stable four quarters prior and post the 13D filing.[4]

An alternate interpretation of the results could be that friendly institutions are smart investors and the higher returns we document in their presence arises not from their support of the activist but rather their ability to pick the future targets or winners. To address this concern, we form portfolios that go long the portfolio held by friendly institutions and short the portfolio held by other institutions. Time series regressions of the monthly returns to the long/short portfolio on the Fama-French-Carhart four-factor model shows that the alphas are negative and significant. Friendly institutions are less likely than other institutions to select securities that earn future abnormal returns. To further rule out the possibility that friendly institutions can pick future activist targets, we examine whether friendly institutions increase or decrease their holding of target firms in the quarters prior to 13D filing. We find that friendly institutions are more likely to decrease their holdings of stocks that are later targeted. Further, long/short portfolios based on target stocks in which they increase/decrease their holdings show no

[4] Further, these owners appear to remain friendly to the activists. Analysis of their voting in shareholder proposals in the two years after targeting shows that whereas these institutions generally do not support shareholder proposals in their proxy voting, they are significantly more likely to support the activist-sponsored proposals. Though this evidence shows direct support of friendly institutions for the activist agenda, it should be interpreted with caution as the sample of activist-sponsored proposals that are voted is very small.

evidence of positive and significant alpha. In summary, it is unlikely that the ability of friendly institutions to pick future winners or future targets can explain our results. Hedge fund activism has been hailed by some as having the potential to solve the monitoring and agency problems of widely held equity e.g., Bebchuk, Brav and Jiang (2015). However, along with successful cases, there have been failures. That is, although average returns are positive there still exist many instances in which hedge fund activism has been associated with little or even negative gains to shareholders. Our results point to a primary factor that helps explain the cross-sectional variation in the value created from hedge fund activism, the presence of activism-friendly owners. Thus, support from institutional shareholders appears to be crucial to unlocking firm value through activism.

The findings of the paper are consistent with recent work by Brav, Dasgupta and Mathews (2017) that model mechanisms that enable institutional investors to implicitly coordinate with a "lead" activist and the importance of this support for a successful intervention. The paper's results are complementary to Appel, Gormley and Keim (2016 a,b) that document the role of passive mutual funds in governance changes, and in supporting requests from hedge fund activists. We study a broader base of institutions as not all passive mutual funds are supportive of hedge fund activists while many actively managed institutions support the activist's agenda. Further we examine whether these institutions' explicit or implicit support of the activist is positively associated with increases in value for shareholders.[5]

A large and growing literature characterizes institutions and their holdings, especially considering investment horizon, turnover propensity and size of the stake, and shows that these

[5] Appel, Gormley and Keim (2016) restrict their analysis to index funds and the target firms to those within the 500 bandwidth around the cutoff between the Russell 1000 and 2000 indexes. They examine passive mutual fund support for specific proposals while we examine the impact of the support on returns attributed to activism.

characteristics can impact institutional monitoring and corporate decision-making.[6] We contribute to this literature by characterizing institutions along a novel, but important, dimension, their likelihood of supporting hedge fund activism. Moreover, this characterization of institutional investors with respect to their support of hedge fund activism is different from other characterizations of institutional investors used in the prior literature. The measure developed in the paper can potentially be used to capture the fraction of the firm's shareholder base that is likely to join a conflict against management whether it occurs through activism or proxy voting.

This paper is also related to the growing literature on the performance impact of shareholder activism. Although earlier papers tend to focus on institutional shareholder activism and find little positive change, more recent papers examine hedge fund activism and find significant short and long term returns (e.g., Brav, Jiang, Partnoy, and Thomas (2008), Clifford (2008), and Bebchuk, Brav and Jiang (2015)).[7] Further, studies have found other significant effects on target firms from the hedge fund activism such as increased productivity.[8] Whereas existing literature has examined how performance varies by hedge fund characteristics and by the nature of changes sought, there is yet insufficient understanding of how institutional ownership and its composition influences the success of the activist's campaign. Our paper fills this gap by examining the composition of institutional ownership, with respect to the presence (or not) of activism-friendly institutions, and how it influences the success of the activism.

2. Hedge Fund Activists and Activism-Friendly Institutions

[6] See for e.g., Bushee (1998) and Chen, Harford and Li (2007)

[7] See Gillan and Starks (2007) for a survey of the early literature on shareholder activism. The added returns from activism by hedge funds are not universal for targeted firms. Greenwood and Schor (2009) document that targets that are eventually acquired account for most of the returns from hedge fund activism, and Boyson, Gantchev and Shivdasani (2016) show that the merger bid is important. Even when the bid is unsuccessful, the offer tends to be associated with value-enhancing operational and financial policy changes at the target firm. (See also Klein and Zur, 2009).

[8] See Becht, Franks, Mayer and Rossi (2010), Boyson and Mooradian (2011) and Brav, Jiang and Kim (2015a). Also see Brav, Jiang and Kim (2009), and Brav, Jiang and Kim (2015b) for surveys on recent studies on the impact of hedge fund activism for target shareholders.

2.1 Sample

No standard list of hedge funds exists. Consequently, we employ five sources to construct our comprehensive list of hedge funds: 1) NIRI list of Top 200 Activist hedge funds, 2) The Altman Group list, 3) Conference Board Top 50 Activist Investors, 4) 13D Monitor and 5) Gantchev (2013).[9] Using this list of hedge funds, we search the Securities and Exchange Commission (SEC) EDGAR database for all 13D filings from 2000 to 2012 and identify the activist filings by checking the name of the 13D filer against our list.[10] This process results in a preliminary sample of 2,156 activism cases initiated by 236 unique hedge fund activists.[11] We then exclude on-going cases, duplicative filings, and cases involving bankruptcy. We also exclude cases in which the 13D holding of the hedge fund is less than 1% or greater than 20% as these cases do not reflect typical activism and usually involve pre-activism major financial transactions such as reorganization and initial public offering. We match the name of the target firms with CRSP and Compustat and exclude targets that can be identified as ADRs, closed-end funds, and certain types of financial firms.[12] Finally, we require that data be available to construct our measure of activism-friendly shareholders, described in the next section.[13] This process results in a final sample of 1,183 cases with 217 hedge fund activists over the 2004- 2012 period.[14]

[9] The NIRI list is available at http://www.niri.org/Other-Content/Top200HedgeFunds.aspx). The Altman Group list is available at http://www.niri.org/Other-Content/Exec-Alerts-PDFs/Hedge-Fund-Activists.aspx). 13DMonitor.com tracks activism targets. Gantchev (2013) list the most frequent hedge fund activists from 2000 to 2007.
[10] Schedule 13D is required to be filed within 10 days of the transaction that reaches the 5% ownership threshold. The 13D lists the name of the target and filer, the number of shares and the purpose of the transaction. If the intentions of the institution are "passive" they must file a 13G. There are 32,045 13D filings over this time period.
[11] Activists occasionally file under different names, for example, their own name versus their fund's name. Consequently, we check EDGAR for names associated with the same activist and examine the 13D and 13D/A filings for all of the different names, consolidating them under one hedge fund activist identifier.
[12] We exclude ADRs (first digit of *shrcd* from CRSP is 3), closed-end funds (*shrcd* 14), REITS (*siccd* 6798), investment advice (*siccd* 6282) blank check entities (*siccd* 6770), and security brokers (*siccd* 6200).
[13] We obtain the institutional holdings in the target firms from the Thomson Reuters 13F data.
[14] Measure 3 of activism-friendly ownership requires four years of data prior to activism and therefore is first available for targets in 2004. Measure 1 and 2 are constructed from voting patterns of institutions and are available from 2007 onwards.

The distribution of the number of target firms in our sample each year is displayed in Table 1. Hedge fund activism increases steadily between 2004 and 2007, but drops during the financial crisis. This activity is consistent with trends reported in prior work (See Bebchuk, Brav, and Jiang (2015) and Gantchev (2013)) as well as the procyclicality documented by Burkart and Dasgupta (2015). The distribution of events by activists is positively skewed with a mean per hedge fund of 5.45 cases and a median of 3 cases. Appendix Table 1 shows the distribution of activism cases for hedge funds that initiated at least 15 activism events during the sample period.

2.2 Measures of Activism-friendly Shareholders

As discussed earlier, the relationship between hedge funds and other institutional shareholders is ambiguous, with some believing that hedge fund activism can increase firm value while others do not believe the activism helps with long-term value. Further, even the institutional investors that at times support hedge fund activists are not constant in their support, favoring some activist causes, but not others. In this section, we develop measures to capture the propensity of an institution to support hedge fund activism.

2.2.1 Dissatisfied Shareholders as Activism-Friendly Shareholders

The first measure for institutions likely to be activism friendly is based on how satisfied the shareholders are with the target's current management. If existing institutional owners of the target firm are unhappy with the management, they are more likely to be supportive of the changes being requested by the hedge fund activist. In fact, such institutions will at times even request hedge fund intervention. For example, William Ackman, founder of hedge fund Pershing Square, has stated, "Periodically, we are approached by large institutions who are disappointed with the performance of companies they are invested in to see if we would be interested in playing an active role in effectuating change." Institutional investors are even reported to have an

informal term for this, R.F.A., or request for activist.[15] Further, hedge funds will look for dissatisfied shareholders in their intervention decision. For example, Eric Rosenfeld, founder of Crescendo Partners, has remarked, "The requirement for us is to have disgruntled shareholders, or shareholders that want change and will support us."[16]

To construct a measure to capture firms that have these dissatisfied institutions as shareholders, we use voting data, which requires us to focus on mutual funds due to voting data limitations on other types of institutions. For a firm that was targeted in quarter q, the measure DISSAT is the percentage ownership of all institutions in the prior quarter, i.e., q-1, that are classified as dissatisfied or unhappy with management. An institution is classified as such if it voted against the target firm management on proxies at least once in the prior three years. We use Risk Metrics' ISS Voting Analytics database to access mutual fund proxy voting records, which begins in 2004. As we require voting history for three years to construct this measure, it is limited to the 2007-2012 period and is available for 656 of the sample targets.

Table 2, Panel A provides summary statistics for the institutional ownership measures in the target firm, the activism-friendly ownership as well as other measures of institutional ownership. The mean ownership by institutions classified as DISSAT is 3.7% with a median of zero, thus, the targets do not have large ownership by institutional investors who have previously voted against their management. Further, not surprisingly, the majority of the target firms have all of their institutional owners voting with management, as is usually the case for proxy votes in general. However, as measured by their voting behavior, in about one quarter of the targets there exists a significant fraction of institutions that are dissatisfied with management.

[15] Available at http://www.bloombergview.com/articles/2014-03-19/activist-hedge-funds-are-making-friends
[16] See https://www.youtube.com/watch?v=dfMaFCw10Yo

2.2.2 Shareholders Voting against Management in Prior Activism Cases

The second measure designed to capture institutions likely to be activism friendly is based on an institution's support, or lack thereof, for the management of other firms that have been targeted by hedge funds in which the institution was a shareholder. An institution that favors activism, in general, is more likely to have voted with an activist and against target management in prior activism campaigns. In our definition, an institution is classified as being supportive of activism if it voted against management in any firm targeted by activists in the prior three years. The measure VOTER is the percentage of the firm held by activism-friendly institutions, as defined above, in the quarter prior to the firm's targeting.[17] As we require three years of voting data for this measure, it is also limited to the 2007-2012 period. For the 656 targets for which we can construct this measure, Table 2, Panel A shows that the mean value of VOTER is quite high at 19.4%, with the median being of similar value. Comparing the DISSAT measure to the VOTER measure shows that although the vast majority of the institutional ownership in the target firms have not voted against management in the past, the ownership indicates a significant percentage has the propensity to vote with activists given they have done so in their other portfolio holdings.

2.2.3 Increase in Ownership During Activist Campaigns

The third measure we employ to identify institutions with a higher propensity to support activism is based on the institutions' equity holding decisions in prior activism events for other firms. That is, if the institution has tended to increase its ownership in prior targets, it is more likely to support current activism campaigns. For this measure, an institution is regarded as being supportive if it increased its ownership in another firm after that firm was targeted by hedge fund

[17] For further details on the construction of this measure see Appendix A.

activists.[18] Specifically, if the proportion of targets, in the past three years, in which the institution increases its ownership is in the top quartile, the institution is classified as being supportive of activism. The variable OWNINC is the fractional ownership of the target firm by all supportive institutions in the quarter prior to being targeted.[19]

The mean value of OWNINC is 8.5% as seen in Table 2, Panel A. In other words, the average ownership by institutions deemed friendly to activism in the quarter prior to the 13D filing is 8.5%. This is in comparison to 50.2%, the average ownership by all institutions, referred to as TOTINT, in targeted firms in the quarter prior to being targeted. Activism-friendly ownership by this measure is similar in magnitude to the average ownership by the activist hedge fund as reported in the initial 13D filing and referred to as INITHOLD of 7.5 percentage.

2.2.4 Other Measures of Institutional Ownership

There exist several characterizations of institutional ownership that have been used in the prior literature. One common measure of investment style developed by Bushee (1998) is based on portfolio turnover and size of holdings. Institutions with relatively high portfolio turnover rates and diversified holdings are characterized as transient (TRA) investors; institutions with relatively low portfolio turnover and diversified holdings are characterized as quasi-indexers (QIX); and those with relatively low turnover rates and large investments are characterized as dedicated (DED). [20] Table 2, Panel A provides the summary statistics for these measures of institutional ownership in the target firms. The quasi-indexers have the largest percentage

[18] If the institution's average ownership in the five quarters after the event, including the event quarter, is positive and greater than its average ownership in the four quarters prior to the event it is classified as being supportive.
[19] For further details on the construction of this measure see Appendix A.
[20] The classification of the institutions as TRA, QIX and DED are obtained from Brian Bushee's website at http://acct3.wharton.upenn.edu/faculty/bushee/

ownership at about 26%, with transient investors at 13% ownership and dedicated investors being almost 5%.

Finally, we measure the independent long term investors (ILTI) of Chen, Harford and Li (2007). This variable is measured by finding for each of the target firms the percentage ownership controlled by the top 5 institutional investors as in Hartzell and Starks (2003) and separating them into two groups according to whether they are in the top 5 for the year before targeting. As Table 2, Panel A indicates, the target firms have about 13% ownership by the ILTI investors.

Panel B of Table 2 reports the correlations between our activism-friendly ownership measures and the other institutional ownership measures. We find that the correlation between two of our activism-friendly measures, OWNINC and VOTER, that is, between the ownership in our firms by institutions that increased their ownership in other firms previously targeted and ownership by institutions that voted in support of activists in other firms is higher than with the third measure (DISSAT). Bushee's measures capture the investment horizon of institutional investors and are different from the measures developed here that capture an institution's propensity to support activism. As can been seen in the table, the highest correlation of our measures is with QIX, the indexers. The correlations of all Bushee measures are the smallest with the DISSAT variable. This is also not surprising as DISSAT is constructed based on the institutional investor views on a specific firm rather than general characteristics. We also examine the relation with the ILTI and find the correlations of this measure with all three of the activism-friendly measures to be low.

The measures of activism support developed in this paper, however, capture a different dimension of institutional preferences than that of investment horizon or trading frequency used

earlier in the literature.[21] Our characterization of institutional preferences can be used more generally to capture the likelihood of an institution questioning and opposing firm management. Note, that an institution's support for hedge fund activism may evolve over time. Funds that did not initially support hedge funds, like some pension funds, have begun to support activism over time. As our measure is based on behavior over the previous three years, it allows for an institution's stance on activism to change and evolve over time.

2.3 Likelihood of Being Targeted and the Presence of Activism-Friendly Institutions

In this section, we examine the fundamental hypothesis implied by the Brav, Dasgupta and Mathews theory (2017) as well as by anecdotal evidence: whether a significant factor in hedge fund activists' search for a target is the presence of activism-friendly institutions. Specifically, we test whether a firm's likelihood of being targeted by an activist is associated with its level of pre-event activism-friendly ownership. As Table 1 suggests, a complication in testing this hypothesis derives from the fact that the likelihood of being targeted by hedge funds is low, and especially so after 2008. Consequently, we estimate the relationship with a conditional logit model using a matched sample in which the target firms are matched to a set of control firms by industry, asset size and book to market ratio. Specifically, for every sample target firm, we select a matched firm from the same Fama-French 48 industry that has the smallest total percentage difference in total asset value and book to market ratio where we measure the latter two variables at the end of the previous year.

[21] In untabulated results we use the Bushee measures, as well as the ILTI measure developed by Chen, Harford and Li (2007) in target performance regressions. Most coefficients are insignificant. Sometimes there are negative significant coefficients (mostly for operating performance) and sometimes there are positive significant coefficient for some specifications of buy and hold returns. We discuss the role of quasi-indexers (QIX) later in the paper.

The primary independent variables of interest in the model are the measures of activism-friendly ownership in the quarter prior to being targeted. If hedge fund activists recognize the role of activism-friendly institutional ownership, firms with high pre-event ownership by these institutions should be more likely to be targeted. For each of the matched control firms we generate the required variables of interest, i.e., OWNINC, VOTER and DISSAT, as described earlier. As before we also include ownership by other institutions that are not classified as activism friendly and the pre-event ownership of the hedge fund activist. The dependent variable takes the value of one if the firm was targeted. As this is a matched sample we estimate a conditional logit model.

The firm level controls are consistent with those in Brav, Jiang, Partnoy and Thomas (2008): firm size (total assets), leverage (ratio of book value of long term debt to total assets), the change in sales over the prior years, Tobin's Q, Return on Assets, Dividend Yield, the Herfindahl-Hirschman Index of sales,[22] the ratio of R&D expenses to sales, and the number of analysts following the firm.

The results, reported in Table 3, show that the coefficients for all of the measures of activism-friendly ownership are positive and significant. The coefficient for other institutional ownership is also positive and significant. All institutional ownership increases the likelihood of being targeted by hedge fund activists. We test for whether there is a greater apparent effect of activism-friendly institutions on the likelihood of being targeted and find for two of the three measures that the influence of activism-friendly institutional ownership on the likelihood of

[22] The Herfindahl-Hirschman index of sales is across different business segments (HHI_SALES) with data from COMPUSTAT Segment data. This measure captures the concentration or lack thereof of revenues in the different segments and controls for the complexity of target firm operations. Activists are thought to be equipped with general skills and target firms with more general/diversified sales are more likely to be targeted. The control variables included are consistent with Brav, Jiang, Partnoy and Thomas (2008).

being targeted is signficantly higher than that of other institutional ownership. For the third measure (VOTER) there is no difference in supportive and other institutional ownership. VOTER captures institutions that have voted against any target management in the past three years and therefore represent a large group of institutions. This may partially account for the lack of difference with other institutional ownership. Not surprisingly, large firms and those with low leverage have a lower likelihood of being targeted. Firms with high research and development expenses are also more likely to be targeted.

For robustness, we also estimate the model in a sample that includes all Compustat firms with the relevant data. The dependent variable takes the value of one if the firm is targeted by the hedge fund in a given year. The other variables are the same as in the previous analysis and we also include year and industry fixed effects. The results, reported in Appendix Table 2, are qualitatively similar. The coefficients of all measures of activism-friendly institutional ownership, as well as other institutional ownership, are positive and significant. For two of the three measures, there is no significant difference between activism-friendly institutional ownership and other institutional ownership in the propensity of getting targeted. Only, when ownership by activism-friendly institutions is captured by the DISSAT measure does it have a higher effect on the likelihood of being targeted than other institutional ownership. In summary, higher ownership by activism-friendly institutions in the pre-event quarter significantly increases the likelihood of being targeted by hedge fund activists.

3. Performance of Target Firms

If the presence of activism-friendly institutions makes a difference in the activist campaign, we would expect to find more successful outcomes when that presence is higher. Thus, we test the interrelated hypotheses that having more institutional ownership that supports

activism allows the hedge fund activists to push for and successfully obtain more meaningful changes from the target firm management and in turn these changes would result in increased shareholder value for the firm. To test these hypotheses, using various performance criteria, we examine the role of the target firm's institutional ownership composition on the activism outcomes.

3.1 Requests

As part of their campaign, activists will often make specific requests to the target firm management for changes, particularly in areas such as mergers, governance or capital structure. Whether or not target management complies with these requests provides insight into whether the activist was successful in achieving the campaign objectives.

From the initial 13D filings and any subsequent amendments we collect all requests for changes made by the activist. We then identify potential outcomes of the activism through 8-Ks filed by the target firm, web search, and SDC Platinum Database. These requests are categorized in Panel A of Table 4, with the majority of the 13-D filings (610) having no specific requests. The remaining 573 cases have at least one request with the most common being merger related which accounts for about 39.6% of all cases. Boyson, Gantchev and Shivdasani (2016) provide evidence that not only is value added when an activist achieves a merger deal for a target as reported in Greenwood and Schor (2009), but also when the merger bid is unsuccessful, the offer tends to be associated with value-enhancing operational and financial policy changes at the target firm. As Table 4, Panel A shows the next most common request by the activists are governance-related requests, which account for 34% of the cases.We define the activist's campaign as successful if at least one request is fulfilled, even if it is not fulfilled in its original form, as long as an agreement is reached with the activist. (For example, the activist could request that the

target firm be acquired, but the final result is an agreement between the activist and the target that allows the activist to nominate directors.) In our sample the highest success rate among the different categories of requests are found in the governance-related requests, which are successful 62.56% of the time. We next examine whether the presence of activism-friendly ownership is associated with a higher likelihood that the target agrees to the hedge fund requests. For the 48% of the sample for which requests are reported, we create four quartiles based on the levels of activism-friendly institutional ownership as captured by the first measure DISSAT. Panel B in Table 4 reports the fraction of successful requests for each quartile of ownership. The first quartile, Q1, with the lowest level of DISSAT, has 56.5% successful requests. In contrast, the fourth quartile, Q4, with the highest value of DISSAT, has 68.3% of successful requests. Targets with greater ownership by dissatisfied institutional shareholders (Q4) appear more likely to grant the activist request relative to targets in Q1, in that we find statistically significant evidence that the likelihood of successful requests is not independent of the activism-friendly quartiles (Test 2) although the difference between Q4 and Q1 in a t-test is not significant at conventional levels

Results are qualitatively similar when we use VOTER, the second measure. When we use OWNINC, the third measure, to capture activism-friendly ownership, we find that the success rate of requests in Q4 is significantly higher than the success rate in Q1. However, we find that Test2, the test for the independence of the distribution is not significant. Overall, the results suggest that targets with higher levels of activism-friendly institutional ownership are more likely to comply with the requests made by the hedge fund activist.

It should be noted that although implementation of requests may be an intuitive measure of the activist's success, it also suffers from several shortcomings. In particular, in about half of

the cases the activists do not make any reported requests and consequently, the measure is unavailable and success along this dimension cannot be measured. As Mason Morfit, a Partner at ValueAct Capital states, "a lot of cases go behind the scenes."[23] Further, in cases where requests are made, it is not clear whether the request creates shareholder value for the target firms or not. While, we report the success of activists in their requests, a more natural measure of whether an activist campaign is successful is to examine stock returns around the announcement of the activist's intervention in order to capture the value expected from the hedge fund activism.

3.2 Short-term Returns Around the News of Activism

In this section, we consider how the market reacts to news of the activism. If market participants expect the activism to be more successful in the presence of friendly institutions ex ante, then we should observe higher returns to firms with this presence upon the announcement. To test this hypothesis, we examine the short-term performance of the target firm around the news of the activism, which generally occurs with the 13D filing. We estimate cumulative abnormal returns (CARs) in excess of the CRSP value-weighted index using several different trading day windows.

We first examine differences within quartiles of targets formed on the basis of the level of activism-friendly institutional ownership. As shown in Table 5, Panel A, the mean abnormal returns over the [-2,+20] trading day window around the 13D filing is 1.5% for targets in Q1, the lowest quartile by value of DISSAT. This is significantly smaller than the 6.4% seen for targets in Q4, the highest quartile of DISSAT. A similar result is shown for the measures of activism-

[23] See http://www.youtube.com/watch?v=jy1l3rOAKjY

friendly ownership and the other specifications based on median differences and the shorter trading day window.

To understand what drives the differences in market reaction to the announcement of activism, we run cross sectional regressions where the dependent variable is the CAR with the variables of interest being the different measures of activism-friendly institutional ownership. We also control for firm characteristics, other institutions' ownership and the hedge fund activist's ownership. The variable Nofrd_DIS is the percentage ownership by all institutions, other than those classified as DISSAT and by the hedge fund activist, in the quarter prior to being targeted. Similarly, Nofrd_VOTER (Nofrd_OWNINC) is the percentage ownership by all institutions, other than those classified as VOTER (OWNINC) and by the hedge fund activist, in the quarter prior to being targeted. We control for pre targeting ownership by the hedge fund activist by including PRE13F, a dummy that takes the value of one if the activist had greater than 1% ownership in the quarter prior to the 13D filing. We control for the target firm performance prior to being targeted by including PRE12_STK the monthly compounded stock return over the twelve month prior to the 13D filing. We also control for firm size (SIZE) which is the natural log of total assets, and firm leverage (LEV), which is the ratio of book value of debt to total assets. Lastly, we include controls for the kind of requests made by the activist. Specifically, we include NOREQ as a dummy for events with no request made in 13D filings. CSREQ (MERGREQ) [GOVREQ] are dummies that take the value of one when the activist makes requests related to capital structure (merger) [governance]. We also include year and industry fixed effects.

We report the results in Table 6. The coefficients for DISSAT, VOTER and OWNINC are positive and significant for most of the specifications. Further, the results are economically

significant as well. For example, a one standard deviation increase in the value of OWNINC is associated with a 1% increase in the [-2, +20] days CAR. In addition, while the CAR is significantly related to the three measures of activism-friendly ownership, it is not related to the other institutional ownership variables. The coefficient of Nofrd_DIS and the corresponding variables for the other measures are not significantly different from zero in any specification. We test for whether the effect of activism-friendly institutional ownership differs from the effect of other institutional ownership. As can be seen in the last row of Table 6, in most specifications there exists a significantly greater association between activism-friendly ownership and the short-term returns to hedge fund activism than the relationship with the other institutional ownership.

The announcement return is also not significantly related to the ownership by the hedge fund activist prior to targeting, PRE13F. The coefficient on the previous 12-months return (PRE12_STK) is negative and significant, which is not surprising. The higher the stock market performance of the target in the year prior to being targeted, the lower would be the perceived potential of further improvements by the activist. Overall, the evidence suggests that targets with higher levels of activism-friendly ownership prior to being targeted have higher announcement returns to activism, which would be consistent with investors expecting such activism to have a higher probability of success.

3.3 Long Term Abnormal Performance

Although returns around announcement of the activism capture the market view of the potential value to be created through the activism campaign, it is possible that the market's expectations are not borne out. Thus, we also examine longer term returns to the activism. We use two commonly used measures of long term abnormal performance, buy and hold abnormal

returns and alphas from a four factor model applied to calendar time portfolios.[24] We estimate these long term returns over different holding periods.

4.3.1 Buy and Hold Abnormal returns (BHAR)

In line with prior analysis, we estimate buy and hold returns for different quartiles by the level of activism-friendly institutional ownership over different holding periods. To study the role of activism-friendly ownership, we compare the post event performance of targets with high friendly institutional ownership to targets with low friendly ownership. To estimate benchmark adjusted buy and hold returns, we estimate the following

$$BHAR_i[1,T] = \left(\prod_{t=1}^{T}(1+R_{i,t})\right) - \left(\prod_{t=1}^{T}(1+R_{b,t})\right),$$

where the event month is designated as zero and T represents the holding period i.e., 24, 36, and 60 months. $R_{i,t}$ is the monthly CRSP return for stock i in month t and $R_{b,t}$ is the monthly return to the benchmark in month t. We use several different benchmarks. The first benchmark is the value-weighted CRSP index and the corresponding buy and hold returns referred to as market adjusted BHAR.[25] The second is the DGTW (size, book to market and momemtum) benchmarks obtained from Russ Wermers.[26] The last benchmark is the industry, as captured by the Fama French 48 industry of the target firm, and are referred to as industry adjusted BHARs.

[24] See Brav, Jiang, Partnoy and Thomas (2008), Bebchuk, Brav and Jiang (2015), Duchin and Schmidt (2013), and Fu, Lin and Officer (2013) among others for estimation of long term returns.

[25] We use "<=" instead of "=" to estimate long term returns. This reduces loss of observations from firms disappearing due to post-event mergers, delisting, or other major events. This implies that long term returns may capture shorter periods. As our results are not sensitive to window choices any biases introduced are not likely large. Also note that ideally we should use benchmark returns that excludes the target firm, but given the population of stocks in any benchmark portfolio employed, we do not expect such an exclusion to influence our results.

[26] The DGTW benchmarks are available http://www.smith.umd.edu/faculty/rwermers/ftpsite/Dgtw/coverpage.htm" For further details see Daniel, Grinblatt, Titman, and Wermers (1997) and Wermers (2003). For DGTW benchmarks, if the event month is in between January and June, we use benchmark assignments in June of the prior year. If the event month is between July and December we use assignments in June of the same year. All stocks in the benchmark are value weighted.

The market-adjusted BHARs for the 36 month period for quartile Q4 (with the highest level of DISSAT at 25%) are significantly higher than 1.1% for quartile Q1 (with the lowest level of DISSAT). (See Panel A, Appendix Table 3.) The results are similar for all holding periods, for all three of the different benchmarks used and when quartiles are formed on the basis of VOTER (Panel B) or OWNINC (Panel C).

Next, we control for factors, other than activism-friendly ownership, that are likely to drive the differences in long term buy and hold returns. As in Table 6 we control for the non-activism-friendly institutional ownership, the ownership by the hedge fund activist prior to the 13D filing, the presence and kind of requests made by the activist, firm characteristics and year and industry dummies.

The results, reported in Table 7, show that the coefficient of DISSAT is positive and signficant. For brevity, we have tabulated the results for the 36 month holding periods for the market adjusted BHARSs. The results are also highly economically significant. A one standard deviation increase in DISSAT is associated with an increase in the 36 month BHAR by 7.76%. The results with other adjustments (DGTW and industry-adjusted) are displayed in Appendex Table 4. The coefficient for other institutional ownership, Nofrd_DIS is not significant, and further its effect is significantly lower than the effect of DISSAT (see p value at the bottom of the table). The coefficients of NOREQ and GOVREQ are also positive and significant suggesting that governance related requests and activism campaigns without any explicit requests are associated with the greatest increases in long term returns for shareholders. The results for the other measures of activism-friendly ownership, in column 2 for VOTER and column 3 for OWNINC are qualitatively similar and have somewhat higher economic

significance.[27] The results with other holding periods (24 and 60 months) are qualitatively similar. In sum, the evidence suggests that targets with higher levels of activism-friendly institutional ownership earn higher benchmark-adjusted buy and hold returns.

3.3.2 Calendar Time Portfolio

We also estimate long term returns using calendar time portfolios. In each month of our sample period, we form a portfolio of firms that were targeted by hedge funds activists in the previous 12, 24, 36, 48, or 60 months and had the highest quartile of ownership by friendly institutions in the quarter prior to the event. The portfolio is rebalanced monthly to add firms that have been targeted recently and drop firms that reach the end of their holding period. We use both equal weights and value weights to calculate portfolio returns, to what we refer to as the high activism-friendly ownership portfolio. We form another portfolio of firms targeted by hedge funds that have ownership in the lowest quartile of ownership by friendly institutions over different holding periods and monthly rebalancing as described above. We calculate monthly equal and value weighted returns of this portfolio, referred to as the low activism-friendly ownership portfolio.

The monthly returns for the high and low activism-friendly ownership portfolios are regressed on monthly returns of the portfolio of risk factors – market excess return, small-minus-big, high-minus-low, and up-minus-down. Specifically we estimate the Fama-French-Carhart four factor model as follows:

$$R_{p,t} - r_{f,t} = a_p + b_p\left(R_{m,t} - r_{f,t}\right) + s_p SMB_t + h_p HML_t + m_p UMD_t + e_{p,t}.$$

[27] A one standard deviation increase in VOTER (OWNINC) is associated with an increase in 36 month BHARs by 11.52% to 14.36% (12.30% to 15.51%) depending on the benchmarks used.

Appendix Table 5 reports the calendar time regression intercepts (alphas) shown in percentage terms for each of the different portfolios and time frames.[28] The long high activism-friendly and short low activism-friendly portfolio (High –Low) has a significant positive alpha per month for most specifications with the results being stronger for equal-weighted portfolios.

3.4 Operating Performance

If hedge fund activism creates shareholder value by bringing about change in the target firm, then it should also be reflected in the firm's operating performance. This section discusses the impact of activism-friendly institutional ownership on the change in the target firms' operating performance after being targeted.

To capture operating performance we use Return on Assets (ROA), which is measured as net income over lagged total assets. As ROA is likely impacted by industry wide factors, we control for this in line with Chen, Harford and Li (2007) and estimate abnormal ROA. This approach is conducted in two steps. First we calculate industry-adjusted ROA as the difference between the ROA and the median ROA for all firms in the same Fama-French 48 industry as the targeted firm. Second, we regress the three year (or the relevant holding period) average industry-adjusted ROA on the corresponding value pre-event year to control for possible impact of pre-event performance.[29] The residual from this regression, referred to as RROA, is the abnormal change in industry-adjusted ROA after being targeted by the activist.

[28] As the number of portfolio firms vary across our sample period, we follow BBJ14 and use Weighted Least Square estimation that uses the number of portfolio firms as the weights. We find that the results are similar if we use an OLS estimation. We require each portfolio at any point in time to have at least 3 firms. This is lower than the 10 required by BBJ14 as we are examining targets with high and low activism support ownership in contrast to using all target firms as do BBJ14. R_f is 3-month T-bill rate.

[29] We estimate abnormal ROA for several holdings periods, specifically 1, 2, 3, 4 and five years. We report the results for three and five year periods for brevity. The results with other holding periods give qualitatively similar results.

The average differences in abnormal ROA for the quartiles formed on the basis of activism-friendly institutional ownership are tabulated in Appendix Table 6. The mean RROA for the three years following the activism event is -2.5% for Q1 which has the lowest level of DISSAT. The mean value for Q4, with the highest level of DISSAT is 3.8% and the difference between the two is highly significant. The results are similar for different horizons and for VOTER and OWNINC, the other measures of activsim friendly owenrship.

The abnormal ROA is industry adjusted and also controls for the effect of pre-event performance. However, factors other than activism-friendly ownership could impact operating performance and in Table 8 we control for the primary factors such as ownership by other institutions and the hedge fund activist in the pre-event quarter, the nature of requests by the hedge fund activist if any and firm level characteristics. We include year fixed effects but not industry fixed effects as the return on assets is already industry adjusted.

Table 8 also shows that the coefficient of DISSAT is positive and both statistically and economically significant. A one standard deviation increase in DISSAT is associated with an increase in three year abnormal industry adjusted ROA of 2.21%. The coefficients of the other two measures are also significant in all the specifications and have similar economic impact. The coefficient for other institutional ownership is positive but not significant when we use DISSAT as the measure. For the other two measures, the coefficient of other institutional onwership is negative and becomes significant for OWNINC for one specification. High institutional ownership is not generally associated with better post activism operating performance. It is only ownership by activism-friendly institutions that is associated with gains in operating performance. Not surprisingly, leverage is positively related to abnormal performance.

4. Corollary Hypotheses

Three corollary hypotheses arise from our original hypotheses. The first is that if the activism-friendly institutions (as we classify them) actually support the activist, then we should observe that they remain invested in the target firm during the activism and they should have a tendency to vote in favor of any proposals submitted by the activist. The second corollary hypothesis is that the higher return we document should arise from the activism-friendly institutions' support of the activist rather than these institutions being smart investors with the ability to select the future targets in advance of the activism. The third corollary hypothesis is that the higher return to activism-friendly ownership should be distinct from other institutional attributes such as indexing that have been shown to be related to governance changes.

4.1 Support by Activism-Friendly Institutions

Since we employ the ownership level of activism-friendly institutions in the quarter prior to being targeted to capture their role, we should also observe that these investors maintain their holdings, that is, they should not sell their holdings in the quarters following the 13D filing. Otherwise, the higher buy and hold returns or operating performance in the months following the targeting should not be attributed to the presence of these activism-friendly institutions. We find for the institutions classified as activism friendly, their average holding period in the target firm is more than 9 quarters after the targeting.[30] Thus, activism-friendly institutions appear to hold the firm for an average of 2 years after the activism begins. As a further analysis, we examine the

[30] The holding period for other institutions, not classified as activism friendly, in the target firms post event is on average 7.6 quarters. Note that since the last quarter to be included in the analysis is March 2013, this truncates the reported holding period for firms targeted in the later years of our sample. The mean post holding period for institutions classified as DISSAT is 10 quarters, for VOTER is 9.3 quarters and for OWNINC is 10.4 quarters. The average pre-event holding period for institutions classified as DISSAT (VOTER) [OWNINC] is 27.5 (20.9) [21.5] quarters while for other institutional owners it is 11.4 quarters. The institutions classified as activism friendly appear to hold the target firms over a long period of time.

aggregate holdings of activism-friendly institutions around the 13D filing. The aggregate ownership by activism-friendly shareholders is relatively stable from four quarters prior to four quarters post the 13D filing (See Appendix Table 7).

To test for more direct support by activism-friendly institutions, we examine shareholder proposals submitted by the activists in the target firm and examine the voting behavior on these proposals by the activism-friendly institutions as compared to other institutions holding shares of the firm. Of the 656 targets that we can match to ISS data, 523 hold a meeting over the two years following the 13D filing and 35 of these have at least one shareholder proposal submitted by the activist. These activists often submit multiple proposals so that overall there are 301 activist-sponsored proposals in these 35 cases.[31]

We find that the incidence of activist proposals increases with the presence of activism-friendly ownership. In the first quartile of such ownership as measured by the DISSAT variable, only 0.55% of all proposals are sponsored by the activist. The percentage of activism-sponsored shareholder proposals increases to 3.01% for the fourth quartile of DISSAT ownership and the difference is significant (see Appendix Table 8).[32] This suggests the activist takes more aggressive tactics when activism-friendly ownership is higher.

Next we examine the voting by institutions on these proposals to examine whether the friendly institutions are indeed more likely to support the activist. Of the 301 activist sponsored proposals we observe voting in only 10 proposals.[33] Though this is a very small sample we still

[31] This number of proposals is relative to 184 proposals by other shareholders and 7,925 management-sponsored proposals in the 523 target firms with voting data in ISS in the two years after the 13D filing.
[32] The results displayed use pre 13D ownership of friendly institutions for the quartiles. The results are similar if quartiles are based on pre meeting ownership by friendly institutions. The results are also significant for the OWNINC at 1% level and for VOTER at the 11% level
[33] This voting is seen in only 8 of the 35 target firms with activist-sponsored proposals. This is because some proposals are not put to vote. The proposal data is from firms' 10-Q and the voting data is from mutual fund N-PX and there might be some discrepancy between them.

examine voting by friendly institutions. This analysis conducted at the fund vote level, includes all shareholder sponsored proposals for target firms in the two years after the 13D filing. The dummy variable *Activist Sponsored* identifies proposals sponsored by the activist. *Friendly Institution* is a dummy that takes the value of one if the institution voting is classified as friendly. The interaction of the two captures the vote of friendly institutions in activist sponsored proposals. We also include all control variables included in prior tables along with proposal and year fixed effects.

As seen in Table 9, the interaction of *Friendly Institution* and *Activist Sponsored* is positive and significant while that of *Friendly Institutions* is negative and significant for all measures of friendly institutions. This suggests that although friendly institutions do not support shareholder proposals in general, they are significantly more likely to support those sponsored by the activist. The coefficient of activist sponsored proposals is insignificant. Although these results are suggestive of the support given by friendly institutions to activists, they should be interpreted with caution as they are based on only 10 activist sponsored proposals.

4.2 Smart Investors

Another concern with the results is that the positive association between friendly ownership and future abnormal stock returns could be driven by the stock picking ability of friendly insitutions, i.e., they invest in firms that are likely to be targeted or firms that are likely to outperform in the future, regardless of the support for activism agenda. To address these issues, we perform the following three analyses.

4.2.1 Activism-Friendly Institutions vs. Other Institutions

In this section, we examine the stock picking ability of friendly institutions relative to other institutions. Specifically, we form portfolios based on all the holdings of both friendly and

other institutions in the 13F data. Each month, we go long the value-weighted portfolio based on the holdings of all friendly institutions, and short the value-weighted portfolio based on holdings of all other institutions. The portfolios are rebalanced every quarter.[34] We conduct time series regressions of monthly returns of long and short portfolios on the Fama-French-Carhart four factors. We use weighted least square regressions to adjust for the variation in the number of securities in the portfolio. If friendly institutions are able to consistently outperform other institutions, the alpha or the regression intercept should be positive and significant. The estimation involves 108 months for the OWNINC measure of friendly institution and 72 months for the other two measures.

As seen in Panel A of Table 10, the value-weighted alphas are negative and significant for all three measures of friendly institutions. The negative and significant alpha shows that friendly institutions are less likely than other institutions to select securities that can earn future abnormal returns. For robustness, we only use non-target firms to form the portfolios ("Non-targets"). Finally, we also form the long (short) value-weighted portfolio for each institution-month, and average across all friendly (non-friendly) institutions in that month ("Average value-weighted"). Neither of the tests support the premise that friendly institutions are more likely to select outperforming securities.

4.2.2 Activism-Friendly Institutions' Holdings of Target Firms

The above tests only show the general selection ability of the institutions. However, since the target firms represent a small fraction of the total set of firms in the 13F data, friendly institutions could still have selective ability to pick the firms that are likely to be targets of hedge

[34] Note that the same portfolio firm may appear in both the long and the short portfolios. Also note that we only use a value-weighted portfolio because the amount of investment itself is also a choice of the institution, which should be included as we examine selection ability.

fund activists. If they are better at selecting targets, then they are more likely to increase their holdings of these in the quarters prior to the 13D filing to maximize their returns.

Based on the portfolios held by friendly institutions, we assign an Up-targeted dummy the value of 1 for an institution-firm-quarter if the institution increases its holdings and the firm is targeted in the next quarter and zero if there is a holding increase but the firm is not targeted. Similarly, we assign a Down-targeted dummy the value of 1 if the institution decreases its holding and the firm is targeted and 0 if there is a decrease in its holding but the firm is not targeted. We then conduct tests of proportions on the two dummies for the institution-firm-quarter observations.[35]

The results, shown in Panel B of Table 10, indicate that when friendly institutions increase their holdings in the firm, that firm is less likely to be targeted by a hedge fund activist in the next qurater. As a robustness test, we also generated the up/down dummy based on the average holding change in the past 4 quarters (Year Prior), and the results show no evidence that friendly institutions are able to forecast which firms will be targeted based on their holding decisions.

4.2.3 Returns based on Activism-Friendly Institutions' Holdings of Target Firms

In the above section, we capture binary measures of increases and decreases in the target holdings of activism-friendly institutions but do not consider the magnitudes. In this section, we form value-weighted long (short) portfolios based on the increases (decreases) of friendly institutions' holdings in target firms in the quarter prior to targeting. The portfolios are

[35]The number of institution-firm-quarter observations are 2,790,451 (3,108,193) [1,871,038] for OWNINC (VOTER) [DISSAT] friendly institutions respectively. The number of observation varies by the number of institutions identified as friendly (VOTER having the highest number of institutions), by the number of years the friendly measure covers (OWNINC covers from 2004 to 2012, while the others cover from 2007 to 2012), and by the portfolio size of each institution.

rebalanced each quarter to add newly targeted firms and drop firms no longer held by an institution. Then we conduct time series regressions of monthly returns of long and short portfolios on the Fama-French-Carhart four factors. We use weighted least square regressions to adjust for the variation in the number of securities in the portfolio. If friendly institutions are able to pick the targets, then the returns to the constructed long-short portfolio should be positive and significant.[36]

As can be seen in Panel C of Table 10, the alphas tend to be negative and insignificant. For robustness, we measure increase/decrease using the average holding change in the past 4 quarters prior to targeting ("Yearly average"). Finally, for robustness, we also first form portfolios for each institution-month, then average across all institutions for each month ("Average value-weighted"). The results are similar: the estimated alphas are never significant. The results suggest that friendly institutions do not display any general ability to pick winners or specific ability to pick targets of hedge fund activists.

4.3 Indexers

Appel, Gormley and Keim (2016a) conclude that passive institutional investors influence firms' governance choices and that increases in passive ownership are associated with increases in firms' long run ROA. Appel, Gormley and Keim (2016b) document that passive ownership in target firms increases the likelihood that activists obtain board representation and sale of the target. As many of the institutions classified as friendly by our measures are likely to be

[36] The same stock could appear in both the increase and the decrease portfolios, if some friendly institutions increase holdings and others decrease holdings. Note that we focus on value-weighted portfolios in examination of selection ability.

indexers, in this section we examine whether the higher returns from activism-friendly ownership are distinct from those that might arise from passive ownership.

Appel, Gormley and Keim (2016 a,b) use mutual fund names to categorize them as indexers and their ownership (S12) to capture passive ownership. They also use Bushee's (1998) classification of indexers, referred to as QIX, as an alternative measure to capture passive ownership. We include ownership by institutions classified as QIX in the pre-event quarter to control for their possible impact on long run returns from activism. As seen in Panel A of Table 11, the inclusion of pre-event ownership by institutions classified as QIX does not impact activism-friendly results that continue to be significant. Further, QIX by itself is not significant in explaining value generated from hedge fund activism.

Appel, Gormley and Keim (2016 a) also use the ownership of the three largest indexers, that is ownership by Barclays, State Street and Vanguard, for robustness in their tests. These three institutions are categorized as friendly for the entire sample period by two of our measures (VOTER and OWNINC) and for a majority of the cases by the third measure (DISSAT). In Table 11, Panel B we control for ownership by these three institutions, referred to as BSV. As can be seen in the table, the coefficient of BSV is itself not significant while the coefficient of friendly ownership is positive and significant for two of the measures, that is DISSAT and VOTER.[37]

The results complement those of Appel, Gormley and Keim (2016a,b) in delineating the role of passive ownership. As shown by Appel, Gormley and Keim (2016) passive ownership is associated with governance changes even without the activist, and is likely to reduce the

[37] OWNINC measure is based on institutions increasing their ownership. Ownership changes for indexers may be simply a manifestation of their passive strategy rather than active support of the activist, indicating that the OWNINC measure is likely to overweight passive investors. This may explain why it loses significance when we control for passive ownership.

likelihood of the firm being targeted by activists. Some of the passive owners however are friendly to activists while many are not.[38] Those among the indexers that are friendly to activists, along with other friendly institutions that are not indexers, can help bring about change in firm's by another channel – supporting the activist to unlock higher gains from the intervention.

Recent papers have also examined connections between hedge funds and institutional investors of the target that may also result in these institutional investors becoming friendly towards the activist. Foroughi (2017) captures connections between activist and institutional investors based on common past investing while He and Li (2016) use prior education and employment ties. In sum, friendly attitudes towards an activist could arise due to fewer exit options associated with index investing, connections to the activist or beliefs held and learnt over time by institutional investors about the benefits of activism. The results in this paper suggest that the success of the activist's campaign depends on the institutions that are friendly and likely to support the activist's agenda.

4.4 Robustness Analysis

Consistent with prior literature we have controlled for firm specific characteristics and case specific characteristics in our multivariate regressions for the different performance measures. In robustness tests we also control for the reputation of the hedge fund activist. An activist campaign by a reputed hedge fund activist might lead to higher announcement period returns and more effective changes in the firm. It should, however, not impact the pre-event ownership by activism-friendly institutions and their role. We proxy for the hedge fund

[38] About 65.9% of DISSAT, 68.9% of VOTER and 57.9% of OWNINC are categorized as QIX. However, QIX is also a large category for non-friendly institutions with 51.6%, 45% and 52% of the non-friendly ownership, based on the three measures respectively, being categorized as QIX.

activist's reputation by the average (–2,+2) day CAR on its prior target announcements. We find that controlling for a hedge fund activist's reputation does not qualitatively impact the results on activism friendly ownership (See Appendix Table 9).[39] This holds although reputation of the activist is not significant in explaining long term stock returns in two of the specifications and has a positive significant effect in the third specification.

As there are few firms subject to activism in any given year, we have used a three year period to capture the behavior of institutions and classify them as activism friendly. However, this classification leads to a loss of data and therefore we also try using one and two years to develop our measures of activism friendly institutions. The results tend to be weaker, especially for the DISSAT variable.[40]

Lastly, we examine whether the presence of activism-friendly ownership along with some kinds of requests are associated with greater value for the target firms. We interact friendly ownership with the dummy variables that capture requests related to capital structure (CSREQ), merger (MERGREQ) and governance (GOVREQ). As seen in Appendix Table 10, there is no evidence that the presence of friendly ownership and any specific request is associated with greater value for the target. In fact, when no specific requests exist (about half the cases when the dummy variable NOREQ takes the value of one), friendly ownership is associated with higher value.

5. Long-term Performance and the Continuing Presence of Activism-Friendly Institutions

[39] Results are qualitatively similar if we use CARs and operating performance of the target, instead of the 36 month market adjusted BHARs to capture target performance.

[40] This is not surprising as DISSAT is based on voting in one firm. Using one year of data limits the number of votes over which to observe and classify the institutions.

The results thus far show clearly that shareholder gains from hedge fund activism as measured by short and long term stock returns as well as operating performance increase in the level of pre-event activism-friendly ownership. The evidence also shows that other institutional ownership does not have any significant association with post-activism returns. We further examine whether the presence of activism-friendly institutions from previous campaigns are associated with higher returns to the activist, that is, whether the long-term performance from an activism campaign is associated with a continued relationship between an activist and the institutions.

Activists may not only consider activism-friendly institutions in the selection of their targets, but that their returns may be higher if they can rely on the presence of institutions who have supported them in the past. Thus, we examine the relationship between the long-term returns and whether the activism-friendly institutions have been present in that activist's previous campaigns versus activism-friendly institutions newly present for the current campaign. To do so for each target firm campaign we divide the activism-friendly institutional ownership into two types: Overlapped ownership, for those activism-friendly institutions that were also present and classified as activism-friendly in the previous case conducted by the activist and New ownership of activism-friendly institutions that were not present in the activist's prior case. On average, overlapped friendly ownership (by the DISSAT measure) is 13.2% of all friendly ownership in the target firm; overlapped friendly ownership (by the VOTER measure) is about 38.2% of all friendly ownership; and overlapped friendly ownership (by the OWNINC measure) is about 49.4% of all friendly ownership.

Using these variables we conduct a regression analysis in which the dependent variable is the 36-month market-adjusted BHARs and the primary variables of interest are the two types of

activism-friendly ownership along with other institutional ownership. We drop all cases that are the first cases of the activist in the sample. The results, displayed in Table 12, show again that higher returns are associated with ownership by activism-friendly institutions, but not with other institutional investor ownership. We further find that the overlapped friendly ownership by OWNINC and the VOTER measures are associated with higher returns. In addition, for the VOTER measure we find that both overlapped and new activism-friendly institutional ownership are associated with higher returns. However, we do not find significant results for prior experience with DISSAT. This should not be surprising because DISSAT is a measure of ownership by institutions that are unhappy with the current target and not a measure of institutional characteristics that point to a general activism-friendly attitude. For DISSAT it is the new institutions that are unhappy with the current target rather than the overlapped institutions that tend to be unhappy with many targets.

6. Conclusion

In this paper we study differences among institutional investors in their propensity to support hedge fund activists and how these differences impact the success and the value created from hedge fund activism. We develop three different measures of activism-friendly institutional ownership. If the presence of activism-friendly institutions facilitates the hedge fund activist in implementing changes, then activists should be more likely to target firms that have higher holdings by these institutions. Consistent with this hypothesis, we find that all institutional ownership is associated with a higher likelihood of being targeted. For two of the three measures, activism-friendly ownership is associated with a significantly greater likelihood than other institutional ownership of being targeted.

We also find that pre-event ownership by these activism-friendly institutions is associated with significantly higher short and long term stock returns, and operating performance of the target firm. These results are robust to different horizons post targeting, to different benchmarks and to controls for other institutional ownership, as well as to firm and activism-specific characteristics. We further find that other institutions, not classified as activism friendly, are associated with no significant impact on the post-event performance of the target. These results are consistent with a role for the activism-friendly institutions in helping the hedge fund activist push for changes in the firm and subsequent increases in target firm value.

The results point to the importance of the type of institution, especially with respect to whether they support hedge fund activism, in the likelihood of firms being targeted and the value generated from hedge fund activism.

Appendix A: Construction of the Measure of Friendly Shareholders

Measure 2: VOTER

The second measure captures an institution's general tendency in activism events to vote against management. We capture this by examining the voting patterns of institutions in prior activism targets. Specifically,

1. A 13D filing for firm i, in quarter q and year y is denoted as event (*i*, *q*, *y*). The measure, referred to as $VOTER_i$, is the percentage ownership by all activism-friendly institutions in the prior quarter q-1.
2. An institution is regarded as being activism friendly based on its voting history in firms targeted over the prior three years. In particular, if the institution voted against management in any target from year y-3 to y-1 then it is classified as being friendly of activism in year y. Note,
    a. The voting data is at the mutual fund level. We aggregate it to the institution or parent level. Specifically, if any of the mutual funds in the family votes against management then the institution is regarded as having voted against management. Withholding, abstaning and voting against are all considered as voting against management.
    b. To ensure that we are capturing voting on matters related to activism, we require that the proposal voted is within two years of the activism event.
    c. As 2004 is the first year of the voting data, and we require three prior years of voting data to construct this variable, this variable is available for the 2007 to 2012 period.

Measure 3: OWNINC

The third measure captures an institution behavior, as manifest from changes in ownership in prior target to gauge the likelihood of supporting activism. Specifically,

1. A 13D filing for firm i, in quarter q and year y is denoted as event (*i*, *q*, *y*). The measure, referred to as $OWNINC_i$, is the percentage ownership by all activism-friendly institutions in the prior quarter q-1.
2. An institutution is regarded as being supportive of activism if its average ownership in the five quarters after the event (including the event quarter) is positive and greater than its average ownerhsip in the four quarter prior to the event quarter. For every year, we calculate the ratio of the number of activism targets in which the institution is regarded as being supportive to the number of cases in which the institution was a shareholder in the event quarter for that year. For e.g. if the institution was a shareholder in 7 target firms in event quarter and increased its ownership, as described above, in 3 of those targets the ratio is 3/7. This captures the fraction of targets in the year that it supported.
3. We then rank all institutions based on this annual ratio. We only inlcude institutions that increase ownership in at least one target and held at least 25% of the cases in that year.

The instituions in the top quartile are classied as being supportive for year y. [41] Activism-friendly institutions are institutions that were classified as being supportive of activism in year y-4, y-3, and y-2. Note that we do not include year y-1, as we require institutional ownership in four quarter after the event to construct this measure. In other words, if we would have included year y-1 that would require data from year y (current year).

[41] It is one of the past three years. We do the ranking in each year of the three years, and identify institutions as friendly as long as they are of top quartile in at least one of the three years.

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Table 1: Distribution of Hedge Fund Activism

This table reports the annual distribution of activism cases initiated by hedge funds over the 2004-2012 sample period.

Year	Number of Cases
2004	108
2005	169
2006	210
2007	260
2008	150
2009	43
2010	94
2011	82
2012	67
Total	1183

Table 2: Measures of Activism-Friendly Institutional Shareholders

This table reports summary statistics on the three measures of activism-friendly ownership as well as other measures of institutional ownership in Panel A. Panel B displays pairwise correlations for the different measures of institutional ownership. All measures capture the fraction of the target firm owned by institutions in the quarter prior to the 13D filing. DISSAT is the percentage ownership by all institutions that voted at least once in the prior three years against the target firm's management. VOTER is the percentage ownership by all institutions that voted at least once against management in any firm targeted by activists in the prior three years. OWNINC is the percentage ownership by institutions that increased their ownership in other activism targets in the past three years, after the other firms were targeted. VOTER and DISSAT measures are available over the period 2007 to 2012. All other variables are measured over the period 2004 to 2012. TOTINT is the fraction of the target held by all 13F institutions in the quarter prior to the 13D filing. INIHOLD is the fraction of the target held by the activist hedge fund as captured in the 13D filing. TRA, QIX, DED are characterizations of institutions from Bushee (1998), transient, quasi-indexers and dedicated investors, respectively, available on his website. ILTI captures independent long term investors.

Panel A.

	Mean	**Median**	**25% Percentile**	**75th Percentile**	**Standard Deviation**	**Number of Observations**
DISSAT	0.037	0	0	0.057	0.062	656
VOTER	0.194	0.196	0.074	0.295	0.132	656
OWNINC	0.085	0.072	0.021	0.133	0.073	1183
TOTINT	0.494	0.536	0.286	0.705	0.267	1183
INIHOLD	0.075	0.063	0.054	0.088	0.031	1183
TRA	0.133	0.115	0.043	0.198	0.111	1183
QIX	0.259	0.262	0.113	0.391	0.170	1183
DED	0.048	0.018	0	0.069	0.069	1183
ILTI	0.100	0.077	0.010	0.151	0.100	1183

Panel B.

	OWNINC	**VOTER**	**DISSAT**	**TOTINT**	**TRA**	**QIX**	**DED**
VOTER	0.738	1					
DISSAT	0.402	0.482	1				
TOTINT	0.681	0.741	0.350	1			
TRA	0.490	0.434	0.181	0.664	1		
QIX	0.676	0.798	0.413	0.817	0.353	1	
DED	0.163	0.210	0.099	0.399	0.081	0.194	1
ILTI	0.133	0.151	0.050	0.316	0.189	0.271	0.447

Table 3: Likelihood of Being Targeted – Matched Sample

The table reports the results of a logit regression in which the dependent variable is a dummy variable that takes the value of one if the firm was a target of hedge fund activism. The control firms are industry, size and book to market matched firms. OWNINC, VOTER and DISSAT are the three measures of activism-friendly ownership. NOFRD_INC, (NOFRD_VOT), and [NOFRD_DIS] represent the ownership of institutions that are neither INC (VOT) [DIS] nor the event's hedge fund activist. SIZE is the natural log of total assets, LEV is the ratio of book value of debt to total assets. Change in sales is measured over lagged sales. Tobin's Q is the sum of market value of equity and book value of debt over the sum of book value of equity and book value of debt. ROA is net income over lagged total assets. DIV is dividend scaled by book equity. HHI_SALES is the Herfindahl–Hirschman Index of sales in different business segments. PRE13F is a dummy that takes the value of 1 if the activist disclosed having more than 1% ownership in the quarter prior to the end. P-values are in parentheses; standard errors are adjusted for heteroskedasticity, and ***, ** and * indicate significance at the 1%, 5%, and 10% levels. All continuous measures are winsorized at 1% and 99% levels.

	Model 1	**Model 2**	**Model 3**
DISSAT	5.713***		
	(0.000)		
VOTER		1.934**	
		(0.019)	
OWNINC			5.383***
			(0.000)
NOFRD_DIS	2.303***		
	(0.000)		
NOFRD_VOT		2.939***	
		(0.000)	
NOFRD_INC			2.580***
			(0.000)
SIZE	-3.405***	-3.293***	-3.199***
	(0.000)	(0.000)	(0.000)
LEV	1.525***	1.479***	1.227***
	(0.003)	(0.004)	(0.002)
Change in Sales	-0.596*	-0.639**	-0.278
	(0.058)	(0.047)	(0.160)
Tobin Q	0.522**	0.479**	0.144
	(0.033)	(0.042)	(0.216)
ROA	-0.651	-0.583	-0.732
	(0.343)	(0.396)	(0.168)
DIV	-1.557	-1.528	0.576
	(0.381)	(0.392)	(0.666)
HHI_SALES	-0.196	-0.162	0.206
	(0.540)	(0.614)	(0.427)
R&D / Sales	3.285**	3.483***	3.364***
	(0.015)	(0.009)	(0.004)
Number of Analysts	-0.011	-0.002	-0.018
	(0.575)	(0.933)	(0.270)
PRE13F	0.301*	0.301**	0.280**
	(0.051)	(0.047)	(0.021)
Observations	998	998	1,658
H0: friendly<=non-friendly	0.009**	0.822	0.026**
Pseudo-R2	0.208	0.204	0.199

Table 4: Requests by Hedge Fund Activists

This table reports the frequency and success rates of requests made to target firm management by hedge fund activists over the 2004-2012 sample period. The requests are categorized into three primary areas. Merger Related requests include support for or against the sale of target firms, leveraged buyouts, going private, or spinoffs. Governance Related requests include bylaw changes, board representation, CEO turnover, or executive compensation. Capital Structure requests include requests related to debt or equity issuance, share buybacks, or special dividends. The General/ No Request category includes requests with general investment improvements and cases where no requests are made. Request is regarded as being successful if at least one of the requests made by the activist is achieved or the activist reaches agreement with the management. Panel A reports the overall success rates. Panel B reports the fraction of all requests that were successful across quartiles formed on the basis of activism-friendly institutional ownership: DISSAT (column 2), VOTER (column 3) and OWNINC, (column 4). Test1 reports the Chi square from a test that fraction of successful requests in Q4 is different from that in Q1. Test2 reports the Chi square for a test that fraction of success is independent of the activism-friendly quartiles.

Panel A.

Type of Request	Total Number	Request Success	Success Percentage
Merger Related (MERGREQ)	227	116	51.10
Block Merger	68	33	48.53
Merger/Leveraged Buyout	145	72	49.66
Spinoff	51	24	47.06
Governance Related (GOVREQ)	195	122	62.56
Amend Bylaw	40	18	45.00
Board	170	115	67.65
CEO Compensation/Replacement	45	22	48.89
Capital Structure (CSREQ)	77	33	42.86
Dividend/Buyback/Other Capital Structure	77	33	42.86
At Least One Request (OVERALL)	573	375	65.45
General/ No Request (NOREQ)	610	-	-

Panel B

	DISSAT		VOTER		OWNINC	
	Fraction Successful	Total Requests	Fraction Successful	Total Requests	Fraction Successful	Total Requests
Q1	0.565	168	0.529	70	0.587	104
Q2	0.827	52	0.642	81	0.667	141
Q3	0.630	46	0.727	88	0.623	162
Q4	0.683	60	0.632	87	0.717	166
Test1	2.551		1.717		4.887	
P- value	0.110		0.190		0.027***	
Test2	12.408		6.685		5.762	
P-value	0.006***		0.083*		0.124	

Table 5: Short-term Stock Returns Around Announcement of 13D Filing

This table displays CARs for two different trading day windows for quartiles formed on the basis of activism-friendly measures, with Q4 (Q1) being the quartile with the highest (lowest) value of the activism-friendly measures. In Panel A (Panel B) [Panel C], the quartiles are formed on the basis of the activism-friendly ownership measure DISSAT (VOTER) [OWNINC]. The CARs are calculated in excess of the CRSP value-weighted index. The P-value (Ranksum) tests for whether mean (median) difference between quartile 4 (Q4) and quartile 1(Q1) is different from zero. ***, ** and * indicate significance at the 1%, 5%, and 10% levels.

	CAR(-2,+2)	**CAR(-2,+20)**	**Number**
		Panel A: DISSAT	
Q1	0.020	0.015	349
Q2	0.022	0.018	98
Q3	0.027	0.025	98
Q4	0.039	0.064	99
Q4-Q1	0.019	0.049	
P-val	0.088*	0.009***	
Ranksum	0.062*	0.001***	
		Panel B: VOTER	
Q1	0.012	-0.001	153
Q2	0.013	0.020	164
Q3	0.039	0.040	163
Q4	0.033	0.038	164
Q4-Q1	0.020	0.039	
P-val	0.036**	0.022**	
Ranksum	0.035**	0.001***	

	CAR(-2,+2)	CAR(-2,+20)	Number
	Panel C: OWNINC		
Q1	0.018	0.020	243
Q2	0.027	0.042	292
Q3	0.027	0.029	295
Q4	0.040	0.044	295
Q4-Q1	0.021	0.024	
P-val	0.006***	0.063*	
Ranksum	0.005***	0.010***	

Table 6: Multivariate Estimation for CARs

This table reports the estimation of a multivariate regression in which the CAR around the 13D filing date is the dependent variable using two different trading day windows. DISSAT, VOTER, and OWNINC are the three measures of activism-friendly ownership. Nofrd_DIS, (Nofrd_vot), and [Nofrd_own] is the 13F ownership of institutions that are neither DISSAT (VOT) [OWNINC] nor the hedge fund activist of the event. PRE13F is a dummy that is one if the activist had greater than 1% ownership in the quarter prior to 13D. PRE12_STK is the monthly compounded stock return from *m-12* to *m-1*, where *m* is the event month. SIZE is the natural log of the target's total assets, LEV is the ratio of book value of debt to total assets. NOREQ is an indicator variable for events with no request made in 13D filings. CSREQ (MERGREQ) [GOVREQ] are indicator variables that take the value of one when the activist makes requests related to capital structure (merger) [governance]. All regressions control for year and industry fixed effects. The p-values, based on standard errors adjusted for heteroskedasticity, are in parentheses, and ***, ** and * indicate significance at the 1%, 5%, and 10% levels. All continuous measures are winsorized at 1% and 99% levels.

	Measure 1: DISSAT		**Measure 2: VOTER**		**Measure 3: OWNINC**	
	(-2,+2)	(-2,+20)	(-2,+2)	(-2,+20)	(-2,+2)	(-2,+20)
DISSAT	0.004	0.175*				
	(0.956)	(0.089)				
VOTER			0.068*	0.107*		
			(0.079)	(0.072)		
OWNINC					0.105**	0.142*
					(0.045)	(0.086)
Nofrd_DIS	0.032	0.034				
	(0.147)	(0.342)				
Nofrd_vot			0.008	0.001		
			(0.778)	(0.991)		
Nofrd_inc					-0.003	0.003
					(0.874)	(0.932)
PRE13F	-0.001	0.006	-0.002	0.005	0.000	0.003
	(0.933)	(0.665)	(0.836)	(0.725)	(0.988)	(0.760)
PRE12_STK	-0.019**	-0.030**	-0.019**	-0.032**	-0.009	-0.026**
	(0.028)	(0.045)	(0.027)	(0.033)	(0.142)	(0.012)
SIZE	0.000	-0.004	-0.001	-0.004	-0.001	-0.005
	(0.909)	(0.392)	(0.835)	(0.368)	(0.774)	(0.177)
LEV	-0.008	-0.085**	-0.006	-0.079**	0.005	-0.008
	(0.686)	(0.017)	(0.766)	(0.026)	(0.753)	(0.761)
NOREQ	-0.018**	-0.017	-0.017*	-0.019	-0.020***	-0.024**
	(0.048)	(0.271)	(0.059)	(0.212)	(0.002)	(0.033)
CSREQ	0.001	0.009	0.001	0.009	0.001	0.001
	(0.956)	(0.726)	(0.973)	(0.720)	(0.929)	(0.978)
MERGREQ	-0.004	0.011	-0.002	0.010	0.004	0.000
	(0.712)	(0.572)	(0.851)	(0.618)	(0.629)	(0.993)
GOVREQ	-0.010	-0.002	-0.010	-0.003	0.002	0.009
	(0.400)	(0.925)	(0.391)	(0.870)	(0.800)	(0.549)
Observations	622	622	622	622	1,059	1,059
R-squared	0.190	0.150	0.192	0.150	0.192	0.127
Year, Ind FE	Y, Y	Y, Y	Y, Y	Y, Y	Y, Y	Y, Y
H0: friendly<=nofrd	0.660	0.084*	0.110	0.095*	0.034**	0.072*

Table 7: Multivariate Analysis of BHARs

This table displays OLS estimation with 36 month BHARS that are market adjusted. DISSAT (VOTER) [OWNINC] are measure for activism-friendly ownership. Nofrd_DIS, (Nofrd_vot), and [Nofrd_inc] is the 13F ownership of institutions that are neither DISSAT (VOTER) [OWNINC] nor the hedge fund activist of the event. PRE13F is a dummy that is if the activist had greater than 1% ownership in the quarter prior to 13D. PRE12_STK is the monthly compounded stock return from *m-12* to *m-1*, where *m* is the event month. SIZE is natural log of total assets, LEV is the ratio of book value of debt to total assets. NOREQ is a dummy for events with no request made in 13D filings. CSREQ (MERGREQ) [GOVREQ] are dummies that take the value of one when the activist makes requests related to capital structure (merger) [governance]. P-value based on standard errors adjusted for heteroskedasticity are in parentheses, and ***, ** and * indicate significance at the 1%, 5%, and 10% levels. All continuous measures are winsorized at 1% and 99% levels.

	Market Adjusted BHAR (36 months)		
DISSAT	1.251**		
	(0.037)		
Nofrd_DIS	-0.044		
	(0.796)		
VOTER		0.919***	
		(0.006)	
Nofrd_VOTER		-0.473**	
		(0.022)	
OwnINC			0.970**
			(0.025)
Nofrd_owninc			-0.122
			(0.368)
SIZE	-0.003	-0.013	0.007
	(0.902)	(0.580)	(0.713)
LEV	-0.104	-0.034	-0.025
	(0.583)	(0.856)	(0.854)
PRE12_STK	0.091	0.075	0.100**
	(0.181)	(0.263)	(0.029)
PRE13F	-0.106	-0.121*	-0.028
	(0.123)	(0.078)	(0.551)
NOREQ	0.196***	0.182**	0.126**
	(0.009)	(0.014)	(0.016)
CSREQ	0.108	0.110	0.062
	(0.439)	(0.434)	(0.496)
MERGREQ	0.040	0.037	0.014
	(0.660)	(0.678)	(0.829)
GOVREQ	0.212**	0.199*	0.150**
	(0.047)	(0.062)	(0.047)
Observations	621	621	1,058
R-squared	0.147	0.156	0.125
Year and Ind FE	Yes, Yes	Yes, Yes	Yes, Yes
H0: Friendly<=Nofrd	0.013**	0.000***	0.010***

Table 8: Operating Performance

RROA(3) and RROA(5) is the abnormal industry adjusted ROA for three and five years post event year respectively. DISSAT, VOTER and OWNINC are the three measures of activism-friendly ownership. Nofrd_DIS, (Nofrd_vot), and [Nofrd_inc] is the 13F ownership of institutions that are neither DIS (VOT) [INC] nor the hedge fund activist of the event. PRE13F is a dummy that is if the activist had greater than 1% ownership in the quarter prior to 13D. PRE12_STK is the monthly compounded stock return from *m-12* to *m-1*, where *m* is the event month. SIZE is natural log of total assets, LEV is the ratio of book value of debt to total assets. NOREQ is a dummy for events with no request made in 13D filings. CSREQ (MERGREQ) [GOVREQ] are dummies that take the value of one when the activist makes requests related to capital structure (merger) [governance]. All regressions control for year and industry fixed effects. P-value based on standard errors adjusted for heteroskedasticity are in parentheses, and ***, ** and * indicate significance at the 1%, 5%, and 10% levels. All continuous measures are winsorized at 1% and 99% levels.

	RROA(3)	RROA(5)	RROA(3)	RROA(5)	RROA(3)	RROA(5)
DISSAT	0.357***	0.361***				
	(0.000)	(0.000)				
VOTER			0.247***	0.211***		
			(0.000)	(0.001)		
OWNINC					0.291***	0.229**
					(0.004)	(0.019)
Nofrd_DIS	0.034	0.024				
	(0.389)	(0.531)				
Nofrd_VOTER			-0.039	-0.032		
			(0.474)	(0.544)		
Nofrd_INC					-0.058*	-0.040
					(0.083)	(0.221)
SIZE	-0.004	-0.002	-0.006	-0.003	-0.000	0.002
	(0.236)	(0.610)	(0.124)	(0.416)	(0.956)	(0.475)
LEV	0.065	0.052	0.082*	0.067	0.123***	0.111***
	(0.126)	(0.217)	(0.059)	(0.121)	(0.000)	(0.001)
PRE12_STK	0.011	0.010	0.008	0.007	0.012	0.012
	(0.565)	(0.589)	(0.688)	(0.725)	(0.454)	(0.397)
PRE13F	-0.007	-0.011	-0.010	-0.014	0.006	0.006
	(0.654)	(0.454)	(0.508)	(0.354)	(0.585)	(0.581)
NOREQ	-0.018	-0.018	-0.023	-0.024	-0.023*	-0.022*
	(0.274)	(0.267)	(0.154)	(0.142)	(0.085)	(0.086)
CSREQ	-0.046	-0.034	-0.046	-0.033	-0.024	-0.011
	(0.106)	(0.214)	(0.116)	(0.226)	(0.213)	(0.551)
MERGREQ	-0.007	-0.005	-0.005	-0.004	-0.013	-0.016
	(0.790)	(0.852)	(0.847)	(0.872)	(0.507)	(0.384)
GOVREQ	0.019	0.007	0.012	0.000	0.009	0.001
	(0.407)	(0.759)	(0.598)	(0.997)	(0.615)	(0.975)
Observations	398	398	398	398	671	671
R-squared	0.052	0.047	0.060	0.047	0.064	0.064
Year FE	YES	YES	YES	YES	YES	YES
H0: Friendly <=Non Friendly	0.001***	0.001***	0.001***	0.003***	0.002***	0.009***

Table 9: Voting Patterns in Shareholder-Sponsored Proposals

This table reports partial results of a logit regression in which the dependent variable is one if the fund votes in favor of the proposal and zero otherwise. Activist Sponsored is an indicator variable that takes the value of one if the proposal is sponsored by the hedge fund activist. Friendly Institution is an indicator variable that takes the value of one if the fund is classified as activism-friendly based on the measure listed in the panel heading. Control variables included but not displayed are SIZE, natural log of total assets; LEV, the ratio of book value of debt to total assets; Change in sales, measured over lagged sales; Tobin Q, the sum of market value of equity and book value of debt over the sum of book value of equity and book value of debt; ROA, net income over lagged total assets; DIV, dividend scaled by book equity; HHI_SALES, the Herfindahl–Hirschman Index of sales in different business segments; PRE13F, a dummy that takes the value of 1 if the activist disclosed having more than 1% ownership in the quarter prior to the end. Also included are proposal and year fixed effects. The sample includes all shareholder proposals in target firms in the two years after the 13D filing. The number in brackets shows p-values.

	Panel A: DISSAT		**Panel B: VOTER**		**Panel C: OWNINC**	
	All Shareholder Proposals	Institution Sponsored Proposals	All Shareholder Proposals	Institution Sponsored Proposals	All Shareholder Proposals	Institution Sponsored Proposals
Activist x Friendly	0.614***	0.579***	0.791***	0.694***	1.269***	1.185***
	(0.003)	(0.007)	(0.000)	(0.001)	(0.000)	(0.000)
Friendly	-0.914***	-0.879***	-0.809***	-0.712***	-1.081***	-0.997***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Activist Sponsored	-0.987	-9.227	-0.786	-1.244	0.715	-5.467
	(0.232)	(0.546)	(0.338)	(0.933)	(0.819)	(0.713)
Pseudo R-squared	0.331	0.393	0.336	0.394	0.304	0.337
N	15925	10827	15925	10827	23406	15528

Table 10: Stock-Picking Ability of Activism-Friendly Institutions

Panel A: Return Performance of Activism-Friendly and Other Portfolios

This table reports alphas from monthly time series regression of Long Short portfolio on Fama-French-Carhart four factor model. Each month we go long the value-weighted portfolio of Activism-Friendly institutions and go short the value-weighted portfolio of other institutions. Non-targets refer to the portfolio which goes long the value-weighted non-target portfolio of activism-friendly institutions and short the value-weighted non-target portfolio of other institutions. Non-target portfolio consists of firms that were not targeted by hedge fund activists. Average value-weighted refers to the long (short) value weighted portfolio for each institution month average across all friendly (other) institutions in that month.

		DISSAT	**VOTER**	**OWNINC**
Value-weighted	Alpha	-0.09%	-0.09%	-0.13%
	P-Value	0.014**	0.006***	0.000***
Non-targets	Alpha	-0.09%	-0.09%	-0.13%
	P-Value	0.015**	0.006***	0.000***
Average value-weighted	Alpha	-0.05%	-0.00%	-0.12%
	P-Value	0.264	0.967	0.000***

Panel B: Change in Holdings Prior to 13D Filing

This table reports the average value of the Up-targeted and Down-targeted variables. The Up-targeted dummy takes the value of one when the activism-friendly institution increases its holding of a stock in the quarter (average of four quarters or year) prior to 13D filing and it is targeted by activists and zero if it increases its holdings and the stock is not targeted. Similarly, the Down-targeted dummy takes the value of one when the activism-friendly institution decreases its holding of a stock in the quarter (average of four quarters or year) prior to 13D filing and it is targeted by activists and zero if it decreases its holdings and the stock is not targeted.

	Quarter Prior to 13D Filing			**Year Prior to 13D Filing**		
	DISSAT	VOTER	OWNINC	DISSAT	VOTER	OWNINC
Up-targeted	0.54%	0.49%	0.54%	0.55%	0.51%	0.56%
Down-targeted	0.58%	0.52%	0.57%	0.56%	0.50%	0.54%
DIFF: Up%-down%	-0.04%	-0.03%	-0.03%	-0.01%	0.01%	0.01%
P-value (Z-statistic)	0.000***	0.000***	0.001***	0.581	0.282	0.167

Panel C: Performance of Activism-Friendly Institutional Holdings of Target Firms

This table reports alphas from monthly time series regressions of the long-short portfolio on the Fama-French-Carhart four factor model. Each month we go long (short) the value-weighted portfolio of target stocks that experience an increase (decrease) in holdings in the quarter prior to the 13D filing by activism-friendly institutions and go short the value-weighted portfolio of other institutions. The Yearly Average captures long/short performance based on increase/decrease of activism-friendly institutions' holdings of target stocks in the year prior, or prior 4 quarters, to the 13D filing. Average Value Weighted forms the long/ short portfolios based on average increase/decrease of target holding for all friendly institutions.

		DISSAT	**VOTER**	**OWNINC**
Value weighted	Alpha	-0.16%	-0.02%	0.16%
	P- value	0.758	0.922	0.526
Yearly average	Alpha	-0.04%	-0.07%	0.16%
	P- value	0.935	0.788	0.580
Average value weighted	Alpha	0.40%	0.26%	-0.01%
	P- value	0.368	0.234	0.937

Table 11: Activism-Friendly Ownership, Indexers and BHARs

This table reports a regression in which the dependent variable is the 36-month market-adjusted BHARs. As before DISSAT (VOTER) [OWNINC] are measures for activism-friendly ownership and Nofrd_DIS, (Nofrd_vot), and [Nofrd_inc] is the 13F ownership of institutions that are neither DISSAT (VOTER) [OWNINC] nor the hedge fund activist of the event. Other control variables -Size, Leverage, Pre12_STK, Pre13F, NOREQ, CSREQ, MERGREQ, and GOVREQ were included in the estimation but not tabulated. QIX is the pre-event ownership by institutions classed as QIX by Bushee's measure. BSV is the ownership of Barclays, State Street and Vanguard. All regressions control for year and industry fixed effects. P-value based on standard errors adjusted for heteroskedasticity are in parentheses, and ***, ** and * indicate significance at the 1%, 5%, and 10% levels. All continuous measures are winsorized at 1% and 99% levels.

	36 Month Market Adjusted BHAR					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
DISSAT	1.340*			1.362*		
	(0.075)			(0.051)		
Nofrd_DIS	0.096			0.110		
	(0.671)			(0.538)		
VOTER		1.295***			1.075***	
		(0.007)			(0.003)	
Nofrd_vot		-0.215			-0.297	
		(0.355)			(0.173)	
OWNINC			1.072**			0.822
			(0.038)			(0.137)
Nofrd_inc			-0.079			-0.053
			(0.623)			(0.688)
QIX	0.035	-0.383	0.140			
	(0.921)	(0.324)	(0.573)			
BSV				0.082	-1.384	2.286
				(0.975)	(0.606)	(0.311)
Observations	620	620	1,058	620	620	1,058
R-squared	0.141	0.150	0.116	0.141	0.149	0.118
Year FE	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES

Table 12: Performance and Relationship of Activism-Friendly Institutions with the Activist

This table reports a regression in which the dependent variable is the 36-month market-adjusted BHARs. Overlapped_OWNINC is ownership by activism-friendly owners that were also present and classified as friendly (by the OWNINC measure) in the prior case conducted by the activist. New_Owninc is ownership by friendly institutions that were not present in the prior case of the activist. Overlapped_voter and Overlapped_DISSAT are similarly defined. All cases that are the first cases of the activist in the sample have been dropped. . Other control variables -Size, Leverage, Pre12_STK, Pre13F, NOREQ, CSREQ, MERGREQ, and GOVREQ were included in the estimation but not tabulated. All regressions control for year and industry fixed effects. P-value based on standard errors adjusted for heteroskedasticity are in parentheses, and ***, ** and * indicate significance at the 1%, 5%, and 10% levels. All continuous measures are winsorized at 1% and 99% levels.

	36 Month Market Adjusted BHAR		
	Model 1	Model 2	Model 3
Overlapped_DISSAT	0.765		
	(0.801)		
New_ DISSAT	1.821**		
	(0.035)		
Overlapped_VOTER		1.262**	
		(0.027)	
New_ VOTER		1.007**	
		(0.024)	
Overlapped_OWNINC			1.251*
			(0.077)
New_ OWNINC			0.386
			(0.532)
Nofrd_ DISSAT	-0.154		
	(0.433)		
Nofrd_ VOTER		-0.736***	
		(0.005)	
Nofrd_ OWNINC			-0.179
			(0.276)
Observations	424	424	660
R-squared	0.171	0.186	0.143
Year FE	YES	YES	YES
Ind FE	YES	YES	YES

Appendix Table 1: Distribution of Activism Cases by Hedge Funds

This table reports the activism frequency of hedge funds over the 2004-2012 sample period . The table includes only hedge funds with at least 15 cases over the sample period.

Hedge Fund	Number of Cases	Percentage of All Cases
Third Point LLC	70	5.92
Millenco LLC	58	4.90
Ramius LLC	47	3.97
VA Partners LLC	41	3.47
Icahn Carl C	37	3.13
Blum Capital Partners LP	20	1.69
SAC Capital Advisors LLC	20	1.69
Pirate Capital LLC	19	1.61
Prides Capital Partners, LLC	19	1.61
SCSF Equities, LLC	19	1.61
Steel Partners Holdings L.P.	19	1.61
Clinton Group INC	18	1.52
Elliot Associates, L.P.	18	1.52
Jana Partners LLC	17	1.44
Shamrock Activist Value Fund L P	17	1.44
Wynnefield Partners Small Cap Value LP	17	1.44
Orbimed Advisors LLC	16	1.35
Riley Investment Management LLC	16	1.35
Seidman Lawrence B	16	1.35
Fine Capital Partners, L.P.	15	1.27
Harbinger Capital Partners Master Fund I, LTD.	15	1.27
MMI Investments, L.P.	15	1.27

Appendix Table 2: Likelihood of Being Targeted in Full Sample

The dependent variable is one if the firm was a hedge fund target in the year. The sample consists of all firms in Compustat. DISSAT, VOTER, OWNINC are the three measures of activism-friendly ownership. NOFRD_INC, (NOFRD_VOT), and [NOFRD_DIS] represent the ownership of institutions that are neither INC (VOT) [DIS] nor the event's hedge fund activist. SIZE is the natural log of total assets, LEV is the ratio of book value of debt to total assets. Change in sales is measured over lagged sales. Tobin's Q is the sum of market value of equity and book value of debt over the sum of book value of equity and book value of debt. ROA is net income over lagged total assets. DIV is dividend scaled by book equity. HHI_SALES is the Herfindahl–Hirschman Index of sales in different business segments. PRE13F takes the value of 1 if the activist holds more than 1% in the quarter prior to the filing. P-values are in parentheses; standard errors are adjusted for heteroskedasticity, ***, ** and * indicate significance at the 1%, 5%, and 10% levels. All continuous measures are winsorized at 1% and 99% levels.

	Model 1	Model 2	Model 3
DISSAT	8.413***		
	(0.000)		
VOTER		1.416***	
		(0.001)	
OWNINC			2.384***
			(0.000)
NOFRD_DIS	1.407***		
	(0.000)		
NOFRD_VOT		2.220***	
		(0.000)	
NOFRD_INC			1.942***
			(0.000)
SIZE	-0.183***	-0.154***	-0.184***
	(0.000)	(0.000)	(0.000)
LEV	0.460*	0.448	0.489**
	(0.095)	(0.102)	(0.021)
Change in Sales	-0.527***	-0.553***	-0.434***
	(0.001)	(0.001)	(0.000)
Tobin's Q	-0.138***	-0.140***	-0.151***
	(0.000)	(0.000)	(0.000)
ROA	-0.506	-0.484	-0.415*
	(0.107)	(0.128)	(0.077)
DIV	-1.441	-1.492	-1.291
	(0.193)	(0.172)	(0.124)
HHI_SALES	-0.010	-0.033	0.055
	(0.958)	(0.865)	(0.726)
R&D / Sales	0.025	0.033	0.326
	(0.970)	(0.961)	(0.516)
Number of Analysts	-0.013	-0.002	-0.015
	(0.260)	(0.884)	(0.116)
PRE13F	0.189*	0.166*	0.137*
	(0.059)	(0.095)	(0.074)
INTERCEPT	-3.388***	-3.753***	-3.739***
	(0.000)	(0.000)	(0.000)
Observations	25,254	25,254	39,697
Year, Ind FE	Yes,Yes	Yes,Yes	Yes,Yes
Pseudo R2	0.098	0.089	0.080
H0: friendly<=other	0.000***	0.896	0.276

Appendix Table 3: Buy and Hold Abnormal Returns

This table displays benchmark adjusted buy and hold returns over different holding periods. For the market-adjusted returns the benchmark is the CRSP Value Weighted Index, for DGTW the benchmarks are in accordance with DGTW and for Industry adjusted the benchmark is Fama French 48 industry returns. In Panel A (Panel B) [Panel C], the quartiles are formed on the basis of the activism-friendly ownership measure DISSAT (VOTER) [OWNINC]. Q1 (Q4) is the quartile with the lowest (highest) activism-friendly ownership. The P-val (Ranksum) tests for whether mean (median) difference between quartile 4 (Q4) and quartile 1(Q1) is different from zero. ***, ** and * indicate significance at the 1%, 5%, and 10% levels.

	Market Adjusted			**DGTW**			**Industry Adjusted**		
	BHAR 24 months	BHAR 36 months	BHAR 60 months	BHAR 24 months	BHAR 36 months	BHAR 60 months	BHAR 24 months	BHAR 36 months	BHAR 60 months
Panel A: DISSAT									
Q1	-0.020	0.011	0.079	-0.028	0.021	0.126	-0.031	-0.008	0.041
Q2	0.013	0.090	0.288	0.061	0.140	0.422	-0.029	0.025	0.220
Q3	0.147	0.211	0.338	0.237	0.335	0.551	0.119	0.194	0.302
Q4	0.153	0.250	0.386	0.225	0.367	0.577	0.134	0.254	0.389
Q4-Q1	0.173	0.239	0.307	0.253	0.346	0.451	0.165	0.262	0.348
P-val	0.022**	0.014**	0.024**	0.001***	0.000***	0.001***	0.031**	0.007***	0.008***
Ranksum	0.003***	0.001***	0.000***	0.000***	0.000***	0.000***	0.004***	0.000***	0.000***
Panel B: VOTER									
Q1	-0.019	0.018	0.079	-0.068	0.006	0.098	-0.018	0.015	0.067
Q2	0.001	0.017	0.166	0.038	0.067	0.306	0.001	0.002	0.144
Q3	0.045	0.129	0.213	0.109	0.229	0.411	0.009	0.103	0.179
Q4	0.118	0.194	0.326	0.172	0.257	0.411	0.076	0.149	0.253
Q4-Q1	0.136	0.175	0.248	0.240	0.251	0.313	0.094	0.135	0.186
P-val	0.067*	0.069*	0.075*	0.002***	0.012**	0.020**	0.215	0.163	0.166
Ranksum	0.001***	0.000***	0.000***	0.000***	0.000***	0.000***	0.010**	0.004***	0.001***
Panel C: OWNINC									
Q1	-0.076	-0.099	-0.050	-0.022	-0.023	0.042	-0.071	-0.096	-0.059
Q2	-0.046	-0.024	0.067	-0.013	0.027	0.111	-0.053	-0.053	0.009
Q3	0.009	0.003	0.040	0.033	0.049	0.134	0.009	-0.007	0.017
Q4	0.088	0.156	0.261	0.133	0.221	0.378	0.061	0.133	0.213
Q4-Q1	0.164	0.254	0.311	0.155	0.244	0.336	0.132	0.228	0.272
P-val	0.004***	0.000***	0.002***	0.009***	0.001***	0.001***	0.019**	0.001***	0.004***
Ranksum	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***

Appendix Table 4: Robustness with BHARs

Panel A (B) displays OLS estimation with DGTW (Industry) adjusted 36 month BHARS. DISSAT (VOTER) [OWNINC] are measure for activism-friendly ownership. Nofrd_DIS, (Nofrd_vot), and [Nofrd_inc] is the 13F ownership of institutions that are neither DISSAT (VOTER) [OWNINC] nor the hedge fund activist of the event. Other variables included in the estimation but not displayed are Size, Lev, Pre12_STK, PRE13F, NOREQ, CSREQ, MERGREQ, and GOVREQ. All estimations have year and industry fixed effects. P-value based on standard errors adjusted for heteroskedasticity are in parentheses, and ***, ** and * indicate significance at the 1%, 5%, and 10% levels. All continuous measures are winsorized at 1% and 99% levels.

	Panel A: DGTW Adjusted BHAR (36 months)			**Panel B: Industry Adjusted BHAR (36 months)**		
DISSAT	1.567***			1.382**		
	(0.008)			(0.020)		
Nofrd_DIS	-0.030			-0.048		
	(0.858)			(0.778)		
VOTER		1.088***			0.873***	
		(0.001)			(0.008)	
Nofrd_VOTER		-0.518**			-0.441**	
		(0.015)			(0.035)	
OWNINC			0.932**			1.175***
			(0.044)			(0.006)
Nofrd_owninc			-0.121			-0.138
			(0.384)			(0.300)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year and Ind. FE	Yes, Yes	Yes, Yes	Yes, Yes	Yes, Yes	Yes, Yes	Yes, Yes
Observations	565	565	967	621	621	1,058
R-squared	0.200	0.211	0.160	0.152	0.158	0.134
H0: Friendly<=Nofrd	0.003***	0.000***	0.017**	0.007***	0.001***	0.003***

Appendix Table 5: Calendar Time Portfolios

Calendar Time Portfolios of High Activism-friendly and Low Activism-friendly targets are created over 12, 24, 36, 48 and 60 month horizons. The table reports alphas from weighted least square estimation of monthly returns of the portfolio on the Fama French Carhart four factor model. For each month, the high activism-friendly portfolio consists of all firms that were targeted by hedge fund activism in the past 12, 24, 36, 48, 60 months and had DISSAT in the top quartile. For each month, the low activism-friendly portfolio consists of all firms that were targeted by hedge fund activism in the past 12, 24, 36, 48, 60 months and had DISSAT in the bottom quartile. Panel B (C) use VOTER (OWNINC) as measures of activism-friendly ownership.

Panel A: DISSAT

	(1,12)	(1,24)	(1,36)	(1,48)	(1,60)
			Equal Weighted		
High Friendly	0.970*	1.246***	1.147***	1.042***	1.112***
	(0.070)	(0.000)	(0.001)	(0.001)	(0.0000
Low Friendly	-1.749***	-1.119*	-0.734	-0.617	-0.507
	(0.001)	(0.063)	(0.170)	(0.207)	(0.270)
High – Low	2.469***	2.239***	1.818***	1.585***	1.545***
	(0.000)	(0.000)	(0.001)	(0.002)	(0.002)
			Value Weighted		
High Friendly	1.131*	0.878*	0.802*	0.908**	0.817**
	(0.081)	(0.069)	(0.075)	(0.028)	(0.024)
Low Friendly	-0.577	-0.542	-0.307	-0.088	0.033
	(0.1100	(0.142)	(0.3920	(0.809)	(0.925)
High – Low	1.608**	1.227**	0.966*	0.853	0.678
	(0.019)	(0.041)	(0.082)	(0.114)	(0.183)
# of months	78	78	78	78	78

Panel B: VOTER

	(1,12)	(1,24)	(1,36)	(1,48)	(1,60)
			Equal Weighted		
High Friendly	0.205	0.294	0.412	0.424	0.459*
	(0.543)	(0.380)	(0.204)	(0.152)	(0.090)
Low Friendly	-0.276	0.033	0.055	0.107	0.178
	(0.682)	(0.960)	(0.926)	(0.845)	(0.734)
High – Low	0.576	0.287	0.362	0.306	0.257
	(0.321)	(0.655)	(0.518)	(0.556)	(0.608)
			Value Weighted		
High Friendly	0.809*	0.551	0.549*	0.498*	0.570**
	(0.082)	(0.136)	(0.086)	(0.072)	(0.032)
Low Friendly	-0.809	-0.749	-0.504	-0.214	-0.115
	(0.239)	(0.172)	(0.317)	(0.655)	(0.805)
High – Low	1.765**	1.378**	1.079*	0.699	0.630
	(0.026)	(0.025)	(0.055)	(0.197)	(0.231)
Number of months	78	78	78	78	78

Panel C: OWNINC

	(1,12)	(1,24)	(1,36)	(1,48)	(1,60)
			Equally Weighted		
High Friendly	0.264	0.417*	0.576**	0.436**	0.501**
	(0.322)	(0.085)	(0.016)	(0.042)	(0.011)
Low Friendly	-0.141	-0.066	-0.155	-0.101	-0.048
	0.770	0.883	0.703	0.793	0.896
High – Low	0.494	0.483	0.726*	0.547	0.547
	0.313	0.286	0.067	0.148	0.112
			Value Weighted		
High Friendly	0.703**	0.582**	0.492**	0.435**	0.476**
	0.039	0.018	0.029	0.040	0.023
Low Friendly	-0.520	-0.289	-0.283	-0.284	0.094
	0.320	0.550	0.527	0.498	0.798
High – Low	1.278**	0.880	0.777*	0.716*	0.371
	0.028	0.104	0.100	0.099	0.359
Number of months	113	113	113	113	113

Appendix Table 6: Operating Performance

RROA is the abnormal industry adjusted ROA for different holding periods. Column1, 2 and 3 report results with holding periods of 2, 3 and 5 years, respectively. In Panel A (Panel B) [Panel C], the quartiles are formed on the basis of the activism-friendly ownership measure DISSAT (VOTER) [OWNINC]. Q1 (Q4) is the quartile with the lowest (highest) activism-friendly ownership. The P-val (Ranksum) tests for whether mean (median) difference between quartile 4 (Q4) and quartile 1 (Q1) is different from zero. ***, ** and * indicate significance at the 1%, 5%, and 10% levels.

	RROA(2 year)	RROA(3 year)	RROA(5 year)	Number
Panel A: DISSAT				
Q1	-0.025	-0.025	-0.021	182
Q2	-0.015	-0.001	-0.007	70
Q3	0.019	0.016	0.018	76
Q4	0.033	0.038	0.040	73
Q4-Q1	0.058	0.063	0.061	
P-val	0.013**	0.005***	0.007***	
Ranksum	0.009***	0.003***	0.008***	
Panel B: VOTER				
Q1	-0.044	-0.039	-0.034	88
Q2	-0.045	-0.044	-0.040	89
Q3	0.018	0.020	0.016	110
Q4	0.033	0.037	0.038	114
Q4-Q1	0.077	0.076	0.073	
P-val	0.001***	0.000***	0.001***	
Ranksum	0.000***	0.000***	0.001***	
Panel C: OWNINC				
Q1	-0.027	-0.024	-0.028	141
Q2	-0.020	-0.018	-0.018	181
Q3	0.003	-0.002	-0.004	175
Q4	0.023	0.026	0.028	199
Q4-Q1	0.051	0.050	0.055	
P-val	0.003***	0.002***	0.001***	
Ranksum	0.001***	0.000***	0.000***	

Appendix Table 7: Activism-Friendly Ownership around 13D filing

This table reports the total activism-friendly ownership in each quarter. Quarter 0 is the quarter of the 13D filing. The other quarters are number relative to the event quarter. DISSAT, VOTER and OWNINC are the three measures of activism-friendly ownership.

	DISSAT	**VOTER**	**OWNINC**
Quarter -4	0.079	0.177	0.082
Quarter -3	0.078	0.179	0.083
Quarter -2	0.078	0.186	0.084
Quarter -1	0.081	0.192	0.084
Quarter 0	0.078	0.185	0.081
Quarter 1	0.075	0.177	0.079
Quarter 2	0.071	0.172	0.077
Quarter 3	0.070	0.165	0.076
Quarter 4	0.066	0.154	0.072

Appendix Table 8: Incidence of Activist Sponsored Proposals

The table reports the average fraction of all proposals in a shareholder meeting that are sponsored by the activist. The quartiles are based on the measure of activism-friendly ownership in the top of the column. The number in the brackets indicates the number of shareholder meetings. The sample includes all shareholder meetings for the target firms in the two years after the 13D filing.

	DISSAT	**VOTER**	**OWNINC**
Q1	0.55% (191)	0.60% (139)	0.17% (229)
Q2	1.14% (148)	1.01% (150)	0.77% (237)
Q3	1.47% (158)	2.22% (159)	1.11% (239)
Q4	3.01% (138)	1.79% (187)	1.98% (254)
Diff Q4 - Q1	2.46%	1.19%	1.81%
p-Value	0.004***	0.112	0.002***

Appendix Table 9: Robustness tests with Activist Reputation

This table displays OLS estimation with 36 month BHARS that are market adjusted. DISSAT (VOTER) [OWNINC] are measure for activism-friendly ownership. Nofrd_DIS, (Nofrd_vot), and [Nofrd_inc] is the 13F ownership of institutions that are neither DISSAT (VOTER) [OWNINC] nor the hedge fund activist of the event. Reputation is the average [-20,+20] day CAR on its prior target engagements. Control variables included but not displayed are similar to those in Table 8. Specifically, include are SIZE, LEVERAGE, PRE13F, PRE12_STK, NOREQ, CSREQ, MERGREQ, GOVREQ and year and industry (Fama French 12) fixed effects. P-value based on standard errors adjusted for heteroskedasticity are in parentheses, and ***, ** and * indicate significance at the 1%, 5%, and 10% levels. All continuous measures are winsorized at 1% and 99% levels.

	Model 1	Model 2	Model 3
DISSAT	1.242**		
	(0.039)		
VOTER		0.939***	
		(0.005)	
OWNINC			0.908**
			(0.038)
NOFRD_DIS	-0.002		
	(0.991)		
NOFRD_VOT		-0.437**	
		(0.038)	
NOFRD_INC			-0.1
			(0.467)
REPUTATION	0.46	0.486	0.364
	(0.284)	(0.250)	(0.203)
Observations	621	621	1058
Psuedo R2	0.142	0.152	0.121
Year, Ind FE	Yes&Yes	Yes&Yes	Yes&Yes

Appendix Table 10: Interaction with Requests

This table displays OLS estimation with 36 month BHARS that are market adjusted. DISSAT (VOTER) [OWNINC] are measure for activism-friendly ownership. Non Friendly ownership is the 13F ownership of institutions that are neither DISSAT (VOTER) [OWNINC] nor the hedge fund activist of the event. Control variables included but not displayed are similar to those in Table 8. Specifically, include are SIZE, LEVERAGE, PRE13F, PRE12_STK, NOREQ, CSREQ, MERGREQ, GOVREQ and year and industry (Fama French 12) fixed effects. P-value based on standard errors adjusted for heteroskedasticity are in parentheses, and ***, ** and * indicate significance at the 1%, 5%, and 10% levels. All continuous measures are winsorized at 1% and 99% levels.

	Model 1	**Model 2**	**Model 3**
	DISSAT	**VOTER**	**OWNINC**
Friendly x NOREQ	2.247***	0.956**	1.236**
	(0.010)	(0.028)	(0.048)
Friendly x CSREQ	1.261	0.433	0.729
	(0.446)	(0.581)	(0.471)
Friendly x MERGREQ	-0.232	0.345	-0.055
	(0.820)	(0.553)	(0.924)
Friendly x GOVREQ	0.809	0.577	0.843
	(0.467)	(0.395)	(0.191)
Non Friendly ownership	-0.041	-0.447**	-0.104
Industry, Year Fixed Effects	Yes, Yes	Yes, Yes	Yes, Yes
R-squared	0.145	0.148	0.122
Number of observations	621	621	1058