Essays on Hedge Fund Activism

by

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# Abstract of Essays on Hedge Fund Activism

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The first essay focuses on detailed activities in hedge fund activism targets. We perform a textual analysis of 8-Ks filed by 693 firms targeted by hedge fund activists over the 2005 to 2012 period to document the comprehensive material changes that these firms undergo after being targeted. We benchmark the changes in the year after the 13D filing to those in the year prior to 13D filing, and then control for changes over the same period in propensity score matched firms. The difference-in-differences results suggest that targets of hedge fund activism that are not acquired experience significantly higher incidence of CEO appointments and director arrivals that are both associated with higher shareholder value. The evidence also suggests that some changes that activists request like repurchases, sale of assets and bylaw changes though more frequent are not associated with any value gains. The evidence complements prior work by showing that activists potentially create value through governance changes along with pressurizing the target to sell itself.

The second essay investigates the role of institutional investors in hedge fund activism. Hedge funds activists do not usually hold a large stake in the target firm. Institutional owners by their support or lack thereof can have a significant impact on the success of the activist's campaign. We develop three measures of institutional ownership that is likely to be supportive of activism. Over the period 2004 to 2012 we find that high pre event activism friendly institutional ownership is associated with significantly higher short term and long term stock returns and operating performance of the target firm. Pre event ownership by activism friendly institutions also significantly increases the likelihood of being targeted by hedge fund activists. The paper is one of the first to document that composition of institutional ownership has a significant impact on the likelihood of and value created from hedge fund activism. Preface

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# Institutional Investors and Hedge Fund Activism

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# Abstract

Hedge funds activists do not usually hold a large stake in the target firm. Institutional owners by their support or lack thereof can have a significant impact on the success of the activist's campaign. We develop three measures of institutional ownership that is likely to be supportive of activism. Over the period 2004 to 2012 we find that high pre event activism friendly institutional ownership is associated with significantly higher short term and long term stock returns and operating performance of the target firm. Pre event ownership by activism friendly institutions also significantly increases the likelihood of being targeted by hedge fund activists. The paper is one of the first to document that composition of institutional ownership has a significant impact on the likelihood of and value created from hedge fund activism.

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"The rubric I came up with is V Cubed to encompass the three characteristics we insist on before deploying an activist campaign: value; votes; variety of ways to win." - Barry Rosenstein, JANA Partners<sup>2</sup>

# **1. Introduction**

Hedge fund activists often claim that it is important to have target firm shareholders who are likely to vote with the activist and hence help in accomplishing the activist's agenda. With over 15 trillion in assets, the mutual fund industry owns a substantial share of public equity. The support or lack thereof of these institutional investors is likely to have a significant impact on the success of the activist's campaign. In this paper, we examine the impact of institutional ownership and its composition on the shareholder value created by hedge fund activism.

Not all institutional investors are similar when it comes to their response to hedge fund activism. On the one hand, there are institutions exemplified by Mario Gabelli, founder of Gamco Investors, who said that "The Hedge funds and portfolio managers have a right to do this," and believe that the market is helped by Activists.<sup>3</sup> On the other hand, Vanguard and BlackRock, along with others, have recently formed an alliance called Shareholder-Director Exchange that seeks to "counter the disproportionate influence of activist hedge funds on corporate America."<sup>4</sup>

In this paper, we examine the composition of institutional ownership, especially with respect to whether it is likely to be supportive of hedge fund activism and its impact

 <sup>&</sup>lt;sup>2</sup> "Jana's Rosenstein is a serious activist" – Pensions and Investment, April 1 2013. Available at <a href="http://www.pionline.com/article/20130401/PRINT/304019995/janas-rosenstein-is-a-serious-activist#">http://www.pionline.com/article/20130401/PRINT/304019995/janas-rosenstein-is-a-serious-activist#</a>.
 <sup>3</sup> See "Gabelli Says Market Helped by Activist Stands" available at

http://www.bloomberg.com/news/2013-02-28/gabelli-says-market-helped-by-activist-stands-tom-keene.html

<sup>&</sup>lt;sup>4</sup> See "Unlikely Allies Seek to Check Power of Activist Hedge Funds," by David Gelles, Feb 2 2014 available at http://dealbook.nytimes.com/2014/02/02/unlikely-allies-seek-to-check-power-of-activist-hedge-funds/

on the shareholder value created from activism. If the ownership of the target firm comprises of institutions that are supportive of the hedge fund activist, the managers of the target firm are likely to feel substantial pressure to make the changes demanded by the activist. On the other hand, if the institutional owners of the target firm are skeptical of the hedge fund activist and are supportive of the management, the activist may find it difficult to bring about the desired changes.

We develop three measures to capture the propensity of an institutional investor to support the hedge fund activist. The first measure captures institutional investors that are dissatisfied with the target firm from their past voting pattern, i.e., whether they voted against target management in the past. These dissatisfied institutional investors, that still have a stake in the firm, are more likely to support the activist. The second measure also uses an institution's voting patterns, in particular it's voting against management of prior activism targets. As most institutions tend to vote with management, this measure captures the institution's attitude towards activist initiated changes. Such independent institutions are less likely to blindly support management and therefore are more open to the activist's agenda. The last and third measure is based on the institution's behavior in prior activism targets. If the institution increases its ownership in prior targets after they were targeted, it suggests that they have a positive view on the potential gains from the activism and hence more likely to support it in the future.

Next, we examine if the presence of activism friendly institutions is associated with greater shareholder value from activism. We hand collect all 13D filing over the period 2004 to 2012 and employ several screens to identify cases of hedge fund activism. The final sample consists of 1183 cases from 217 hedge fund activists. We begin by examining short term returns to the announcement of hedge fund activism. We study several different trading day windows around the date of the 13D filing and find that the average cumulative abnormal returns (CARs) are significantly higher for the quartile with the highest relative to the quartile with the lowest level of pre event activism friendly institutional ownership. This results holds for all trading windows and for all measures of activism friendly ownership. In multivariate regressions, we control for the pre event ownership of other institutional ownership and the activist along with firm level and case specific variables. The level of pre event activism friendly ownership is 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 the activism friendly measure is associated with an increase in the [-2,+20] day CAR by 1.04% to 1.41% depending on the measure. It is worth noting that other institutional ownership, not classified as activism friendly, is never significant and does not appear to be related to the CARs in any specification.

We also examine long term returns to activism by estimating buy and hold returns, as well as, estimating four factor alphas to calendar time portfolios. The buy and hold returns are estimated over different horizons, i.e., 24, 36 and 60 months. We also use three different benchmarks, i.e., the CRSP Value weighted index, the DGTW portfolios and Fama French 48 industry classification. The results are consistent across all horizons, benchmarks and for all 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. Controlling for other institutional ownership, firm and activism specific variables does not impact 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 weaker with calendar time alphas.

Lastly, we examine the effect of activism friendly ownership on the target's post event operating performance. Consistent with Chen, Harford and Li (2007) we estimate abnormal industry adjusted return on assets for the three and five year following the activism initiation. Consistent with prior results we find the operating performance is significantly higher for targets in the highest quartile of activism friendly ownership relative to targets in the lowest quartile of activism friendly ownership. 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 institutional ownership have higher value created from the activism, as captured by short term and long term stock returns as well as operating performance.

As we measure friendly ownership in the quarter prior to 13D filing, we examine whether friendly institutions continue to hold targeted firm's stock and be present to support the activist's agenda after 13D filing. We find that friendly ownership is stable four quarters prior and post 13D filing. Analysis of friendly institution voting in shareholder proposals in the two years after being targeted shows that whereas these institutions are generally not supportive of shareholder proposals, they are significantly more likely to support 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 voted is very small.

An alternate interpretation of the results could be that friendly institutions are smart investors and the higher returns we document in their presence arise not from their support of the activist but rather their ability to pick the future targets or winners. То 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 regression of the monthly returns to the long/short portfolio on 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 targets of activists, 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 stock that is later targeted. Further, long / short portfolios based on target stock they increase / decrease holding of shows no evidence of positive and significant alpha. In short, it is unlikely that the ability of friendly institutions to pick winners or pick targets accounts for the results.

We then study if the presence of activism friendly institutions increases the likelihood that a firm will be targeted for hedge fund activism. In a matched sample, we find that firms with higher level of activism friendly institutional ownership in the pre event quarter are more likely to be targeted than control firms. Though other institutional ownership is also associated with a higher likelihood of being targeted, activism friendly institutional ownership is significantly more likely than other institutional ownership to increase the likelihood of being targeted.

Hedge fund activism has been hailed as having the potential to solve the monitoring and agency problems of widely held equity. There have been cases with spectacular success. But there have also been failures. Though average returns are positive there are still many instances when hedge fund activism is associated with little or negative gains to shareholders. The results in this paper point to one factor, the presence of activism friendly institutions that help explain the cross sectional variation in the value created from hedge fund activism. The results suggest, that support from institutional shareholders is crucial to unlocking firm value through activism.

There is also a large literature that characterizes institutions, especially along the line of investment horizon or turnover propensity and size of the stake (See for e.g., Bushee (1998) and Chen, Harford and Li (2007)). These characteristics are shown to impact institutional monitoring and firm policy. We characterize institutions along another dimension, their likelihood of supporting hedge fund activism. It is worth noting that the characterization of institutional investors with respect to their support of hedge fund activism is different from other characterization 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 be through activism or proxy voting.

The next section briefly reviews the relevant literature. Section 3 describes the data and the construction of activism friendly measures. Section 4 discusses the performance of firms after being targeted for activism, section 5 examine friendly institution voting and stock picking ability, and section 6 discusses the likelihood of being targeted. Finally, Section 7 concludes.

# 2. Literature Review

The paper is related to the growing literature on the performance impact of shareholder activism. While the earlier papers were about institutional shareholder activism (see Gillan and Starks (2007) for a survey), recent papers examine hedge fund activism. Brav, Jiang, Partnoy, and Thomas (2008) document abnormal positive returns to the announcement of hedge fund activism. They also examine firm characteristics that are more likely to be associated with being targeted by hedge funds. Clifford (2008) also documents higher announcement and long term returns to 13D interventions (See also Bebchuk, Brav and Jiang (2015)). Greenwood and Schor (2009) document that targets that are eventually acquired account for most of the returns from hedge fund activism (See also Boyson, Gantchev and Shivdasani (2016), and Klein and Zur (2009))) Brav, Jiang and Kim (2015a), using plant-level data from U.S. Census Bureau, find that hedge fund activism can increase the productivity of target firms by efficient capital redeployment (See also Boyson and Mooradian (2011)). Becht, Franks, Mayer and Rossi (2009) examine proprietary and detailed data on the interventions of one hedge fund and document positive impact of such interventions on target firm abnormal returns.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> 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. Studies on debtholders find hedge fund activism has some negative impact on debtholders (See Klein and Zur (2011)) and is associated with increased bank

Whereas existing literature has examined how performance varies by hedge fund characteristics and by nature of changes sought, there is yet little understanding of how institutional ownership and its composition impacts the success of the activist's campaign. This 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 impacts the success of the activism. Whereas Appel, Gormley and Keim (2016) document the role of passive mutual funds in supporting requests from hedge fund activist, we study a broad base of activism friendly institutions and examine whether their explicit or implicit support of the activist is positively associated with increase in value for shareholder.

Gantchev (2013) models the hedge fund's decision in a sequential model and estimates that the costs of activism to exceed two-thirds of returns. Levit (2014) models the activist's choice between strategic voice and threat of exit. Gantchev and Jotikasthira (2015) study how hedge fund activist's time the accumulation of their initial stake from signals of mutual fund trading. The paper contributes to this literature by studying how the composition of institutional shareholders impacts the hedge fund's decision to initiate an activist campaign.

Lastly, our paper is related to the literature that examines composition of institutional ownership and its effect on corporate decision making. Bushee (1998)

spreads (See Sunder, Sunder and Wongsunwai (2014)). Brav, Jiang and Tian (2014) study the effect of hedge fund activism on innovation efficiency, while Cheng, Huang and Li (2015) document a positive relation between hedge fund activist monitoring and accounting conservatism. Cheng, Huang, Li and Stanfield (2012) document the effect of hedge fund activism on corporate tax avoidance. Gantchev, Gredil and Jotikasthira (2015) examine the spill over effects of hedge fund activism. Gow, Shin and Srinivasan (2014a) study the firm level determinants and consequences of director arrivals in hedge fund activism cases, while Gow, Shin and Srinivasan (2014b) examine the impact of activism on target firm's director turnover.

categorizes institutions based on size of holdings and frequency of trading. Bushee (1998) documents that institutions with short horizons are associated with myopic behavior like reduction in R&D investment. Burns, Kedia and Lipson (2010) use Bushee's classification and also find that the presence of short horizon institutions are associated with greater earnings management.<sup>6</sup> Chen, Harford and Li (2007) also identify independent long term institutions (ILTI) based on investor type and long term holding, and examine its effect in mergers. This paper develops another dimension of institutional ownership, i.e., their propensity to support shareholder activism and examines its role in unlocking the returns from activism.

#### 3. Data Description

#### 3.1 Sample

The sample of firms targeted by activist hedge funds is obtained by searching the Securities and Exchange Commission (SEC) EDGAR database for all 13D filings from 2000 to 2012.<sup>7</sup> To identify activist filings by hedge funds we check the name of the 13D filer against several lists of hedge funds. The list of institutions categorized as hedge funds is compiled from five sources: 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).<sup>8</sup> This results in a sample of 2156 activism cases initiated by 236 unique hedge fund activists.

<sup>&</sup>lt;sup>6</sup> Parrino, Sias and Starks (2003) classify institutions based on majority assets, while Davis and Kim (2007) classify institutions based on their pension business ties with portfolio firms. Also see Cronqvist and Fahlenbrach (2008) for blockholder heterogeneity.

<sup>&</sup>lt;sup>7</sup> 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 32045 13D filings over this time period.

<sup>&</sup>lt;sup>8</sup> The NIRI list is available at <u>http://www.niri.org/Other-Content/Top200HedgeFunds.aspx</u>). The Altman Group list is available at <u>http://www.niri.org/Other-Content/Exec-Alerts-PDFs/Hedge-Fund-</u>

We exclude from this sample 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. We exclude targets that are ADRs, closed-end funds, and some financial firms.<sup>9</sup> We obtain institutional holdings in target firms from the Thomson Reuters 13F data.

Finally, we require that data be available to construct our measure of activism friendly shareholders, described in the next section. This is available for 1183 cases from 217 hedge fund activists from year 2004 to year 2012 and constitutes our final dataset.<sup>10</sup> The distribution of the target firm over this time period is displayed in Table 1. Hedge fund activism increased steadily between 2004 and 2007 and drops during the financial crisis. This is consistent with trends reported in prior work (See Bebchuk, Brav, and Jiang (2015) and Gantchev (2013)). Daniel Loeb's Third Point LLC has 70 activism cases, the highest number in our sample (See Table 2). The distribution of events by activists is positively skewed. The mean number of cases is 5.45 while the median is 3.

We collect from all the initial 13D filings and amendments, filed subsequently, all requests for change made by the activist. We use 8-Ks filed by the target firm, web

<sup>&</sup>lt;u>Activists.aspx</u>). 13DMonitor.com tracks activism targets. Gantchev (2013) list the most frequent hedge fund activists from 2000 to 2007.

<sup>&</sup>lt;sup>9</sup> 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). <sup>10</sup> 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.

search, and SDC Platinum Database to identify potential outcomes of the activism. Majority of the sample, about 610 of the activism cases accounting for 51.5% of the sample are not associated with any specific request (see Table 3). The remaining 573 cases have at least one request. The most common requests are merger related, accounting for about 39.6% of all cases followed by Governance related requests accounting for 34% of the cases.

The activist's campaign is defined as successful if at least one request made by the activist is fulfilled. We also classify the outcome as successful if an agreement is reached even though the request is not fulfilled in its original form. This might happen, for example, in cases where the activist requests that the target firm be acquired but the case ends up with an agreement between the activist and the target that allows the activist to nominate directors. Governance related requests are successful in 62.56% of the cases, the highest success rate among the different categories.

#### 3.2 Measures of Activism Friendly Shareholders

Institutional investors can vary in their response to hedge fund activism. As discussed earlier, on the one hand there exist institutions that believe hedge fund activists help increase firm value and on the other hand there are institutions that believe hedge fund activists have gone too far. Most institutional investors are likely to have supported some activist causes over the years and been against others. In this section, we develop measures that capture the propensity of an institution to support hedge fund activism.

#### 3.2.1 Unhappy Shareholders

The first measure for institutions likely to be activism friendly is based on how satisfied the shareholders are with target management. If existing shareholders of the target firm are unhappy with management they are more likely to be supportive of the changes being asked for by the hedge fund activist. William Ackman, founder of hedge fund Pershing Square said "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 even have an informal term for this, R.F.A., or request for activist. <sup>11</sup> A similar sentiment is expressed by Eric Rosenfeld, founder of Crescendo Partners "The requirement for us is to have disgruntled shareholders, or shareholders that want change and will support us."<sup>12</sup>

We use voting data to capture an institutions unhappiness with target firm management. For a firm that was targeted in quarter q, the measure SUFFER is the percentage ownership of all institutions in the prior quarter, i.e., q-1 that are classified as unhappy. An institution is classified as being unhappy if it voted against the target firm management at least once in the prior three years. We use Risk Metrics' ISS Voting Analytics database to access mutual fund proxy voting records. The database contains mutual fund proxy votes from 2004 to 2012. As we require the past three years voting history to construct this measure, it is available only for the period 2007 to 2012. Consequently, this measure is available for only 656 targets.

 $<sup>^{11}\</sup> Available\ at\ http://www.bloombergview.com/articles/2014-03-19/activist-hedge-funds-are-making-friends$ 

<sup>&</sup>lt;sup>12</sup> See <u>https://www.youtube.com/watch?v=dfMaFCw10Yo</u>

The mean ownership by institutions classified as SUFFER is only 3.7% and the median is zero. Not surprisingly, majority of the targets have institutions voting with management as is usually the case. However, in about quarter of the targets there is a significant fraction of institutions that are unhappy with management.

#### 3.2.2 Voting against Management

The second measure for institutions that are likely to be supportive of activism is based on institution's support or lack thereof in prior targets in which it was a shareholder. If the institution favors activism it is more likely to have voted with the activist, and against target management in prior activism campaigns. 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 being targeted. See Appendix A for further details on the construction of this variable. As we require three years of voting data for this measure, it is also available only for the period 2007 to 2012. For the 656 targets for which we can construct this measure, the mean value of VOTER is quite high at 19.4% with the median being of similar value (See Table 3).

## 3.2.3 Increase in Ownership

The last measure to identify institutions with a higher propensity to support activism is based on the institutions holding decisions in prior activism events. For this measure, an institution is regarded as being supportive if it increased its ownership in a firm after it was targeted by hedge fund activists.<sup>13</sup> If the proportion of targets, in the past three years, in which the institution's increases its ownership is in the top quartile, the institution is classified as being supportive of activism. If the institution tends to increase its ownership in prior targets it is more likely to support current activism campaigns. The variable OWNINC is the fractional ownership of the target firm by all supportive institutions in the quarter prior to being targeted (for further details on the construction of this measure see Appendix A).

The mean value of OWNINC is 8.5% as seen in Table 4. 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.

### 3.2.4 Other Measures of Institutional Ownership

There are several characterizations of institutional ownership that have been used in the prior literature. One common measure of investment style was developed by Bushee (1998) and 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. In contrast, institutions with relatively low portfolio turnover

<sup>&</sup>lt;sup>13</sup> 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.

and diversified holdings are characterized as quasi-indexers (QIX) and those with relatively low turnover rates and large investments are characterized as dedicated (DED). Bushee (1998) shows that short investment horizons of TRA investors are associated with myopic R&D while long term DED investors are more likely to be associated with monitoring. Bushee's measure capture investment horizon of institutional investors and are different from the measures developed here that capture an institutions propensity to support activism. As can been seen in Table 5, the correlation of all three measures with the Bushee measures is low.<sup>14</sup> Not surprisingly, the highest correlation is with QIX the indexers, as these institutions are not always able to sell their holdings if they do not support management and are likely to welcome activists. The correlations of all Bushee measures are the smallest with the SUFFER variable. This is also not surprising as SUFFER is constructed based on institutional views on a specific firm rather than general characteristics. We also examine the relation with the ILTI developed by Chen, Harford and Li (2007). The correlations of ILTI with all the three activism support measures is also low.

This suggests that the measures of activism support developed in this paper capture a different dimension of institutional preferences than that of investment horizon or trading frequency used earlier in the literature.<sup>15</sup> This new characterization of institutional preferences can be used more generally to capture the likelihood of an

<sup>&</sup>lt;sup>14</sup> 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/

<sup>&</sup>lt;sup>15</sup> In untabulated results we use the Bushee measures, as well as the ILTI measure developed by Chen, Harford and Li (2007) to capture activism friendly ownership 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.

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 past three years behavior, which allows for an institution's stance on activism to change and evolve over time.

## 4. Performance of Target Firms

We use several performance criteria to study how the composition of institutional ownership of the target firms has an impact on the hedge fund's activist campaign. Does a greater presence of institutions that support activism allow hedge fund activists to push for and successfully obtain more meaningful changes from the target firm management? We examine the role of the target's institutional composition on the shareholder returns generated from activism using different performance criteria.

## 4.1 Requests

As discussed above, activists will often request the target firm to make specific changes as part of their campaign. Whether or not the target complies with this request, is an intuitive way to ascertain whether the activist was successful in its objectives. Therefore, we begin by first examining the impact of activism friendly ownership on the likelihood that the target agrees to the hedge fund requests.

It should be noted that though, implementation of requests is an intuitive measure of the activist's success it suffers from several shortcomings. In particular, in about half the cases the activists do not make any reported specific request and the measure is unavailable. As said by Mason Morfit, a Partner at ValueAct Capital "a lot of cases go behind the scenes."<sup>16</sup> 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 request we next examine stock returns as they are more likely to capture the value generated from hedge fund activism.

We begin by creating four quartiles based on the levels of activism friendly institutional ownership as captured by the first measure SUFFER. Table 6 reports the fraction of successful requests for each quartile. The first quartile, Q1 with the lowest level of SUFFER has 56.5% successful requests while the fourth quartile, Q4 with the highest value of SUFFER has 68.3% of successful requests. Targets with greater ownership by dissatisfied institutional shareholders (Q4) are more likely to grant the activist request relative to targets in Q1, though the difference between Q4 and Q1 is significant only at the 11% level (Test 1). Next, we test and find statistically significant evidence that the likelihood of successful requests is not independent of the activism friendly quartiles (Test 2).

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.

<sup>&</sup>lt;sup>16</sup> See <u>http://www.youtube.com/watch?v=jy113rOAKjY</u>

## 4.2 Short Term Returns Around the announcement of Activism

In this section, we examine short term performance of the target firm around the announcement of the activism. The event date is defined as the 13D filing. We estimate cumulative abnormal returns (CARs) around the announcement for several different trading day windows. CARS are calculated in excess of the CRSP value weighted index.

We begin, like before, by examining differences within quartiles of targets formed on the basis of the level of activism friendly institutional ownership. As seen in Table 7, Panel A the mean abnormal returns over the [-20,+20] trading day window around the 13D filing is 2.3% for targets in Q1, the lowest quartile by value of SUFFER. This is significantly smaller than the 8.4% seen for targets in Q4, the highest quartile of SUFFER. A similar result is seen for median differences and for other trading day windows. The results are qualitatively similar when we form quartiles based on VOTER (Panel B). With OWNINC the results are weaker for the [-20,+20] trading day window but are highly significant for shorter time windows around the 13D announcement.<sup>17</sup>

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 in line with the analysis in Brav, Jiang, Partnoy and Thomas (2008). The variable of interest are the different measures of activism friendly institutional ownership. Consistent with Brav, Jiang, Partnoy and Thomas (2008) we control for other firm characteristics. We also control for other institutional ownership. The variable

<sup>&</sup>lt;sup>17</sup> Prior studies report higher values of announcement returns. This difference is primarily due to difference in the time period studied. For e.g. Brav, Jiang, Partnoy and Thomas (2008) examine activism announcements from 2000 to 2006 and report an average [-20,+20] day CARs of 8.4%. In our sample, the earlier activism announcements from 2000 to 2004 are associated with an average CAR of 8.10% while the CARs for the period 2005 to 2012 is lower at only 4.59%.

Nofrd\_SUF is the percentage ownership by all institutions, other than those classified as SUFFER 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 COMMONLY 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]. We also include year and industry fixed effects.

The coefficient of SUFFER, for the [-20,+20] day CAR is positive and significant (See Table 8). The effect is economically significant as well, a one standard deviation increase in SUFFER is associated with an increase in [-20,+20] day CAR by 1.85%. The coefficients are positive for the other windows as well though not significant for the short trading day window of [-2,+2]. The coefficient for VOTER, the second measure is

significant for all windows and that of OWNINC is significant for two of the three windows.<sup>18</sup>

Institution ownership as such is not significant in explaining short term returns to the announcement of hedge fund activism. The coefficient of Nofrd\_SUF, or the corresponding variables for the other measures, is not significant 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 8, in most specifications there is significantly greater impact of activism friendly ownership on short term returns to hedge fund activism.

Ownership by the hedge fund activist prior to targeting, PRE13F, is also not significant. The coefficient of PRE12\_STK is negative and significant. Not surprisingly, the higher the stock market performance of the target in the year prior to being targeted the lower is 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.

## 4.3 Long Term Abnormal Performance

Though event returns around announcement capture the market view of the potential value to be created through the activism campaign, skeptics argue that event day returns may capture temporary value gains that are not sustained in the long run or worse reverse in the long run. To address this concern, we also examine long term returns. We

<sup>&</sup>lt;sup>18</sup> A one standard deviation increase in VOTER is associated with an increase in [-20,+20] day CAR by 2.01%. The coefficient of OWNINC, the third measure is not significant for the [-20,+20] day CAR but is significant for the other two windows. A one standard deviation increase in the value of OWNINC is associated with a 1% increase in the [-2,+20] days CAR.

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.<sup>19</sup> We estimate 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 is the value weigted CRSP index and the corresponding buy and hold returns referred to as market adjusted BHAR.<sup>20</sup> The second is the DGTW (size, book to

<sup>19</sup> 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.

<sup>&</sup>lt;sup>20</sup> 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 period. 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.

market and momemtum) benchmarks which have been obtained from Russ Wermers.<sup>21</sup> 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.

The market adjusted BHARs for the 36 month period for quartile Q4, with the highest level of SUFFER is 25% and are significantly higher than those for quartile Q1, with the lowest level of SUFFER (See Panel A, Table 9). The results are similar for all holding period and for all the three different benchmarks used. When quartiles are formed on the basis of VOTER (Panel B) or OWNINC (Panel C) we see similar results – BHARs are higher for the quartile with the highest level relative to the quartile with the lowest level of activism friendly institutional ownership. This holds for all holding periods and for all benchmarks. In sum, the results point to the strong role of activism friendly institutional ownership in facilitating the hedge fund activists agenda and therefore in generating the buy and hold returns.

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 before we control for the non actitivsm 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 and firm charactertics. These are the same control variables that were included in Table 8. We also include target firm performance, firm size, firm leverage and year and industry dummies.

<sup>&</sup>lt;sup>21</sup> 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 weigthed.

As seen in Table 10, Panel A the coefficient of SUFFER is positive and significant in all the specifications. For brevity, we have tabulated the results for the 36 month holding periods for the three benchmarks. The results are also highly economically significant. A one standard deviation increase in SUFFER is associated with an increase in the 36 month BHAR by 7.76% to 9.72% depending on the benchmark used. The results for the other holding periods (24 and 60 months) are qualitatively similar. The coefficient for other institutional ownerhsip, Nofrd\_SUF is not significant in any specification. We test and find that the effect of SUFFER is significantly higher than that of other institutional ownership as can be seen by the p value at the bottom of Panel A. The coefficient of COMMONLY and GOVREQ are also positive and significant in many of the specification. This suggests that governance related requests and activism campaign without any explicit requests are associated with the greatest increase in long term returns for shareholders. The results for the other measures of activism friendly ownership are tabulated in Panel B for VOTER and Panel C for OWNINC and are qualitatively similar and have somewhat higher economic significance.<sup>22</sup> In sum, the evidence suggests that targets with high levels of activism supporitve institutional ownership earn higher benchmark adjusted buy and hold returns.

#### 4.3.2 Calendar Time Portfolio

The second approach for estimating long term returns is 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

<sup>&</sup>lt;sup>22</sup> 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.

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 is referred to as high support 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 period and monthly rebalancing as described above. We calculate monthly equal and value weighted returns of this portfolio, referred to as low support ownership portfolio.

The monthly returns for the high and low support ownership portfolio 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

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

Table 11 reports calendar time regression intercepts (alphas) of the above Fama-French-Carhart four factor model, shown in percentage terms. Since the number of portfolio firms vary dramatically in our sample period, we follow Bebchuk, Brav and Jiang (2015) and use Weighted Least Square estimation that uses the number of portfolio firms as weight.<sup>23</sup>

As seen in Table 11, Panel A targets with high support ownership, formed on the basis of SUFFER, have a significant positive 36-month alpha of 1.147% per month for

 $<sup>^{23}</sup>$  In untabulated results 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 Bebchuk, Brav and Jiang (2015) as we are looking at targets with high and low activism support ownership in contrast to all target firms by Bebchuk, Brav and Jiang (2015). R<sub>f</sub> is 3-month T-bill rate.

equal weighted portfolio and 0.802% per month for value weighted portfolios. Targets with the low support ownership have a negative but insignificant alpha for this holding period. The long high support and short low support portfolio (High –Low) has a significant positive 36-month alpha of 1.818% (0.966%) per month for equal (value) weighted portfolio. The results are similar for other horizons. The results with equal weighting are somewhat stronger than that with value weighting.

The results using OWNINC to form portfolios (Panel C) are qualitatively similar. The high support portfolio alphas are positive and significant while low support alphas are negative and insignificant. The difference is always positive and tends to be significant for the value weighted rather than equal weighted portfolios. The results when we use VOTER to measure activism friendly are presented in Panel B and are weaker. The alphas for the high support portfolio are positive and often significant and that for the low support are negative and insignificant. The long high support and short low support portfolio is positive and tends to be significant for the value weighted portfolios.

### 4.4 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 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 is done in two steps. First we calcuate 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.<sup>24</sup>

The residual from the above regression, referred to RROA, is the abnormal change in industry adjusted ROA after being targeted by the activist.

We begin by examining average differences in abnormal ROA for the quartiles formed on the basis of activism friendly institutional ownership. As seen in Panel A of Table 12, the mean RROA for the three years following the activism event is -2.5% for Q1 which has the lowest level of SUFFER. The mean value for Q4, with the highest level of SUFFER 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 activism friendly owenrship.

The abnormal ROA is industry adjsusted and also controls for the effect of pre event performance. However, factors other than activism friendly ownership could impact operating perofrmance and in Table 13 we control for these. Like before we control for ownership by other institutional ownership and by the hedge fund activist in the pre event quarter. We control for the nature of requests by the hedge fund activist if any and for firm level characteristics. We include year fixed effects but not industry fixed effects as the return on assets is already industry adjusted.

<sup>&</sup>lt;sup>24</sup> We estimate abnormal ROA for several holdings periods, specifically 1, 2, 3, 4 and five years. We report the results for two, three and five year period for brevity. The results with other holding period are available on request and give qualitatively similar results.

The coefficient of SUFFER is positive and both statistically and economically significant. A one standard deviation increase in SUFFER 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 insitutional ownership is positive but not significant when we use SUFFER as the measure. For the other two measures, the coefficient of other institutional ownership 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 acitivsm friendly institutions that is associated with gains in operating performance. Not surprisingly, leverage is positively related to abnormal performance.

## 5. Discussion

In this section, we discuss two sets of questions. The first is whether friendly institutions as we classify them actually support the activist. The second question is regarding whether the friendly institutions are smart investors and the higher return we document arises not from their support of the activist but their ability to pick the future targets.

# 5.1 Support by Friendly Institutions

We have used the ownership level of activism friendly institutions in the quarter prior to being targeted to capture the role of activism friendly ownership. One potential concern is that these activism friendly institutions may sell their holding in the quarters following the 13D filing. If this were so, the higher buy and hold returns or operating performance in the months after being targeted cannot be attributed to the presence of these activism friendly institutions. We check and find that the average holding period for institutions classifed as activism friendly in the target firm after being targeted is more than 9 quarters.<sup>25</sup> So it appears that activism friendly institutions hold the firm on average for 2 years after it has been targeted. We also examine the aggregate holding of activism friendly institutions around the 13D filing. As seen in Table 14, the aggregate ownership by activism friendly is relatively stable from four quarters prior to four quarter post 13D filing.

To provide evidence of more direct support by friendly institutions, we examine shareholder proposals by activists in the target firm and examine voting behavior on these proposals by friendly institutions relative to other institutions. Of the 656 targets that are matched to ISS data, 523 hold a meeting over the two years following the 13D filing and only 35 of these have at least proposal by the activist. Overall there are 301 activist sponsored proposals in these 35 cases.<sup>26</sup>

We find that the incidence of activist proposals increases with friendly ownership. In the first quartile of friendly ownership by SUFFER variable, only 0.55% of all proposals are sponsored by the activist. The increases to 3.01% for the fourth quarile and the difference is significant (see Table 15). Though the results displayed use pre 13D ownership of friendly institutions for the quartiles the results (not tabulated) are similar if

<sup>25</sup> 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 for last quarter to be included in the analysis is March 2013. This truncates the reported holding period for firms targeted in later years like 2012. The mean post holding period for institutions classified as SUFFER 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 SUFFER is 10 quarters, for VOTER is 9.14 quarters. The average pre event holding period for institutions classified as SUFFER (VOTER) [OWNINC] is 27.5 (20.9) [21.5] 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.
<sup>26</sup> These is relative to 184 proposals by other shareholders and 7925 management sponsored proposals in the 523 13D targets for voting data in ISS in the two years afer 13D filing.

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.

Next we examine the voting by instituitons on these proposals to examine if the friendly institutions are indeed more likley to support the activist. Of the 301 activist sponsored proposals we observe voting in only 10 proposals.<sup>27</sup> Though this is a very small sample we still 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 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 16, 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 suggets that whereas 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 tends to be positive suggesting that these on average receive support from most funds. Though 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.

<sup>&</sup>lt;sup>27</sup> 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 firm 10-Q and the voting data is from mutual fund N-PX and there might be some discrepancy between them.

# 5.2 Smart Investors

Another concern with the results is that he 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.

#### 5.2.1 Friendly Institutions vs. Other Institutions

In this section, we examine 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 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.<sup>28</sup> We conduct time series regression of month returns of long and short portfolios on Fama-French-Carhart four factors. We use Weighted Least Square to adjust for the variation in 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 17, the value weighted alphas are negative and significant for all the three measures of friendly institutions. The negative and significant alpha shows that friendly institutions are less likely than other institutions to select

<sup>&</sup>lt;sup>28</sup> Note that the same portfolio firm may appear in both long portfolio and short portfolio. Also note that we only use value-weighted portfolio because the amount of investment itself is also a choice of the institution, which should be included as we examine the selection ability.
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) valueweighted portfolio for each institution-month, and average across all friendly (nonfriendly) institutions in that month ("Average value-weighted"). Neither of the tests support the premise that friendly institutions are more likely to select outperforming securities.

#### 5.2.2 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 13F space friendly institutions could still have selective ability to pick the firms that are likely to be targets of hedge 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 portfolio held by friendly institutions, we assign Up-targeted dummy the value 1 for an institution-firm-quarter if the institution increases holding and the firm is targeted in the next quarter and zero if there is holding increase but the firm is not targeted. Similarly, we assign Down-targeted dummy the value 1 if the institution decreases holding and the firm is targeted and 0 if there is decrease in holding but the firm is not targeted. We then conduct test of proportions on the two dummies for the institution-firm-quarter observations.<sup>29</sup>

<sup>&</sup>lt;sup>29</sup>The number of institution-firm-quarter observations are 2,790,451 (3,108,193) [1,871,038] for OWNINC (VOTER) [SUFFER] 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.

The results shown in Panel B of Table 17, show that when friendly institution increase their holding in the firm, it 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 results show no evidence that friendly institutions are able to forecast which firms will be targeted based on their holding decisions.

### 5.2.3 Returns based on Friendly Institutions holdings of Target firms

In the above section, we only capture increase and decrease in the target holdings of friendly institution but not by how much. In this section, we form value-weighted long (short) portfolio based on the increase (decrease) of friendly institution holdings in target firms in the quarter prior to targeting. The portfolios are rebalanced each quarter to add newly targeted firms and drop firms no longer held by an institution. Then we conduct time series regression of monthly returns of long and short portfolios on Fama-French-Carhart four factors. We use Weighted Least Square to adjust for the variation in number of securities in the portfolio. If friendly institutions are able to pick the targets then the returns to the above long short portfolio should be positive and significant.<sup>30</sup>

As can be seen in Panel C of Table 17, the alphas tend to be negative and insignificant. For robustness, we measure increase/decrease using average holding change in the past 4 quarters prior to targeting ("Yearly average"). Finally, for robustness, we also first form portfolio for each institution-month, then average across all

<sup>&</sup>lt;sup>30</sup> Note that the same stock may appear in both the increase and the decrease portfolios, if some friendly institutions increase holding and others decrease holding. Note that we focus on value-weighted portfolios in examination of selection ability.

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.

# 5.3 Robustness Analysis

We have followed prior literature in controlling for firm specific characeristics and case specific characteristics in our multivariate regressions for the different performance measures. In robustness tests we control for the reputation of the hedge fund activist. An activist campaign by a reputed hedge fund activist might lead to higher announcemnt period returns and more effective changes in the firm. It should however not impact the pre event ownership by activism friendly institutions and its role. We proxy for the hedge fund activist's reputation by the average (-20,+20) day CAR on its prior target announcements. In untabulated results, we find that the hedge fund activist's reputation has a positive effect on the announcement returns (CARs) but does not impact the results on activism friendly ownership. Reputation of the activist is not significant in explaining long term stock returns or operating performance of the target and does not effect the results for activism friendly ownership.

As there are few firms subject to activism every year, we have used a three year period to capture the behavior of institutions and classify them as activism friendly. However, this leads to a loss of data and therefore we also try using one and two years to develop our measures of activism friendly. The results tend to be weaker, especially for the SUFFER variable.<sup>31</sup>

## 6. Likelihood of Being Targeted

The results so far show clearly that shareholder returns to hedge fund activism, short and long term stock returns as well as operating performance, are increasing 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. Given the impact of activism friendly institutions, hedge fund activists should consider institutional ownership, and its composition in their decision to target firms. In this section, we examine a model for hedge fund activism to study whether pre event activism friendly ownership impacts the likelihood of being targeted by an activist.

The likelihood of being targeted by hedge funds is low especially after 2008. We therefore estimate the above model in a matched sample. The control firms are matched by industry, size and book to market. Specifically, for every firm that was targeted, we select a matched firm that was in the same Fama-French 48 indsutry and with the smallest total perectage difference in the value of total assets and the book to market ratio in the year prior.

The main variable of interest is 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, targets with high pre event ownership by these friendly institutions should be more likely to be targeted. For the matched control firms we

<sup>&</sup>lt;sup>31</sup> As SUFFER 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.

generate the required variable of interest, i.e., OWNINC, VOTER and SUFFER as described before. As before we also include ownership by other institutions that were 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.

We include a host of firm level controls in line with Brav, Jiang, Partnoy and Thomas (2008). We control for firm size by including total assets, leverage by including the 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, Hirfindahl Hirschman Index of sales<sup>32</sup>, the ratio of R&D to sales, and the number of analysts following the firm.

The coefficients of all the measures of activism friendly ownership are positive and significant (See Table 18). We also find that coefficient of other institutional ownerhsip 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 impact of activism friendly institutions on the likelihood of being targeted. For, two of the three measures the effect of activism friendly institutional ownership on the likelihood of being targeted is significantly 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

<sup>&</sup>lt;sup>32</sup> The herfindahl 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).

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 esimate the model in sample that includes all compustat firms with data. The depenent variable takes the value of one if the firm was targeted by the hedge fund in that year. The other variables are as before and we also include year and indsutry fixed effects. As seen in Table 19, the results are qualitatively similar. The coefficient of all measures of activism friendly institutional ownerhsip, as well as other instutional ownership, is 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 activism friendly institutions is captured by SUFFER 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.

#### 7. Conclusion

In this paper we study difference among institutional investors in their propensity to support hedge fund activists and how this impacts the success and the value created from hedge fund activism. We develop three different measures of activism friendly institutional ownership. 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 onership, as well as to firm and activism specific characteristics. It is worth noting that other institutions, not classified as activsm friendly, are associated with no significant impact on post event performance of the target. These results point to the role of activism friendly institutions in helping the hedge fund activist push for requested changes and increase target firm value.

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, 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. 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<sub>i</sub>, 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 activsm. 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<sub>i</sub>, 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.<sup>33</sup> 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 inlcuded year y-1 that would require data from year y (current year).

<sup>&</sup>lt;sup>33</sup> 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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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 1: Distribution of Hedge Fund Activism

The following table gives the distribution of activism cases initiated by Hedge funds over the sample time period.

# Table 2: Distribution of Activism Cases by Hedge Funds

The following table gives the frequency of activism across hedge funds over the sample period 2004 to 2012. The table includes only hedge funds with at least 15 cases over the sample period.

Hedge Fund	Number of	Percentage of
	Cases	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

# Table 3: Requests by Hedge Fund Activists

The following table gives the frequency and success rates of requests made by hedge fund activists over the sample period 2004 to 2012. Capital Structure includes requests related to issuance of debt or equity, share buyback, or special dividends. Merger Related requests include support/against sale of target firm, leveraged buyout, going private, or spinoffs. Governance Related requests include bylaw changes, board representation, CEO turnover, or executive compensation. 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.

Type of Request	Total Number	Success	Percentage of Success
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
Capital Structure (CSREQ)	77	33	42.86
Dividend/Buyback/Other Capital	77	33	42.86
Structure			
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
At Least One Deguest	572	275	<u>(</u> 5 1 5
At Least One Request	575	3/5	65.45
(OVERALL)			
General/ No Request	610	-	-
(COMMONLY)			

### **Table 4: Measure of Activism Friendly Institutional Shareholders**

The table reports summary statistics on the three measures of activism friendly ownership. All measures capture the fraction of the target firm owned by institutions that are classified as being activism friendly in the quarter prior to the 13D filing. SUFFER is the percentage ownership by all institutions that voted at least once against the management of the target firm in the prior three years. 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 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 activism targets in the past three years, after they were targeted. All the measures are in the quarter prior to being targeted. VOTER and SUFFER 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's website. ILTI follows Chen, Harford, Li 2007 and captures independent long term investors.

	Mean	Median	25%	75 <sup>th</sup>	Standard	Number
			Percentile	Percentile	Deviation	
SUFFER	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

# Table 5: Correlation Between other Measures of Institutional Ownership

The table displays pairwise correlations for different measures of institutional ownership. All measures are as of the quarter prior to the 13D filing. SUFFER is the percentage ownership by all institutions that voted at least once against the management of the target firm in the prior three years. 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 activism targets in the past three years, after they were targeted. TOTINT is the total 13F institutional ownership in the quarter prior to being targeted. TRA, QIX, DED are characterizations of institutions from Bushee's website. ILTI follows Chen, Harford, Li (2007) and captures independent long term investors.

	OWNINC	VOTER	SUFFER	TOTINT	TRA	QIX	DED
VOTER	0.738	1					
SUFFER	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 6: Success of Requests**

The table reports the fraction of all requests that were successful across quartiles formed on the basis of activism friendly institutional ownership. In column 2, the measure of activism friendly ownership is SUFFER, while in column 3 and 4 it is VOTER and OWNINC respectively. 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: SUFFER		Panel B:	Panel C: OWNINC			
			VOTER			
	Fraction	Total	Fraction	Total	Fraction	Total
	Successf	Reques	Successf	Requests	Successf	Requests
	ul	ts	ul		ul	
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 7: Short Term Stock Returns Around Announcement

The table displays CARs for 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 activism friendly measures. In Panel A (Panel B) [Panel C], the quartiles are formed on the basis of the activism friendly ownership measure SUFFER (VOTER) [OWNINC]. The CARs are calculated in excess of CRSP value weighted index. 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.

	CAR(-2,+2)	CAR(-2,+20)	CAR(-20,+20)	Number
		Panel A: SUFF	FER	
Q1	0.020	0.015	0.023	349
Q2	0.022	0.018	0.013	98
Q3	0.027	0.025	-0.007	98
Q4	0.039	0.064	0.084	99
Q4-Q1	0.019	0.049	0.061	
P-val	$0.088^{*}$	$0.009^{***}$	$0.016^{**}$	
Ranksum	$0.062^{*}$	$0.001^{***}$	$0.004^{***}$	
		Donal B. VOT	ED	
01	0.012	<u>railer B. vO1</u>	0.006	152
$Q^1$	0.012	-0.001	0.000	155
Q2 03	0.013	0.020	0.003	10 <del>4</del> 163
Q3	0.039	0.040	0.046	105
Q4 04 01	0.033	0.030	0.040	104
Q4-Q1 D vol	0.020	0.039	0.040	
P-val	0.030	0.022	0.10	
Kanksum	0.055	0.001	0.023	
		Panel C: OWN	<u>INC</u>	
Q1	0.018	0.020	0.039	243
Q2	0.027	0.042	0.036	292
Q3	0.027	0.029	0.043	295
Q4	0.040	0.044	0.052	295
Q4-Q1	0.021	0.024	0.012	
P-val	$0.006^{***}$	$0.063^{*}$	0.529	
Ranksum	$0.005^{***}$	$0.010^{***}$	$0.071^{*}$	

### **Table 8: Multivariate Estimation for CARs**

The dependent variable is CAR over different trading day windows. SUFFER, VOTER, and OWNINC are the three measures of activism friendly ownership. Nofrd\_suf, (Nofrd\_vot), and [Nofrd\_own] is the 13F ownership of institutions that are neither SUFFER (VOT) [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. COMMONLY 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.

	Mea	asure 1: SUI	FFER	Me	Measure 2: VOTER		Measure 3: OWNINC		NINC
	(-2,+2)	(-2,+20)	(-20,+20)	(-2,+2)	(-2,+20)	(-20,+20)	(-2,+2)	(-2,+20)	(-20,20)
SUFFER	0.004	$0.175^{*}$	$0.299^{**}$						
	(0.956)	(0.089)	(0.044)						
VOTER				$0.068^{*}$	$0.107^{*}$	$0.152^{*}$			
				(0.079)	(0.072)	(0.080)			
OWNINC							$0.105^{**}$	$0.142^{*}$	0.165
							(0.045)	(0.086)	(0.177)
Nofrd_suf	0.032	0.034	0.039						
	(0.147)	(0.342)	(0.501)						
Nofrd_vot				0.008	0.001	-0.014			
				(0.778)	(0.991)	(0.856)			
Nofrd_inc							-0.003	0.003	-0.014
							(0.874)	(0.932)	(0.754)
PRE13F	-0.001	0.006	-0.006	-0.002	0.005	-0.007	0.000	0.003	-0.009
	(0.933)	(0.665)	(0.772)	(0.836)	(0.725)	(0.720)	(0.988)	(0.760)	(0.541)
PRE12_STK	-0.019**	-0.030**	$0.045^{*}$	$-0.019^{**}$	-0.032**	$0.042^{*}$	-0.009	-0.026**	0.020
	(0.028)	(0.045)	(0.054)	(0.027)	(0.033)	(0.072)	(0.142)	(0.012)	(0.182)
SIZE	0.000	-0.004	-0.009	-0.001	-0.004	-0.009	-0.001	-0.005	-0.006
	(0.909)	(0.392)	(0.214)	(0.835)	(0.368)	(0.219)	(0.774)	(0.177)	(0.284)
LEV	-0.008	-0.085**	-0.058	-0.006	-0.079**	-0.049	0.005	-0.008	0.029
	(0.686)	(0.017)	(0.314)	(0.766)	(0.026)	(0.395)	(0.753)	(0.761)	(0.445)
COMMONLY	-0.018**	-0.017	-0.010	$-0.017^{*}$	-0.019	-0.014	-0.020***	-0.024**	0.002
	(0.048)	(0.271)	(0.659)	(0.059)	(0.212)	(0.530)	(0.002)	(0.033)	(0.905)
CSREQ	0.001	0.009	0.018	0.001	0.009	0.019	0.001	0.001	-0.008
	(0.956)	(0.726)	(0.612)	(0.973)	(0.720)	(0.604)	(0.929)	(0.978)	(0.761)
MERGREQ	-0.004	0.011	0.018	-0.002	0.010	0.015	0.004	0.000	0.021
	(0.712)	(0.572)	(0.489)	(0.851)	(0.618)	(0.562)	(0.629)	(0.993)	(0.274)
GOVREQ	-0.010	-0.002	0.026	-0.010	-0.003	0.024	0.002	0.009	$0.036^{*}$
	(0.400)	(0.925)	(0.320)	(0.391)	(0.870)	(0.362)	(0.800)	(0.549)	(0.065)
Observations	622	622	622	622	622	622	1,059	1,059	1,059
R-squared	0.190	0.150	0.128	0.192	0.150	0.128	0.192	0.127	0.112
Year, Ind FE	Υ, Υ	Υ, Υ	Υ, Υ	Υ, Υ	Υ, Υ	Υ, Υ	Υ, Υ	Υ, Υ	Υ, Υ
H0:	0.660	$0.084^*$	0.039**	0.110	$0.095^{*}$	$0.080^*$	0.034**	$0.072^{*}$	$0.095^{*}$
friendly<=nofrd									

### **Table 9: Buy and Hold Abnormal Returns**

The 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 SUFFER (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 Ac	ljusted			DGTW		Industry A	Adjusted	
	BHAR								
	24	36	60	24	36	60	24	36	60
	months								
Panel A: SU	UFFER								
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: V	OTER			I			l		
01	-0.019	0.018	0.079	-0.068	0.006	0.098	-0.018	0.015	0.067
02	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: O	WNINC			I			l		
01	-0.076	-0.099	-0.050	-0.022	-0.023	0.042	-0.071	-0.096	-0.059
Õ2	-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	$0.000^{***}$	$0.000^{***}$	$0.000^{***}$	$0.000^{***}$	$0.000^{***}$	$0.000^{***}$	$0.000^{***}$	$0.000^{***}$	$0.000^{***}$

# Table 10: Multivariate Analysis of BHARs

The table displays OLS estimation with 36 month BHARS that are market adjusted (column1), DGTW adjusted (column2) and Fama French 48 industry adjusted (column 3). Panel A (B) [C] displays the results with SUFFER (VOTER) [OWNINC] as the measure for activism friendly ownership. Nofrd suf, (Nofrd vot), and [Nofrd\_inc] is the 13F ownership of institutions that are neither SUFFER (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. COMMONLY 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.

	BHAR	BHAR	BHAR
	Market Adjusted	DGTW	Industry Adjusted
	36 months	Adjusted	36 months
		36 months	
SUFFER	$1.251^{**}$	1.567***	$1.382^{**}$
	(0.037)	(0.008)	(0.020)
Nofrd_suf	-0.044	-0.030	-0.048
	(0.796)	(0.858)	(0.778)
SIZE	-0.003	0.004	-0.010
	(0.902)	(0.852)	(0.673)
LEV	-0.104	-0.138	-0.096
	(0.583)	(0.481)	(0.604)
PRE12_STK	0.091	0.087	0.091
	(0.181)	(0.215)	(0.193)
PRE13F	-0.106	-0.146**	-0.112
	(0.123)	(0.042)	(0.101)
COMMONLY	$0.196^{***}$	$0.208^{***}$	$0.177^{**}$
	(0.009)	(0.006)	(0.018)
CSREQ	0.108	0.138	0.046
	(0.439)	(0.327)	(0.730)
MERGREQ	0.040	0.037	0.024
	(0.660)	(0.675)	(0.788)
GOVREQ	$0.212^{**}$	0.235**	$0.232^{**}$
	(0.047)	(0.031)	(0.028)

Panel A: SUFFER

Observations	621	565	621
R-squared	0 147	0 200	0 152
Year FE	YES	YES	YES
HO:	9 ES	YES	YES
	0.013**	0.003***	0.007***
SUF<=Nofrd_suf			

# Panel B: VOTER

	BHAR,	BHAR	BHAR
	Market	DGTW	Industry Adjusted
	Adjusted	Adjusted	36 months
	36 months	36 months	
VOTER	0.919***	$1.088^{***}$	$0.873^{***}$
	(0.006)	(0.001)	(0.008)
Nofrd_VOTER	-0.473**	-0.518**	-0.441**
	(0.022)	(0.015)	(0.035)
SIZE	-0.013	-0.007	-0.018
	(0.580)	(0.768)	(0.447)
LEV	-0.034	-0.057	-0.029
	(0.856)	(0.768)	(0.877)
PRE12_STK	0.075	0.066	0.075
	(0.263)	(0.341)	(0.281)
PRE13F	-0.121*	-0.164**	-0.126*
	(0.078)	(0.022)	(0.067)
COMMONLY	$0.182^{**}$	$0.192^{**}$	$0.160^{**}$
	(0.014)	(0.010)	(0.030)
CSREQ	0.110	0.135	0.049
	(0.434)	(0.345)	(0.718)
MERGREQ	0.037	0.024	0.016
	(0.678)	(0.780)	(0.857)
GOVREQ	$0.199^{*}$	$0.222^{**}$	$0.219^{**}$
	(0.062)	(0.041)	(0.039)
Observations	621	565	621
R-squared	0.156	0.211	0.158
Year FE	YES	YES	YES
Ind FE	YES	YES	YES
H0:	$0.000^{***}$	$0.000^{***}$	$0.001^{***}$
VOT<=Nofrd_vot			

	BHAR	BHAR	BHAR
	Market Adjusted	DGTW Adjusted	Industry Adjusted
	36 months	36 months	36 months
INC	$0.970^{**}$	$0.932^{**}$	$1.175^{***}$
	(0.025)	(0.044)	(0.006)
Nofrd_inc	-0.122	-0.121	-0.138
	(0.368)	(0.384)	(0.300)
SIZE	0.007	0.009	-0.006
	(0.713)	(0.646)	(0.741)
LEV	-0.025	-0.003	-0.009
	(0.854)	(0.985)	(0.944)
PRE12_STK	$0.100^{**}$	0.060	$0.101^{**}$
	(0.029)	(0.193)	(0.027)
PRE13F	-0.028	-0.036	-0.018
	(0.551)	(0.472)	(0.696)
COMMONLY	$0.126^{**}$	0.134**	$0.123^{**}$
	(0.016)	(0.013)	(0.021)
CSREQ	0.062	0.103	0.022
	(0.496)	(0.250)	(0.802)
MERGREQ	0.014	-0.010	0.013
	(0.829)	(0.878)	(0.833)
GOVREQ	$0.150^{**}$	$0.160^{**}$	$0.172^{**}$
	(0.047)	(0.036)	(0.021)
Observations	1,058	967	1,058
R-squared	0.125	0.160	0.134
Year FE	YES	YES	YES
Ind FE	YES	YES	YES
H0:	$0.010^{***}$	$0.017^{**}$	$0.003^{***}$
INC<=Nofrd_inc			

# **Table 11: 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 SUFFER 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 SUFFER 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 SUFFER 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 SUFFER 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 SUFFER in the bottom quartile. Panel B (C) use VOTER (OWNINC) as measures of activism friendly ownership.

	(1,12)	(1,24)	(1,36)	(1,48)	(1,60)
		Equal Weig	ghted		
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)
		Voluo Woi	rhtad		
	*	value welş	gnied	**	**
High Friendly	1.131*	$0.878^{\circ}$	$0.802^{*}$	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 A: SUFFER

	(1,12)	(1,24)	(1,36)	(1,48)	(1,60)
		Equal Weig	hted		
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 Weig	hted		
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 B: VOTER

# Panel C: OWNINC

	(1,12)	(1,24)	(1,36)	(1,48)	(1,60)
	]	Equally Weig	hted		
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 Weigh	ited		
High Friendly	0.703**	0.582**	0.492**	0.435**	$0.476^{**}$
0 1	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	0.028	0.104	0.100	0.099	0.359
Number of months	113	113	113	113	113

# Table 12: Operating Performance

RROA is the abnormal industry adjusted ROA for different holding periods. Column1, 2 and 3 report results with holding period 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 SUFFER (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
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***	
01	-0.044	-0.039	-0.034	88
02	-0.045	-0.044	-0.040	89
03	0.018	0.020	0.016	110
04	0.033	0.037	0.038	114
Q4-Q1	0.077	0.076	0.073	
P-val	$0.001^{***}$	$0.000^{***}$	$0.001^{***}$	
Ranksum	$0.000^{***}$	$0.000^{***}$	$0.001^{***}$	
01	-0.027	-0.024	-0.028	141
02	-0.020	-0.018	-0.018	181
03	0.003	-0.002	-0.004	175
04	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***	

# Table 13: Operating Performance

RROA(3) and RROA(5) is the abnormal industry adjusted ROA for three and five years post event year respectively. SUFFER, VOTER and OWNINC are the three measures of activism friendly ownership. Nofrd\_suf, (Nofrd\_vot), and [Nofrd\_inc] is the 13F ownership of institutions that are neither SUF (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. COMMONLY 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)
SUFFER	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_SUFFER	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)
COMMONLY	-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	$0.001^{***}$	$0.001^{***}$	$0.001^{***}$	0.003***	$0.002^{***}$	$0.009^{***}$
<=Non Friendly						

# Table 14: Activism Friendly Ownership around 13D filing

The 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. SUFFER, VOTER and OWNINC are the three measures of activism friendly ownership.

	SUFFER	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
-			

# **Table 15: Incidence of Activist Sponsored Proposals**

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

	SUFFER	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***

### **Table 16: Voting Patterns in Shareholder Sponsored Proposals**

The table reports partial results of a logit regression. The sample includes all shareholder proposals in target firms in the two years after the 13D filing. The dependent variable is one if the fund votes in favor of the proposal. Activist Sponsored is an indicator variable that takes the value of one if the proposal is sponsored by the institution. Friendly Institution is an indicator variable that takes the value of 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 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 inlcuded are proposal and year fixed effects. The number in brakets shows p-values.

	Panel C: SUFFER		Panel B: VOTER		Panel A: OWNINC	
	All	Institution	All	Institution	All	Institution
	Shareholde	Sponsore	Shareholde	Sponsore	Shareholde	Sponsore
	r Proposals	d	r Proposals	d	r Proposals	d
		Proposals		Proposals		Proposals
Activist x	.504 <sup>**</sup> (0.016)	0.579 <sup>***</sup> (0.007)	.791 <sup>***</sup> (0.000)	0.694 <sup>***</sup> (0.001)	1.227 <sup>***</sup> (0.000)	1.134 <sup>***</sup> (0.000)
Friendly	794***	-0.879***	801***	-0.712***	-1.066***	-0.973***
Activist	(0.000) -0.440 (0.725)	(0.000) 29.520 <sup>***</sup> (0.005)	(0.000) -0.882 <sup>***</sup> (0.000)	(0.000) 23.594** (0.022)	(0.000) 2.071** (0.014)	(0.000) 27.890 <sup>***</sup> (0.010)
Number of Pseudo R2	15,925 0.323	10,827 0.393	15,925 0.328	10,827 0.394	23,579 0.302	15,907 0.336

# Table 17: Stock Picking Ability of Friendly Institutions

# Panel A: Time Series Regression of Friendly and Other Portfolios

The 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 Friendly institutions and go short the value weighted portfolio of other institutions. Non-targets refer to the portfolio which goes long value weighted non-target portfolio of 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.

		SUFFER	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 Holding Prior to 13D Filing

The table reports average value of the Up-targeted and Down Targeted variables. The Up-Targeted dummy takes the value of one when the 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, Down-Targeted dummy takes the value of one when the 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		
	SUFFER	VOTER	OWNINC	SUFFER	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%-	-0.04%	-0.03%	-0.03%	-0.01%	0.01%	0.01%
down%						
P-value (Z-	$0.000^{***}$	$0.000^{***}$	$0.001^{***}$	0.581	0.282	0.167
statistic)						

# **Panel C: Time Series Regression Based on Friendly Institutional Holdings of Target Firms**

The table reports alphas from monthly time series regression of Long Short portfolio on 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

holding in the quarter prior to 13D. Friendly institutions and go short the value weighted portfolio of other institutions. The Yearly Average captures long/short based on increase/decrease of friendly institutions holding of target stock in the year prior, or prior 4 quarters, to 13D filing. Average Value Weighted forms the long/ short portfolios based on average increase/decrease of target holding for all friendly institutions.

		SUFFER	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 18: Likelihood of Being Targeted – Matched Sample

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 SUFFER are the three measures of activism friendly ownership. NOFRD\_INC, (NOFRD\_VOT), and [NOFRD\_SUF] is the ownership of institutions that are neither INC (VOT) [SUF] nor the hedge fund activist of the event. SIZE is 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 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-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
OWNINC	5.383***		
	(0.000)		
VOTER		$1.934^{**}$	
		(0.019)	
SUFFER			5.713***
			(0.000)
NOFRD_INC	$2.580^{***}$		
	(0.000)		
NOFRD_VOT		$2.939^{***}$	
		(0.000)	
NOFRD_SUF			$2.303^{***}$
			(0.000)
SIZE	-3.199***	-3.293***	-3.405***
	(0.000)	(0.000)	(0.000)
LEV	$1.227^{***}$	$1.479^{***}$	$1.525^{***}$
	(0.002)	(0.004)	(0.003)
Change in Sales	-0.278	-0.639**	-0.596*
	(0.160)	(0.047)	(0.058)
Tobin Q	0.144	$0.479^{**}$	$0.522^{**}$
	(0.216)	(0.042)	(0.033)
ROA	-0.732	-0.583	-0.651
	(0.168)	(0.396)	(0.343)
DIV	0.576	-1.528	-1.557
	(0.666)	(0.392)	(0.381)
HHI_SALES	0.206	-0.162	-0.196
	(0.427)	(0.614)	(0.540)
R&D / Sales	3.364***	3.483***	$3.285^{**}$

	(0.004)	(0.009)	(0.015)
Number of Analysts	-0.018	-0.002	-0.011
-	(0.270)	(0.933)	(0.575)
PRE13F	$0.280^{**}$	0.301**	$0.301^{*}$
	(0.021)	(0.047)	(0.051)
Observations	1,658	998	998
H0: friendly<=non-friendly	$0.026^{**}$	0.822	$0.009^{**}$
Pseudo-R2	0.199	0.204	0.208

### **Table 19: Likelihood of Being Targeted**

The dependent variable is a dummy that takes the value of one if the firm was a target of hedge fund activism in the year. The sample consists of all firms in Compustat. SUFFER, VOTER, OWNINC are the three measures of activism friendly ownership. NOFRD\_INC, (NOFRD\_VOT), and [NOFRD\_SUF] is the ownership of institutions that are neither INC (VOT) [SUF] nor the hedge fund activist of the event. SIZE is 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 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-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
SUFFER	8.413***		
	(0.000)		
VOTER		$1.416^{***}$	
		(0.001)	
OWNINC			$2.384^{***}$
			(0.000)
NOFRD_SUF	$1.407^{***}$		
	(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 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
H0: friendly<=other	$0.000^{***}$	0.896	0.276
	0.098	0.089	0.080

# The Impact of Hedge Fund Activism on Firm Activities: Evidence from 8-K Filings

Simi Kedia Xianjue Wang Xiaofei Zhao<u>34</u>

# Abstract

We perform a textual analysis of 8-Ks filed by 693 firms targeted by hedge fund activists over the 2005 to 2012 period to document the comprehensive material changes that these firms undergo after being targeted. We benchmark the changes in the year after the 13D filing to those in the year prior to 13D filing, and then control for changes over the same period in propensity score matched firms. The differencein-differences results suggest that targets of hedge fund activism that are not acquired experience significantly higher incidence of CEO appointments and director arrivals that are both associated with higher shareholder value. The evidence also suggests that some changes that activists request like repurchases, sale of assets and bylaw changes though more frequent are not associated with any value gains. The evidence complements prior work by showing that activists potentially create value through governance changes along with pressurizing the target to sell itself.

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# The Impact of Hedge Fund Activism on Firm Activities: Evidence from 8-K Filings

## 1. Introduction

Recent years have seen a significant increase in hedge fund activism. Prior work documents significant positive returns to the announcement of hedge fund activism along with long term returns to interventions by hedge funds (See Brav, Jiang, Partnoy, and Thomas (2008) and Clifford (2008) among others). Greenwood and Schor (2009) document that these returns to hedge fund activism are largely explained by the ability of activists to force target firms into a takeover. Boyson, Gantchev and Shivdasani (2016) show that hedge fund activism creates shareholder value primarily by putting targeted firms up for sale. However, the majority of hedge fund activism targets are not acquired. This raises the question of whether activism by hedge funds for these non-acquired targets creates any value and if so how?

Becht, Franks, Mayer and Rossi (2009) examine proprietary and detailed data on the interventions of one UK based fund and document positive impact of such interventions on target firm abnormal returns. They document that the largest returns are associated with restructuring of diversified activities, followed by replacing the CEO or Chairman and increase in cash payout. Their evidence suggests that asset sales, restructuring and governance changes are likely to be associated with significant increase in value for target firms. In this paper, we examine the 8-K filings of firms to document the comprehensive material changes that take place in the firm after it is targeted by hedge fund activists. We then examine which changes especially in targets that are not acquired, are associated with increase in shareholder value, if any.

Section 13 and 15(d) of the Securities Exchange Act of 1934 and Regulation FD require that material corporate events of public companies be reported to the Securities and Exchange Commission (SEC) on Form 8-K within four business days after the events took place. The purpose of this "current report" is to communicate any unscheduled material corporate event to investors on a rapid and current basis. The 8-K covers a broad range of aspects about a corporation and allows us to examine the changes that unfold in the firm after it is targeted by an activist. Examination of the 8-K therefore allows us to document a whole range of changes that the target firms undergo, from changes in the board, to repurchasing shares, changes in operations and disclosure among others.

The SEC mandates the disclosure in different sections and some items like Item 2.01 titled "Completion of Acquisition and Disposition of Assets" is unambiguous and focused about what it covers. Others like Item 5.02 titled "Departure of Directors or Certain Officers; election of directors, appointment of certain officers; Compensatory Arrangements of Certain Officers" are broad and cover several areas that we would like to get further details on. To get a more detailed breakdown of the nature of the changes that take place in target firms, we conduct a textual analysis of the 8-K filings to categorize the information disclosed into nine major categories of economic and financial activities, which are further broken into detailed categories that correspond to major areas of change.

The methodology that we use to map the 8-K content to firm activities builds on the emerging literature of textual analysis in finance and accounting (for a recent survey, see for example, Loughran and McDonald (2015)). The spirit of our method falls in the "bag of words" approaches in that we analyze and keep the categories of firm activities with high frequencies. One popular "bag of words" approach, "words list" approach typically decomposes a document into a collection of words and then compares the words to a predefined dictionary to classify the tone of the document (for example, Tetlock (2007)), or to compare document similarities (for example, Hanley and Hoberg (2010)). These approaches generally ignore the sequence of words. Since the goal of our study is to understand the firm activities following activist intervention, we take an approach that takes the content into account. The method that we adapt is a combination of the targeted phrases (for example, Loughran, McDonald and Yun (2009)) and Naïve Bayesian approach (for example, Antweiler and Frank (2004)). Therefore, we take the word sequence into account when manually creating a collection of the targeted phrases to classify economic and financial activities. And we do so in a repetitive learning procedure to ensure the robustness of our textual analysis algorithm.

We are among the first to classify and map the SEC defined 8-K items to specific firm activities using textual analysis. Previous studies using 8-Ks generally have not focused on this. For example, Zhao (2015) analyzes the text of 8-Ks to measure information intensity and its effect on cross-sectional stock returns. Goldstein and Wu (2015) study the disclosure timing of 8-Ks and its impact on bidask spreads. As discussed earlier many SEC defined 8-K items are ambiguous in terms of linking to specific firm activities. Therefore, it is important to classify 8-K content to firm activities for the purpose of our paper. Our study is also related to Cohen, Jackson and Mitts (2015), who manually categorize 8-Ks into 14 broad categories and document insider trading patterns prior to public announcement.

To identify the firms targeted by hedge fund activists, we collect all the 13D filings over the period of 2005 to 2012, check the identity of the filers to isolate those that involve hedge funds and ensure data availability to give us a final sample of 693 target firms. We analyze the text of all 8-Ks filed by the target firms in the one year after the 13D filing, referred to as the Post Period, to understand the kind of activities and material changes that the target firms initiate in the period after being targeted by the activist. To identify the changes that take place we also analyze all 8-Ks filed in the one year prior to the 13D filing, referred to as the Pre Period. Comparing the intensity of changes in the Post Period relative to those in the Pre Period helps shed light on what activities are likely to have been initiated in response to the activist.

However, firms are targeted by the activists for a reason and the changes the firm undergoes could potentially be due to firm characteristics rather than intervention by the activist. To control for this possibility we employ propensity score matching to identify a nearest matching firm for each target firm. We check and find little difference in the observable firm characteristics between target firms and their matched counterparts. We then analyze the 8-Ks filed by the matched firms in the Pre Period as well as in the Post Period that allows us to control for the change over the period for matched firms that were not subject to activism. This matched sample enables us to perform difference-in-differences tests that examine the change in targeted firms in the post period in comparison to the pre period relative to a similar change seen in matched firms. These difference-in-differences tests also help identify the effect of hedge fund activism on firm activities and the potential sources of value creation for these firms.

We begin by examining the frequency of disclosure in the nine broad categories. The first of the nine categories of firms activities are Acquisition related and involve sale of the firms, assets, and subsidiaries among others. About 39% of the target firms file 8-Ks with Acquisition related disclosure in the pre period and not surprisingly, this increases to 48% in the post period. The second category, referred to as Bylaws, covers declassification of boards, roles of board members, and rules about nomination and shareholder meeting. We find that 64% of the target firms file 8-Ks in this category in the post period, up significantly from 53% in the pre period. The third category, referred to as Governance, involves arrival and departure of CEO, directors and officers along with changes in compensation. This category is frequent with about 86% of the sample firms filing at least one 8-K in the pre period and this appears to decrease in the post period. The fourth major category is *Capital Structure* and involves changes in leverage and payout policy. About 62% of the target firms file 8-Ks related to this category in the pre period and its stays the same in the post period. The next category, referred to as *Operations*, covers changes in operations and there is no change in its frequency that stays around 53%. The other categories are Communication that includes the presentation of the financial results and management guidance. The remaining categories are related to Litigation,

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Distress and Others that capture disclosure not directly related to activist's agenda. Though the activist does not seek changes in all the nine areas, classifying the activities of the target allows us to capture some perhaps unintended consequences of activism.

As the purpose of the study is to identify the changes, other than being acquired, that create value in firms that are targeted by hedge fund activists, we identify target firms that were acquired and those that were not. Among the 693 target firms, 195 firms were acquired over the 2 years after the 13D filings. We study these 195 firms and their matched firms for changes in their firm activities. Not surprisingly, target firms have significantly higher *Acquisition* related 8-Ks in the post period relative to matched firms. Interestingly, there is a decrease in frequency with which governance related 8-Ks are filed for these target firms in the post period. This suggests that activists do not seek any governance, capital structure or operations related changes for the target firms that they prime for acquisitions.

Next we concentrate on the 498 sample firms that were not acquired to delineate the changes they go through after the 13D filings. We also estimate the buy and hold returns, BHARs to shed light on which of these changes are associated with increase in value. We calculate the BHARs over the [0, 12] month window from the 13D filing to capture the contemporaneous returns and [13, 36] month BHARs to shed light on the value impact of the changes in the two years following the changes that we document.

We find that though the target firms were not acquired, they nevertheless have higher acquisition related disclosures. This arises as non-acquired target firms sell assets, and seek strategic alternative more frequently than matched firms. The higher propensity to seek strategic alternative is associated with lower BHARs over the [0, 12] month but higher BHARs over the [13, 36] month period. Firms may seek strategic alternative if they declined to be acquired or if an acquisition bid failed. Though this is associated with negative contemporaneous returns possibly due to failed bid, over the longer time period these activities are associated with higher value. Higher asset sales by non-acquired targets are not associated with any impact on shareholder value.

The target firms experience significantly higher changes in bylaws in the post period relative to changes in matched firms. A detailed analysis of the *Bylaws* category reveals that the higher frequency of the changes is *Board Related* and pertain to proposals to declassify boards, majority voting rules, and separating the CEO and Chairman of the board role (see Appendix 5 for some examples of this category). Other detailed categories, within the Bylaws major category are also more frequent in target firms in the post period. However, surprisingly none of these changes and their more frequent occurrence is associated with higher BHARs over the [0, 12] months or the longer term. This is surprising as many of these changes are sought by hedge fund activists.

The third major category is Governance. This is a broad category and 8-K disclosure is classified into detailed and more specific categories to isolate the frequent changes. There is a significant increase in frequency of CEO arrival with about 8.6% more target firms, relative to matched firms, likely to file 8-Ks regarding CEO arrival in the post period. The higher frequency of CEO arrivals in target firms

is associated with increase in shareholder value and higher [13, 36] month BHARs. This is consistent with the results in Becht et al. (2009) that CEO turnover is associated with significant value gains.

The data also shows significantly higher likelihood of director arrival and director departure for target firms. In particular, 20.5% (10.8%) more target firms are likely to file 8-Ks related to director arrival (departure) relative to matched firms in the post period. Higher director turnover in target firms is also documented by Gow, Shin and Srinivasan (2014b). Though director departure has no impact on BHARs, director arrival has significant value impact for target firms. Greater number of director arrivals is associated with significantly higher [0,12] month as well as [13,36] month BHARs. The evidence suggests that appointment of new directors under pressure from the activist is one potential way that hedge fund activists create value for target firms that are not acquired.

Also within the *Governance* category is arrival and departures of officers. We separately categorize 8-Ks related to the arrival and departure of CFO, named executive officers (NEO) and other officers. We find no differences between sample and matched firms in any of these detailed categories. This lack of evidence of more frequent changes in these categories is accompanied by little impact of these activities on the BHARs. Finally, the *Governance* category also includes 8-Ks that detail changes in compensation and contracts with executives. The contracts could be compensation contracts, severance agreements, bonus plans and other contracts. We separately capture changes in the compensation and contracts for CEOs, directors, CFO, NEO and officers. Overall, there is little difference between the propensity of filing these 8-Ks for target firms relative to matched firms and this is also reflected in no impact on the BHARs.

The next category *Capital Structure* includes changes in leverage and payout policy. Not surprisingly target firms are significantly more likely to conduct repurchases. About 6.4% (5.6%) more target firms file repurchase (undefined dividends) related 8-Ks in the post period relative to matched firms. However, higher repurchases and undefined dividends are not associated with significant value creation for target firms. Hedge funds often seek cash payouts from the firms they target and the evidence in the paper suggest that these activities are not associated with any (long term) value gains.

We find some interesting trends in *Communication* related 8-Ks filed by firms. The difference-in-differences tests show that sample firms increase the propensity to present financial results and reduce guidance relative to matched firm. This change in relative disclosure policy however is not associated with any value impact. This evidence suggests that hedge fund activism, though not intending to, is likely to impact disclosure policy of targeted firms. A detailed study of *Operations* related 8-Ks reveals little difference between target and matched firms in business expansion or shrinking activities or in asset purchases and no value impact of this for target firms. The other categories, *Distress, Litigation* and others are not directly related to the activist's agenda and we detail the changes in these later in the paper.

Overall, our evidence shows that target firms that are not acquired experience a higher incidence of CEO arrivals and director arrivals, both of which are associated with significantly higher shareholder value relative to matched firms. The results

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suggest that priming the targets for acquisition is not the only way hedge fund activism creates value. Governance changes, specifically appointment of new CEO and directors is also associated with significant value gains.

The results also suggest that many of the changes requested by the hedge fund activists though seen more frequently are not associated with any value gains. Specifically, sales of assets or divisions, repurchases and changes in the bylaws of the firms though more frequent in target firms are not associated with any increase in shareholder value in our sample. Finally, as we study the full gamut of changes that target firms undergo including the ones that are not usually requested by hedge fund activists, we find that there are also unintended consequences of hedge fund activism. The evidence shows that target firms tend to report financial results more frequently, and guidance less frequently relative to matched firms.

# 2. Related Literature

Our study is related to several strands of academic literature in finance and accounting. Our paper is mostly related to the literature on hedge fund activism. Several recent studies document that hedge fund activism is associated with significant abnormal returns (See Brav, Jiang, Partnoy, and Thomas (2008), Clifford (2008), Boyson and Mooradian (2011), Brav, Jiang and Kim (2009), Bebchuk, Brav and Jiang (2015) and Klein and Zur (2009)).<sup>35</sup> Greenwood and Schor (2009) document that these returns to hedge fund activism are largely explained by the ability of activists to force target firms into a takeover (See also Boyson, Gantchev

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<sup>&</sup>lt;sup>35</sup> Hedge fund activism has some negative impact on debtholders (See Klein and Zur (2011)) and is associated with increased bank spreads (See Sunder, Sunder and Wongsunwai (2014)).

and Shivdasani (2016)). In contrast, Becht, Franks, Mayer and Rossi (2009) examine proprietary interventions of one UK based fund and document that the largest returns are associated with restructuring of diversified activities, followed by replacing the CEO or Chairman and increase in cash payout. Along with priming firms to be acquired and initiating governance changes, hedge funds have been shown to increase innovation efficiency (Brav, Jiang and Tian (2014)), lead to accounting conservatism (Cheng, Huang and Li (2015)), and increase productivity (Brav, Jiang and Kim (2015)).<sup>36</sup> Our paper contributes to this literature by documenting the major changes occurring to the majority of the firms that are targeted by hedge funds but are not acquired. We also document heterogeneous value impact of these changes.

Second, our paper is related to a growing number of studies on 8-Ks. While earlier studies (for example, Carter and Soo (1999)) rely on a small sample of 8-Ks to study their market reactions, recent studies employ much larger sample of 8-Ks (due to the availability of EDGAR) to understand broader impacts of 8-Ks. For example, Zhao (2015) employs 8-Ks to measure information intensity and studies its impact on cross-sectional stock returns. Goldstein and Wu (2015) study the disclosure timing of 8-Ks and its impact on bid-ask spreads. Cohen, Jackson and Mitts (2015) manually categorize 8-Ks into 14 broad categories and document insider trading patterns prior to public announcement. While these papers mostly focus on the capital market consequences of 8-Ks, our paper uses 8-Ks to identify

<sup>&</sup>lt;sup>36</sup> Other papers examine the role of liquidity in activism (Gantchev and Jotikasthira (2015)), estimating the cost of hedge fund activism (Gantchev (2013)), and effect of activism on corporate tax avoidance (Cheng, Huang, Li and Stanfield (2012)).

firm changes triggered by activists' intervention. To the best of our knowledge, our paper is among the first to classify and map the SEC defined 8-K items to specific firm activities.

The methodology that we use to map the 8-K content to firm activities builds on the emerging literature of textual analysis in finance and accounting (for a recent survey, see for example, Loughran and McDonald (2015)). The spirit of our method is the same as the "bag of words" approach in that we analyze and keep the categories of firm activities with high frequencies. We differ from the popular "words list" approach by the way that we use the combination of words to identify economic and financial activities through a repetitive learning procedure.

# 3. Textual Analysis and Categorization of 8-K Reports

The SEC assigns nine major items for firms to file the information accordingly and these categories and their subsections are listed in Appendix 1.<sup>37</sup> However, not all SEC items have unambiguous interpretations for the specific economic activities. Some items can be so broadly interpreted that many firm changes could fall in these categories, for e.g., Item 1.01 and 1.02 are titled "Entry into a Material Definitive Agreement" and "Termination of a Material Definitive Agreement" respectively. Many firm activities can be filed using these two items such as appointments or departures of directors, officers and CEOs, changes in compensation plans, and operations issues that include purchase and sale of assets and spinoffs. Therefore, this ambiguity prevents us from using the SEC item

<sup>&</sup>lt;sup>37</sup> See https://www.sec.gov/answers/form8-K.htm for all the detailed items.

categories as it is not clear where a firm may file for example the departure of a director.

To get a better idea of the changes that take place in the firm after it is targeted by the activist we delve deeper into the content of the 8-K. This is done through a textual analysis of the 8-K content. We begin by first identifying SEC sections that are likely to be ambiguous and then analyzing these sections to categorize the content into specific and interpretable firm activities. We list the details of the ambiguous categories in Appendix 2 where we present the firm activities that might fall in the respective SEC category. For the others we follow the SEC item categorization.

Our textual analysis algorithm adopts a repetitive learning structure. As there is no formalized way for firms to report 8-K content under SEC defined items, firms tend to report very similar firm activities with a wide range of words and phrases. Our goal is to design an algorithm with various regular expressions of words and phrases to capture similar firm activities. The repetitive learning structure aims to refine the algorithm through several rounds of modifications. The first round of learning involves manual reading and classification of a random sample of 8-Ks. Specifically, we read a random sample of 500 targets' 8-Ks from 2005 to 2012, and form an initial list of 86 categorized events.<sup>38</sup> We also compose regular expressions of words and phrases for each of these categories.<sup>39</sup>

<sup>&</sup>lt;sup>38</sup> Later in the process we clean the sample and any category with less than 100 occurrences in the whole sample is aggregated to a broader category leading to final 47 detailed categories.

<sup>&</sup>lt;sup>39</sup> In the process of reading these 8-Ks, we also find that some firms irregularly describe the SEC defined item names or item numbers. We make a special set of regular expressions to capture these exceptions.

To give an idea on how we form the regular expressions, we use the following example to show one way how we capture merger transactions in SEC defined Item 1.01. If a report uses the general word "acquisition", we look further in the sentence for: 1) propositions "from, by" immediately after "acquisition", and 2) the company name mentioned ("the company", its first name, or its full name; if first name is "the" or a single character, we instead use the first two words in the name). If the company name appears after the proposition, the categorization for this particular Item 1.01 is "purchase merger"; otherwise, we can assume that the acquirer is not the company and thus the categorization is "dispose merger".<sup>40</sup>

Another example for the use of regular expression to classify firm activities is the following on director arrivals. The 8-K text on the arrival of two directors reads as "On October 26, 2011, the Board of Directors of the Company (the "Board") increased the size of the Board from eleven members to thirteen members and, upon the recommendation of the Corporate Governance Committee, appointed each of Messrs Alan H Cohen and Peter M Scott, III to the Board." Since the sentence contains the pattern: "appoint" followed by "to the Board", it is classified as a "director arrival" activity. This regular expression for "director arrival" also captures other patterns for example, "named" followed by "as", which is followed by "director." It excludes possible confounding patterns like "named" followed by "executive/below/above/prior/there/here" because this pattern does not imply appointment.

<sup>&</sup>lt;sup>40</sup> Note that a blank check company's name usually contains the word "acquisition", and in such cases we assume the blank check company is the acquirer.

We write Python program to incorporate the regular expressions, parse all the 8-K filings, and automate the textual analysis process. We also extract the 8-K content to form a corpus for post-automation manual check. After the first round, we conduct the same procedure for three more rounds until the error ratio of the regular expressions stabilizes. The second to fourth round of learning is a trial-and-error refinement process for the regular expressions. In each round, we start with the automation output from previous round to generate a random sample of the most frequent categories of activities. Specifically, for each category with at least 100 observations, we draw 10 random observations. The number of frequent categories ranges from 66 to 70 in each round of learning. Next, we manually compare the categorization generated by the automation with the sample content of the 8-Ks. Once an error is detected, we revise the automation code to accommodate the changes. We also generate an error ratio for each category, based on the ratio of erroneous observation to 10. Finally, we run the modified code to complete one round of learning. The final categorization data is obtained after the fourth round of learning where the error ratio stays at around 10%. As discussed in Loughran and McDonald (2015), any further modification is essentially handling cases of outliers, therefore we stop revising the code after the error ratio stabilizes. In Appendix 5 we list examples for each of the detailed subcategory of events.

#### 4. Firm Changes Trigged by Activist Intervention

The sample of firms targeted by activist hedge funds is obtained by searching the Securities and Exchange Commission (SEC) EDGAR database for all 13D filings from 2005 to 2012.<sup>41</sup> To identify activist filings by hedge funds we check the name of the 13D filer against several lists of hedge funds. The list of institutions categorized as hedge funds is compiled from five sources: 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). We exclude from this sample on-going cases, duplicative filings, cases involving bankruptcy, ADRs, closed-end funds, some financial firms, and those without clean 8-K categories and without data available on CRSP, COMPUSTAT, I/B/E/S, and Thomson Reuters.<sup>42</sup> The final sample is 761 cases which further drops to 693 after ensuring that they have a propensity score matching firm that is described below.

As discussed earlier, there are nine major categories that describe the changes happening in target firms. Table 1 presents the descriptions of these categories and a brief description of what they comprise. The first category, referred to as *Acquisitions* consists of sale of the firm, assets, or subsidiaries. We analyze the frequency of disclosure related to this category in the one year prior to the 13D filing and the one year after. The dummy variable *Pre-Period* takes the value of one if the firm files at least one 8-K in the one year prior related to the category. We also create a count variable that is the number of times the firm files an 8-K that refers to

<sup>&</sup>lt;sup>41</sup> 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 32045 13D filings over this time period

<sup>&</sup>lt;sup>42</sup> 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. 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). We also exclude 13D cases where dates of the two cases are within 720 days in order to have an uncontaminated [-360, 360] day period.

the category in the Pre Period. Similarly, we create a *Post Period* indicator (count) variable that takes the value of one if the firm files any (the number of) 8-K in the category in the one year after the 13D filing. About 39% of the target firms file an acquisition related 8-K in the pre period that significantly increases to 48% in the post period (See Table 2). A similar increase in also seen for the number of 8-Ks filed. Whereas the average number of 8-Ks related to *Acquisitions* was 0.72 in the pre period it jumps to 1.19 in the post period. This is perhaps not too surprising since we know that the targets have a high likelihood of being acquired after the filing of the 13D.

## [Table 1 and 2 about here]

The second category, referred to as *Bylaws* consists of changes to the bylaws of the firms that relate to roles of directors, administrative requirements of meetings and proposals. Disclosures related to *Bylaws* are seen in 53% of target firms in the pre period and increase significantly to 64% in the post period. This is not entirely surprisingly as several of the changes like separating the roles of CEO and Chairman of the board are requested by activists. The third category, referred to as *Governance*, comprises of the arrival and departure of the CEO, officers and directors along with changes in compensation. Disclosures related to *Governance* are very frequent, seen in about 86% of the firms in the pre period. *Governance* related disclosure drops in the post period and seen in 83% of the firms.

The category referred to as *Capital Structure* consists of disclosure related to increase and decrease of leverage along with share repurchases and dividends. About 62% of the target firms file disclosures related to this category in the pre period and

there is no significant change in the post period. This is somewhat surprising as many activists request for increased share repurchases and payouts from their target firms. The category *Operations* refers to all activities that shrink the business, or increase its scope like purchase of assets and new product launches. We find that the frequency of *Operations* related disclosure does not change in the post period relative to what is seen in pre period - about 55% of target firms file *Operations* related disclosure.

The last four categories are not explicitly related to any requests by activists. The category referred to as *Communication* relates to the presentation of financial results and management guidance. This is a most frequent disclosure category and not surprisingly 93% of firms file 8-K related to this category in the pre period that drops a bit to 91% in the post period. The category *Litigation* captures disclosure related to ongoing and new litigation against the firm or by the firm. There is a significant increase in the frequency of this from 22% in the pre period to 28% in the post period. As acquisition related activity is often accompanied by litigation, this increase in litigation around 13D filing may reflect the increased acquisition activity. The category referred to as *Distress* captures notices of violation of exchange listing requirements and bankruptcy or debt restructuring. There appears to be an increase in the frequency of disclosures related to this category as well in the post period. Finally, the category *Other* captures the remaining issues.

### 4.1 Matching Sample

The increase in disclosure activity in the post period relative to pre period could also reflect a trend in these activities rather than changes initiated in response

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to the activist. Further, activists do not target firms randomly but rather based on their firm characteristics. To control for firm characteristics that are associated with targeting and their influence on the changes that take place, we construct a sample of propensity score matched firms which are similar to targeted firms in the likelihood of being targeted by activists.

#### 4.1.1. Construction of Matching Sample

We use a propensity score matching procedure to generate the matching firms.<sup>43</sup> First, we run a Probit model for the likelihood of being targeted by a hedge fund activist. The dependent variable in this estimation is a dummy variable that takes the value of 1 if the firm gets targeted in a particular year and 0 otherwise. The independent variables used are those dictated by prior literature (see Brav, Jiang, Partnoy, and Thomas (2008)).

We control for firm size (the natural logarithm of total assets), leverage (ratio of book value of debt to total assets), Dividend Yield (ratio of total dividend to book equity), and R&D (ratio of research and development expense to sales). We control for firm performance by including ROA (ratio of net income to lagged total assets), Tobin's Q (ratio of the sum of market value of equity and book value of debt to the sum of book value of equity and book value of debt), and Change in sales in prior years. We also include HHI Sales (Herfindahl Hirschman Index of segment sales), Institutional ownership (fraction held by 13F institutions), Number of analysts following the firm, and Liquidity. Liquidity is estimated according to Amihud as the

<sup>&</sup>lt;sup>43</sup> Firms with 8-Ks that are corrupted, have only exhibits (i.e., item 9.01 only), have repeated flings, or infrequent categories, are dropped. The infrequent categories are those that occur 100 times or less among the 41283 category observations. Our final sample includes 68 frequent categories each of which occurs more than 100 times.

yearly average (using daily data) of 1000 times the square root of |Return|/(Price\*Volume). All control variables are measured in the year prior to the 13D filing and winsorized at 1% and 99% levels. Lastly, we include industry and year fixed effects.

The results of the Probit model estimation are displayed in Appendix 3. Consistent with previous studies, smaller firms with lower Tobin's Q, lower sales growth and high institutional ownership are more likely to be targeted by hedge fund activists. From the estimated coefficients of model, we calculate the propensity score or likelihood of being targeted by an activist for every firm year. For each target in year t, we match it with a non-target firm in year t with the closest propensity score (nearest neighbor matching with replacement). Appendix 4 displays the comparisons of the relevant firm characteristics between the target and their matched firms. Not surprisingly, most of the firm characteristics are not significantly different between the target and their matched firms.<sup>44</sup> This suggests a satisfactory result of propensity score matching.

#### 4.1.2 Differences in Changes between Target and Matched Firms

Pressuring the target firm to put itself up for sale is one of the frequent objectives of the hedge fund activist and as documented by Greenwood and Schor (2009) one of the major sources of value gain from hedge fund activists. If the objective of the activist is to ensure the sale of the firm, it is unlikely that the activist will also push for changes in the governance and operations of the firm. Therefore,

<sup>&</sup>lt;sup>44</sup> In untabulated results, we rerun the probit model using only the target firms and their matched firms and find that none of the independent variables load significantly.

we separate the sample of target firms into those that are acquired and those that are not. In our sample of 693 firms that are targeted by hedge fund activist, 195 firms are acquired within 2 years of the 13D filings and comprise the acquired sample. The remaining 498 firms are the non-acquired sample.

We begin by examining the changes in acquired 13D targets with respect to their matched firms. As seen in Table 3 in the acquired sample, target firms have more acquisition related disclosure relative to matched firms even in the pre period. They are 31% more likely than matched firms to file 8-K related to this category in the pre period. This difference increases to 45% in the post period. The increase in the post period, relative to the pre period for target firms is significantly higher than that seen for matched firm. There is a 14% higher increase in the post period relative to matched firms. Interestingly, this sample of acquired target firms display no significant increases, relative to their matched firms, in activities related to any other category.

In summary, target firms that are eventually acquired disclose being engaged in activities that are related to the sale of the firm and do not embark on any other changes related to governance, payouts or operations. In the following section, we examine the changes in the non-acquired sample to identify the major areas of change for these firms.

#### [Table 3 about here]

## 4.3 A Detailed Analysis of Changes in the Non Acquired Sample

To understand the changes in the non-acquired sample, we take a similar approach as in previous tables and examine the changes occurring in the year prior to

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and the year after the 13D filing. In the following sections, we examine each category in details.

## 4.3.1 Acquisition

We begin with the Acquisition Related 8-Ks that span across four different kinds of disclosures. These four categories are *Sale of Subsidiaries, Sale of Assets, Strategic Alternative and Administrative* details. *Strategic Alternative* involves seeking alternatives for example selling a division and *Administrative* details involve voting on acquisition related activities (see Appendix 5 for examples). As this is the sample that was not acquired, we do not have a category about sale of the firm itself.

As seen in Table 4A and Panel A, 11% of the targets file an 8-K related to the *Sale of Assets* in the pre period. This increases to 15.1% in the post period and the increase is significant. A similar pattern emerges when we look at the number of 8-Ks filed: there is significantly higher number of 8-Ks related to asset sales that are filed in the post period by target firms. However, this increase in *Sale of Assets* may not be related to activism, and may reflect trends in the industry or related to firm characteristics. To isolate the potential effect of activism, Panel B reports the difference with the matched sample. Target firms do not differ from the matched firms in the year prior to 13D (the pre period difference is not statistically significant), but have relatively higher asset sales in the post period. The difference across the two periods is significantly higher for target firms. Note that this is a difference-in-difference) and whether this differs between target and matched firms (second difference). The result is similar for the count variables. The next acquisition related category is *Sale of Subsidiaries*. This involves sale of wholly owned subsidiaries, other subsidiaries and spinoffs. About 13% of the target firms disclose these activities in the pre period and this increases significantly to 17.3% in the post period. However, this change is not significantly different from that seen in matched firms. There is a significant increase in disclosure related to *Strategic Alternative* at target firms. It increases from 14.5% in the pre period and to 18.7% in the post period. This increase is significantly higher than that seen in matched firms. Lastly, disclosures related to *Administrative* details do not change materially in the post period and there is no difference with matched firms. In short, target firms increase asset sales and are significantly more likely to seek strategic alternative in the post period relative to the matched firms.

#### [Table 4A about here]

#### 4.3.2 Bylaws

As discussed before, the *Bylaws* category includes 8-K filings that disclose activities and changes in the bylaws of the firms. This covers a broad range and is grouped in five detailed categories that are *Board Related*, *Meeting Admin*, *Vote Outcome*, *Rights Plan* and *Others*. As seen in Table 1, *Board Related* bylaw changes include proposals to declassify boards, majority voting rules, and separating the CEO and Chairman of the board role. The second category is *Meeting Admin* and is related to administrative requirements for shareholder proposals and nominations among others. The third category, referred to as *Vote Outcome*, captures 8-Ks that disclose the results of meetings and matters put to vote and is administrative. *Rights*  *Plan* involves the adoption and amendments to existing rights plan and finally *Others* includes remaining disclosures.

As shown in Table 4B, there are significant changes in *Board Related* bylaws. About 23.7% of target firms disclose 8-K in this category in the pre period and this increases significantly to 31.5% in the post period. This increase in target firms is significantly higher than that in the matched firms. There is also an increase in disclosures related to *Meeting Admin* category: it increases from 10.8% in the pre period to 16.7% in the post period. However, this increase is not materially different from that of matched firms. Vote Outcome is an administrative category and there is a significant increase in the frequency of this category and this increase is higher than that seen in the matched firms. However, this might just be capturing the impact of the other changes that the firm is proposing and putting to vote. The category Other captures matters related to 10b-5 plans, rights of preferred stock that appear to be unrelated to the activist agenda and there is no difference with matched firms. Lastly, there is a significant increase in the disclosure related to *Rights Plan*. There is no difference-in-differences test displayed for this group as there is no 8-K related to this filed by matched firms.

In short, we see significantly higher *Board Related* bylaw changes in target firms in the post period. There is also an increase in *Voting Outcomes* but it might not be directly related to the activist demands. We will examine later in the paper whether the higher frequency of target firms in these areas is associated with increase in shareholder value.

[Table 4B about here]

# 4.3.3 Governance

This is a very broad category and disclosures related to governance changes are disclosed in several detailed categories. We discuss separately changes and disclosures related to the arrival and departure of CEOs, Directors, and executive officers and then compensation related 8-Ks for all these officers.

8-Ks disclosing information about new *CEO Arrival* are filed by 12.7% of the target firms in the pre period (See Table 4C). This significantly increases to 18.3% in the post period. This increase in CEO arrival disclosure is significantly higher than that seen in matched firms. In contrast to CEO arrivals, there is no significant difference in *CEO Departure*.<sup>45</sup> About 10% of the target firms file 8-Ks related to *CEO Departure* in the pre period that is significantly higher than the matched firms. However, the post period displays a similar higher frequency and the difference between pre and post period is not significantly different.

There are substantial activities related to the arrival and departure of directors. About 40.6% of target firms file disclosures related to *Director Arrival* in the pre period and this jumps significantly to 53.4% in the post period. This trend of increased *Director Arrival* in target firms is significantly higher than that seen in matched firms. The difference-in-differences tests show a 16% increase in target firms, relative to matched firms, for the post period. There is also a significant increase in *Director Departure* – the frequency of *Director Departure* disclosure jumps from 28.3% to 32.9% and the increase is significantly higher than that seen in

<sup>&</sup>lt;sup>45</sup> CEO arrivals capture disclosures about CEO succession planning and announcement of CEO joining in the future. As these may not contain CEO departure information, disclosures about CEO arrivals are not always accompanied by disclosures about CEO departures.

matched firms. Gow, Shin and Srinivasan (2014b) also document that the incidence of higher director turnover after firms are targeted by hedge fund activists.<sup>46</sup>

For the remaining executives, we organize arrivals and departures separately for the CFO, named executive officers (NEO) and other officers. The named executive officers (NEO) are the top five paid officers of the firms. The most frequent of these relate to the arrival and departure of CFO that is disclosed in 21.3% of the target firms in the pre period. This frequency does not change significantly in the post period. The change in the post period for target firms is similar to that seen for matched firms. The frequency of arrival and departure of Named Executive Officers (NEO) and other officers also does not change materially in the post period for target firms and there is no material difference in these activities relative to matched firms (see Table 4C).

Not surprisingly, disclosures related to compensation are common. As before we list separately 8-Ks related to compensation of CEO, Directors, Named Executive Officers (NEO) and officers. Firms also disclose contracts, captured by the detailed category *Package*, with the CEO and other officers. These contracts include employment contracts, severance agreements, and other contracts along with bonus plan details (see Appendix 5 for examples). The most frequent of these are related to the compensation of officers (18.3%) and packages given to Officers (33.3%). There is little difference with matched firms in most of these categories with the exception of two categories. The first is packages to named executive

<sup>&</sup>lt;sup>46</sup> Appel, Gormley and Keim (2016) show that support from passive mutual fund's is important in making the activists efforts to appoint new directors successfully.

officers (NEO) which is more frequent in the target firms, relative to matched firms, in the post period. The second is compensation of directors; the increased disclosure about *Director Compensation* is consistent with prior results of increased activities in the arrival and departure of directors in target firms relative to matched firms.

Overall, there is a significant increase in director related disclosure in the post period for target firms relative to matched firms. There is significantly higher *Director Arrival, Director Departure and Director Compensation* related 8-Ks in the post period for the target firms. We also find a significantly higher likelihood of *CEO Arrival* in the post period in target firms.

# [Table 4C about here]

# 4.3.4 Capital Structure

This category consists of changes in leverage and payout policy for the firms. Disclosures related to *Capital Structure* are grouped into *Increase of Leverage*, *Decrease of Leverage*, *Repurchase*, *Regular Dividend*, *and Undefined Dividend*.<sup>47</sup> *Undefined Dividends* includes disclosures about dividends with no disclosed details.

The most frequent activity in the pre period involves increase in leverage, for 48% of the target firms, and decrease in leverage for 30.9% of the sample firms. There is no significant change in either category in the post period. There is also no difference relative to matched firms. The changes are seen in repurchase activity – whereas 12.9% of target firms disclose repurchase related activity in the pre period, about 20.1% do so in the post period. The difference is significant and also is higher

<sup>&</sup>lt;sup>47</sup> The category Leverage Increase also includes disclosure about sale of preferred stock and covenants. These were not very frequent disclosures and do not display significant changes.

than that seen in matched firms. This is not surprising as prior research documents that repurchasing shares or increasing payout is one of the frequent demands of hedge fund activists. This increase in payout is also seen in the increase in the frequency of undefined dividends from 3% to 6% for the sample firms. There is no difference in the 8-Ks filed pertaining to regular dividends.

In summary, 8-Ks reveal that target firms are significantly more likely to repurchase stocks, and payout undefined dividends in the year post 13D in comparison to changes in matched firms.

## [Table 4D about here]

## 4.3.5 Operations

This category includes disclosures related to the expansion of business, shrinking of business, positive and negative disclosures about employee related matters and finally purchase of assets. The detailed category *Operations Positive* captures 8-Ks related to positive news about the business like new product or stores, and signing of contracts among others while *Operations Negative* includes negative news about the business. *Employee Positive* captures positive news about employees like settlement of disputes and *Employee Negative* includes costs, typically related to staff reduction. Finally, the detailed category *Purchase Assets* includes disclosure about the purchase of assets or divisions by the firm.

Though several prior papers suggest that firms targeted by hedge fund activists make significant changes in their operations, there is little of that in our sample. As presented in Table 4E, there is no change in any of these detailed categories for target firms in the post period relative to what is seen in the pre period. There is also no difference with matched firms. The only exception is *Employee Negative* that captures costs related to employee reduction. There is a significant increase in *Employee Negative* disclosure by target firms from 10.2% in the pre period to 14.7% in the post period. This increase in the post period for target firms is significantly higher than that seen in matched firms.

In summary, the only evidence of material change in the operations of target firms is seen in disclosure about employee related costs due to closure of facilities.

[Table 4E about here]

# 4.3.6 Communication

This is the most frequent disclosure category. Disclosures in this category comprise presentation of *Financial Results*, *Management Guidance* or communication with *Capital Markets* participants like analysts.

About 92% of the target firms file financial results related disclosure in the pre period and this remains similar in the post period. However, matched firms tend to decrease disclosure of financial results in the post period. Due to this we see that relative to matched firms, there is an increase in the disclosure of *Financial Results* by target firms in the post period. In contrast, there is significant decrease in the *Management Guidance* by target firms in the post period, relative to matched firms. There is no material change in *Capital Markets* communication for target firms in the post period relative to matched firms.

In summary, relative to matched firms target firms increase the frequency of reporting *Financial Results* and reduce the frequency with which they provide *Management Guidance*.

[Table 4F about here]

### 4.3.7 Remaining Categories

The category referred to as *Distress* contains 8-K disclosures about two sets of activities. The first, referred to as *Delisting* includes disclosures about notices received for being in violation of listing requirements. The second category *Restructuring* consists of updates about bankruptcy proceedings or debt restructuring. About 14% of the target firms file 8-Ks related to delisting and this increases somewhat to 16.1 % in the post period but is not statistically significant (see Table 4G). About 7.8% of firms file disclosures about debt restructuring or bankruptcy related restructuring and this remains the same in the post period. There is no difference in these activities relative to that seen in matched firms.

The broad category *Litigation* involves lawsuits filed by the firm and updates on the status of such litigation, referred to as *Litigation Positive* as well as disclosures related to litigation against the firm, referred to as *Litigation Negative*. There are no significant changes in the litigation against the firm though litigation by the firm (*Litigation Positive*) increases in the post period. Specifically, there is a significant increase from 10.8% in the pre period to 15.5% in the post period. This increase in target firms is significantly higher than that seen in matched firms.

[Table 4G about here]

In summary, for the sample of non-acquired target firms, we find significant activities in the post period for target firms relative to matched firms in the following areas 1) *Sale of Assets*, 2) *Strategic Alternative*, 3) *Board Related Bylaws* 4) *CEO Arrival* 5) *Director Arrival* and *Departure*, 6) *Director Compensation*, 7) *Package NEO*, 8) *Repurchase*, 9) *Employee Negative*, 11) *Financial Results*, 12) *Management Guidance*, and 13) *Litigation Positive*.

### 5. Long Run Stock Returns by Activists Intervention

Next we examine if the more frequent changes in target firms in the post period are associated with increase in firm value. To shed light on this we estimate buy and hold returns post 13D filing for both target firms and their matched counterparts. If changes initiated by the activist are associated with value increase they should be reflected in higher buy and hold returns for target firms relative to their matched counterparts. As we examine 8-Ks filed one year after the 13D filing, the buy and hold returns BHARs from [0, 12] month capture returns that are contemporaneous to the changes taking place in the firm. We also estimate BHARs over the [13, 36] month period to capture the long run impact of the changes initiated by target firms.

#### 5.1 Buy and Hold Returns (BHARs)

To estimate benchmark adjusted buy and hold returns, we estimate the following

$$BHAR_{i}[0,T] = \left(\prod_{t=0}^{T} (1+R_{i,t})\right) - \left(\prod_{t=0}^{T} (1+R_{b,t})\right)$$

where the event month is designated as zero and T represents the holding period, in this case 12 months.  $R_{i,t}$  is the monthly CRSP return for stock i in month t and  $R_{b,t}$ is the monthy return to the benchmark, the value weigted CRSP index including dividends, in month t.

BHARs across target and matched firms could vary on account of factors other than activism related changes. We control for these factors in our examination of which activism related changes are associated with increased value for the target firms. Specifically, we control for Firm Size (the natural logarithm of total assets), Leverage (the ratio of book value of debt to total assets), Change in Sales (The change in sales in prior year), Tobin's Q (the ratio of the sum of market value of equity and book value of debt to the sum of book value of equity and book value of debt), ROA (Net income / Lagged Total assets), Dividend Yield (Total dividend / Book Equity), and R&D (Research and Development Expenses / Sales). We also include the Herfindahl Hirschman Index of segment sales, referred to as HHI Sales, and Institutional Ownership (Total 13F ownership), Number of Analysts following the firm, Amihud's Liquidity measure and finally Pre BHARs which is the buy and hold returns over the prior year. Lastly, we include the variable of interest; the *Target Dummy* takes the value of one for target firms and zero for the matched firms. The variable, referred to as *Category*, is the number of 8-Ks filed in the specified category (listed as the column heading) in the post period. The *Category* variable captures the intensity of the changes in that category in the post period. Finally, the interaction of the *Target Dummy* with the *Category* captures whether more frequent

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changes in the target firm are associated with higher returns. Below, we report results for all the detailed categories.

### 5.2 Acquisition Related

In this section, we examine if changes in the acquisition related categories in target firms are associated with long run returns for target firms. The first column in Table 5A, under the heading Sale Sub presents the impact of disclosures related to the sale of a subsidiary. The coefficient of Category is positive and significant suggesting that disclosures related to sale of subsidiaries is associated with positive [0, 12] month BHARs for all firms, i.e., both target and matched firms. The coefficient of the interaction of *Target Dummy* with *Category* is negative and significant suggesting that for target firms, sale of subsidiaries is associated with negative [0,12] month BHARs. This is however reversed when we look at [13, 36] month BHARs where sale of subsidiaries is associated with negative returns in general and no significant differences for target firms. As seen in the prior section, target firms do not have subsidiary sale disclosures with higher frequency after 13D filing (see Table 4A) but these changes though not more frequent are associated with differing value impact. Whereas matched firms have positive contemporaneous and negative future buy and hold returns, target firms experience negative contemporaneous and but positive future returns from sale of subsidiaries.

There is also evidence that disclosures about *Strategic Alternative* are associated with significant buy and hold returns for target firms. Note that target firms have a significantly higher likelihood of disclosing such activity in the post period and though this is associated with negative [0, 12] month BHARs in the long

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run they are associated with increased value. It is possible that target firms respond to pressure from activists to sell the firms by seeking strategic alternatives. The negative return over the [0,12] month period reflects the market's disappointment that the firm was not sold but over the longer term these activities, undertaken under pressure from the activist are associated with higher value. This result is consistent with a recent paper by Gantchev, Shin and Shivdasani (2016) that activists increase the likelihood of firms being sold.

Along with seeking *Strategic Alternative*, target firms are also more likely to sell assets in the post period. Though this activity is more frequent in target firms it is not associated with any value impact for target firms or for matched firms when undertaken. Finally, *Sales Admin* for target firms is associated with negative returns over the [0, 12] month period but is positive for matched firms. This is not surprising. As the target firms are those that were not acquired over the 24 months after 13D filing, *Sales Admin* include failed bids (that did not materialize into acquisitions) and consequently associated with negative impact on BHARs. However, for the matched firms many of these bids received do materialize into acquisitions.

#### [Table 5A about here]

#### 5.3 Bylaws

As discussed in Section 4, *Board Related* bylaw changes are significantly more likely in target firms in the post period. These changes, like declassifying the board and separating the CEO and Chairman position are often sought by activists. However, we find no evidence that more activity in this category is associated with higher returns in general or for target firms in particular. This is seen both for the first year, as well as over the long run for BHARs over [13, 36] months.

The other category that was more frequent was *Voting Outcomes* that was likely more administrative and in line with expectation, there is no significant impact of these activities on firm value. The other categories like *Rights Plan* and *Meetings Admin* also have no value impact for target firms or matched firms. Overall, it is surprising that these changes related to the bylaws, often requested by hedge funds and are more frequently seen in target firms after 13D filing, are in fact associated with no significant impact on firm value. This result may be partly explained by the fact that some changes, for example in the *Meeting Admin* detailed category seek to deter activist's communication with other shareholders. Consequently, a higher frequency of these changes may reflect defensive measures of firms against the activist and negate any increases in shareholder value.

## [Table 5B about here]

### 5.4 Governance

As noted earlier, we see significant increase in *CEO arrival* for target firms in the post period. Disclosure about *CEO Arrival* is not associated with any effect on contemporaneous BHARs for both target and matched firms. However, [13, 36] month BHARs are significantly positive for target firms though not for matched firms. There was no significant difference between target and matched firms in the frequency of CEO departure disclosures and consistent with that we do not see that this is associated with any value impact.

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Target firms experience significantly higher frequency of *Director Arrival* and *Departure* in the post period. We find that director arrivals, though not departures, are associated with significant value impact. Specifically, more frequent director arrivals are associated with significantly higher [0,12] month as well as [13, 36] month BHARs for target firms. One director arrival 8-K is associated with 6.7% higher [0,12] month and a 9.3% higher [13, 36] month higher BHAR. Gow, Shin and Srinivasan (2014a) study "activist" director arrival at target firms but find no significant impact on long term shareholder value. As opposed to examining the average value impact for all firms that have "activist" director, our measure proxies for the intensity of director arrival by including the number of director arrival 8-K files. This suggests that when there are a sufficiently large number of new directors on the board, there is a higher likelihood of increase in value. Further, as we benchmark the returns to propensity score matched firms, our results show that relative to matched firms target firms with director arrivals perform better.

Arrivals and departures of CFO, named executive officers (NEO) and other officers are not more frequent in target firms in the post period. Consistent with this result that activists do not focus or push for these changes on average, there is no significant value impact related to these activities. Lastly, we examine compensation related changes. Though *Director Compensation* and *NEO Package* are more frequent for target firms in the post period, these more frequent activities are not associated with any value impact. In contrast, *CEO Compensation* related disclosures though not more frequent are associated with higher returns for targets
over the [13, 36] month period. This suggests that changes in *CEO Compensation* are more meaningful when undertaken under pressure from activists.

#### [Table 5C about here]

#### 5.5 Capital Structure

Paying cash is one of the frequent demands of the activists. In line with this, there is significant increase in sample firms repurchasing shares in the post period relative to matched firms. However, we see no evidence that this increase in propensity to repurchase is associated with any value impact for target firms. Repurchase activity is associated with positive contemporaneous performance for all firms but has no long run [13, 36] month effect on shareholder value. The higher repurchase for target firms do not translate into value gains over those achieved by matched firms. Similarly, though undefined dividends are higher for target firms, they are not associated with any significant value impact. This could be because we observe undefined dividends in only 5.6% of target firms in the post period.

### [Table 5D about here]

#### 5.5 *Operations*

There was little difference in the frequency of operations related disclosure for target and matched firms in most areas except for costs related to employees. Though this category was more frequent we do not see any evidence that it is associated with any value impact for target firms. None of the changes in *Operations* related activities generate significantly higher value for target firms in the months after the 13D filing.

### [Table 5E about here]

#### 5.6 Communication and Other Categories

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As discussed earlier target firms disclose financial results more frequently and management guidance less frequently in the post period relative to matched firms. Despite this interesting pattern in the frequency with which 8-Ks in this category are filed, these are not associated with any difference in firm performance of target and matched firms (see Table 5F).

The frequency of 8-Ks filed in the category *Litigation Positive*, i.e., related to litigation initiated by the firm is higher in the post period for target firms. Though frequency of disclosure in the *Litigation Positive* category is associated with positive [0, 12] month BHARs for all firms, there is no significant difference for target firms. There is also no effect of activity in the area on long run BHARs. Not surprisingly, activity in the *Litigation Negative* category has no effect on either contemporaneous or future BHARs.

Though distress and delisting related disclosures are not more frequent in target firms these are associated with significantly different value impact for target firms. Specifically, delisting related disclosures as expected are negative events and are associated with lower [0, 12] month as well as [13, 36] month BHARs for all firms. However, for target firms these disclosures are associated with less negative, or zero, returns over the [13, 36] month period as the interaction of Target Dummy with this category is positive and significant. The improved performance may result from pressure from the activist to regain listing status, since activists have an incentive to keep targets listed to avoid liquidity issues if they want to change holding or exit. This suggests the possibility that the presence of the activist forces the firm into dealing with adverse circumstances in a more focused and efficient

manner. Disclosures related to restructuring are also negative events but are associated with significant negative BHARs over the [0, 12] months only for target firms and have no effect over the longer period. As response to delisting related woes or restructuring is not directly sought by the activist, these results suggest that the activist can have an impact on other unintended areas of the firm. A greater understanding of this would help enhance our understanding of the impact hedge fund activists have on the firm.<sup>48</sup>

#### [Table 5F and 5G about here]

### 5.7 Breadth of Changes

So far we have examined whether the frequency of activities in any given category is related to the BHARs. In this section, we examine if the breadth of these changes impacts value. In other words, do target firms which only focus on governance changes generate more value than firms which change governance, operations, bylaws, and communication, i.e., four major categories? Are broad changes in target firms more effective in generating value than focused ones?

To capture the breadth of changes we count the number of categories that are spanned by the 8-Ks filed by the target and matched firms in the post period. The measure, *Breadth* is the count of the number of broad categories in which the firm files an 8-K in the post period. The average of this measure is 4.6, i.e., on average the 8-Ks filed by the firm span across 4.6 of the 9 broad categories. However, it is

<sup>&</sup>lt;sup>48</sup> Though, Accounting related disclosures are not more frequent in the target firms they are associated with significant difference for BHARs. The Accounting category includes detailed categories that involve change in accountant, impairments, and restatement related. Though the frequency of the detailed categories is not different for target and matched firms the value impact differs based on the detailed categories. The higher [0,12] month BHAR seen for target firm in the accounting category is primarily due to impairment. This is likely related to the higher frequency of asset sales in target firms.

possible that firms files one isolated 8-K in a category and this does not imply that the firm is actively making changes in this category. To better capture categories where the firm is heavily involved in making changes, we define a firm as being active in a category only if the firm has above normal disclosures in that category. We use two benchmarks to define above normal disclosures. First, the measure *Breadth Mean* is the number of broad categories that are active, with active being defined as the number of unique detailed categories in the broad category that are greater than the mean for that broad category. Secondly, the measure *Breadth75* is the number of broad categories in the broad category that are greater than or equal to the 75<sup>th</sup> percentile of that broad category. The average of this *Breadth75* is 1.996, that is, on average the firm is actively focusing on 2 of the 9 broad categories.

Table 6 displays the results of estimating the effect of Breadth on [0, 36] month buy and hold returns. We include all the control variables that are included in Table 5 before. The base measure *Breadth* is not statistically significant (Column 1). However, when the firms are active in more categories, as captured by the *Breadth Mean* or *Breadth75*, it is generally associated with negative [0,36] month BHARs – the coefficient of Breadth measure is negative and significant. Making changes across many aspects of the firm, rather than being focused, is not associated with higher buy and hold returns on average. However, for target firms making changes in many areas is not necessary negative. The coefficient of the interaction of the *Target Dummy* with *Breadth Measure* is positive and significant and similar in magnitude to the coefficient of the *Breadth* measure. As the post 13D period is a time for intense scrutiny for target firms, making changes across many aspects of the firm does not signal lack of focus or inefficiency and is not associated with negative buy and hold returns.

[Table 6 about here]

### 6. Conclusion

In this paper, we conduct a detailed textual analysis of the 8-Ks filed by firms targeted by hedge fund activists to study the nature and extent of changes that target firms undergo, with a particular focus on the firms that are not acquired. To identify the changes, we also analyze the 8-Ks filed by target firms in the year prior to 13D filings as well as in propensity score matched firms. Examining the disclosures by target firms in the year after 13D filing in comparison with the year prior to the 13D helps isolate changes the firms undergo. Comparing these changes to those in matched firms helps identify changes that are likely attributable to hedge fund activism.

Based on the analysis of the texts of 8-Ks, we categorize nature of firm activities in nine broad categories. These categories are Acquisition, Bylaws, Governance, Capital Structure, Operations, Communication, Litigation, Distress and Others. We measure the frequency of the disclosures in each broad category to capture the intensity of activities in that area.

We find that 195 of the 693 target firms are acquired within two years of the 13 D filing. An examination of the 8-Ks filed by acquired targets reveals that firms are focused on acquisition related activity with little changes in other aspects of the firm relative to matched firms. A detailed analysis of the non-acquired sample of

target firm reveals that target firms undergo significant changes in the post period relative to their matched counterparts. Specifically, we find that non-acquired target firms have significant higher activities in the post period relative to matched firms in the following areas 1) *Sale of Assets*, 2) *Strategic Alternative*, 3) *Board Related Bylaws* 4) *CEO Arrival* 5) *Director Arrival and Departure*, 6) *Director Compensation*, 7) *NEO Package*, 8) *Repurchase*, 9) *Employee Negative*, 11) *Financial Results*, 12) *Management Guidance*, and 13) *Litigation Positive*.

Several of the changes that are more frequently seen in target firms after 13D filings are not associated with any value impact. Specifically, sale of assets, board related bylaws and repurchases are not associated with any value impact for target firms. These changes are often requested by activists but the evidence suggests that firms that engage in these changes do not generate any value from these. In contrast, we find that CEO arrivals and director arrivals that are more frequent in target firms after 13D filing are associated with increase in shareholder value. The results suggest that hedge fund activists create value not just by pressuring the firm to sell itself but by also changing the governance of the firm in particular putting in place a new CEO and directors.

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Zhao, Xiaofei. "Does Information Intensity Matter for Stock Returns? Evidence from Form 8-K Filings." *Management Science, Forthcoming* (2015). **Table 1** 

Main Category	Detailed Category	Explanation
Acquisition Related		Dispose merger
	Sale of Subsidiary Sale of Assets	Sale of subsidiaries, Spinoffs,
	Strategic Alternative	Intention of seeking strategic alternative
	Administrative	Voting on acquisition related activities, Receipt of bid to acquire firm
Bylaws		
2	<b>Rights Plans</b>	Amend rights plan, adopt rights plan
	Voting	Matters submitted to shareholder voting,
	Outcomes	Annual meeting results
	Board Related	Setting roles of directors / chairman/ committee, separating Chairman/CEO Role, Special shareholder meeting, Declassify board/majority voting
	Meetings Admin	Administrative requirements for shareholder proposal/nomination
	Other	Insider trading (10b5) plans, rights of preferred stock, Participating in Direct Registration System
Governance		
CEO	Arrival CEO	Arrival of CEO, Arrival transition CEO
	Departure CEO	Departure of CEO

This table displays the major categories of change and their corresponding detailed categories.

Director	Arrival Director	Arrival of director, Settle proxy
		contest/threat from investors (primarily
		activists), arrival of Chairman
	Departure	Departure of director
	Director	L
Executives	Arrival CFO	Arrival of CFO. Arrival of transition
		CFO
	Arrival NEO	Arrival of named executives
	Arrival OFF	Arrival of officers
	Departure CEO	Departure of CFO
	Departure NEO	Departure of pamed executives
	Departure NEO	Departure of officers
	Common setion	Commensation for directors
Compensation	DRT	Compensation for directors
	Compensation CEO	Compensation for CEO
	Compensation	Compensation for named executives
	Compensation	Compensation for officers
	OFF	compensation for officers
	Package CEO	Contracts for CEO
	Package DRT	Contracts for directors
	Package CFO	Contracts for CFO
	Package NEO	Compensation/ employment/ severance
	C	contracts for named executives
	Package OFF	Contracts for officers
Consider <sup>1</sup>		
Capital		
Structure	<b>.</b>	
Leverage	Increase	Increase in leverage, sale preferred stock,
	Leverage	other leverage changes (e.g., waiver and
	-	covenant renegotiation)
	Decrease	Increase in equity/repayment of debt
-	Leverage	~
Payout	Repurchase	Repurchase shares
	Regular	Quarterly Dividend, cash dividends
	Dividend	
	Undefined	Undisclosed details
	Dividend	
Operations		
-	Operations	Shrinking of business
	negative	č
	Operations	Expansion of business such as new
	Positive	products or stores, signing
		contract/license

	Purchase Assets	Purchase other firms, assets, close deals
	Employee	Costs (typically staff reduction)
	Negative	associated with discontinued operations, sale of units, layoffs
	Employee positive	Settlement/management communication with employees
Communication		
	Results	Financial results
	Capital Markets Guidance	Communication with investors/analysts Management guidance
Litigation	Litigation Positive	Filed lawsuit against other firms, status updates
	Litigation Negative	Lawsuit filed against firm, status updates
Distress	Delisting	Notices for violation of listing requirements
	Restructuring	Bankruptcy or debt restructuring
Other		
	Change in	
	Control	
	Other	
	agreements	
	Change	
	accountant	
	Impairments	
	Restatement	
	related	

### Table 2: Description of Disclosure Categories Before and After 13D filing

The table displays information content of 8-K filed by firms targeted by hedge fund activists. The pre period is 360 days prior to the 13D filings. The post period is 360 days after the 13D filing. The sample consists of 693 firms targeted by hedge fund activists. Panel A displays the average of dummy variables that take the value of one if the firm files at least on 8-K in the period for that category. Panel B reports the averages number of 8-K filed by the firm in the period related to that category. The P Value is for the t test for the difference between the pre and the post period. The *Acquisition* category includes all disclosure related to sale of firms and assets, *Bylaws* includes disclosures related to changes in bylaws and rules for the firms, *Governance* includes arrival and departure of director, executives and CEO and

change in any compensation plans, *Capital structure* includes increase and decrease in leverage along with repurchases, *Operations* relate to shrinking and expansion of business and layoff of employees, *Communication* includes disclosure of financial results and management guidance, *Litigation* includes updates about lawsuits filed by the firm and those filed against the firm, *Distress* includes violation of listing requirements and debt restructuring and *Other* includes the remaining categories.

Category	Panel A	anel A: Indicator			Panel B: Count Variable			
	Variabl	le						
	Pre	Post	P Value	Pre	Post	P value for		
	Period	Period	for	Perio	Period	Difference		
			Difference	d				
Acquisition	0.39	0.48	0	0.72	1.19	0		
Bylaws	0.53	0.64	0	0.87	1.19	0		
Governance	0.86	0.83	.04	3.13	3.34	.06		
Capital Structure	0.62	0.65	.24	1.7	1.8	.27		
Operations	0.55	0.53	.27	1.3	1.27	.66		
Communication	0.93	0.91	.09	5.03	4.6	0		
Litigation	0.22	0.28	0	0.39	0.48	.09		
Distress	0.19	0.22	.07	0.38	0.38	.98		
Other	0.3	0.35	.03	0.47	0.54	.11		

This table displays difference between the target and the matched firm for the subsample of 195 target firms that were acquired within 24 months of the 13D filing. The first column, titled Pre-Period (Post Period) is the difference in the average Pre Period (Post Period) dummy between the target and control firm in the one year prior to (after) the 13D. The third column displays the p value for the change for target minus the change for the matched. The change for the target (matched) is the difference between the Post-Period and the Pre Period for the target (matched) sample. The Acquisition category includes all disclosure related to sale of firms and assets, Bylaws includes disclosures related to changes in bylaws and rules for the firms, Governance includes arrival and departure of director, executives and CEO and change in any compensation plans, Capital structure includes increase and decrease in leverage along with repurchases, *Operations* relate to shrinking and expansion of business and layoff of employees, Communication includes disclosure of financial results and management guidance, *Litigation* includes updates about lawsuits filed by the firm and those filed against the firm, Distress includes violation of listing requirements and debt restructuring and Other includes the remaining categories.

	Panel A: Indicator Variable			Panel B: Count for the			
	for 8-K			number o	of <b>8-K</b>		
	Pre	Post	P Value	Pre	Post	P Value	
	Period	Period	for	Period	Period	for	
	Differen	Differen	Differenc	Differen	Differen	Differenc	
	ce	ce	e in	ce	ce	e in	
			Differenc			Differenc	
			e			e	
Acquisition	.31 (0)	.45 (0)	.14 (.05)	.72 (0)	1.65 (0)	.93 (0)	
Bylaws	.11 (.02)	.08 (.14)	03 (.71)	.24 (.02)	.26 (.03)	.03 (.86)	
Governance	.06 (.1)	06	11 (.04)	.33 (.19)	41 (.1)	74 (.01)	
		(.21)					
Capital	09	13	04 (.73)	51	66 (0)	15 (.51)	
Structure	(.08)	(.01)		(.01)			
Operations	0(1)	08	08 (.21)	08	26	17 (.37)	
		(.13)		(.65)	(.15)		
Communicati	03	05	03 (.37)	.08 (.79)	-1.49 (0)	-1.57 (0)	
on	(.13)	(.11)					
Law	.08 (.05)	.22 (0)	.13 (.01)	.14 (.09)	.44 (0)	.3 (.01)	
Distress	0(1)	.04 (.4)	.04 (.35)	01	01	0(1)	
				(.93)	(.89)		
Other	0(1)	.12 (.01)	.12 (.04)	0(1)	.11 (.17)	.11 (.29)	

### Table 4: Changes in Acquired Sample

The table documents the nature and frequency of changes in the 498 non- acquired 13D targets of hedge funds. Each panel display detailed disclosure in each of the broad categories. In Panel A, the column, titled Pre-Period (Post Period) is the average Pre Period (Post Period) for target firms. The Post-Pre column displays the difference between the post and pre period and its P value in parenthesis. Similarly the Pre Count (Post Count) is the average number of 8-K filed in the category in the Pre (Post) Period and Post-Pre Counts is their difference. In Panel B, Pre (Post) Dummy is the difference between the target and matched firm in the one year prior to (after) the 13D. The third column displays the p value for the change for target minus the change for the matched. The change for the target (matched) is the difference between the Post-Period and the Pre Period for the target (matched) sample.

### **Table 4A: Acquisition Related**

This panel displays the detailed category related to Acquisition. Sale Assets includes 8-K related to sale of assets, Sale Subsidiary includes 8-K related to sale of subsidiaries of the firm, Strategic Alternative includes 8-K related to the firm seeking strategic alternative like selling a division, and Sale Admin include 8-K that disclose administrative matters related to acquisitions.

	Panel A: F	<b>requency</b> a	nd Count f	or Target	Firms	
	Pre	Post	Post-Pre	Pre	Post	Post-Pre
	Dummy	Dummy	Dummy	Count	Count	Count
Sale Assets	0.11	0.151	.04	0.159	0.251	.092
			(.046)			(.028)
Sale	0.131	0.173	.042	0.185	0.295	.11
Subsidiary			(.037)			(.009)
Strategic	0.145	0.187	.042	0.205	0.291	.086
Alternative			(.046)			(.009)
Sale Admin	0.034	0.042	.008	0.046	0.08	.034
			(.493)			(.175)
	Panel B	: Difference	e With Ma	tched Firn	ns	
	Pre	Post	Post-Pre	Pre	Post	Post-Pre
	Dummy	Dummy	Dummy	Count	Count	Count
			(Diff-in-			(Diff-in-
			Diff)			Diff)
Sale Assets	008	.046	.054	.016	.112	.096
	(.683)	(.029)	(.029)	(.587)	(.011)	(.062)
Sale	.038	.076	.038	.066	.159	.092
Subsidiary						(071)
•	(.059)	(.001)	(.213)	(.033)	(.001)	(.071)
Strategic	(.059) .038	(.001) .084 (0)	(.213) .046	(.033) .06	(.001) .112	(.071) .052

Sale Admin	.008	.002	006	.012	.02	.008
	(.465)	(.869)	(.701)	(.467)	(.495)	(.792)

### Table 4B: Bylaws

This table displays the detailed category related to the Bylaws category. *Board Related* bylaw changes include proposals to declassify boards, majority voting rules, and separating the CEO and Chairman of the board role. *Meeting Admin* include 8-K related to administrative requirements for shareholder proposals and nominations among others. *Vote Outcome*, captures 8-Ks that disclose the results of meetings and matters put to vote and is administrative. *Rights Plan* involves the adoption and amendments to existing rights plan and finally *Others* includes remaining disclosures.

Panel A	: Freque	ency and (	Count for Ta	arget Firm	S	
	Pre	Post	Post-Pre	Pre	Post	Post-Pre
	dummy	dummy	dummy	count	count	count
Board Related	0.237	0.315	.078	0.305	0.438	.133
			(.003)			(.001)
Meetings	0.108	0.167	.058	0.116	0.199	.082
Admin			(.006)			(.002)
Vote Outcome	0.299	0.38	.08 (0)	0.371	0.488	.116
						(.001)
<b>Rights</b> Plan	0.06	0.114	.054	0.074	0.149	.074
			(.001)			(.002)
Other	0.127	0.203	.076	0.165	0.245	.08
			(.001)			(.007)
	Panel B	: Differen	ice With Ma	atched Firr	ns	
	Panel B Pre	: Differen Post	ce With Ma Post-Pre	atched Firr Pre	ns Post	Post-Pre
	Panel B Pre dummy	: Differen Post dummy	Ce With Ma Post-Pre dummy	Atched Firm Pre count	ns Post count	Post-Pre count
	Panel B Pre dummy	: Differen Post dummy	ece With Ma Post-Pre dummy (Diff-in-	atched Firr Pre count	ns Post count	Post-Pre count (Diff-in-
	Panel B Pre dummy	: Differen Post dummy	ece With Ma Post-Pre dummy (Diff-in- Diff)	atched Firr Pre count	ns Post count	Post-Pre count (Diff-in- Diff)
Board Related	Panel B Pre dummy .042	: Differen Post dummy .149 (0)	Post-Pre dummy (Diff-in- Diff) .106	atched Firr Pre count .066	ns Post count .235 (0)	Post-Pre count (Diff-in- Diff) .169
Board Related	Panel B Pre dummy .042 (.096)	: Differen Post dummy .149 (0)	Post-Pre dummy (Diff-in- Diff) .106 (.003)	atched Firr Pre count .066 (.068)	ns Post count .235 (0)	Post-Pre count (Diff-in- Diff) .169 (.001)
Board Related Meetings	Panel B Pre dummy .042 (.096) .034	: Differen Post dummy .149 (0) .072	Post-Pre dummy (Diff-in- Diff) .106 (.003) .038	atched Firr Pre count .066 (.068) .036	ns Post count .235 (0) .098 (0)	Post-Pre count (Diff-in- Diff) .169 (.001) .062
Board Related Meetings Admin	Panel B Pre dummy .042 (.096) .034 (.062)	: Differen Post dummy .149 (0) .072 (.001)	Post-Pre dummy (Diff-in- Diff) .106 (.003) .038 (.122)	atched Firr           Pre           count           .066           (.068)           .036           (.078)	ns Post count .235 (0) .098 (0)	Post-Pre count (Diff-in- Diff) .169 (.001) .062 (.048)
Board Related Meetings Admin Vote Outcome	Panel B Pre dummy .042 (.096) .034 (.062) .014	: Differen Post dummy .149 (0) .072 (.001) .096 (0)	ce With Ma Post-Pre dummy (Diff-in- Diff) .106 (.003) .038 (.122) .082	atched Firr Pre count .066 (.068) .036 (.078) .048	ns Post count .235 (0) .098 (0) .161 (0)	Post-Pre count (Diff-in- Diff) .169 (.001) .062 (.048) .112
Board Related Meetings Admin Vote Outcome	Panel B Pre dummy .042 (.096) .034 (.062) .014 (.499)	: Differen Post dummy .149 (0) .072 (.001) .096 (0)	ce With Ma Post-Pre dummy (Diff-in- Diff) .106 (.003) .038 (.122) .082 (.004)	atched Firr           Pre           count           .066           (.068)           .036           (.078)           .048           (.117)	ns Post count .235 (0) .098 (0) .161 (0)	Post-Pre count (Diff-in- Diff) .169 (.001) .062 (.048) .112 (.006)
Board Related Meetings Admin Vote Outcome Other	Panel B Pre dummy .042 (.096) .034 (.062) .014 (.499) 008	: Differen Post dummy .149 (0) .072 (.001) .096 (0) .036	rece With Ma Post-Pre dummy (Diff-in- Diff) .106 (.003) .038 (.122) .082 (.004) .044	atched Firr           Pre           count           .066           (.068)           .036           (.078)           .048           (.117)           .008	ns Post count .235 (0) .098 (0) .161 (0) .062	Post-Pre count (Diff-in- Diff) .169 (.001) .062 (.048) .112 (.006) .054

### **Table 4C: Governance**

This table displays the detailed category related to the Governance category. Arrival and Departure capture the appointment and resignation of the mentioned executive. Arrival NEO and Departure NEO refers to the arrival and departure of a Named Executive Officer. These are the top five paid officers in the firm. Package refers to contracts signed with the executive and include employment, severance and other contracts.

Pan	el A: Freq	quency ar	nd Count for	Target F	irms	
	Pre	Post	Post-Pre	Pre	Post	Post-Pre
	Dummy	Dumm	dummy	Count	Count	Count
		у				
<b>CEO Related</b>						
Arrival CEO	0.127	0.183	.056 (.006)	0.149	0.237	.088
						(.003)
Departure CEO	0.1	0.092	008	0.112	0.098	014
			(.666)			(.507)
<b>Director Related</b>						
Arrival Director	0.406	0.534	.129 (0)	0.548	0.912	.363 (0)
Departure	0.283	0.329	.046 (.094)	0.351	0.418	.066
Director						(.091)
Executive						
Related						
Arrival CFO	0.213	0.219	.006 (.799)	0.259	0.283	.024
						(.456)
Arrival NEO	0.133	0.149	.016 (.45)	0.153	0.179	.026
						(.323)
Arrival Officer	0.173	0.197	.024 (.281)	0.197	0.247	.05
						(.097)
Departure CFO	0.153	0.127	026	0.171	0.151	02
	0.101	0 1 1 0	(.213)	0 1 7 1	0 1 5 0	(.444)
Departure NEO	0.131	0.143	.012 (.574)	0.151	0.173	.022
	0.150	0.000	05 (045)	0 101	0.051	(.417)
Departure Officer	0.159	0.209	.05 (.045)	0.181	0.251	.07
<b>C</b>						(.025)
Compensation	0.07	0.050	010	0.074	0.056	010
Compensation	0.07	0.052	018	0.074	0.056	018
CEO	0.120	0 107	(.189)	0.155	0 1 4 5	(.234)
Compensation	0.139	0.127	012	0.155	0.145	01
NEU Componentier	0 102	0 107	(.513)	0 241	0.261	(.053)
Officer	0.183	0.197	.014 (.344)	0.241	0.201	.02
Compensation	0 125	0 197	052(016)	0 155	0 227	(.J49) NQ7
Director	0.155	0.10/	.032 (.010)	0.155	0.237	.002
Director						(.003)

Package CEO	0.163	0.181	.018 (.405)	0.181	0.219	.038
-						(.172)
Package CFO	0.056	0.078	.022 (.159)	0.06	0.08	.02
						(.232)
Package NEO	0.217	0.261	.044 (.076)	0.281	0.343	.062
						(.075)
Package Officer	0.333	0.335	.002 (.941)	0.442	0.468	.026
						(.524)
Package Director	0.094	0.108	.014 (.431)	0.108	0.127	.018
						(.394)

# Table 4C continued...

Panel B: Difference With Matched Firms									
-	Pre	Post	Post-Pre	Pre	Post	Post-Pre			
	Dummy	Dummy	Dummy	Count	Count	Count			
			(Diff-in			(Diff-in			
			Diff)			Diff)			
CEO Related									
Arrival CEO	.046	.086 (0)	.04	.054	.129 (0)	.074			
	(.018)		(.109)	(.027)		(.048)			
Departure	.032 (.07)	.028	004	.036	.02	016			
CEO		(.094)	(.862)	(.083)	(.318)	(.568)			
Director									
Related		<b>.</b>							
Arrival	.044 (.15)	.205 (0)	.161 (0)	.07	.474 (0)	.404 (0)			
Director		100 00		(.145)					
Departure	.02 (.468)	.108 (0)	.088	.024	.149 (0)	.124			
Director			(.022)	(.533)		(.02)			
Executive									
Related	. – .								
Arrival CFO	.078	.082	.004	.104	.135 (0)	.03			
	(.002)	(.001)	(.971)	(.001)		(.469)			
Arrival NEO	.002	.002	0 (.73)	.01	.026	.016			
	(.922)	(.928)		(.68)	(.323)	(.649)			
Arrival	.01 (.662)	.056	.046	008	.044	.052			
Officer		(.016)	(.104)	(.815)	(.375)	(.249)			
Departure	.046	.03	016	.058	.044	014			
CFO	(.028)	(.139)	(.47)	(.016)	(.08)	(.686)			
Departure	.012	.032	.02	.012	.052	.04 (.25)			
NEO	(.532)	(.137)	(.518)	(.627)	(.051)				
Departure	.022	.054	.032	.02	.086	.066			
Officer	(.309)	(.028)	(.236)	(.459)	(.004)	(.098)			
Compensatio									
n									
Compensation	.004	006	01	.002	008	01			
CEO	(.793)	(.68)	(.597)	(.907)	(.623)	(.647)			
Compensation	.046	.038	008	.05	.042	008			
NEO	(.022)	(.051)	(.676)	(.038)	(.069)	(.789)			
Comp. Officer	.03 (.193)	.058	.028	.062	.09	.028			
		(.013)	(.384)	(.065)	(.008)	(.519)			
Comp.	004	.066	.07	01	.092	.102			
Director	(.85)	(.005)	(.012)	(.721)	(.004)	(.007)			
Package CEO	.016 (.48)	.04	.024	.012	.06	.048			
		(.098)	(.715)	(.657)	(.051)	(.221)			

Package CFO	.002	.02	.018	004	.018	.0
-	(.893)	(.204)	(.528)	(.821)	(.286)	(.35
Package NEO	008	.066	.074	.004	.108	.1
	(.77)	(.01)	(.047)	(.915)	(.004)	(.02
Package	.024	.056	.032	.018	.11	.0
Officer	(.401)	(.05)	(.351)	(.69)	(.012)	(.09
Package	0(1)	.01	.01	.006	.016	
Director		(.619)	(.625)	(.787)	(.517)	(.74

### **Table 4D: Capital Structure**

This table displays the detailed category related to the Capital Structure category. Leverage increase includes disclosures related to increase in firm leverage, Leverage Decrease include 8-K related to a reduction in the firm's leverage, Repurchase include 8-Ks related to repurchase of shares, Regular Dividend include disclosures related to the firm's regular quarterly or semi-annual dividend payout, and finally Undefined Dividends include 8-K related to dividends with undisclosed details

Panel A	Panel A: Frequency and Count for Target Firms									
	Pre	Post	Post-Pre	Pre	Post	Post-Pre				
	dummy	dummy	dummy	count	count	count				
Leverage	0.48	0.526	.046	1.096	1.219	.122				
Increase			(.103)			(.153)				
Leverage	0.309	0.343	.034	0.562	0.629	.066				
Decrease			(.183)			(.243)				
Repurchase	0.129	0.201	.072	0.167	0.257	.09				
			(.001)			(.006)				
Regular	0.084	0.108	.024 (.09)	0.181	0.213	.032				
Dividend						(.281)				
Undefined	0.03	0.056	.026 (.02)	0.052	0.072	.02				
Dividend						(.174)				

	Panel B	: Differen	ce With Ma	tched Firn	15	
	Pre	Post	Post-Pre	Pre	Post	Post-Pre
	dummy	dummy	dummy	count	count	count
			(Diff-in-			(Diff-in-
			Diff)			Diff)
Leverage	.032	.088	.056	.181	.371 (0)	.191
Increase	(.298)	(.005)	(.072)	(.093)		(.097)
Leverage	012	.022	.034	062	.044	.106 (.2)
Decrease	(.682)	(.48)	(.307)	(.403)	(.554)	
Repurchase	006	.064	.07 (.014)	002	.076	.078
	(.776)	(.005)		(.946)	(.027)	(.055)
Regular	02	.006	.026	05	002	.048
Dividend	(.286)	(.763)	(.157)	(.306)	(.969)	(.314)

### **Table 4E: Operations**

This table displays the detailed category related to the Operations category. *Operations Positive* captures 8-Ks related to positive news about the business like new product or stores, and signing of contracts among others while *Operations Negative* include negative news about the business. *Employee Positive* capture positive news about employees like settlement of disputes and *Employee Negative* includes costs, typically related to staff reduction. *Purchase Assets* include disclosure about the purchase of assets or divisions by the firm. There is no matched firm difference for Employee Positive as there was no 8-K in this category filed by matched firms in the post period.

]	Panel A: F	requency a	nd Count f	or Targe	t Firms	
	Pre	Post	Post-Pre	Pre	Post	Post-Pre
	dummy	dummy	dummy	count	count	count
Business						
Operations	0.106	0.131	.024	0.161	0.161	0(1)
negative			(.211)			
Operations	0.307	0.321	.014	0.641	0.681	.04
positive			(.574)			(.522)
Employee						
Related						
Employee	0.102	0.147	.044	0.137	0.181	.044
Negative			(.012)			(.09)
Employee	0.032	0.044	.012	0.066	0.064	002
Positive			(.273)			(.935)
Purchase Asset	s 0.257	0.221	036	0.404	0.369	034
			(.15)			(.491)

	Panel B: Difference With Matched Firms					
	Pre	Post	Post-Pre	Pre	Post	Post-Pre
	dummy	dummy	dummy	count	count	count
			(Diff-in-			(Diff-in-
			Diff)			Diff)
Business						
Operations	002	018	016	.016	032	048
negative	(.92)	(.397)	(.419)	(.616)	(.298)	(.24)
Operations	018	.012	.03	032	.048	.08
positive	(.543)	(.686)	(.525)	(.748)	(.666)	(.399)
Employee						
Related						
Employee	.016	.08 (0)	.064	.032	.088	.056
Negative	(.388)		(.011)	(.233)	(.002)	(.094)
Purchase Assets	006	028	022	088	066	.022
	(.83)	(.291)	(.638)	(.163)	(.287)	(.751)

## **Panel 4F: Communication**

This table displays the detailed category related to the Communication category. Disclosures in this category comprise presentation of financial results, Management Guidance or communication with capital markets participants like analysts.

Ouluance of o	communicatio	n with capi	ai markets	participant	s like allary	515.
	Panel A:	Frequency	and Count	for Targ	et Firms	
	Pre	Post	Post-Pre	Pre	Post	Post-Pre
	dummy	dummy	dummy	count	count	count
Financial	0.92	0.922	.002	4.382	4.458	.076 (.458)
Results			(.884)			
Guidance	0.086	0.086	0(1)	0.112	0.104	008
						(.713)
Capital	0.233	0.229	004	0.508	0.536	.028 (.622)
Markets			(.849)			

	Panel 1	B: Differe	nce With M	latched Fi	rms			
	Pre	Post	Post-Pre	Pre	Post	Post-Pre		
	dummy	dummy	dummy	count	count	count		
			(Diff-in-			(Diff-in-		
		Diff) Diff)						
Financial	018	.026	.044	0(1)	.311	.311 (.016)		
Results	(.216)	(.144)	(.018)		(.051)			
Guidance	.022	01	032	0(1)	048	048		
	(.204)	(.569)	(.073)		(.123)	(.106)		
Capital	.066	.054	012	.179	.084	094 (.22)		
Markets	(.011)	(.028)	(.723)	(.02)	(.343)			

# **Table 4G: Remaining categories**

This table displays the detailed category related to the remaining categories. Panel A reports the frequency of the sample firms that engage in these activities. Panel B reports the difference of sample firms with matched firms. P-values are displayed in parenthesis.

	Panel A: 1	Frequency	and Count	for Target	Firms	
	Pre	Post	Post-Pre	Pre	Post	Post-Pre
	dummy	dummy	dummy	count	count	count
Distress						
Delisting	0.141	0.161	.02	0.273	0.303	.03
-			(.302)			(.537)
Restructuring	0.078	0.082	.004	0.141	0.11	03 (.38)
			(.803)			
Litigation						
Litigation	0.137	0.135	002	0.211	0.191	02 (.58)
Negative			(.918)			
Litigation	0.108	0.155	.046	0.173	0.205	.032
Positive			(.016)			(.387)
Other						
Accounting	0.185	0.179	006	0.263	0.223	04
-			(.795)			(.265)
Misc	0.169	0.207	.038	0.239	0.329	.09
			(.087)			(.018)

	Panel I	B: Differei	nce With M	atched Fir	ms	
	Pre dummy	Post dummy	Post-Pre dummy (Diff-in- Diff)	Pre count	Post count	Post-Pre count (Diff-in- Diff)
Distress						
Delisting	.042	.032	01	.084	.086	.002
-	(.037)	(.157)	(.687)	(.11)	(.099)	(.975)
Restructuring	.026	.03	.004	.062	.034	028
-	(.074)	(.059)	(.843)	(.079)	(.194)	(.503)
Litigation	. ,	. ,		. ,	. ,	
Litigation	.03	.028	002	.044	.044	0(1)
Negative	(.147)	(.178)	(.855)	(.342)	(.197)	
Litigation	002	.046	.048	.038	.064	.026
Positive	(.919)	(.035)	(.063)	(.291)	(.058)	(.559)
Other			· · · ·			
Accounting	.028	.06	.032	.074	.076	.002
C	(.219)	(.006)	(.413)	(.039)	(.012)	(.964)
Misc	016	.066	.082	028	.116	.145
	(.511)	(.006)	(.007)	(.548)	(.019)	(.005)

The sample consists of 996 firms, 498 target and their matched firms. The dependent variable is the BHAR, the difference between the cumulative monthly returns on the firm and the cumulative monthly returns on the CRSP value weighted market portfolio including dividends. Category variable includes the number of 8-K that with disclosure in that category in the one year after the 13D filing. Category examined changes across the columns and is listed as the column heading. Control variables are all measured in the year prior to 13D filing, unless specified differently. Firm Size is the natural logarithm of total assets. Leverage is the ratio of book value of debt to total assets. Change in Sales is the change in sales in prior year. Tobin's Q is the ratio of the sum of market value of equity and book value of debt to the sum of book value of equity and book value of debt. ROA is ratio of net income to lagged total assets. Dividend yield is the ratio of total dividend to book equity. R&D is the ratio of research and development expense to sales. HHI Sales is the Herfindahl Hirschman Index of segment sales. Institutional ownership is the total 13F ownership. Number of Analysts is the number of analysts following the firm. Amihud liquidity measure is defined as the yearly average (using daily data) of 1000 times the square root of |Return|/(Price\*Volume). Pre BHAR is the buy and hold return over the prior year. All estimations include year fixed effects and industry fixed effects, with standard error clustered by firm.

	Panel	A: BHAI	R, 0 to 12	month	Panel	B: BHAR	R, 13 to 36	month
	Sale	Sale	Strateg	Sale	Sale	Sale	Strateg	Sale
	Sub	Assets	ic Alt	Admin	Sub	Assets	ic Alt	Admin
Target x	-		-	-				
Category	0.145*		0.107*	0.160*				
	*	-0.042	*	*	0.081	0.012	0.103*	-0.045
	(0.028				(0.20			
	)	(0.455)	(0.010)	(0.015)	4)	(0.874)	(0.083)	(0.650)
Category					-			
	0.126*			0.132*	0.098			
	*	0.058	0.050*	*	*	-0.029	-0.021	0.011
	(0.043				(0.05			
	)	(0.188)	(0.067)	(0.025)	6)	(0.686)	(0.443)	(0.820)
Target Dummy	0.033	0.016	0.036	0.021	0	0.008	-0.019	0.012
	(0.282				(0.99			
	)	(0.613)	(0.246)	(0.488)	6)	(0.877)	(0.717)	(0.817)
Firm Size	0.007	0.002	0.004	0.004	0.013	0.015	0.012	0.014
	(0.667				(0.59			
	)	(0.921)	(0.816)	(0.822)	3)	(0.559)	(0.638)	(0.559)
Leverage	-0.028	-0.022	-0.017	-0.012	0.133	0.13	0.129	0.124
	(0.779				(0.41			
	)	(0.830)	(0.864)	(0.905)	5)	(0.430)	(0.430)	(0.447)

Change in Sales	0.035 (0.433	0.038	0.033	0.037	0.001 (0.98	0	0.006	0.002
	)	(0.401)	(0.468)	(0.421)	4)	(0.998)	(0.916)	(0.972
Tobin's Q	0.002 (0.864	0.002	0.003	0.003	0.031 (0.37	0.032	0.03	0.032
	)	(0.887)	(0.817)	(0.847)	1)	(0.359)	(0.365)	(0.362
ROA	0.009	0.019	0.017	0.012	0.031 (0.89	0.025	0.03	0.022
	)	(0.886)	(0.896)	(0.927)	9)	(0.917)	(0.899)	(0.929
Dividend Yield	0.401 (0.315	0.485	0.417	0.483	0.272 (0.67	0.212	0.274	0.242
	)	(0.227)	(0.298)	(0.222)	0)	(0.740)	(0.665)	(0.703
R&D	0.041 (0.867	0.007	0.028	0.018	0.32 (0.39	0.339	0.322	0.32
HHI Sales	)	(0.976)	(0.908)	(0.940)	0)	(0.371)	(0.390)	(0.382
	0.033 (0.560	0.035	0.025	0.029	0.081 (0.39	-0.082	-0.073	-0.075
Institutional	)	(0.536)	(0.655)	(0.604)	0) -	(0.382)	(0.438)	(0.428
Ownership	0.025 (0.756	0.037	0.04	0.036	0.065 (0.62	-0.073	-0.073	-0.07
	)	(0.643)	(0.611)	(0.649)	3)	(0.579)	(0.578)	(0.588
Number of Analysts	-0.001	0	-0.001	-0.001	0.004	0.004	0.004	0.004
A '1 19	(0.790)	(0.930)	(0.893)	(0.850)	(0.44 8)	(0.481)	(0.463)	(0.463
Amihud's Measure	0.024	0.027	0.031	0.028	0.012	-0.015	-0.017	-0.01
Pro BHAR	(0.383	(0.542)	(0.476)	(0.525)	(0.80 6)	(0.827)	(0.809)	(0.808
		0.089*						
	0.082* (0.065	*	0.084*	0.083*	0.046 (0.48	0.044	0.047	0.04
Constant	)	(0.047)	(0.060)	(0.064)	) -	(0.503)	(0.468)	(0.481
	0.479* **	0.444* **	0.473* **	0.459* **	0.316 *	- 0.326*	-0.286	0.332 <sup>*</sup>
	(0.000 )	(0.000)	(0.000)	(0.000)	(0.07 0)	(0.062)	(0.100)	(0.059
Ind, Year F.E.	Yes,Y	Yes,Ye	Yes,Ye	Yes,Ye	Yes,	Yes,Ye	Yes,Ye	Yes,Y
	es	S	S	S	Yes	S	S	1
Adj. R-squared	0.054	0.047	0.053	0.05	0.079	0.077	0.08	0.07
N	996	996	996	996	996	996	996	99

### Table 5B: BHARs for Bylaw related 8-K

	Panel A: BHAR, 0 to 12 month								
	Board	Meetings	Vote	Rights	Bylaw				
	Related	Admin	Outcome	Plan	Other				
Target									
Dummy x									
Category	-0.022	-0.104	-0.006		-0.031				
	(0.636)	(0.112)	(0.908)		(0.624)				
Category	-0.006	0.100*	-0.027	0.03	0.071				
	(0.874)	(0.061)	(0.541)	(0.506)	(0.138)				
Target									
Dummy	0.024	0.022	0.018	0.006	0.014				
	(0.494)	(0.495)	(0.591)	(0.834)	(0.659)				
Constant			-	-	-				
	-0.347***	-0.443***	0.384***	0.435***	0.438***				
	(0.007)	(0.000)	(0.001)	(0.000)	(0.000)				
Ind, Year		Yes,Yes							
F.E.	Yes,Yes	,	Yes,Yes	Yes,Yes	Yes,Yes				
Adj. R-		0.048							
squared	0.046		0.047	0.047	0.048				
Ν	996	996	996	996	996				

	Panel B: BHAR, 13 to 36 month								
	Board	Meetings	Vote	Rights	Bylaw				
	Related	Admin	Outcome	Plan	Other				
Target									
Dummy x									
Category	0.07	-0.02	0.02		-0.009				
	(0.303)	(0.881)	(0.810)		(0.927)				
Category	-0.034	0.033	-0.028	-0.079	-0.005				
	(0.561)	(0.777)	(0.727)	(0.330)	(0.947)				

Target					
Dummy	-0.016	0.009	0.003	0.021	0.011
	(0.765)	(0.867)	(0.955)	(0.686)	(0.838)
Constant				-	-
	-0.439**	-0.321*	-0.3	0.340*	0.327*
	(0.035)	(0.069)	(0.117)	(0.056)	(0.064)
Ind, Year					
F.E.	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes
Adj. R-					
squared	0.078	0.077	0.077	0.079	0.077
N	996	996	996	996	996

### Table 5C: BHARs for Governance related 8-K

The sample consists of 996 firms, target and matched firms. The dependent variable is the BHAR, the difference between the cumulative monthly returns on the firm and the cumulative monthly returns on the CRSP value weighted market portfolio including dividends. Category variable includes the number of 8-K that cover the category in the one year after the 13D filing. Category examined changes across the columns and is listed as the column heading. Missing interaction means the category only appears in the target sample and not in the matched sample. The table displays partial results. Control variables included but not tabulated are Firm Size, Leverage, Change in Sales, Tobin's Q, ROA, Dividend Yield, R&D, HHI Sales, Institutional Ownership, Number of Analysts, Amihud's Liquidity measure and Pre BHAR. All specifications include year fixed effects and industry fixed effects, with standard error clustered by firm.

		Panel A: BHA	R, 0 to 12 moi	nth	I	anel B: BHAF	R, 13 to 36 mo	nth
	CEO Arrival	CEO Departure	Director Arrival	Director Departure	CEO Arrival	CEO Departure	Director Arrival	Director Departure
Target Dummy x Category	0.093	0.017	0.067**	0.053	0.219**	0.165	0.093*	0.081
	(0.184)	(0.887)	(0.048)	(0.373)	(0.013)	(0.237)	(0.064)	(0.335)
Category	-0.067	0.015	-0.024	-0.041	-0.159**	-0.061	-0.036	-0.021
	(0.263)	(0.870)	(0.413)	(0.437)	(0.025)	(0.530)	(0.352)	(0.758)
Target Dummy	-0.001	0.009	-0.039	-0.005	-0.021	-0.006	-0.06	-0.023
	(0.965)	(0.768)	(0.279)	(0.881)	(0.690)	(0.902)	(0.284)	(0.680)
Ind, Year F.E.	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes
Adj. R-squared	0.047	0.045	0.051	0.047	0.08	0.078	0.081	0.078
IN	996	996	996	996	996	996	996	996

### Table 5C: BHARs for Governance related 8-K Continued

		Panel	A: BHAI	R, 0 to 12	month		Panel B: BHAR, 13 to 36 month					
	CFO Arriva	CFO Depart	NEO Arriva	NEO Depart	OFF Arriva	OFF Depart	CFO Arriva	CFO Depart	NEO Arriva	NEO Depart	OFF Arriva	OFF Depart
Target Dumm y x Cat	-0.027	-0.062	0.043	0.128*	0.004	-0.069	-0.09	0.067	0.07	-0.13	0.062	-0.11
Cut.	(0.698 )	(0.387 )	(0.601 )	(0.080 )	(0.902 )	(0.365 )	(0.432 )	(0.563 )	(0.531 )	(0.356 )	(0.318 )	(0.323 )
Categ ory	-0.044	-0.051	-0.092	-0.093	-0.006	0.027	0.031	-0.066	-0.089	0.177	-0.007	0.079
2	(0.462 )	(0.357 )	(0.121 )	(0.122 )	(0.663 )	(0.683 )	(0.753 )	(0.462 )	(0.261 )	(0.150 )	(0.713 )	(0.401 )
Target Dumm	0.024	0.022	0.005	-0.006	0.01	0.026	0.029	0.001	-0.002	0.022	-0.006	0.029
y	(0.456 )	(0.483 )	(0.871 )	(0.856 )	(0.746 )	(0.440 )	(0.603 )	(0.985 )	(0.970 )	(0.665 )	(0.905 )	(0.590 )
Ind, Year F.E.	Yes,Y es	Yes,Y es	Yes,Y es	Yes,Y es	Yes,Y es	Yes,Y es						

Adj. R-	0.05	0.051	0.049	0.048	0.045	0.047	0.078	0.077	0.078	0.08	0.077	0.078
square d N	996	996	996	996	996	996	996	996	996	996	996	996

### Table 5C: BHARs for Governance related 8-K Continued

	Panel A: BHAR, 0 to 12 month								
	CEO Comp	CEO Package	DRT Comp	DRT Package	CFO Package	NEO Comp	NEO Package	OFF Comp	OFF Package
Target Dummy x Category	-0.014	0.035	0.016	-0.016	-0.01	-0.045	0.051	0.092	-0.013
	(0.902)	(0.535)	(0.794)	(0.888)	(0.916)	(0.574)	(0.292)	(0.126)	(0.776)
Category	-0.006	-0.052	-0.005	0.101	-0.069	0.038	-0.008	-0.06	0.013
	(0.942)	(0.239)	(0.915)	(0.298)	(0.254)	(0.541)	(0.816)	(0.243)	(0.716)
Target Dummv	0.012	0.006	0.008	0.011	0.013	0.016	-0.005	-0.007	0.016
	(0.700)	(0.843)	(0.803)	(0.718)	(0.677)	(0.608)	(0.870)	(0.817)	(0.636)
Ind., Year F.E	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes
Adj. R-	0.045	0.046	0.045	0.051	0.047	0.046	0.047	0.048	0.045
N	996	996	996	996	996	996	996	996	996

Panel	B:	BHAR,	13 to	36	month

	CEO	CEO	DRT	DRT	CFO	NEO	NEO	OFF	OFF
	Comp	Package	Comp	Package	Package	Comp	Package	Comp	Package
Target Dummy x Category	0.247*	-0.029	0.069	0.005	-0.026	-0.008	-0.099	0.101	0.008
	(0.096)	(0.699)	(0.506)	(0.956)	(0.867)	(0.944)	(0.243)	(0.299)	(0.902)
Category	-0.017	0.037	-0.019	-0.132**	-0.099	0.027	0.067	-0.071	-0.011
	(0.845)	(0.483)	(0.808)	(0.020)	(0.401)	(0.775)	(0.293)	(0.316)	(0.822)
Target Dummy	-0.006	0.013	-0.006	0.01	0.012	0.009	0.035	-0.012	0.006
	(0.911)	(0.820)	(0.909)	(0.851)	(0.820)	(0.874)	(0.522)	(0.831)	(0.919)
Ind., Year F.E	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes
Adj. R- squared	0.079	0.077	0.077	0.081	0.078	0.077	0.078	0.078	0.077
Ň	996	996	996	996	996	996	996	996	996

### Table 5D: BHARs for Capital Structure related 8-K

	Panel A: BHAR, 0 to 12 month					Panel B: BHAR, 13 to 36 month				
	Lever	Decre	Repur	Unde	Regul	Leve	Decr	Repur	Unde	Regu
	age	ase	chase	fined	ar	rage	ease	chase	fined	lar
		Lever		Divid	Divid		lever		Divid	Divi
		age		end	end		age		end	dend
Target Dummy										-
x Category						0.04	0.03			0.09
	0.003	0.031	-0.057		0.037	8	1	0.01		6*
	(0.87	(0.32	(0.187		(0.33	(0.21	(0.50	(0.866		(0.09
	9)	4)	)		4)	3)	5)	)		9)
Category	-	-					-			
	0.032	0.041	0.074		-		0.04			0.11
	**	**	**	0.009	0.007	-0.01	6	0.017	0.158	2**
	(0.03	(0.03	(0.023	(0.89	(0.81	(0.73	(0.20	(0.678	(0.17	(0.01
	8)	4)	)	3)	7)	4)	6)	)	5)	0)
Target Dummy						-	-			
	0.010	-		0.011	0.000	0.04	0.00		-	0.02
	0.018	0.006	0.02	0.011	0.003	8	9	0.004	0.003	9
	(0.60	(0.83	(0.549	(0.72	(0.92	(0.43	(0.87	(0.937	(0.94	(0.59
	9)	8)	)	8)	2)	2)	2)	)	9)	0)
Ind., Year F.E.	Yes.	Yes.	Yes.Y	Yes.	Yes.	Yes.	Yes.	Yes.Y	Yes.	Yes.
,	Yes	Yes	es	Yes	Yes	Yes	Yes	es	Yes	Yes
Adj. R-squared						0.08	0.07			0.08
5 1	0.055	0.05	0.049	0.046	0.046	1	9	0.077	0.08	4
Ν	996	996	996	996	996	996	996	996	996	996

### Table 5E: BHARs for Operations related 8-K

	Panel A: BHAR, 0 to 12 month							
	Operations Positive	Operations Negative	Employee Positive	Employee Negative	Purchase Assets			
Target Dummy x Category	0.002	0.093		0.059	-0.003			
	(0.920)	(0.195)		(0.316)	(0.910)			
Category	0.003	-0.092***	0.042	-0.065	-0.01			
	(0.825)	(0.007)	(0.480)	(0.148)	(0.531)			
Target Dummy	0.01	-0.007	0.008	0.006	0.012			
	(0.746)	(0.832)	(0.781)	(0.856)	(0.713)			
Ind., Year F.E.	Yes,Yes	Yes,Yes	Yes,Yes	Yes, Yes	Yes,Yes			
Adj. R-squared	0.045	0.051	0.047	0.047	0.046			
N	996	996	996	996	996			

		Pane	l B: BHAR, 13 to	36 month	
	Operations Positive	Operations Negative	Employee Positive	Employee Negative	Purchase Assets
Target Dummy x Category	-0.003	0.118		-0.13	0.054
	(0.896)	(0.189)		(0.211)	(0.234)
Category	0.012	-0.063	0.048	0.109	-0.031
	(0.270)	(0.253)	(0.680)	(0.127)	(0.163)
Target Dummy	0.01	-0.013	0.005	0.023	-0.013
	(0.856)	(0.812)	(0.919)	(0.662)	(0.812)
Ind., Year F.E.	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes
Adj. R-squared	0.077	0.078	0.078	0.078	0.078
N	996	996	996	996	996

### **Table 5F: BHARs for Communication Related 8-K**

	Panel A	A: BHAR, 0 to	12 month	Panel I	Panel B: BHAR, 13 to 36 month				
	Financial Results	Capital Markets	Guidance	Financial Results	Capital Markets	Guidance			
Target Dummy	0.005	-0.006	0.027	-0.007	0.013	0.06			
x cutogory	(0.665)	(0.843)	(0.675)	(0.687)	(0.670)	(0.534)			
Category	0.008	0.017	0.029	0.029**	0.01	0.012			
	(0.286)	(0.260)	(0.480)	(0.014)	(0.585)	(0.816)			
Target Dummy	-0.014	0.012	0.009	0.031	0	0.002			
	(0.810)	(0.709)	(0.768)	(0.718)	(0.998)	(0.966)			
Ind., Year F.E.	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes	Yes,Yes			
Adj. R-squared	0.048	0.047	0.047	0.083	0.078	0.077			
N	996	996	996	996	996	996			

### Table 5G: BHARs for Remaining Categories

	Panel A: BHAR, 0 to 12 month						Panel B: BHAR, 13 to 36 month					
	La	La	Deli	Rest	Acc.	Mi	La	La	Deli	Rest	Acc	Mis
	W	W	stin	ruct		sc	w	W	stin	ruct		c
	Pos	Neg	g	urin			Pos	Neg	g	ure		
	itiv	ativ		g			itiv	ativ				
	e	e					e	e				
Target	-	0.0	0.02	-	0.11	-	0.0	0.0	0.12	0.10	0.0	0.05
Dummy	0.0	77	5	0.11	4**	0.0	05	82	8**	7	72	
х	66			0*		24						
Category												
	(0.2	(0.2	(0.3	(0.0)	(0.0)	(0.	(0.9	(0.2	(0.0)	(0.2	(0.3	(0.3
	41)	04)	78)	92)	40)	573	51)	49)	15)	87)	81)	63)
~						)						
Category	0.0	-	-	-	-	-	0.0	-	-	-	-	-
	73*	0.0	0.12	0.04	0.14	0.0	45	0.0	0.12	0.07	0.1	0.05
	(0.0	l	***	(0.2	***	01	(0.4	4	***	2	3*	5
	(0.0	(0.8	(0.0	(0.3	(0.0	(0.	(0.4	(0.4	(0.0	(0.2	(0.0	(0.1
	99)	52)	00)	32)	00)	969	95)	87)	09)	48)	52)	67)
Tanat	0.0		0.00	0.02		)	0.0				0	
Target	0.0	-	0.00	0.02	-	0.0	0.0	-	-	-	0	-
Dummy	2	0.0	9	4	0.00	19	04	0.0	0.02	0.00		0.00
	(0.5	05	(0.7)	(0.4	5 (0.9	(0	(0.0	0.0	5 () 6	1	(0.0	2
	(0.5)	(0.9	(0.7	(0.4	(0.8)	(0. 542	(0.9)	(0.9)	(0.0)	(0.9	(0.9)	(0.9)
	20)	19)	80)	55)	70)	)	30)	17)	01)	09)	90)	09)
						)						
T., J	Vaa	Vaa	Vaa	Vee	Vaa	V-	Vaa	Vaa	Vaa	Vaa	Vaa	Vac
Ind., Near E E	res	r es	res,	res,	res,	re	res	res	res,	res,	res	res,
rear F.E.	, re	, re	res	res	res	s, 1	, re	, re	res	res	, re	res
Adi D	s 0.0	s 0.0	0.07	0.05	0.05	es 0.0	s 00	s 0.0	0.08	0.07	s 0.0	0.07
AUJ. K-	10.0	40	0.07 5	0.03	0.03	0.0 46	70.0	0.0 77	0.08	0.07	0.0	0.07
squared N	40 006	49 006	э 006	э 006	4 006	40 006	10	// 006	∠ 006	/	0 006	0 006
T.N.	990	990	330	330	990	770	990	770	99U	990	330	990

### Table 6: Impact of the Breadth of Changes

The dependent variable is the [0, 36] month BHAR, the difference between the cumulative monthly returns on the firm and the cumulative monthly returns on the CRSP value weighted market portfolio including dividends. The sample consists of 498 non acquired 13D targets and their matched firms. *Breadth* is the count of the number of broad categories in which the firm files an 8-K in the post period. *Breadth Mean* is the count of the number of active broad categories for the firm, where active is when the number of detailed categories for the firm is above the mean for the broad category. *Breadth75* is the number of broad categories that are active, with active being defined as when the number of detailed categories in the broad category are greater than or equal to the 75<sup>th</sup> percentile of that broad category. The table displays partial results. Control variables included but not tabulated are Firm Size, Leverage, Change in Sales, Tobin's Q, ROA, Dividend Yield, R&D, HHI Sales, Institutional Ownership, Number of Analysts, Amihud's Liquidity measure, Pre BHAR and a constant. All specifications include year fixed effects and industry fixed effects, with standard error clustered by firm.

	Breadth	Breadth Mean	Breadth75
Target Dummy x Breadth	0.028	0.066**	0.068**
	(0.342)	(0.039)	(0.040)
Measure of Breadth	-0.023	-0.068***	-0.072***
	(0.314)	(0.007)	(0.005)
Target Dummy	-0.078	-0.068	-0.063
	(0.568)	(0.423)	(0.447)
Constant	-	-0.621***	-0.614***
	0.634**		
	*		
	(0.003)	(0.006)	(0.005)
Ind Year F.F.	Yes Yes	Ves Ves	Ves Ves
Adi P squared	0.03	0.034	0.035
Auj. K-squateu	0.05	0.034	0.033
IN	990	990	990

# Appendix 1: SEC description of 8-K categories

Item name	SEC description				
G (1 4					
Section 1	Registrant's Business and Operations				
Item 1.01	Entry into a Material Definitive Agreement				
Item 1.02	Termination of a Material Definitive Agreement				
Item 1.03	Bankruptcy or Receivership				
Item 1.04	Mine Safety - Reporting of Shutdowns and Patterns of Violations				
Section 2	Financial Information				
Item 2.01	Completion of Acquisition or Disposition of Assets				
Item 2.02	Results of Operations and Financial Condition				
Item 2.03	Creation of a Direct Financial Obligation or an Obligation under an Off- Balance Sheet Arrangement of a Registrant				
Item 2.04	Triggering Events That Accelerate or Increase a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement				
Item 2.05	Costs Associated with Exit or Disposal Activities				
Item 2.06	Material Impairments				
Section 2	Securities and Trading Markets				
Jtom 2 01	Notice of Delicting or Ecilure to Setisfy a Continued Listing Dule or				
item 5.01	Standard; Transfer of Listing				
Item 3.02	Unregistered Sales of Equity Securities				
Section 4	Matters Related to Accountants and Financial Statements				
Item 4.01	Changes in Registrant's Certifying Accountant				
Item 4.02	Non-Reliance on Previously Issued Financial Statements or a Related				
100111 1102	Audit Report or Completed Interim Review				
Section 5	Corporate Governance and Management				
Item 5.01	Changes in Control of Registrant				
Item 5.02	Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers				
Item 5.03	Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year				
Item 5.04	Temporary Suspension of Trading Under Registrant's Employee Benefit Plans				
Item 5.05	Amendment to Registrant's Code of Ethics, or Waiver of a Provision of the Code of Ethics				
Item 5.06	Change in Shell Company Status				
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Item 5.07	Submission of Matters to a Vote of Security Holders				
Item 5.08	Shareholder Director Nominations				
Section 6	Asset-Backed Securities				
Item 6.01	ABS Informational and Computational Material				
Item 6.02	Change of Servicer or Trustee				
Item 6.03	Change in Credit Enhancement or Other External Support				
Item 6.04	Failure to Make a Required Distribution				
Item 6.05	Securities Act Updating Disclosure				
Section 7 or 8	<b>Regulation FD or Other Events</b>				
Item 7.01 or 8.01	Regulation FD Disclosure or Other Events				

Item	Description	Categories (including less frequent ones)
Number		
1.01 and	Entry	Purchase/Dispose of
1.02	into/termination	merger/subsidiary/assets;
	of a Material	Merger vote; Restructuring; Going private;
	Definitive	Spinoff; Alliance;
	Agreement	Leverage; deleverage; leverage-other;
		repurchase; sale-preferred;
		Litigation;
		Operations;
		Compensation/package/arrival/departure of CEO/CEO/NEO/chair/director/officer: settle
		contest
		Cash dividend; stock dividend; quarterly
		dividend; undefined dividend; stock split;
		adopt/amend/cancel rights
		Other agreements (regular expressions do
		not match any content representing the
		above categories)
2.01	Completion of	Purchase/dispose of
	Acquisition or	merger/subsidiary/assets;
	Disposition of	Restructuring; Going Private; Spinoff;
	Assets	Alliance;
3.03	Material	Cash dividend; stock dividend; quarterly
	Modification to	dividend; undefined dividend; preferred
	Holders	stock; adopt/amend/cancel rights;
	noiders	match any content representing the above
		(ategories)
5.02	Departure of	Compensation/package/arrival/departure of
5.02	Directors or	CEO/CEO/NEO/chair/director/officer:
	Certain Officers:	Settle contest:
	Election of	Miscellaneous (regular expressions do not
	Directors;	match any content representing the above
	Appointment of	categories)
	Certain Officers;	
	Compensatory	
	Arrangements of	
	Certain Officers	
5.03	Amendments to	Meetings administrative; Board size;
	Articles of	Indemnification; Rights of security holders
	Incorporation or	(positive right), cancel rights of security
	Bylaws; Change	noiders (negative right); Direct Registration
	in Fiscal Year	System; preferred stock; roles of
		urectors/orncers/executives; other bylaw

Appendix 2: SEC Items subject to Text Search and detailed categories extracted

7.01 and	Regulation FD	Employee; Strategy; Restructuring;
8.01	Disclosure/Other	Litigation; operations; meetings
	Events	(annual/special meeting); governance (other
		governance events such as new accounting
		standard); governance 10b-5 (insider trading
		plan);
		Compensaiton/package/arrival/departure of
		CEO/CFO/NEO/chair/director/officer;
		Purchase/dispose of
		merger/subsidiary/assets; Merger vote;
		restructuring; going private; spinoff;
		alliance;
		Leverage; deleverage; leverage-other;
		repurchase; sale-preferred;
		Cash dividend; stock dividend; quarterly
		dividend; undefined dividend; preferred
		stock; adopt/amend/cancel rights;
		Financial results;
		miscellaneous (regular expressions do not
		match any content representing the above
		categories)

#### **Appendix 3: Probit Model for Propensity Score Matching**

The dependent variable is a dummy variable that takes the value of one for firm-year that are target by a hedge fund activist. Firm size is the natural logarithm of total assets, Leverage is the ratio of book value of debt to total assets. Change in Sales is the change in sales from prior year. Tobin's Q is the ratio of the sum of market value of equity and book value of debt to the sum of book value of equity and book value of debt. ROA is the ratio of net income to lagged total assets. Dividend yield is the ratio of total dividend to book equity. R&D is the ratio of research and development expense to sales. HHI Sales is the Herfindahl Hirschman Index of segment sales. Institutional Ownership is the total 13F ownership. Amihud Liquidity measure is the yearly average (using daily data) of 1000 times the square root of |Return|/(Price\*Volume). Year and industry fixed effects were also included. All independent variables are measured at year prior to event year and winsorized at the 1% and 99% level.

	Model 1
Firm Size	-0.095***
	(0.000)
Leverage	0.146*
	(0.086)
Change in Sales	-0.097**
	(0.019)
Tobin's Q	-0.072***
	(0.000)
Return on Assets (ROA)	-0.170*
	(0.079)
Dividend Yield	-0.453
	(0.133)
R&D	0.045
	(0.828)
HHI Sales	-0.039
	(0.516)
Institutional Ownership	0.758***
	(0.000)
Number of Analysts	-0.007*
	(0.064)
Amihud Liquidity Measure	-0.052*
	(0.071)
Constant	-1.795***
	(0.000)
Industy and Year Fixed Effects	Yes,Yes
Pseudo R-squared	0.082
Number of observations	39631

### **Appendix 4: Comparison of Sample and Matched Firms**

The table reports the average of firm characteristics between the sample firms, i.e., those targeted by hedge fund activists and their propensity matched firms. The standard deviation is shown in parenthesis. The last column reports the difference between the two groups with the p value of an unpaired *t*-test in parenthesis

### Panel A: Full Sample

**Difference** (**P** value) Sample Matched Firms **Firms** Firm Size 5.95 (1.69) 5.98 (1.79) -.03 (.78) Leverage .17 (.21) .17 (.21) 0(.76) Change in Sales .14 (.78) .29 (1.9) -.15 (.07) Tobin's Q 2.15 (2.67) 2.07 (3.04) .09 (.57) ROA -.01 (.18) -.01 (.21) 0 (.70) **Dividend Yield** .02 (.07) .01 (.16) 0 (.47) R&D 0 (.96) .05 (.1) .05 (.12) HHI Sales .8 (.26) .82 (.25) -.02 (.13) Institutional Ownership .62 (.3) .64 (.31) -.02 (.26) Number of Analysts 5.21 (5.61) 5.17 (5.6) .04 (.9) Amihud Liquidity Measure .27 (.47) .03 (.31) .31 (.71)

This table presents the results of the full sample of 693 sample firms and their matched firms.

## Panel B: Non Acquired Sample

This table presents the results of the non-acquired sample of 498 sample firms and their matched firms.

	Sample Firms	Matched Firms	Difference (P value)
Firm Size	6.03 (1.79)	5.98 (1.8)	.04 (.70)
Leverage	.18 (.21)	.17 (.21)	0 (.83)
Change in Sales	.15 (.9)	.27 (1.85)	12 (.21)
Tobin's Q	2.16 (3.01)	2.02 (3.43)	.14 (.49)
ROA	01 (.18)	01 (.22)	0 (.85)
Dividend Yield	.02 (.08)	.01 (.17)	.01 (.24)
R&D	.05 (.1)	.05 (.13)	0 (.57)
HHI Sales	.78 (.27)	.81 (.25)	03 (.06)
Institutional Ownership	.62 (.31)	.63 (.31)	02 (.35)

Number of Analysts	5.19 (5.68)	5.19 (5.56)	0(1)
Amihud Liquidity Measure	.33 (.77)	.27 (.45)	.06 (.12)

# Appendix 5. Examples of Detailed Subcategory of Firm Activity

This appendix lists examples for each detailed subcategory of firm activities.

# 1. Acquisition

# 1.1 Sale of subsidiary

**Example:** On April 28, 2008, Fleetwood Enterprises, Inc (the "Company") and Fleetwood Holdings, Inc , a wholly owned subsidiary of the Company (the "Seller"), entered into a Stock Purchase Agreement (the "Original Stock Purchase Agreement") with FTCA, LLC (the "Stock Buyer") pursuant to which the Stock Buyer agreed to purchase all of the outstanding stock of Fleetwood Folding Trailers, Inc , a wholly owned subsidiary of the Seller ("Folding Trailers").

**Example**: In a Form 8-K filed by IKON Office Solutions, Inc (the "Company") on April 28, 2005, the Company announced its proposed divestiture of IKON Office Solutions (Holdings) S.A.S, a subsidiary of the Company.

# 1.2 Sale of Assets

**Example:** On October 29, 2004, we completed the sale ("Sale") of our paper, forest products, and timberland assets to affiliates of Boise Cascade, L.L.C ("Boise").)

# 1.3 Strategic Alternative

**Example**: As previously disclosed in our Form 8-K dated March 26, 2009, BMO Capital Markets Corp is helping us review our strategic options, including the sale of our Pekin plant. On March 31, 2009, we executed a definitive, written agreement with them to act as our exclusive financial advisor in connection with our review of the sale or other disposition of our Pekin plant and other strategic options. There can be no assurance that this will result in any specific transaction or as to the timing or terms of any such transaction. We do not expect to disclose further developments regarding our review until it has been terminated or the Board has approved a specific transaction.

# 1.4 Sale Admin

**Example**: Earlier today, ProPhase Labs, Inc issued a press release relating to the unsolicited proposal received from Matrixx Initiatives, Inc , which is attached as Exhibit 99.1.

**Example**: On August 29, 2006, Ace Cash Express, Inc (the "Company") issued a press release announcing that it had scheduled a special meeting of shareholders to vote on the proposal to approve and adopt the Agreement and Plan of Merger, dated June 6, 2006 by and among Ace Holdings I, LLC, a Delaware limited liability company, Ranger Merger Sub, Inc , a Texas corporation, and the Company.

# 2. Bylaws

## 2.1 Rights Plan

**Example**: On February 23, 2005, the The Steak n Shake Company (the "Company") entered into an amendment to the Rights Agreement, dated as of May 16, 2001, between the Company and Computershare Investor Services, LLC, as Rights Agent (the "Rights Agreement").

**Example**: On March 13, 2007 the Board of Directors of The Stride Rite Corporation (the "Company") adopted a new shareholder rights plan, as set forth in the Shareholder Rights Agreement, dated March 13, 2007, between the Company and Computershare Trust Company, N.A, as Rights Agent (the "Rights Agreement").

## 2.2 Board Related

**Example**: On October 24, 2006, the Board of Directors of the Company (the "Board") amended Section 6 of Article IV of the Company's Bylaws to delete a provision that the Chairman of the Board is a member of all standing committees appointed by the Board and adding a provision to allow the Chairman of the Board to attend committee meetings.

**Example**: On November 14, 2006, the Board of Directors of URS Corporation ("URS"), upon recommendation of its Board Affairs Committee, amended its By-Laws to adopt a majority vote standard for the voting of directors in non-contested elections. Under the amended By-Laws, if the number of nominees for director exceeds the number of directors being elected, then each director shall be elected by plurality voting.

**Example**: On April 14, 2011, Bel Fuse Inc (the "Company") delivered a letter to shareholders of the Company regarding its solicitation of proxies for the election of its slate of director nominees to the Board of Directors of Pulse Electronics Corporation.

## 2.3 Voting Outcomes

**Example:** At our annual meeting of stockholders on April 13, 2010, stockholders elected the three Class C director nominees to serve three-year terms and ratified the appointment of KPMG LLP as our independent registered public accounting firm for the year ending October 31, 2010. For Proposal 1, the three nominees receiving the most votes cast were elected as directors. Proposal 2 required the affirmative vote of the holders of a majority of shares entitled to vote and present at the meeting. The results of the voting are shown below.

**Example**: Charming Shoppes, Inc (the "Company") held its Annual Meeting of Shareholders at 10:00 a.m. on June 21, 2007, at the Company's headquarters in Bensalem, Pennsylvania. During the meeting, Dorrit J Bern, Chairman of the Board of Directors, President, and Chief Executive Officer, made a presentation that included a review of the Company's performance. 2.4 *Meetings Admin* 

**Example**: On June 10, 2008, the board of directors of Fleetwood Enterprises, Inc. (the "Company") adopted the Amended and Restated Bylaws of the Company. The changes

included in the Amended and Restated Bylaws were as follows: Sections 2 02 (Special Meetings), 2.05 (Notice of Stockholder Business at Annual Meetings) and 2.05 (Notice of Stockholder Nominees for Director) of the Bylaws were revised to clarify the procedures to be followed for business and nominations to be brought before a meeting.

### 3. Governance

3.1 CEO

Arrival of CEO

**Example**: On January 7, 2009, the company announced that it had named Lloyd Garrison as chief executive officer of CDI Contractors, LLC.

Departure of CEO

**Example**: On December 14, 2009, Matthew P Lawlor ("Mr Lawlor") retired from his position as Chief Executive Officer of Online Resources Corporation (the "Company"), effective immediately.

### 3.2 Executives

Arrival CFO

**Example**: On July 28, 2008, the Board of Directors of Quality Distribution, Inc (the "Company") appointed Stephen R Attwood to serve as Senior Vice President and Chief Financial Officer of the Company.

Arrival Transition CFO

**Example**: On June 1, 2006, the Company appointed Thomas D Johnson, Senior Vice President - Corporate Finance and Business Development, as Interim Chief Financial Officer in addition to his current responsibilities.

Arrival of named executives

**Example**: On August 28, 2007, the registrant, Cubist Pharmaceuticals, Inc. ("Cubist" or the "Company"), announced the appointment of Robert J Perez, MBA, currently Cubist's SVP Commercial Operations, to the new position of Executive Vice President, Chief Operating Officer.

Arrival of officers

**Example**: Effective January 22, 2007, Esterline Technologies Corporation ("Esterline") appointed Brad Lawrence as Group Vice President.

Prior to this appointment, Mr Lawrence, 59, was the President of Advanced Input Devices, Inc, part of Esterline's Avionics & Controls segment, since September 2002.

### Departure of CFO

**Example**: On October 5, 2011, Sandra A Gardiner announced her resignation as Vice President and Chief Financial Officer of Vermillion, Inc (the "Company"), effective October 21, 2011.

Ms Gardiner accepted an employment opportunity in the San Francisco Bay Area and her resignation was not the result of any disagreement with the Company on any matter relating to the Company's operations, policies or practices.

### Departure of named executives

**Example**: On January 5, 2007, Ciphergen Biosystems, Inc (the "Company") received the resignation of James P Merryweather, the Executive Vice President, Sales & Marketing of the Company whose role principally supported the Company's tools business.

### Departure of officers

**Example**: On December 30, 2005, Martin Verhoef's employment with the Company was terminated. Mr Verhoef was serving as the Company's Executive Vice President of Biosystems Operations.

### 3.3 Director

### Arrival of director

**Example**: On October 26, 2011, the Board of Directors of the Company (the "Board") increased the size of the Board from eleven members to thirteen members and, upon the recommendation of the Corporate Governance Committee, appointed each of Messrs Alan H Cohen and Peter M Scott, III to the Board.

Each of Messrs Cohen and Scott will serve as a member of the Board until the 2012 annual meeting of shareholders of the Company or until his resignation or sooner removal and otherwise until his successor is elected and qualifies.

### Departure of director

**Example**: On February 24, 2005, at a meeting of the Board of Directors of the Company, the Company was advised that Samuel E Leftwich plans to retire from his service on the Board of Directors at the expiration of his term effective as of the Company's annual meeting of shareholders scheduled for April 28, 2005.

### 3.4 Compensation

## CEO compensation

**Example**: On October 5, 2009, the Compensation Committee (the "Committee") of The First American Corporation (the "Company") approved the reinstatement of the annual base salary of Dennis J Gilmore, chief executive officer of the Company's financial services company, to \$650,000.

Mr Gilmore's salary was reduced by ten percent as part of the Company's cost reduction efforts on April 1, 2008. The reinstatement is effective October 11, 2009.

Compensation of named executives

**Example**: On April 29, 2008, the Board of Directors of Tumbleweed Communication Corp (the "Company") approved awards of restricted stock to the Named Executive Officers of the Company.

James P Scullion, Chief Executive Officer and President, received an award of 48,226 shares, Taher Elgamal, Chief Technology Officer, received an award of 40,012 shares, Timothy Conley, Chief Financial Officer and Senior Vice President, Finance, received an award of 31,705 shares, Nicholas W. Hulse, Executive Vice President, Worldwide Field Operations, received an award of 8,837 shares and Bernard J Cassidy, Senior Vice President, General Counsel and Secretary, received an award of 9,302 shares.

#### Compensation for officers

**Example**: Executive Compensation On February 29, 2008, the Compensation Committee (Committee) of Hibbett Sports, Inc. (Company) approved the annual base salaries (effective February 3, 2008) of the Company's executive officers for Fiscal 2009. The following table sets forth the annual base salary level of the Company's Named Executive Officers (which officers were determined by reference to the Company's proxy statement, dated May 2, 2007) for Fiscal 2009 and Fiscal 2008: Base Salary Name Position Fiscal 2008 Fiscal 2009 Michael J Newsome Chief Executive Officer and Chairman of the Board \$ 465,000 \$ 525,000 Nissan Joseph \*\* Chief Operating Officer and President NA 290,000 Cathy E Prior Vice President of Operations 242,000 255,000 Jeffry O Rosenthal Vice President of Merchandising 265,000 285,000 Gary A Smith Vice President and Chief Financial Officer 260,000 278,000

#### Compensation for directors

**Example**:On April 28, 2005, the McKesson Corporation (the "Company") Board of Directors, on the recommendation of its Committee on Directors and Corporate Governance, approved a change in the Nonemployee Directors' compensation effective July, 2005.

The changes provide that the annual cash retainer will increase from \$40,000 to \$50,000 per year.

#### Package for CEO

**Example**:On April 26, 2012, Alexandria Real Estate Equities, Inc (the "Company") entered into an Amended and Restated Executive Employment Agreement (the "Agreement") with Joel S Marcus, the Company's Chief Executive Officer (the "Executive"). The Agreement amends and restates the Amended and Restated Executive Employment Agreement, effective as of January 1, 2005, between the Company and the Executive (the "Prior Agreement") in its entirety. The term of the Agreement commences on April 26, 2012, and ends on December 31, 2014, subject to an election exercisable on or after October 1, 2014, by either the Company or the Executive to extend the term through December 31, 2016, (the "Executive Chairman Election"). If the Executive Chairman Election is exercised, the Executive Chairman Election, cease to hold the position of Chief Executive Officer and shall be employed as the Company's full-time Executive Chairman. The Agreement provides that the Executive's base salary shall be \$895,000, or such higher amount as may from time to time be determined by the Company.

#### Package for CFO

**Example**: Employment Agreement With New Chief Financial Officer.On February 27, 2006, we entered into an employment agreement with Mark S Frey under which we agreed to employ Mr Frey as Executive Vice President and Chief Financial Officer effective as of March 20, 2006.

The agreement has an initial term of one year, with the term automatically renewing each year for additional one-year terms unless we or Mr Frey gives notice of non-renewal at least 180 days before the end of the current term. The agreement provides for a base annual salary of at least \$325,000, subject to increases at the discretion of the chief executive officer on a basis consistent with company policies. Mr Frey's annual incentive target amount under our annual cash bonus program, the Enhanced Fairchild Incentive Plan, will be 90% of his base salary.

#### Package for named executives

**Example:** On April 9, 2009, World Heart Corporation (the "Company") entered into an employment agreement with Jal S Jassawalla, the Company's Executive Vice President and Chief Technology Officer, with an effective date of February 4, 2009 (the "Effective Date"). The employment agreement amends, restates and supersedes in its entirety the prior offer letter between the Company and Mr Jassawalla dated June 23, 2000, as amended. Mr Jassawalla's initial base annual salary under the employment agreement will be \$287,400.

### Package for officers

**Example**: Item 5.02 and other employees (the "2009 Performance Bonus Program") had been met by J Alex Martin, the Company's President and Chief Executive Officer, Morgan R Brown, the Company's Executive Vice President and Chief Financial Officer, and Jal S Jassawalla, the Company's Executive Vice President and Chief Technology Officer.As a result, the Compensation Committee approved the payment of cash bonuses to such officers pursuant to the 2009 Performance Bonus Program in the amounts set forth in the table below. Named Executive Officer Cash Performance Bonus J Alex Martin, President and Chief Financial Officer \$ 26,032,.62 Morgan R Brown, Executive Vice President and Chief Financial Officer \$ 6,932.69 Jal S Jassawalla, Executive Vice President and Chief Technology Officer \$ 19,795.12.

### Package for directors

**Example**: On March 2, 2008, the Board of Directors of ATMI, Inc (the "Company"), upon the recommendation of the Compensation Committee, approved and authorized an amendment of the Non-Employee Directors Deferred Compensation Program of ATMI, Inc. 1998 Stock Plan (the "Program") to conform the Program with the requirements of Internal Revenue Code Section 409A ("Code Section 409A"). The amendment primarily clarifies (i) that benefits will not be "grandfathered" under the Program; (ii) the timing of deferral and payment elections; and (iii) the circumstances when payments will be made (e.g., "Separation from Service", "Unforeseeable Emergency").

### 4. Capital Structure

### 4.1 Leverage

### Increase in leverage

**Example**: On July 27, 2012, OpenTable, Inc (the "Company") and Comerica Bank ("Comerica") entered into an amendment (the "Amendment") to the Amended and Restated Loan and Security Agreement, dated July 30, 2011 (the "Agreement"). The Agreement provides for a \$5.0 million line of credit from Comerica to the Company to fund working capital.

## Sale of preferred

**Example**: On October 23, 2009, the Company issued a press release entitled, "Grubb & Ellis Company Announces \$90 Million Preferred Equity Transaction," which is filed herewith as Exhibit 99.3 and is incorporated by reference. The press release constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Preferred Stock in any state in which the offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such state.

### Increase in equity / decrease in leverage

**Example 1**: On February 1, 2006, NuVasive, Inc (the "Company") entered into an Underwriting Agreement (the "Underwriting Agreement") with the selling stockholders named therein and Banc of America Securities LLC, Lehman Brothers Inc., Thomas Weisel Partners LLC and William Blair & Company, L.L.C, as representatives of the several underwriters named therein (the "Underwriters"), relating to the sale and issuance of 6,704,120 shares of the Company's common stock by the Company and 795,880 shares of the Company's common stock by the selling stockholders at a price to the public of \$19.25 per share.

**Example 2**: On November 29, 2006, United States Steel Corporation issued a press release announcing that it has commenced a cash tender offer and consent solicitation for its 10-3/4% Senior Notes due August 1, 2008, and issued a press release announcing that it has called for full redemption on January 2, 2007, its 10% Senior Income Debt Securities due 2031.

### 4.2 Payout

### Repurchase shares

**Example**: On October 14, 2011, Pier 1 Imports, Inc issued a press release announcing the authorization of a new \$100 million share repurchase program.

### Quarterly dividend

**Example**: On May 21, 2009, Raymond James Financial, Inc issued a press release announcing the board's authorization of a quarterly cash dividend on its common shares of \$0.11 per share and approval of the filing of a "universal shelf" registration statement with the Securities and Exchange Commission.

Cash dividend or payout

**Example**: On November 17, 2010, First Financial Corporation issued a press release to report the declaration of the semi-annual dividend of \$.46 per share payable January 3, 2011 to shareholders of record on December 15, 2010.

Undefined dividend

**Example 1**: On December 5, 2008, the Board of Directors of Exide Technologies adopted a rights plan and declared a dividend of one common share purchase right for each outstanding common share. The dividend is payable on December 23, 2008 to our stockholders of record on that date.

**Example 2**: On December 13, 2012, STRATTEC SECURITY CORPORATION issued a press release (the "Press Release") announcing the declaration of a special dividend to be paid prior to the end of calendar 2012.

## 5. Operations

## 5.1 Operations Positive

Expansion of business such as new products or stores, signing contract/license

**Example 1**: On December 1, 2009, Pericom Semiconductor Corporation (the "Company") entered into an R&D Center Investment Agreement (the "R&D Agreement") with the Administrative Committee of Yangzhou Economic and Technology Development Zone (the "Committee") in the People's Republic of China (the "PRC") for the Company's investment in the Yangzhou Economic and Technology Development Zone (the "Zone") that is located in Jiangsu Province, PRC.

**Example 2**: CSG Systems International, Inc. ("CSG") generates a significant portion of its revenues from EchoStar Communication ("EchoStar") under a multi-year processing agreement.

On December 1, 2005, CSG issued a press release announcing that it had signed a new multi-year Master Subscriber Management System Agreement (the "Agreement") with EchoStar to continue providing customer care and billing support services to EchoStar.

## 5.2 Operations Negative

## Shrinking of business

**Example 1:** The following schedules present the consolidated statements of operations of the Company for the quarters ended November 30, 2004, February 28, 2005, May 31, 2005, and August 31, 2005 and for the year ended August 31, 2005 adjusted to show the results for ProCare One Nurses, LLC ("ProCare") as discontinued operations due to the Company's divestiture of ProCare effective August 29, 2005.

**Example 2:** In September 2005, The Estée Lauder Companies Inc (the "Company") committed to a plan to sell the assets and operations of its reporting unit that markets and

sells Stila brand products, causing such assets and operations to be treated as discontinued operations for financial statement reporting purposes (the "Discontinued Operations").

### 5.3 Purchase Assets

#### Purchase assets from other firms

Example 1: Real Estate Purchase In anticipation of the expiration of the lease for the corporate headquarters of Brocade Communication Systems, Inc. ("Brocade") in San Jose, California on August 31, 2010, on May 23, 2008, Brocade purchased property located in San Jose, California, pursuant to a real estate agreement with MFP/Hunter@First Office Partners, LLC (the "Seller") dated April 24, 2008.
Example 2: On June 17, 2005, Netsmart Technologies, Inc (the "Registrant"), through its subsidiary Creative Socio-Medics Corp. ("CSM"), entered into an agreement with Addiction Management Systems, Inc. ("AMS") pursuant to which the Registrant acquired substantially all of the assets of AMS in exchange for the payment of \$2,478,865 in cash and the assumption by CSM of \$948,833 in certain contract liabilities.

#### Purchase other firms

**Example**: On June 11, 2007, CSG Systems International, Inc issued a press release announcing that it had reached a definitive agreement to acquire ComTec, Inc, a privately-held provider of print and electronic statement processing services headquartered in Fairfield, New Jersey. The agreement provides that CSG will acquire ComTec, Inc for \$23.5 million in cash, to be paid upon closing of the transaction which is currently anticipated to be in early July 2007.

### Closing of a purchase of other firms

**Example**: On August 1, 2011, ANSYS, Inc , a Delaware corporation (the "Company"), completed its acquisition of Apache Design Solutions, Inc , a Delaware corporation ("Apache"), pursuant to an Agreement and Plan of Merger (the "Merger Agreement"), dated June 29, 2011, by and among the Company, Power Play Merger Sub, Inc , a Delaware corporation and a wholly owned subsidiary of the Company ("Merger Sub"), Apache and, with respect to certain sections only, Papachey, Inc , solely as the representative of the securityholders of Apache (the "Securityholders' Representative").

### 5.4 Employee Positive

Developments related to employees, e.g. settlement/management communication with employees

**Example 1**: On June 29, 2006, The Stride Rite Corporation issued a press release announcing that it had adopted changes to its U.S defined benefit pension plan effective December 31, 2006, and that it will significantly increase matching contributions to its defined contribution plans effective January 1, 2007.

**Example 2**: On June 16, 2008 the Company reported that a new collective bargaining agreement has been reached with the Company's represented employees at Westmoreland Resources Inc 's Absaloka Mine in Montana. The new agreement with the International Union of Operating Engineers Local 400 ("IUOE") is effective June 1, 2008, and will expire May 31, 2011.

#### 5.5 Employee Negative

Costs (typically staff reduction) associated with selling an asset/the company **Example 1**: In March 2010, the U.S enacted significant healthcare reform legislation which effectively changes the tax treatment of the federal subsidies received by employers who provide certain prescription drug benefits for retirees (Medicare Part D subsidy) beginning after December 31, 2012. The Company is required to recognize the impact of the tax law change in the period in which the law is enacted. In the first quarter of fiscal year 2011, the Company expects to recognize a reduction in deferred tax assets related to the Medicare Part D subsidy with an offsetting increase in income tax expense of approximately \$12 million.

**Example 2**: On October 8, 2012, Targacept issued a press release announcing the workforce reduction described in 8-K Except to the extent of the portion of the press release incorporated by reference into Item 2.05 as described above.

**Example 3**: On September 15, 2011, Stream Global Services, Inc. ("Stream") commenced implementation of workforce reductions and organizational changes in the company's service delivery and associated operational support functions in order to improve efficiencies and continue to make the company more responsive to its clients and their customers.

### 6. Operations

### 6.1 Financial Results

Example 1: We are furnishing this Report on Form 8-K in connection with the disclosure of information during a conference call and webcast on June 30, 2011 discussing our fourth quarter and full year fiscal 2011 financial results.
Example 2: On July 2, 2008, X-Rite, Incorporated ("X-Rite") issued a press release reporting the Company's preliminary sales results for its second quarter.

### 6.2 Guidance

**Example 1:** On November 30, 2005, Alliance Data Systems Corporation (the "Company") issued a press release regarding its full-year 2005 and full-year 2006 guidance. Also attached is a slide presentation to be given to investors and others by senior officers of the Company.

**Example 2:** The Company issued a press release, dated January 25, 2007, updating its outlook for 2006 and announcing that it will issue its 2006 earnings release and report on its financial results on February 21, 2007. A copy of this press release is attached hereto as Exhibit 99.1.

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**Example 3:** Also on October 20, 2005, the Registrant issued a press release regarding the financial outlook for the fourth fiscal quarter ending December 31, 2005 and the first fiscal quarter ending March 31, 2006. A copy of the press release is attached hereto as Exhibit 99.2.

The information in this Item 7.01 including Exhibit 99.2, is furnished and be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities under that Section and be deemed to be incorporated by reference into the filings of the Company under the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such a filing.

### 6.3 Capital Markets

Letter between management and investors/analysts.

**Example 1:** Press Release dated April 7, 2005 EX-99.1 2 dex991.htm PRESS RELEASE DATED APRIL 7, 2005 Press Release dated April 7, 2005 Exhibit 99.1 For Release Apr.7, 2005 @ 4:05 ET Media: Tony Thompson Blue Coat Systems, Inc. (408) 220-2305 tony.thompson@bluecoat.com Investors: JoAnn Horne Market Street Partners (408) 220-2318 investor.relations@bluecoat.com BLUE COAT ANNOUNCES SEC INVESTIGATION SUNNYVALE, Calif., Apr.7, 2005 Blue Coat® Systems, Inc. (Nasdaq: BCSI), a leading provider of proxy appliances, today announced that the Securities and Exchange Commission (SEC) is conducting a formal, nonpublic investigation of the Company.

**Example 2:** SinoCoking Coal and Coke Chemical Industries, Inc. (SCOK) (the "Company") plans to engage in a series of discussions with institutional investors and market professionals regarding potential investments in the Company to support its working capital needs.

**Example 3:** On September 9, 2010, the Registrant issued a press release, a copy of which is attached hereto as Exhibit 99.1, and the information in Exhibit 99.1 is incorporated herein by reference. The information in Item 8.01

# 7. Litigation

7.1 *Litigation Positive* 

Filed lawsuit against other firms

**Example 1:** Item 8.01 On July 14, 2008, ATMI, Inc issued a press release announcing the global settlement of litigation with Praxair, Inc. A copy of the press release is filed as Exhibit 99.2 to this Current Report on Form 8-K and is incorporated herein by reference.

**Example 2:** On January 24, 2005, OMNI Energy Services Corp. ("OMNI") filed a lawsuit against the holders of its 6.5% Subordinated Convertible Debentures. The suit alleges claims against Provident Premier Master Fund, Ltd., Portside Growth and Opportunity Fund, Manchester Securities Corp., Elliott Management Corporation, Gemini Investment Strategies, L.L.C, Ramius Capital, L.L.C, and Gemini Master Fund, Ltd (collectively the "Debenture Holders") arising under Section 16(b) of the Securities Exchange Act of 1934.

**Example 3:** On March 12, 2007, the trial began in the patent infringement lawsuit launched by Diomed Holdings, Inc against AngioDynamics, Inc and Vascular Solutions, Inc in the District of Massachusetts, in which Diomed alleged AngioDynamics and Vascular Solutions had infringed Diomed's U.S Patent NUM 6,398,777 (the "'777 patent"). After a two-week trial, on March 26, 2007, jury deliberations began. On March 28, 2007, the jury returned a verdict in Diomed's favor, finding that products sold by AngioDynamics and Vascular Solutions infringed Diomed's patent, and awarding damages to Diomed of \$8.36 million from AngioDynamics and \$4.1 million from Vascular Solutions. A copy of Diomed's March 28, 2007, press release announcing the verdict is included as an exhibit to this Current Report.

#### 7.2 Litigation Negative

#### Lawsuit filed against firm

**Example 1:** Item 7.01 On October 3, 2007, Diomed Holdings, Inc issued a press release announcing that on October 2, 2007 the judge presiding over the patent infringement lawsuit filed by VNUS Medical Technologies, Inc against Diomed and others in the U.S District Court for Northern California had issued an order denying plaintiff's motion for summary judgment based on a claim of infringement, plaintiff's motion to strike and defendants' motion for summary judgment under 35 U.S.C §1112 and also denying in part and deferring in part her ruling on defendant's motion for summary judgment under 35 U.S.C §102-103.

**Example 2:** As previously reported, Selectica, Inc , a Delaware corporation ("Selectica"), has been engaged in patent litigation with Trilogy Software, Inc and Trilogy Group (collectively, "Trilogy") since April 22, 2004. On April 22, 2004, Trilogy filed a complaint in the United States District Court for the Eastern District of Texas Marshall Division, alleging patent infringement against Selectica. On September 2, 2004, Selectica filed counterclaims in the Eastern District of Texas Marshall Division action against Trilogy alleging infringement of certain of Selectica's patents. Selectica has entered into a binding Memorandum of Understanding, dated as of January 7, 2006 (the "Memorandum"), with Trilogy which amicably settles the pending patent lawsuit described above. Pursuant to the terms of the Memorandum, Selectica will make a one-time payment to Trilogy of \$7.5 million, and Trilogy and Selectica will enter into a cross license of the asserted patents for the life of the patents and mutually dismiss with prejudice all claims made against the other in the litigation. The parties have agreed that the resolution of this lawsuit does not constitute an admission or concession of liability or fault by either party.

**Example 3:** On November 5, 2007, EDO Corporation (the "Company" or "EDO") filed with the Securities and Exchange Commission a definitive proxy statement (the "Definitive Proxy Statement") in connection with the proposed acquisition of the Company by ITT Corporation, an Indiana corporation ("ITT"), pursuant to the previously announced Agreement and Plan of Merger, dated as of September 16, 2007, among the Company, ITT and Donatello Acquisition Corp., a New York corporation and a wholly-owned subsidiary of ITT ("Merger Sub"). As disclosed in the Definitive Proxy Statement, on October 15, 2007, one of our shareholders, the City of Bethlehem Aggregated Pension Fund, filed in the Supreme Court of the State of New York, New York County, a putative shareholder class action against the Company and the individual members of the Board of Directors. The complaint alleges, among other things, that the proposed acquisition of the Company by ITT substantially undervalues our common shares and unfairly benefits the Company's insiders. The plaintiff seeks injunctive relief with regard to the proposed acquisition. On November 1, 2007, plaintiff filed an amended complaint, adding allegations that the preliminary proxy statement filed by the Company on October 23, 2007 failed to disclose material non-public information concerning the financial position and prospects of the Company.

## 8. Distress Related

## 8.1 Delisting

**Example**: On August 29, 2008, the Partnership issued a press release relating to its receipt of the Nasdaq Staff Deficiency Letter discussed in Item 3.01 A copy of the press release is furnished as an exhibit to this Current Report.

## 8.2 Restructure

Bankruptcy or debt restructuring

**Example 1:** On June 7, 2006, the United States Bankruptcy Court for the District of Delaware authorized USG Corporation (the "Corporation") to make the borrowings and otherwise perform its obligations in connection with the Corporation's commitment letter with JPMorgan Chase Bank, N.A , J.P Morgan Securities Inc and Goldman Sachs Credit Partners L.P Under the commitment letter, JPMorgan Chase Bank and Goldman Sachs Credit Partners have committed to provide the Corporation with a credit facility of up to \$2.8 billion on the terms set forth in the commitment letter.

**Example 2:** On March 3, 2009, Westwood One, Inc (the "Company") announced that it had agreed in principle to a non-binding term sheet (the "Debt Term Sheet") with holders of its Existing Notes (as defined below) and lenders under its Existing Credit Agreement (as defined below) (collectively, the "Debt Holders"), which outlines the principal terms of a restructuring of all of the Company's outstanding long-term indebtedness (approximately \$241 million in principal amount) (the "Debt Restructuring").

# 9. Others

## 9.1 Change in Control

**Example**: In connection with the Merger, at the Effective Time, the Company's certificate of incorporation and bylaws were amended and restated.

The changes to the Company's certificate of incorporation and bylaws relate to and are consistent with the Company becoming a wholly-owned subsidiary of the Parent and its ceasing to be a public reporting company.

The Company's certificate of incorporation and bylaws as in effect following the Merger are attached hereto as Exhibits 3.1 and 3.2, respectively, and incorporated herein by reference.

#### 9.2 Change accountant

**Example**: (a) Dismissal of PricewaterhouseCoopers LLP

On December 6, 2005, the Audit Committee of the Board of Directors of Aehr Test Systems (the "Company") dismissed PricewaterhouseCoopers LLP ("PwC") as its independent registered public accounting firm, effective immediately.

PwC's reports on the Company's financial statements for the fiscal years ended May 31, 2005 and 2004 did not contain an adverse opinion or disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope, or accounting principle.

During the fiscal years ended May 31, 2005 and 2004, and through December 6, 2005, there were no disagreements with PwC on any matter of accounting principles or practices, financial statements disclosure, or auditing scope or procedure, which disagreements, if not resolved to PwC's satisfaction, would have caused PwC to make reference thereto in its reports on the financial statements for such years. During the period described in the preceding sentence, there were no "reportable events" (as defined in the Securities and Exchange Commission Regulation S-K, Item 304 (a)(1)(v)).

The Company provided PwC with a copy of the above disclosures and requested PwC to furnish a letter addressed to the Securities and Exchange Commission stating whether it agrees with the above statements. Attached as Exhibit 16.1 is a copy of the PwC letter to the Securities and Exchange Commission.

#### (b) Engagement of Burr, Pilger & Mayer LLP

On December 6, 2005, the Audit Committee of the Board of Directors of the Company engaged Burr, Pilger & Mayer LLP ("BPM") as the Company's independent registered public accounting firm for the fiscal year ending May 31, 2006. During the Company's two most recent fiscal years ended May 31, 2005 and May 31, 2004 and through the date of this Form 8-K, neither the Company nor anyone acting on its behalf consulted with BPM regarding either: (i) the application of accounting principles to a specific transaction, either completed or proposed, or the type of audit opinion that might be rendered on the Company's financial statements; or (ii) any matter that was the subject of a disagreement or event identified in response to Item 304(a)(1)(iv) of Regulation S-K and the related instructions to that Item.

The Company has requested that BPM review this Form 8-K and provided BPM the opportunity to furnish a letter addressed to the Securities and Exchange Commission containing any new information, clarification of the Company's expression of its views, or the respects in which it does not agree with the statements made by the Company.

BPM has advised the Company that it has reviewed this Form 8-K and has no basis on which to submit a letter addressed to the Securities and Exchange Commission in response to Item 304 of Regulation S-K.

#### 9.3 Impairments

**Example**: Item 2.05 Costs Associated with Exit or Disposal Activities: On March 5, 2007, Bassett Furniture Industries committed to and announced plans to cease operations at its wood manufacturing facility in Bassett, Va. In connection with the closing of the Bassett facility, the Company will record a first quarter pre-tax restructuring and impairment charge of approximately \$3.0 to \$3.6 million, or \$0.15 to \$0.18 per share after tax, all of which will be non-cash, and an estimated second quarter pre-tax cash charge of approximately \$1.0 million, or \$0.05 per share after tax, for one-time severance benefits.

#### 9.4 Restatement related

**Example**: As a result of the above-referenced restatements, on November 6, 2006, TDS and U.S Cellular, disclosed that they would delay the filing with the Securities and Exchange Commission ("SEC") of their Quarterly Reports on Form 10-Q ("Form 10-Q") for the period ended September 30, 2006.