

The Power of Reputation: Hedge Fund Activists

Emanuel Zur
Stern School of Business
New York University
44 West 4th Street – Suite 10-173
New York, NY 10012
ezur@stern.nyu.edu

Job Market Paper

December 21, 2007

Abstract:

This paper considers the influence of shareholder activists' reputation on the valuation and performance of target firms. Prior work finds a significantly positive market reaction for the target firm around the initial Schedule 13D filing date, and I extend this work by analyzing the effect of the different dimensions of the hedge fund's reputation on the stock price. Specifically, I consider the hedge fund's past actions as indicators of a reputation for success or aggression and relate these past actions to stock returns. My findings suggest that the market rewards hedge funds with a reputation for being successful, but does not reward hedge funds with a reputation for simply being aggressive. In addition, my results can be viewed as providing evidence that the market discounts the past, giving more weight to recent events and less to the far past. These findings suggest that reputation fades away gradually with time. Finally, my paper presents evidence that the positive excess returns earned around the Schedule 13D filing can be attributed to the mitigation of the free cash flow problem, as described by Jensen (1986).

This paper is part of my dissertation at New York University. I am grateful for the support and guidance of my dissertation committee: Mary Billings, April Klein (Chair), Stephen Ryan, David Yermack and Paul Zarowin. I also thank Dan Amiram, Karthik Balakrishnan, Daniel Cohen, Alex Dontoh, Yael Eisenthal, Kalin Kolev, Alina Lerman, Baruch Lev, Joshua Ronen and Michelle Zemel for their valuable comments. I also benefited from workshop attendants' remarks at Vanderbilt Law School. All remaining errors are my own.

I. Introduction

There has been significant interest among academics and practitioners in understanding the influence of shareholder activists on the valuation and performance of target firms. Recently, the research on activist investors has focused on hedge funds (e.g. Brav, Jiang, Partnoy, and Thomas, 2007; and Klein and Zur, 2007), as the industry has grown from \$15 billion to more than \$1 trillion over the past 15 years. I contribute to and extend this body of research and provide valuable insights by examining the effect of a hedge fund activist's reputation for success and/or aggression on the target firm's valuation, using an extensive database of hedge fund activists' events.

I define reputation, based on Fombrum (1996), as a perceptual representation of the hedge fund's past actions that indicates its overall appeal to investors when compared to other hedge funds. The aim of my paper is to test the effect of the hedge fund activist's reputation for success and/or aggression on the stock price and to shed light on the factors that determine this reputation. I consider a hedge fund to be successful if at least one member of the hedge fund is appointed to the board of the target firm or if the target firm initiates or increases its dividend payment after the initial investment. I consider a hedge fund to be aggressive if the hedge fund publicly threatens or starts a proxy fight.

This study examines a comprehensive sample of activism campaigns¹ by 111 hedge funds that engaged in 868 active investments during the years 1994 to 2006. I identify hedge fund activism based on the fund's choice of the required Securities and

¹ Shareholder activism is a broad concept that encompasses, among other things, confrontational and non-confrontational campaigns. My study captures shareholder activism in a limited sense based on the activist's choice of the required SEC filing. Hence, shareholder activist is an investor that files a Schedule 13D with the SEC.

Exchange Commission filing.² The Securities and Exchange Act of 1934 requires a person or group of persons to publicly disclose stockholdings exceeding a threshold of 5% of the company's outstanding shares or any class of shares within 10 days of reaching that threshold. When a hedge fund has specific plans to influence the target firm, or when it is unwilling to forfeit the option of influencing the firm in the future, the fund must file a Schedule 13D.³

This paper contributes to and extends a number of topics in both the accounting and finance literatures. First, this paper extends studies that examine the impact of hedge fund activism on the target's performance (e.g. Brav et al., 2007; Klein and Zur, 2007) by analyzing the importance of the factors that characterize hedge fund activists' reputations. In particular, I use a multi-period framework to analyze the effects of indicators of hedge fund success or aggression in the previous investment on the target firm's price in the current investment.

My results indicate that hedge fund targets earn higher positive abnormal stock returns during the period surrounding the initial filing of Schedule 13D when the hedge fund gained at least one seat on the previous target's board or if the previous target initiated or increased a dividend payment. These findings suggest that the market rewards a hedge fund with a reputation for being successful. However, I do not find a significant correlation between the threat of a proxy fight in the previous investment and the abnormal stock returns in the current investment. This finding suggests that the market does not reward a hedge fund with a reputation for simply being aggressive. In addition, I

² The definition of hedge fund activism and investment in this paper is consistent with the definition in Brav et al. (2007) and Clifford (2007) but not with Klein and Zur (2007) who examine confrontational activism only.

³ If the party acquiring the stake in the company in the course of business and does not intend to influence the management or control the firm, the Securities and Exchange Act of 1934 permits to submit a schedule 13G filing, which is shorter and less burdensome filing that requires less information from the filing party.

test the impact of a failure on a hedge fund's reputation. I consider as failure cases in which a hedge fund threatens to start a proxy fight but does not gain at least one seat on the board. I find that the hedge fund experiences lower excess returns after a failure, reflective of a worsening of the fund's reputation. This is the first empirical evidence that a particular component of hedge fund's reputation, success or failure, is associated with the target's excess return.

This paper also contributes to the accounting literature by examining how reputation is acquired. Prior accounting research (e.g. Lang, 1991; Chen, Francis and Jiang, 2005) examines how investors learn about analyst predictive ability and reputation, and finds that reputation effects learning process in a dynamic way, incorporating historical information by given greater weight to more recent events. I find a positive correlation between the total number of past successful events and the excess return in the current investment. My results, therefore, can be viewed as providing additional evidence that investors incorporate historical events in determining the hedge fund's reputation. This reputation, in turn, affects the investors' perception of the hedge fund's quality.

I also examine whether industry specialization by the hedge fund enhances shareholder returns around the Schedule 13D filing date. In the audit industry setting, Crasswell, Francis and Taylor (1995) find that audit firms that acquire reputation as industry experts earn higher fees. My results support the industry specialization hypothesis as I find that hedge funds that develop industry-specific knowledge and expertise earn higher excess returns around the Schedule 13D filings.

Finally, Klein and Zur (2007) show that hedge funds target profitable firms with strong operating cash flow. They also present evidence that the positive excess returns

earned around the Schedule 13D filing is attributed to the mitigation of the free cash flow problem, as articulated by Jensen (1986). Greenwood and Schor (2007) present an alternate hypothesis that hedge fund activists identify undervalued companies, locate potential acquirers for them, and remove opposition to a takeover. They find evidence that activist investors tend to have relatively short horizons, and that targets of investor activism earn high returns only for the subset of events in which the activist successfully persuades the target to merge or be acquired (ex-post).

To test these alternative hypotheses, I analyze regression results using interaction terms between the success indicators and the level of free cash in the firms, as well as interaction terms between the success indicators and whether the target firm is subsequently merged or acquired. I find that the interaction term's coefficient between cash and success is positive and significant. In contrast, the interaction term's coefficient between mergers and acquisitions and success is insignificant. These findings support Klein and Zur's (2007) view that hedge funds appear to attack the free cash flow problem as articulated by Jensen (1986). On the other hand, my results do not confirm Greenwood and Schor's (2007) findings and do not indicate that the reputation for success is correlated with the hedge fund's successful persuasion of the target firm to merge.

The remainder of the paper is organized as follows. Section II presents the related literature, develops the general research hypotheses and delineates the research design. Section III describes the data selection and sample. Sections IV and V present the empirical evidence. Section VI presents corporate governance evidence and Section VII concludes. In the Appendix, I provide additional details on the construction of my key variables.

II. Prior Research, General Hypothesis Development and Research

Design

A. Reputation

Kreps and Wilson (1982) and Milgrom and Roberts (1982) illustrate the role of reputation in the financial markets using game-theoretic models, and describe a firm's reputation as the product of learning over time from the observed behavior of the firm. In addition, they claim that reputation is particularly important in distinguishing among equivalent groups of firms. Economists have long considered reputation to be an important non-contractual mechanism for the governance of transactions and a private device that provides incentives to assure contract performance in the absence of any third party enforcement (e.g. Hayek, 1948; and Klein and Leffler, 1981). Moreover, numerous theoretical models have subsequently shown that tracking the reputation of participants of the financial market in a setting of repeated games helps overcome the Akerlof (1970) "market for lemons."⁴

The accounting and finance literatures widely study the effect of the reputation on market perception. Most notably, reputation has gained considerable empirical attention as a means to explain various phenomena in the financial markets. Studying analysts' reputations, for example, Stickel (1992) finds that analysts with the best ex-ante reputations have the largest market impact,⁵ concluding that market participants are capable of identifying the best analysts and responding accordingly. Park and Stice (2000) find that the market differentiates among analysts to some extent. They find that

⁴ See Kreps and Wilson (1982), Kreps, Milgrom, Roberts and Wilson (1982), Fudenberg and Kreps (1987), Diamond (1989), Fudenberg and Levine (1992), and Tadelis (1999, 2002) among others.

⁵ Stickel (1992) identifies the analysts with the best reputations as the members of the Institutional Investor All-America research team.

when high profile analysts with a strong track record of correctly forecasting earnings of a particular firm change their estimates, the market response in the days immediately following the release of the revisions is stronger with larger changes to the stock price.

Extensive research has also been conducted on understanding how the market perceives the reputation of an underwriter firm. Chemmanur and Fulghieri (1994) demonstrate that an investment bank's reputation is acquired from the capital market history of the firms it underwrites. Jo, Kim and Park (2007) find a positive association between post issue abnormal returns and underwriter reputation in seasoned equity offerings even after controlling for earnings management and other confounding effects.⁶

B. Hedge Fund's Reputation for Success

In recent years, as the number of hedge funds and dollar value of their investments has increased, research on the activist investor has focused on hedge fund activism (see, e.g. Bratton, 2006; Brav et al., 2007; Briggs, 2007; Clifford, 2007; Kahan and Rock, 2007; Klein and Zur, 2007; Partnoy and Thomas, 2007). However, as these papers note, there is neither an institutional nor a regulatory definition of a hedge fund. Instead, the research characterizes hedge funds as pooled investment vehicles that are open to only a limited group of investors⁷ and generally invest the money on a collective basis. Therefore, hedge funds are relatively free from the regulatory controls of the

⁶ Other research related to the influence of reputation in the financial market are: Francis, Huang, Rajgopal and Zang (2004) and Graham, Harvey and Rajgopal (2004) who investigate the influence of the CEO reputation, and Srinivasan (1999) and Vein, Hunter and Jagtiani (2003) research the reputation of the investment banks.

⁷ The investments are organized as "3(c)(1)" or "3(c)(7)" funds, referring to exemptions from mutual fund registration. Funds organized as 3(c)(1) funds are limited to 99 "accredited" investors. Section 3(c)(7) funds may have up to 499 "qualified" investors, but the net worth requirement is higher.

Securities Act of 1933, the Securities Exchange Act of 1934, and most notably the Investment Company Act of 1940.

In turn, these characteristics give rise to unique activism investment strategies when compared to the standard activism investment strategy as previously described in the literature.⁸ Hedge funds have better incentives to monitor a firm's management and its board because the funds are subject to less costly regulations as compared to other activist investors. This freedom from costly regulations often allows hedge funds to use aggressive strategies that are not available to mutual and pension funds, for example selling short, leveraging, and purchasing a high percentage of one firm. Moreover, hedge funds are almost always organized as limited partnerships, thus giving the general partners a great deal of control over their investment strategies without the interference of the "shareholders".

These characteristics also contribute to why investors perceive hedge fund activist as being aggressive and successful, a reputation that is further propagated by its wide coverage by the popular media. The media describes the hedge fund industry as a new breed of corporate raiders that instill fear in managers of underperforming firms, and claims that the new group of hedge fund managers is garnering a reputation as aggressive, but effective, gadflies.⁹ These observations motivate the first question addressed in this paper: does a hedge fund's past rate of success impact the abnormal return earned by the current target firm during the window of time surrounding the initial Schedule 13D filing date?

⁸ E.g. Gordon and Pound, 1993; Bethel et al., 1998; Gillan and Starks, 2000; Karpoff, 2001; Faleye, 2004.

⁹ "Hedge Fund Bullies," CFO Magazine (June 2007 Issue)

I use two different indicators to determine a hedge fund's reputation for success. First, I consider a hedge fund to gain a reputation for success if the hedge fund gained at least one seat on the previous targets' boards. Second, I regard a hedge fund as successful if the previous target initiated or increased a dividend payment. These dimensions are taken from Becht et al. (2007) and Klein and Zur (2007), who document that hedge funds are successful in making these significant changes to their target firms.

Conversely, I test the effect of hedge fund's reputation for failure on the abnormal returns surrounding the Schedule 13D filing date. I define failure as an event in which hedge funds publicly threaten to start a proxy fight in the previous investments, but eventually fail to gain seats on the boards of those investments.¹⁰ This definition is based on Klein and Zur (2007), who conclude that an explicit or implicit proxy threat is positively related to whether an activist successfully gains a seat on the target's board. Accordingly, I formulate a directional hypothesis with respect to the effect of the hedge fund's reputation for success/failure:

H1: A hedge fund's reputation for success (failure) is associated with higher positive (negative) excess returns for its target firms.

Specifically, I test the following three joint hypotheses:

H1a: The excess return for the target firm around the initial Schedule 13D filing date is positively associated with the hedge fund's success in appointing a member to the board of its previous investment.

¹⁰ Failure is not the complementary variable of success. In my sample there are many firms that neither succeeded nor failed.

H1b: The excess return for the target firm around the initial Schedule 13D filing date is positively associated with the hedge fund's success in initializing or increasing a dividend payment in its previous investment.

H1c: The excess return for the target firm around the initial Schedule 13D filing date is negatively associated with the hedge fund's failure in appointing a member to the board of its previous investment after threatening to start a proxy fight.

C. Hedge Fund's Reputation for Aggression

Next, I examine if the past aggression of a hedge fund affects the current target's stock return. Shareholder activist literature claims that public pension funds use shareholder proposals to pursue their highly active role in governing the target firms,¹¹ with Romano (1993) proposing that the pension funds use shareholder proposals to increase their reputation for being aggressive. Looking at the hedge fund industry, Bebchuk (2005, 2007), Briggs (2007), and Kahan and Rock (2007) suggest that a proxy fight, and not shareholder proposal, is the shareholder's only effective weapon to bring about significant change in the target firm. Therefore, I use the hedge fund's threat to start a proxy fight as an indicator of a reputation for being aggressive. I then examine the effect of a hedge fund's reputation for being aggressive on the excess returns earned around the date of the Schedule 13D filing. This motivates the following hypothesis:

¹¹ e.g., Romano, 1993; and Murphy and Van Nuys, 1994.

H2: Hedge funds' reputation for being aggressive is associated with higher positive excess returns for their target firms.

Specifically, I test the following hypothesis:

H2a: The excess return for the target firm around the initial Schedule 13D filing date is positively associated with the hedge fund threatening to start a proxy fight in its previous investment.

D. Multi-Period Framework

Theoretical studies, supported by empirical ones, propose several different models to explain how the market learns about reputation. The different models find that the market uses historical data to infer underlying parameters in a rational way.¹² Chen et al. (2005) show that investors use a dynamic learning process that incorporates the history of an analyst's past performance to distinguish among analysts. Hutton and Stocken (2006) find strong positive correlation between the historical managerial forecasting reputations and investor response to new management earnings forecasts. They show that investors learn from the firm's forecasting reputation, but only after a sufficient number of firm forecasts are available to evaluate the reputation. This evidence suggests that investors learn from the firm's reputation, but only after the firm has established its reputation. This leads to the following hypothesis:

¹² e.g. Hutton and Stocken (2006) about analysts' reputation; Huang et al. (2006) about mutual fund's performance; Datar et al. (1991) and Titman and Trueman (1986) about the market for IPOs.

H3: In establishing the hedge fund's reputation, investors incorporate the long history of the fund's performance and not only the recent events.

In addition, the theoretical studies use Bayesian learning models in different settings and find that as investors learn, they place decreasing weight on their prior beliefs. For example, Hollander (2007) looks at the initial public offering aftermarket in the U.S. and analyzes the auditor's reputation. He finds that the weight investors attach to auditor reputation decreases as time passes due to investors learning about the past events from additional sources of information. Accordingly, I propose the following hypothesis:

H4: Investors attach decreasing weights to hedge fund reputation for being successful and aggressive as time passes.

E. Industry Expertise

The last hypothesis relates industry expertise to target roles. The accounting literature provides evidence that the market learns about the auditor's reputation for industry expertise. For example, an accounting firm that gains a reputation for being an industry expert earns a higher fee relative to the other accounting firms in the specific industry (e.g., Craswell et al. 1995; DeFond, Francis and Wong, 2000; Francis, Reichelt and Wang, 2005). Moreover, Ferguson, Francis and Stokes (2003) find that industry expertise reputations of accounting firms are driven by office level (specific cities) industry leadership rather than the overall national or international firm reputation.

Clifford (2007) documents a high level of industry specialization in the hedge fund industry, finding that 21% of the hedge funds focus their investments in only one industry. In my sample, I also find industry specialization by hedge funds; 31% of hedge funds invest only in one or two out of the 48 Fama-French industry classifications. This leads me to consider the industry expertise reputation. In particular, I check whether the hedge fund's reputation for being aggressive or successful is stronger when the fund specializes in a specific industry and gains a reputation also for being an industry expert.

H5: A hedge fund's reputation for success or aggression is associated with higher positive excess returns when the fund also gains a reputation for being an industry expert.

F. Research Design

Many current and previous activist and blockholder studies use market-adjusted returns to calibrate the market's perception of the effect of activism on shareholder wealth (i.e., Holderness and Sheehan, 1985; Barclay and Holderness, 1989; Brav et al., 2007; Klein and Zur, 2007). Consistent with this literature, I compute market-adjusted abnormal share price reactions around the initial Schedule 13D filing date ("day zero").¹³ The market-adjusted return is the target's buy-and-hold return minus the value-weighted NYSE/AMEX/NASDAQ index from CRSP. I choose an event window of (-5, +5) days

¹³ I also compute the abnormal share price reactions around the date on which the fund crossed the 5% barrier.

around “day zero” to capture the price reaction to the event, but also to limit the influence of other possible events and noise in the market.¹⁴

I consider the sequential investments of hedge fund families, and I examine whether the market’s perception of the current hedge fund’s investment is driven by the hedge fund’s reputation. Specifically, I estimate the following equation:

$$\text{Abnormal Returns} = f(\text{Hedge Fund's Reputation, Controls})$$

With this specification, abnormal returns are modeled as a function of the hedge fund’s reputation and a set of k firm-specific factors which have been shown to affect the returns (e.g., prior return and the level of cash and debt).

III. Sample Selection and Data Description

A. Data

The hand collection of this data sample is necessary because there is no central database of activist hedge funds, and the publicly available hedge fund databases (i.e., TASS and CISDM) do not comprehensively cover the hedge fund activist industry. Therefore, I rely on the procedure used in the recent hedge fund activism literature (e.g., Brav et al., 2007; Clifford, 2007; and Klein and Zur, 2007) to classify the hedge fund activists and to identify the companies targeted by those hedge funds.

I use a two-step procedure to create a database of activist hedge funds and their investments in the years 1994 to 2006. In the first stage, I assemble a comprehensive list of activist hedge funds that engaged in large investments during the years 1994-2006. To

¹⁴ The results for the (-2, +2) and (-10, +10) days excess returns are virtually identical and hence are not reported separately in this study.

construct this list, I perform a search in Factiva (formerly Dow Jones Interactive) using the terms “hedge fund,” “activism” and “activist” (as done in Brav et al., 2007). To verify the accuracy of the tests, I rely on several other sources including the funds’ Internet sites and investor journals. From this process, I am able to gather the names of 117 hedge funds.

In the second stage, I collect information about the companies targeted by these funds. I identify hedge fund activists’ investments based on the funds’ choice of the required SEC filing. The Securities and Exchange Act of 1934 requires a person or group of persons to publicly disclose large stockholdings within 10 days after the holding exceeds a threshold of 5% of the company’s outstanding shares or of a class of the company’s equity securities. When a hedge fund has specific plans to influence the target firm, or when it is unwilling to forfeit the option of influencing the firm in the future, the fund files a Schedule 13D. When a hedge fund acquires the stake in the company only as a passive investor who purchases the securities in the course of business and does not intend to influence the management or control the firm, the Securities and Exchange Act of 1934 permits him to submit a Schedule 13G filing, which is a shorter and less burdensome filing that requires less information from the filing party. In my research I only examine Schedule 13D filings filed with the SEC between January 1, 1994 and December 31, 2006.¹⁵

Using the SEC Edgar database, I collect all the 13D hedge funds’ filings that were submitted during the years 1994 to 2006. This search yields 695 unique firm-fund block holdings. Because I am interested in the learning process of the market, I excluded hedge

¹⁵ See Clifford (2007) for an examination of 13G filings by hedge funds.

funds that targeted less than three firms during these years (six hedge funds were excluded). Ultimately, I generate a list of 111 activist hedge funds and 686 targeted firms between 1994 and 2006. From each of the 13D filings I collect both the filing date with the SEC and the date on which the fund crossed the 5% ownership barrier. I also collect the primary reasons stated by the fund in the Schedule 13D filing for the investment under Item 4: “Purpose of Transaction.”

Because I am interested in the behavior of the market (and more specifically the learning process from the established reputation), for each hedge fund, I trace the Schedule 13D filings backwards in time and exclude the first investment after the new hedge fund emerged. I exclude the first investment because during this stage the hedge fund still has not established its reputation since there is virtually no public information about the hedge fund. From the second investment and forward, information about the hedge fund’s past investments is available and therefore, the market can establish the hedge fund’s reputation.

Though I rely on the procedure used in the recent hedge fund activism literature to construct my sample, I find some disparities between my sample of hedge fund activists and the samples in both Brav et al. (2007) and Klein and Zur (2007). Klein and Zur (2007) examine only confrontational activist campaigns in which the activist clearly states in the “purpose” statement of the filing that its goal is to redirect management’s efforts, whereas I study all of the Schedule 13D filings. Therefore, my database is similar to Brav et al. (2007) and Clifford (2007) by including both the confrontational and non-confrontational activist campaigns. Moreover, the data set in this paper has a longer time

series (13 years) than Klein and Zur (2007) and Brav et al. (2007), which have three and six years respectively.

Finally, this process is consistent with previous research, and I am confident that almost all (if not all) of the investors that I classify as hedge funds are indeed hedge funds.

B. Descriptive Statistics

Table I describes the summary statistics of the hedge fund activists samples and Appendix 1 presents a list of variables used in my analyses and their associated sources. Panel A in Table I displays the distribution of the sample by years. As panel A indicates, between 1994 and 2006, hedge funds targeted 686 firms (filing Schedule 13D), and the number of filings increased over time, with over 100 events in both 2005 and 2006. The significant increase in the number of target firms during the sample period is consistent with the rise in the number of hedge funds and assets under their management. The increase in the earlier years could also be attributed to the fact that all public domestic companies were required to make their filings on Edgar only from the middle of the 1996 fiscal year. Therefore, to avoid any selection bias in the early years of my sample, I also use a sub-sample of the years 2000 to 2006 as a robustness test (not reported), and find that all of the results are robust.

I tabulate the target firms' industries in Table I Panel B. The target companies in my sample span 47 of the 48 Fama-French industries (excluding the tobacco products industry). As indicated in Panel B, the top industries that hedge fund activists invest in are business services (76 investments), electronic equipment (34), banking (31), medical

equipment (27), restaurants (23) and the entertainment industries (21). Furthermore, I find industry specialization by hedge funds; thirty one (nineteen) percent of hedge funds invest only in one or two (only one) of the 48 Fama-French industry classifications.

Panel C of Table I presents the primary reasons for the investments stated in item 4 (“Purpose of Transaction”) of the original 13D filings.¹⁶ The most frequently stated purpose is investment (234 filings), when the hedge fund does not have an activist purpose but it is unwilling to give up the option of affecting the firm. Changing the board’s composition (109) and pursuing alternative strategic goals (106) are respectively the second and third most frequently stated purpose found in the sample.

Panel D summarizes excess returns, tabulating the market-adjusted stock returns surrounding the date on which the fund filed the primary Schedule 13D (“day zero”), using different event windows. Panel D indicates that the portfolio of hedge fund targets earns statistically significant positive mean market-adjusted returns of 3.5% over the $[-2,+2]$ window, 6.8% over the $[-5,+5]$ window, and 8.3% over the $[-10,+10]$ window. The medians are respectively 2.7%, 5.9%, and 6.3%, also statistically different from zero. My findings are consistent with those of Brav et al. (2007) and Klein and Zur (2007).

Panel E presents a measure of prior-period accounting profitability, defined as EBITDA/Assets, and prior-period cash holdings and debt-to-asset ratios. The accounting measures are calculated over a one-year horizon ending on the fiscal year preceding the 13D filing date. Consistent with prior literature, hedge funds target firms with positive earnings, i.e., the mean EBITDA/Assets is 0.063, and positive levels of cash and debt, i.e. its mean $(\text{Cash}+\text{Short-term-Investment})/\text{Assets}$ is 0.166 and $(\text{Total-Debt})/\text{Assets}$ is 0.254.

¹⁶ However, the purpose is not exclusive or binding, and the hedge fund can update or change the purpose by filing an amendment (Schedule 13D/A).

Panel E also presents basic descriptive statistics about the hedge funds. The mean (median) of the number of activist campaigns conducted by the hedge funds in my sample is 6.180 (7.000). The panel also describes the media coverage by the popular press, using the number of articles in Factiva containing the hedge fund's name in the period prior to each investment as the measure of coverage. The mean (median) number of articles in the month prior to the Schedule 13D filing is 31.64 (22.00), and in the 6 months prior to the Schedule 13D filing is 136.58 (59.00).

C. Reputation

As previously detailed, I use whether the hedge fund successfully appointed at least one member of the hedge fund to the board of the target firm or initiated a dividend payment by the target firms as a proxy for the hedge fund's reputation for success. I use a public threaten of starting a proxy fight as a signal for the hedge fund's reputation for aggression. Table I, Panel F, provides descriptive statistics for the different reputation proxies. As the panel shows, 41% of the 686 hedge funds' activist campaigns (282 events) resulted in the hedge fund getting at least one seat on the target's board of directors. In 16.5% of the events (114 events), the target firm initiated or increased dividend payment within one year of the initial investment. Out of these events, there are 65 cases in which both the hedge fund gained a representative on the board and the target initiated a dividend payment. Further, 217 events resulted in gaining a seat on the board only, and 49 events had the target firm initiate dividend payments only.

Panel F also shows the proxy for the hedge fund's reputation for being aggressive. The panel shows that in 28% of the 686 events (193 events), the hedge fund publicly threatens to start a proxy fight against the target firm.

Table II presents the correlations between the different firms and reputation characteristics. The upper (lower) diagonal in Table II reports Person (Spearman) correlations. With regard to control variables, the level of cash is correlated with both level of debt and the EBITDA. In addition, Table II reveals a significant correlation between the media coverage (represented by the Adj. News variable) and whether the target firms initiated or increased the dividend payments.

IV. Hedge Fund's Reputation: Empirical Results

In order to test my different hypotheses, I regress the (-5, +5) days excess returns around the Schedule 13D filing day against a set of explanatory variables, interaction terms and controls.

A. Hedge Fund Reputation for success

Tables III and IV present the results from my examination of excess stock returns, conditional on the different proxies for hedge fund reputation. Panel A and Panel B of Table III present empirical results of the impact of prior success (hypotheses H1a and H1b, respectively); Panel C of Table III presents evidence of the impact of a failure on a hedge fund's reputation (hypothesis H1c); and Table IV presents empirical results of the impact of prior aggression (hypothesis H2a).

In Panel A, I define success as appointing a member to the board of its last target before the current investment. I gather this information through news articles on Factiva and by examining the target firm filings. Model 1 presents the association between appointing a member to the board and the excess return, and finds that the coefficient on this variable is 0.105 and significant with a t-statistic of 5.92. The rest of the models in Panel A of Table III also find a significant positive association between appointing a member to the board and the excess return

In Models 6 to 10, I control for the different characteristics of the targets (Cash, Debt and Profitability). As the models show, when using these controls the coefficient between success and return remains positive significant. In addition, the Adjusted R-Square rises when compared to models 1 to 5.¹⁷

The bottom two rows in Models 4, 5, 9 and 10 present coefficients on the public awareness as measured in the prior accounting and finance literature through media coverage (i.e., Milbourn, 2002; and Francis, Huang, Rajgopal, and Zang, 2007). In order to control for the public awareness, I hand collect a dataset of media coverage for my sample. From Factiva, I record the number of articles published in the popular press that mention the hedge fund name for a given period prior to the filing of the Schedule 13D. Hence, this variable is a proxy for the intensity of the media coverage of a given hedge fund. Using both one and six month time windows of the adjusted media coverage I find no association between the share price and the media coverage.

¹⁷ As an additional analysis, I control for the undervaluation of the targets by including the excess return in the 30 and 60 days prior to the investment in the regression. However, I do not find any association between the current and previous excess returns.

Panel A of Table I also examines the important influence of time on reputation. Datar et. al. (1991) and Hollander (2007) look at Initial Public Offering markets, and find that the auditor's reputation decays as time goes by, since the investors learn about the event from additional sources of information. In line with this literature, I find that the hedge fund's reputation for being successful fades with time. Models 2 to 5 and 7 to 10 in Panel A control for the number of days between gaining a seat on the board and the current investment (Num of Days since Board Variable), and describe significant negative correlations between excess returns and the number of days. The negative sign and significance of the number of days suggests that the market reaction weakens with time as the reputation fades.

Panel B presents an alternative test of the hedge fund's reputation for success. In this part, I define success when the previous target firm initiates or increases its dividend payment after the initial investment. I gather information about dividend payments from the Compustat database. Panel B presents the results of the cross sectional regression analysis for the alternative test and the different models support the previous results about the reputation for success. The models indicate a positive correlation between the market reaction and the initiation/increase in the dividend payments, and support the hypothesis that the market rewards hedge funds with reputations for success. Models 6 to 10 control for the different characteristics of the targets (Cash, Debt and Profitability), and exhibit virtually identical results. Moreover, models 4, 5, 9 and 10 in Panel B do not find a significant association between the share price and the media coverage, therefore supporting the previous results regarding public awareness.

In addition, I test the effect of hedge fund's reputation for failure. I define failure as an indicator variable that equals one when a hedge fund publicly threatens to start a proxy fight but eventually fails to gain one or more seats on the board of the last investment prior to the current investment. Models 1 to 7 in Table III, Panel C, indicate a significant negative association between the failure indicator and the excess return. In Panel C I also control for the reputation for being aggressive and successful in the different models, and my results support the prior conclusion that the market rewards hedge funds with reputations for success. Therefore, I conclude that the negative and positive signs for failure and success, respectively, indicate that hedge fund can gain a reputation for being successful (and be rewarded by the market), and on the other hand can weaken this reputation by failing (and experiencing lowered market returns).

B. Hedge Fund's Reputation for being Aggressive

Next, I gather from Factiva all news reporting that the activist was threatening to begin a proxy solicitation. I consider a hedge fund to be aggressive if the hedge fund publicly threatens or starts a proxy fight in the last investment prior to the current investment. Table IV describes the connection between aggression tactics and the reaction of the market. I find no significant correlation between the threatened proxy fights in the last investment of a hedge fund and the abnormal return in the current one. These findings are consistent with the pension fund activism literature that finds no evidence that the shareholder proposals have significant effect on the stock return (e.g. Del Guercio and Hawkins (1999)). These results are contrary to the hedge fund industry's reputation propagated by the popular press, claiming that the hedge fund industry is

garnering a reputation as aggressive by instilling fear in the managers of underperforming firms.

To summarize, the results presented in Table III are consistent with investors reward hedge funds with reputations for being successful. At the same time, the results in Table IV do not suggest that investors reward hedge funds with reputations for being aggressive. In addition, the findings in Table III suggest that the market reaction weakens with time as the reputation fades.

C. Industry Expertise

Table III and VI examine the industry expertise by investigating whether a hedge fund that gains a reputation for being an industry expert earns higher excess returns around “day zero.” In addition, the tables examine whether the hedge fund’s reputation for being aggressive or successful is stronger when the fund specializes in a specific industry and gains a reputation also for being an industry expert

To test these hypotheses, I use a binary variable that is equal to one when the current hedge fund’s investment is in the same industry as the last investment (Same Previous Industry), and also the interaction term between the industry expert and the proxies for success and aggression. Panel A and B of Table III and Table IV indicate that the coefficients on the Same Previous Industry variable are all positive and significant. Panel A and B of Table III show that the interaction terms are significant for reputation of being successful, but Table IV indicates that the interaction term is not significant for reputation of being aggressive.

In conclusion, the results support the prior accounting literature's findings about the auditor's reputation for industry expertise, by suggesting that hedge fund that gains a reputation for being an industry expert earns higher excess returns around "day zero". Moreover, the results also indicate that the market appreciates industry specialization by hedge funds when it infers the hedge fund's reputation for success. This result does not hold for reputation for being aggressive.

V. Hedge Fund's Reputation: Empirical Results: Multi-Period Framework

I proceed to test my hypotheses regarding the influence of reputation in the multi-period framework. The theoretical and empirical literature studies the development of reputation over time (i.e. Holmstrom, 1982; Chen et al., 2005). An implication of Holmstrom's (1982) model of reputation is that the highest reputation effect is felt at the start of the agent's "career" and this effect decreases with time and experience. However, in this framework I do not find support for this phenomenon. In Table III and IV, I examine the different proxies for the hedge fund reputation and control for the length of the agent's career by using the ordinal number of the hedge fund's investment. The control for the length of the agent's career (Investment Number) is not significant in any of the different models of Table III and IV, thus challenging the hypothesis that the effect of reputation is strongest at the start of the agent's career.

As previously detailed, the literature hypothesizes and finds that the market uses historical data to infer reputation. To test this hypothesis, I again examine the excess returns, conditional on different proxies for the hedge fund reputation; however, I use

proxies connected to any of the hedge fund's previous investments and not only to its last one. Specifically, I use a binary variable that is equal to one only if the hedge fund successfully fulfilled an event that affects reputation (Board appointment/Dividend increase/Proxy threat) in any of its prior investments in the six months preceding the current investment.^{18, 19}

Table V presents the results of regression estimation using the information history as a control. As shown in models 1 and 2, I find a strong positive correlation between the excess returns and a gain of at least one seat on any of the previous targets' boards in the six months prior to the current investment. In line with the prior accounting literature, my results suggest that the investors learn from the past events about the hedge fund's reputation by incorporating historical information in determining the reputation. Models 3 and 4 also control for the reputation for success by using the initiation/increase of dividend payments in any previous target in the past six months. I find qualitatively the same results as presented above. Models 5 and 6 do not find associations between the threatened proxy fights and the excess returns. In addition, models 2 and 4 support the prior findings by showing that the market reaction weakens with time as the reputation fades.

Since I am testing whether the market uses historical data to infer reputation, I argue that more success and/or aggression proxies in the past are indicative of better reputation and therefore should lead to higher positive excess returns. To test this hypothesis, I use the aggregate number of indicators of reputation in the six months prior

¹⁸ For example, looking on previous success for the #4 investment of the hedge fund, a success will occur if the hedge fund succeeded in achieving the goal in its investments #1, 2 or 3 during periods #1, 2 or 3 (as long as the period is shorter than 6 months).

¹⁹ I also used (not tabulated) one year window and the results are robust.

to the current investment. Empirically, I find a strongly significant association between the excess returns and the aggregate number of indicators, as shown in Table VI. Model 1 presents the result of excess return regression with the total number of previous indicators for reputation for success and aggression. Models 2, 3 and 4 present different combinations of proxies for success, and the results are virtually identical. Supporting my previous results, I find that the investor incorporates historical information when learning about the hedge fund's reputation.

As previously discussed, my results support the theoretical and empirical literature by indicating that the reputation for being successful fades with time. To further examine this hypothesis, I study the relationship between the (-5, +5) day returns and gaining at least one seat on the last target's board, controlling for the effect of calendar time. To capture the time trend, I use 13 binary variables, *Month1-Month13*, containing information on the hedge fund's success history. For Month-n, a one indicates that the hedge fund successfully appointed a member to the board in its last investment in the n months before the current investment.²⁰ To avoid any possible multicollinearity problem, I use the product of the signal for success (Previous-Board) and the time trend variable (Month-n).

Table VII, Panel A, presents the results of the cross-sectional models. Model 1 (model 2) demonstrates a significant positive correlation between the previous four (three) months and the abnormal returns, however it also indicates that the size of the coefficient decreases each month. These results are consistent with the previous findings

²⁰ Month13 variable is =1 if the hedge fund appointed a board member in a period longer than the prior year (12 months).

and support the hypothesis that investors attach decreasing weights to hedge fund reputation as time passes (hypothesis H4).

In addition, as robustness tests, I use both quarters instead of months to capture the time trend and gaining at least one seat in the previous six months on any of the previous target's board. The results of the tests are presented in Table VII, Panel B and Table VIII respectively, and support the finding that investors attach decreasing weights to hedge fund reputation as time passes.

VI. Hedge Fund Activism and Corporate Governance

Klein and Zur (2007) show that hedge funds target profitable firms with strong operating cash flow. When analyzing the fiscal year following the initial Schedule 13D filing, Klein and Zur (2007) find that hedge fund targets, on average, double their dividends, significantly increase their debt-to-assets ratio, and significantly decrease their cash and short-term investments. Therefore, they suggest that the positive excess returns earned around the Schedule 13D filing is attributed to the mitigation of the free cash flow problem, as articulated by Jensen (1986). Greenwood and Schor (2007) suggests an alternate explanation: that hedge fund activists identify undervalued companies, locate potential acquirers for them, and remove opposition to a takeover. To support their hypothesis, Greenwood and Schor (2007) show that activist investors tend to have relatively short horizons and that targets of investor activism earn significant positive returns only for the subset of events in which the activist successfully persuades the target to merge or be acquired (ex-post).

I use different measures to test these alternative hypotheses. I analyze regression results using interaction terms between the success and aggression indicators and the level of free cash in the firms (both in the last investment), as well as interaction terms between the success and aggression indicators in the last investment and whether the target firm is subsequently merged or acquired before the current investment. To measure the level of cash, I use the ratio of the sum of cash plus short-term investments to total assets. As a second measure for the level of cash, I use the Richardson (2006) accounting based measure of free cash flow. To determine whether the target firm is subsequently merged or acquired, I use the CRSP delisting codes.²¹

Table IX presents the results of the different tests. Panel A tests whether the positive excess return is attributed to the mitigation of the free cash flow problem. Models 1, 3, 7 and 9 find that the interaction terms between the two different success indicators and the level of cash in the firms are significantly positive. These results are consistent with the existing work by Klein and Zur (2007) that support the view that hedge funds attack the free cash flow problem. The results suggest that when the market perceives a reputation for success, it appreciates successful hedge funds that attack and mitigate the free cash flow problem. Model 2, 4, 8 and 10 use the targets' level of free cash flow to test the hypothesis, and the results support the previous findings. However, the interaction terms in models 5, 6, 11 and 12 are not significant, indicating that when the market infers a reputation for aggression, it does not appreciate the level of free cash flow in the target firms.

²¹ CRSP delisting codes detail whether the firm's security is trading or not and also specify the reason for not being traded. Delisting code that starts with a first digit of 2 indicates that the firm either merger or been acquired.

Table IX, Panel B, presents the results for the alternative hypothesis that hedge funds persuade targets to merge or be acquired. In each of the six different models, the interaction terms between the success and aggression indicators and whether the target firm is subsequently merged or acquired are not significant. These results do not confirm Greenwood and Schor's (2007) findings and do not indicate that the reputation for success or aggression is correlated with the hedge fund's successful persuasion of the target firm to merge.

VII. Summary and Conclusions

In this paper, I use a new approach to investigate the abnormal returns generated by the Schedule 13D filings made by hedge fund activists. I analyze a large and comprehensive sample of hedge fund activism in the years 1994 to 2006 and examine the effect of a hedge fund activist's reputation on the target firm's valuation. My study contributes to ongoing research stream on the motivation, activity and impact of the hedge fund activism in several ways.

First, I analyze the effects of the different factors of the hedge fund's reputation on the stock price. Specifically, I consider the hedge fund's past actions to indicate whether the market perceives the fund as aggressive and/or successful. I consider a hedge fund to be successful if at least one member of the hedge fund is appointed to the board of the target firm or if the target firm initiates or increases its dividend payment after the initial investment. I consider a hedge fund to be aggressive if the hedge fund publicly threatens or starts a proxy fight. I find that investors reward hedge funds with reputations for being successful and they also penalize hedge funds with reputation for failure. My

results, on the other hand, do not suggest that investors reward hedge funds with reputations for being aggressive.

Second, my paper also contributes to the accounting literature on the reputation for industry expertise. My results support the industry specialization hypothesis, as I find that hedge funds that develop industry-specific knowledge and expertise earn higher excess returns around the Schedule 13D filings. Third, I contribute to the accounting literature on the way the reputation is acquired in the market. I find that the market discounts the past, giving more weight to recent events and less to the far past, suggesting that reputation fades gradually with time.

Finally, I test different alternative corporate governance hypotheses: first, that the excess return is attributed to the mitigation of the free cash flow problem, and second that it is attributed to the activist persuading the target to merge or be acquired. My results support the first hypothesis only that hedge funds appear to attack the free cash flow problem.

To examine the robustness of my findings, I conducted a large number of tests. These tests include using different time windows, alternate proxies for reputation (board, dividend, failure and proxy fight), various control variables (controls for the target and hedge fund characteristics and for the market awareness), and different corporate governance control (level of cash, free cash flow and M&A). None of the tests changes my results, interpretations or conclusions.

Appendix 1

Variable definitions and data sources

Variable	Definitions	Data Sources
	Hedge Fund Date	
(-5, +5) Abnormal Return	= the market-adjusted abnormal return in an event window of (-5, +5) days around the initial Schedule 13D filing date, using the value-weighted NYSE/AMEX/NASDAQ index from CRSP.	<p>I obtain the hedge fund data from few different sources:</p> <ul style="list-style-type: none"> • The excess return measures are obtained from CRSP. I use the value-weighted NYSE/AMEX/NASDAQ index to calculate the market model abnormal return. • The data about the investment purpose is obtained from the Schedule 13D filings in the SEC's EDGAR filing system. • The data about the coverage media is obtained from the Factiva database (formerly Dow Jones Interactive). • The industry information is obtained from the COMPUSTAT database, using the Fama and French (1997) 48 industry classifications.
Previous Return	= the abnormal return in an event window of (-5, +5) days around the initial Schedule 13D filing date of the hedge fund's previous investment.	
Investment Number	= the ordinal number of the hedge fund's investment during the sample period.	
News (# month)	= the media coverage calculated by the number of articles in Factiva containing the hedge fund's name in the # month before the initial Schedule 13D filing.	
Adj. News (# month)	= the number of articles in Factiva containing the hedge fund's name in the # month before the initial Schedule 13D filing, adjusted by the median value of the media coverage for all firms in the sample.	
Same Previous Industry	= an indicator variable =1 when the hedge fund's current investment is in the same industry as the hedge fund's previous investment. Industry is defined according to the Fama and French (1997) 48 industry classifications.	

Variable	Definitions	Data Sources
Reputation Data		
Previous Success – Board	= an indicator variable =1 when the hedge fund successfully appointed at least 1 member to the board of its last investment before the current investment and =0 otherwise.	<p>I obtain the reputation data from few different sources:</p> <ul style="list-style-type: none"> • The information about the board and the threats to start a proxy fight is obtained from the popular press, using the Factiva database (formerly Dow Jones Interactive). • The information about the dividend payments is obtained from Compustat database.
Board Success – 6 Months	= an indicator variable =1 when the hedge fund successfully appointed at least one member to the board of any of its previous investments in the six months prior to the current investment and =0 otherwise.	
Num of Days since Board	= the number of days between the date the hedge fund appointed a member to the board and the new investment date.	
Previous Success – Dividend	= an indicator variable =1 when the hedge fund’s last target initiated or increased the dividend payments before the current investment and =0 otherwise.	
Div Success – 6 Months	= an indicator variable =1 when any of the hedge fund’s prior targets initiated or increased the dividend payments in the six months prior to the current investment and =0 otherwise.	
Num of Days since Div	= the number of days between the date the hedge fund’s target initiated/increased the dividend payments and the new investment date.	
Previous Proxy Threaten	= an indicator variable =1 when the hedge fund publicly threatens a proxy fight against its last investment before the current investment and =0 otherwise.	
Proxy Threaten – 6 Months	= an indicator variable =1 when the hedge fund publicly threatens a proxy fight against any of it previous investments in	

the six months prior to the current investment and =0 otherwise.

Num of Days since Proxy	= the number of days between the date the hedge fund publicly threatens a proxy fight against its last investment and the new investment date.
Failure	= an indicator variable =1 when the hedge fund publicly threatens a proxy fight in its last investment but does not appoint at least one member to the board of its last investment before the current investment and =0 otherwise.
All Signals – Aggregate	= the total number of all different proxies for reputation (board, dividend and proxy fight) in the previous six months.
Board & Dividend – Aggregate	= the total number of all different proxies for success (board and dividend) in the previous six months.
Board– Aggregate	= the total number times that the hedge fund successfully appointed a member to the board of any of the previous targets in the last six months.
Dividend – Aggregate	= the total number times that the any of the previous targets initiated or increased the dividend payments in the last six months.
Proxy – Aggregate	= the total number times that the hedge fund publicly threatened to start a proxy fight against any of the previous targets in the last six months.
Month #	= an indicator variable =1 when the hedge fund successfully appointed a member to the board of its last investment in the month # prior to the current investment.
Qtr #	= an indicator variable =1 when the hedge fund successfully

appointed a member to the board of its last investment in the quarter # prior to the current investment.

Prior-Month #

= an indicator variable =1 when the hedge fund successfully appointed a member to the board of any of its previous investment in the month # prior to the current investment.

Prior-Qtr #

= an indicator variable =1 when the hedge fund successfully appointed a member to the board of any of its previous investment in the quarter # prior to the current investment.

Variable	Definitions	Data Sources
Target Firms Data		
(Cash+Short-term Investments)/Assets (Cash)	= is cash and short term investments (MM\$) to total assets ratio, and is calculated as data#1/data#6.	
Total Debt/Assets	= is the sum of the long and short tem debt to total assets ratio, and is calculated as (data#9+data#34)/data#6.	I obtain the reputation data from few different sources:
EBITDA/Assets	= is the earnings before interest, taxes, depreciation and amortization, and is calculated as data#13/data#6.	<ul style="list-style-type: none"> • The information about the board and the threats to start a proxy fight is obtained from the popular press, using the Factiva database (formerly Dow Jones Interactive).
Free Cash Flow (FCF)	= is the cash flow remain after maintaining assets in place and financing the new investment, as defined and calculated in Richardson (2006).	<ul style="list-style-type: none"> • The information about the dividend payments is obtained from Compustat database.
M&A	= an indicator variable =1 whether the target firm is subsequently merged or acquired in the after the hedge fund's investment.	

References

- Akerlof, George A., 1970, The Market of “Lemons”: Quality Uncertainty and the Market Mechanism, *Quarterly Journal of Economics* 84 (August), 488–500.
- Barclay, Michael J., and Clifford G. Holderness, 1989, Private Benefits from Control of Public Corporations, *Journal of Financial Economics*, 25, 371-395.
- Becht, Marco, Julian Franks, Colin Mayer, and Stefano Rossi, 2007, Returns to Shareholder Activism: Evidence from a Clinical Study of the Hermes UK Focus Fund, *Review of Financial Studies* (forthcoming).
- Bebchuk, Lucian Arye, 2005, The Case for Increasing Shareholder Power, *Harvard Law Review* 118, 835–914.
- Bebchuk, Lucian Arye, 2007, The Myth of the Shareholder Franchise, *Virginia Law Review* 93, 675–732.
- Bethel, Jennifer E., Julia Porter Liebeskind, and Tim Opler, 1998, Block Share Purchases and Corporate Performance, *Journal of Finance* 53, 605-634.
- Brav, Alon, Wei Jiang, Frank Partnoy and Randall Thomas, 2007, Hedge Fund Activism, Corporate Governance, and Firm Performance, *Journal of Finance* (forthcoming).
- Bratton, William, 2006, Hedge Funds and Governance Targets, Working Paper, Georgetown Law School.
- Briggs, Thomas W., 2007, Corporate Governance and the New Hedge Fund Activism: An Empirical Analysis, *Journal of Corporation Law*, (forthcoming).
- Chemmanur, Thomas J., and Paolo Fulghieri, 1994, Investment Bank Reputation, Information Production, and Financial Intermediation, *Journal of Finance* 49, 57–79.
- Chen, Qi, Jennifer Francis, and Wei Jiang, 2005, Investor Learning about Analyst Predictive Ability, *Journal of Accounting and Economics*, 39, 3–24.
- Clifford, Chris, 2007, Value Creation or Destruction? Hedge Funds as Shareholder Activists, Working Paper, Arizona State University.
- Craswell, Allen T., Jennifer Francis, Stephen L. Taylor, 1995, Auditor Brand Name Reputations and Industry Specializations, *Journal of Accounting and Economics* 20, 297-322.
- Datar, Srikant M., Gerald A. Feltham, and John S. Hughes, 1991, The Role of Audits and Audit Quality in Valuing New Issues, *Journal of Accounting and Economics*, 14, 3-51.
- Defond, Mark L., Jere R. Francis and T.J. Wong, 2000, Auditor Industry Specialization and Market Segmentation: Evidence from Hong Kong, *Auditing: A Journal of Practice and Theory* 19 (1), 49-66.
- Del Guercio, Diane and Hawkins, Jennifer, 1999, The Motivation and Impact of Pension Fund Activism, *Journal of Financial Economics*, 52, 293-340.
- Diamond, Douglas W., 1989, Reputation Acquisition in Debt Markets, *Journal of Political Economy*, 97, 828-862.
- Faleye, Olubunmi, 2004, Cash and Corporate Control, *Journal of Finance* 59, 2041-2060.

- Fama, Eugene, and Kenneth French, 1997, Industry Costs of Equity, *Journal of Financial Economics* 43, 153–193.
- Ferguson, Andrew C., Jere R. Francis and Donald J. Stokes, 2006, What Matters in Audit Pricing - Industry Specialization or Overall Market Leadership?, *Accounting and Finance*, 46, 97-106.
- Fombrun, Ch.J., 1996, Reputation, Harvard Business School Press, Boston-Massachusetts
- Francis, Jennifer, Allen H. Huang, Shivaram Rajgopal, and Amy Y.Zang, 2007, CEO Reputation and Reporting Quality, *Contemporary Accounting Research* (forthcoming).
- Francis, Jere R., Kenneth Reichelt, Dechun Wang, 2005, The Pricing of National and City-Specific Reputations for Industry Expertise in the US Audit Market. *The Accounting Review*, 80, 113-136.
- Fudenberg, Drew, and David M Kreps, 1987, Reputation in the Simultaneous Play of Multiple Opponents, *Review of Economic Studies* 54, 541–568.
- Fudenberg, Drew, and David K. Levine, 1992, Maintaining a Reputation when Strategies are Imperfectly Observed, *Review of Economic Studies*, 59(3), 561–579.
- Gillan, Stuart L., and Laura T. Starks, 2000, Corporate Governance Proposals and Shareholder Activism: The Role of Institutional Investors, *Journal of Financial Economics* 57, 275–305.
- Gordon, Lilli A., and John Pound, 1993, Information, Ownership Structure, and Shareholder Voting: Evidence From Shareholder-Sponsored Corporate Governance Proposals, *Journal of Finance* 48, 697-718.
- Graham, John R., Campbell R. Harvey, and Shiva Rajgopal ,2005, The Economic Implications of Corporate Financial Reporting, *Journal of Accounting and Economics* 40, 3-73.
- Greenwood, Robin and Michael Schor, 2007, Hedge Fund Investor Activism and Takeovers, Working Paper, Harvard Business School.
- Hayek, Friedrich, 1948, Individualism and Economic Order, Chicago: University of Chicago Press.
- Holderness, Clifford, and Dennis Sheehan, 1985, Raiders or Saviors? The Evidence in Six Controversial Investors, *Journal of Financial Economics*, 14, 555-580.
- Holmstrom, Bengt, 1982, Managerial Incentive Problems: A Dynamic Perspective, In *Essays in Economics and Management in Honor of Lars Wahlbeck*. Helsinki: Swedish School of Econ.
- Hollander, Stephan, 2007, Auditor Reputation in the IPO Aftermarket, Working Paper, Tilburg University.
- Huang, Jennifer, Kelsey D. Wei, and Hong Yan, 2006, Volatility of Performance, Investor Learning, and The Flow-Performance Sensitivity, Working paper, University of Texas at Austin.
- Hunter, William C. and Julapa Jagtiani, 2003, An Analysis of Adviser Choice, Fees, and Effort in Mergers and Acquisitions, *Review of Financial Economics* 12, 65-81.

- Hutton, Amy P., and Phillip C. Stocken, 2006, Effect of Reputation on the Credibility of Management forecasts, Working paper, Dartmouth College.
- Jensen, Michael C., 1986, Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers, *American Economic Review* 76, 323–329.
- Jo, Hoje, Yongtae Kim, Myung Seok Park, 2007, Underwriter Choice and Earnings Management. *Review of Accounting Studies*, 12, 23–59.
- Kahan, Marcel, and Edward B. Rock, 2007, Hedge Funds in Corporate Governance and Corporate Control, *University of Pennsylvania Law Review* (forthcoming).
- Karpoff, Jonathan, M., 2001, The Impact of Shareholder Activism on Target Companies: A Survey of Empirical Findings, Working Paper.
- Klein, April and Emanuel Zur, 2007, Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors, *Journal of Finance* (forthcoming).
- Klein, Benjamin, and Keith B. Leffler, 1981, The Role of Market Forces in Assuring Contractual Performance, *Journal of Political Economy* 89, 615–41.
- Kreps, David M., Paul Milgrom, John Roberts, and Robert Wilson, 1982, Rational Cooperation in the Finitely Repeated Prisoners' Dilemma, *Journal of Economic Theory*, 27, 214-233.
- Kreps, David M., and Wilson, Robert, 1982, Reputation and Imperfect Information, *Journal of Economic Theory*, 27, 253-279.
- Lang, Mark., 1991, Time-Varying Stock Price Response to Earnings Induced by Uncertainty about the Time-Series Process of Earnings, *Journal of Accounting Research*, 29(2), 229-257.
- Ljungqvist, Alexander, Felicia Marston, and William J. Wilhelm, 2006, Competing for Securities Underwriting Mandates: Banking Relationships and Analyst Recommendations, *Journal of Finance* 61, 301-340.
- Milbourn, Todd T., 2002, CEO Reputation and Stock-Based Compensation, *Journal of Financial Economics*, 68(2): 233-262.
- Milgrom, Paul and Roberts, John, 1982, Predation, Reputation, and Entry Deterrence, *Journal of Economic Theory* 27, 280-312.
- Murphy, Kevin and Karen Van Nuys, 1994, State Pension Funds and Shareholder Inactivism, Manuscript, Harvard Business School, Boston: MA
- Park, Chul W., and Earl K. Stice, 2000, Analyst Forecasting Ability and the Stock Price Reaction to Forecast Revisions, *Review of Accounting Studies*, 5, 259-272.
- Partnoy, Frank and Randall Thomas, 2006, Gap Filling, Hedge Funds, and Financial Innovation, Working Paper, Brookings Institution Press.
- Richardson, Scott, 2006, Over-Investment of Free Cash Flow, *Review of Accounting Studies* 11, 159-189.
- Romano, Roberta, 1993. Public Pension Fund Activism in Corporate Governance Reconsidered. *Columbia Law Review* 93, 795-853.

- Stickel, Scott E., 1992, Reputation and Performance among Security Analysts, *Journal of Finance* 47, 1811-1836.
- Tadelis, Steve, 1999, What's in a Name: Reputation as a Tradable Asset, *The American Economic Review*, 89(3), 548-563.
- Tadelis, Steven, 2002, Complexity, Flexibility, and the Make-or-Buy Decision, *American Economic Review* (AEA Papers and Proceedings) 92-2, 433-437.
- Titman, Sheridan., and Brett Trueman, 1986, Information Quality and the Valuation of New Issues, *Journal of Accounting and Economics*, 8, 159-172.

Table I

Descriptive StatisticsPanel A: Year of First 13D Filing

	Hedge Fund Activists
1994	5
1995	25
1996	31
1997	40
1998	49
1999	43
2000	42
2001	38
2002	58
2003	66
2004	76
2005	104
2006	109
Total	686

Panel B: Industry of Target Firm (20 or More Firms)

	Hedge Fund Activists
Business Services	76
Electronic Equipment	34
Banking	31
Medical Equipment	27
Restaurants, Hotels, Motels	23
Entertainment	21

Panel C: Activists' Stated Reasons in Schedule 13D's "Purpose of Transaction"

	Hedge Fund Activists
Investment	234
Change Board of Directors' Composition	109
Firm Should Pursue Strategic Alternatives	106
Buy More Stock with Intention of Buying the Firm	47
Sell the Firm or Merge with Another Company	44
Oppose a Merger	35
Expresses Concerns with Corporate Governance	18
Firm Should Buy Back its Own Stock	17
Firm Should Pay a Cash Dividend	16
Replace the CEO	8
Other Reasons	52

Panel D: Abnormal Stock Returns Surrounding “Day Zero”

Returns	Mean	Median	Minimum	Maximum
(-2,+2) days	0.035 ^{***}	0.027 ^{***}	-0.246	0.332
(-5,+5) days	0.068 ^{***}	0.059 ^{***}	-0.395	0.499
(-10,+10) days	0.083 ^{***}	0.063 ^{***}	-0.542	0.513
N=	686	686	686	686

Panel E: Descriptive Statistics

Variable	Mean	Median	Minimum	Maximum
(Cash+Short-term-Investments)/Assets	0.166	0.086	0.000	0.898
Total Debt/Assets	0.254	0.212	0.000	1.881
EBITDA/Assets	0.063	0.082	-0.804	0.640
Investment Number	6.180	7.000	3.000	43.000
News (1 month)	31.640	22.000	0.000	1162.000
News (6 months)	136.581	59.000	0.000	4366.000
N=	686	686	686	686

Panel F: Control Variables

Variable	Num. of Observations	Percentage
Appoint Member to the Board	282	41.0%
Initiating Dividend Payments	114	16.5
Both Board and Dividend	65	9.5
Only Board	217	32.5
Only Dividend	49	7.0
Threaten Proxy Fight	193	28.0

This table reports descriptive statistics for the final sample of hedge funds and the target firms. Panel A summarizes the number of firms targeted in each year by the hedge fund activists. Panel B summarizes the different industries of the target firms (top six industries). Industry is defined according to the Fama and French (1997) 48 industry classifications. Panel C summarizes the activists’ initial stated reasons for targeting the firms. The information was collected from the Schedule 13D’s item 4: “Purpose of Transaction” section. Panel D presents mean, median, minimum and maximum values of the market-adjusted stock returns surrounding the initial 13D filing date (“day zero”). Panel E summarize characteristics of firms targeted by hedge funds. For each variable the mean, median, minimum and maximum values are reported. Previous Return is the excess return in the (-5, +5) window surrounding the initial 13D filing date of the hedge fund’s prior investment. Investment number is the serial number of the hedge funds investment (2,3,4...). (Cash + Short-term Investments)/Assets is cash plus short-term investments to total assets ratio. Total Debt/Assets is the sum of the long and short-term. EBITDA/Assets is earnings before depreciation, amortization, interest and taxes divided by average total assets. News (# months) is the number of articles in Factiva containing the hedge fund’s name in the # month before “day zero”. Panel F summarizes the different proxies for the hedge fund reputation for success and aggressive. Appoint Member to the Board is the number of times the hedge fund successfully appointed a member to the board of its target. Initiating Dividend Payments is the number of times the target firm initiates or increases dividend payment. Both Board and Dividend is the number of times the hedge fund both appoints a member to the board and the target initiates dividend payment. Only Board is the number of times when the hedge fund appoints a member to the board but the target does not initiate dividend payment. Only Dividend is the number of times when the hedge fund does not appoint a member to the board but the target initiates dividend payment. Threaten Proxy Fight is the number of times the hedge fund publicly threatens or starts a proxy fight. *, **, *** correspond to t-statistic significant at 10%, 5%, 1% level, respectively.

Table II
Correlation Table

	Previous Return	Investment Number	Cash+Inv /Assets	Total Debt /Assets	EBITDA/ Assets	Adj News (1 month)	Previous Board	Previous Dividend	Previous Proxy	Same Industry
Previous Return		-0.057	0.004	-0.014	-0.053	-0.002	0.202*	0.075	0.037	-0.013
Investment Number	-0.095		0.100*	-0.009	-0.024	-0.108**	-0.082*	-0.115*	-0.006	-0.085
Cash+Inv/Assets	0.013	0.031		-0.372***	-0.367**	0.003	-0.019	0.008	-0.009	-0.037
Total Debt/ Assets	-0.057	-0.012	-0.532***		0.142**	-0.014	0.011	0.084	-0.001	-0.053
EBITDA/ Assets	-0.035	0.113	-0.173**	0.178**		0.059	-0.001	-0.021	-0.094	0.030
Adj. News (1 month)	-0.003	-0.052**	0.018	0.020	0.009		0.048	0.153**	-0.029	-0.026
Previous Board	-0.206**	-0.105	-0.030	0.043	0.019	0.040		0.062*	0.060	0.065
Previous Dividend	0.053	-0.013**	-0.013	0.048	-0.025	0.133***	0.062		0.020	0.024
Previous Proxy	0.059	-0.043	-0.043	-0.049	-0.061	-0.053	0.055	0.028		-0.019
Same Industry	-0.022	-0.001	-0.001	-0.039	-0.016	0.069	0.069	0.024	-0.021	

This table presents the correlation table of the different firms and reputation characteristics. The upper (lower) diagonal in this table reports Person (spearman) correlations. Previous Return is the excess return in the (-5, +5) window surrounding the initial 13D filing date of the hedge fund's prior investment. Investment number is the serial number of the hedge funds investment (2,3,4...). (Cash + Short-term Investments)/Assets is cash plus short-term investments to total assets ratio. Total Debt/Assets is the sum of the long and short-term. EBITDA/Assets is earnings before depreciation, amortization, interest and taxes divided by average total assets. Adj. News (1 month) is the number of articles containing the hedge fund's name in the one month prior to "day zero" minus the median value for all firms in the sample. Previous Board is an indicator variable =1 when the hedge fund successfully appointed a member to the board of her previous (ordinal) investment before the current investment and =0 otherwise. Previous Dividend is an indicator variable =1 when the dividend increased in the hedge fund's previous (ordinal) investment before the current investment and =0 otherwise. Previous Proxy is an indicator variable =1 when the hedge fund publicly threatens a proxy fight and =0 otherwise. Same industry is an indicator variable =1 when the hedge fund's current investment is in the same industry as the hedge fund's previous investment. Industry is defined according to the Fama and French (1997) 48 industry classifications. *, **, *** correspond to correlations that are significant at 10%, 5%, 1% level, two-tailed, respectively.

Table III
Success/Failure Signal (*in Last Investment*) Affect on Short-Run Excess Returns

Panel A: Success Signal (Board Representation)										
Dependent Variable = (-5,+5) Abnormal Returns										
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Intercept	0.015 (0.94)	0.014 (0.89)	0.019 (1.06)	0.016 (1.04)	0.016 (1.09)	0.009 (0.63)	0.011 (0.64)	0.013 (0.61)	0.014 (0.58)	0.013 (0.60)
Previous Success – Board	0.105*** (5.92)	0.111*** (5.90)	0.107*** (5.86)	0.098*** (5.53)	0.105*** (5.74)	0.109*** (5.94)	0.112*** (5.99)	0.114*** (5.96)	0.110*** (6.01)	0.112*** (5.98)
Num of Days since Board		-0.0006** (-2.28)	-0.0002** (-2.14)	-0.0005** (-2.20)	-0.0004** (-2.17)		-0.0004** (-2.09)	-0.0003** (-2.12)	-0.0003** (-2.06)	-0.0003** (-2.05)
Same Previous Industry			0.011* (1.71)	0.009* (1.69)	0.010* (1.73)		0.013* (1.77)	0.015* (1.72)	0.014* (1.77)	0.014* (1.77)
Previous Board X Same Industry			0.025** (2.19)	0.028** (2.23)	0.031** (2.30)		0.030** (2.09)	0.031** (2.02)	0.029** (2.12)	0.029** (2.12)
Previous Return	0.189*** (3.79)	0.191*** (4.03)	0.185*** (3.80)	0.178*** (3.72)	0.179*** (3.76)	0.199*** (4.06)	0.203*** (3.97)	0.206*** (4.02)	0.202*** (3.91)	0.202*** (4.01)
Investment Number	-0.0001 (-0.69)	-0.0006 (-0.75)	-0.0006 (-0.80)	-0.0005 (-0.65)	-0.0006 (-0.71)	0.0001 (0.25)	0.0001 (0.23)	0.0002 (0.16)	0.0002 (0.15)	0.0001 (0.22)
(Cash+Short-term Investments)/Assets						0.021* (1.93)	0.020* (1.91)	0.020* (1.89)	0.022* (1.92)	0.020* (1.91)
Total Debt/Assets						-0.024 (-0.70)	-0.023 (-0.69)	-0.019 (-0.65)	-0.21 (-0.67)	-0.021 (-0.68)
EBITDA/Assets						0.011 (0.52)	0.012 (0.59)	0.012 (0.57)	0.012 (0.55)	0.011 (0.57)
Adj. News (1 month)				-0.0006 (-0.52)					-0.0003 (-0.18)	
Adj. News (6 months)					0.0001 (0.19)					0.0002 (0.27)
Adj R-Square	0.087	0.087	0.089	0.088	0.089	0.095	0.095	0.097	0.097	0.096

Panel B: Success Signal (Dividend Distribution)

	Dependent Variable = (-5,+5) Abnormal Returns									
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Intercept	0.053*** (2.91)	0.050*** (2.71)	0.049*** (2.81)	0.049*** (2.79)	0.050*** (2.80)	0.052** (2.20)	0.053** (2.14)	0.053** (2.22)	0.055** (2.23)	0.051** (2.19)
Previous Success - Dividend	0.040* (1.72)	0.042* (1.70)	0.039* (1.79)	0.040* (1.73)	0.041* (1.77)	0.038* (1.83)	0.040* (1.83)	0.039* (1.90)	0.041* (1.95)	0.040* (1.94)
Num of Days since Div Increased		-0.0001 (-0.46)	-0.0001 (-0.58)	-0.0001 (-0.53)	-0.0001 (-0.55)		-0.0002 (-0.59)	-0.0001 (-0.61)	-0.0001 (-0.63)	-0.0001 (-0.62)
Same Previous Industry			0.029* (1.81)	0.030* (1.83)	0.030* (1.85)			0.037* (1.79)	0.038* (1.77)	0.037* (1.77)
Previous Dividend X Same Industry			0.019* (1.93)	0.017* (1.91)	0.019* (1.92)			0.020* (1.93)	0.021* (1.92)	0.021* (1.91)
Previous Return	0.115** (2.40)	0.117** (2.42)	0.115** (2.41)	0.116** (2.43)	0.115** (2.41)	0.122** (2.31)	0.123** (2.34)	0.122** (2.35)	0.122** (2.33)	0.124** (2.34)
Investment Number	-0.001 (-1.37)	-0.001 (-1.39)	-0.001 (-1.41)	-0.002 (-1.42)	-0.001 (-1.40)	-0.003 (-0.96)	-0.003 (-0.96)	-0.002 (-1.05)	-0.002 (-1.02)	-0.002 (-1.03)
(Cash+Short-term Investments)/Assets						0.005** (1.98)	0.005** (1.97)	0.010** (2.03)	0.012** (1.99)	0.011** (2.02)
Total Debt/Assets						-0.026 (-0.82)	-0.024 (-0.80)	-0.023 (-0.83)	-0.025 (-0.81)	-0.024 (-0.82)
EBITDA/Assets						0.019 (0.54)	0.021 (0.57)	0.020 (0.54)	0.019 (0.54)	0.021 (0.55)
Adj. News (1 month)				-0.0004 (-0.79)					-0.0001 (-0.92)	
Adj. News (6 months)					0.0002 (0.19)					0.0001 (0.17)
Adj R-Square	0.032	0.033	0.032	0.030	0.030	0.041	0.040	0.041	0.038	0.039

Panel C: Failure vs. Success

	Dependent Variable = (-5,+5) Abnormal Returns						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Intercept	0.019 (1.20)	0.020 (0.93)	0.056 ^{***} (3.73)	0.059 ^{***} (3.61)	0.008 (0.29)	0.008 (0.28)	0.008 (0.29)
Failure	-0.027 [*] (-1.71)	-0.019 [*] (-1.72)	-0.062 ^{**} (-2.16)	-0.057 ^{**} (-2.03)	-0.041 [*] (-1.76)	-0.041 [*] (-1.74)	-0.0145 [*] (-1.79)
Previous Success - Board	0.091 ^{***} (5.16)	0.092 ^{***} (4.85)			0.093 ^{***} (4.59)	0.094 ^{***} (4.61)	0.093 ^{***} (4.57)
Num of Days since Board		-0.0005 [*] (-1.94)			-0.0001 (-1.47)	-0.0001 (-1.43)	-0.0001 (-1.47)
Previous Proxy Threaten			0.021 (1.16)	0.023 (1.24)	0.018 (0.99)	0.019 (1.01)	0.017 (0.95)
Num of Days Since Proxy				0.0004 (0.75)	0.0003 (0.69)	0.0003 (0.64)	0.0003 (0.66)
Previous Return	0.175 ^{***} (3.75)	0.174 ^{***} (3.70)	0.128 ^{***} (2.65)	0.122 ^{**} (2.47)	0.171 ^{***} (3.55)	0.169 ^{***} (3.50)	0.169 ^{***} (3.52)
Investment Number	-0.0006 (-0.69)	-0.0006 (-0.69)	-0.001 (-1.04)	-0.001 (-0.97)	-0.0006 (-0.65)	-0.0006 (-0.58)	-0.0006 (-0.65)
Adj. News (1 month)						-0.00006 (-0.56)	
Adj. News (6 months)							0.00009 (0.21)
Adj R-Square	0.077	0.078	0.027	0.024	0.074	0.074	0.074

This table documents the cross-sectional relation between the target firm's event-window returns and different characteristics of the target firm and the hedge fund. The different proxies for the reputation are all related to the previous (ordinal) investment and only if the hedge fund successfully fulfill an event before the current investment. Previous Success – Board is an indicator variable =1 when the hedge fund successfully appointed a member to the board of its previous (ordinal) investment before the current investment and =0 otherwise. Num of Days since Board is the number of days between the appointment date and the new investment date. Previous Success - Dividend is an indicator variable =1 when the dividend increased in the hedge fund's previous (ordinal) investment before the current investment and =0 otherwise. Num of Days since Div Increased is the number of days between the Dividend declaration date and the new investment date. Failure is an indicator variable =1 when the hedge fund publicly threatens a proxy fight but does not successfully appointed a member to the board of its previous investment and =0 otherwise. Same Previous Industry is an indicator variable =1 when the hedge fund's current investment is in the same industry as the hedge fund's previous investment. Industry is defined according to the Fama and French (1997) 48 industry classifications. Previous Board X Same Industry is the product of Previous Success – Board and Same Previous Industry. Previous Dividend X Same Industry is the product of Previous Success – Dividend and Same Previous Industry. Previous Proxy Threaten X Same Industry is the product of Previous Proxy Threaten and Same Previous Industry. Previous Return is the excess return in the (-5, +5) window surrounding the initial 13D filing date of the hedge fund's prior investment. Investment number is the serial number of the hedge funds investment (2,3,4...). (Cash + Short-term Investments)/Assets is cash plus short term investments to total assets ratio. Total Debt/Assets is the sum of the long and short-term. EBITDA/Assets is earnings before depreciation, amortization, interest and taxes divided by average total assets. Adj. News (# months) is the number of articles containing the hedge fund's name in the # months prior to "day zero" minus the median value for all firms in the sample. All regressions are ordinary least squares estimates. (*t*-statistics are in brackets.) *, **, *** correspond to correlations that are significant at 10%, 5%, 1% level, two-tailed, respectively.

Table IV

Aggressive Signal (*in Last Investment*) Affect on Short-Run Excess Returns

	Dependent Variable = (-5,+5) Abnormal Returns									
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Intercept	0.026 (1.43)	0.023 (1.52)	0.029 (1.55)	0.030 (1.55)	0.032 (1.49)	0.060*** (2.38)	0.059*** (2.61)	0.059*** (2.58)	0.059*** (2.55)	0.059*** (2.55)
Previous Proxy Threaten	0.015 (0.50)	0.017 (0.52)	0.014 (0.56)	0.016 (0.53)	0.014 (0.55)	0.005 (0.26)	0.006 (0.34)	0.006 (0.31)	0.006 (0.33)	0.006 (0.35)
Num of Days Since Proxy		0.00004 (0.25)	0.00004 (0.29)	0.00006 (0.33)	0.00005 (0.31)		-0.0001 (-1.23)	-0.00009 (-1.36)	-0.00009 (-1.35)	-0.00009 (-1.36)
Same Previous Industry			0.019* (1.85)	0.017* (1.90)	0.018* (1.88)			0.010* (1.92)	0.009* (1.91)	0.010* (1.91)
Previous Proxy Threaten X Same Industry			0.013 (0.91)	0.011 (0.89)	0.012 (0.89)			0.006 (1.03)	0.005 (0.99)	0.006 (1.02)
Previous Return	0.124** (2.48)	0.130** (2.43)	0.127** (2.39)	0.131** (2.42)	0.127** (2.39)	0.124** (2.26)	0.122** (2.18)	0.124** (2.30)	0.127** (2.37)	0.127** (2.38)
Investment Number	-0.001 (-1.42)	-0.002 (-1.44)	-0.002 (-1.53)	-0.002 (-1.49)	-0.002 (-1.45)	-0.011 (-0.69)	-0.012 (-0.73)	-0.009 (-0.69)	-0.009 (-0.72)	-0.009 (-0.70)
(Cash+Short-term Investments)/Assets						0.008** (2.00)	0.006* (1.95)	0.009** (2.05)	0.010** (2.11)	0.010** (2.11)
Total Debt/Assets						-0.024 (-0.95)	-0.023 (-0.93)	-0.025 (-0.99)	-0.024 (-0.99)	-0.025 (-1.00)
EBITDA/Assets						0.010 (0.29)	0.010 (0.34)	0.011 (0.33)	0.011 (0.32)	0.011 (0.32)
Adj. News (1 month)				0.0002 (1.03)					0.0001 (0.74)	
Adj. News (6 months)					0.0004 (0.78)					0.0009 (0.50)
Adj R-Square	0.017	0.017	0.018	0.018	0.018	0.026	0.027	0.027	0.025	0.026

This table documents the cross-sectional relation between the target firm's event-window returns and different characteristics of the target firm and the hedge fund. The different proxies for the reputation are all related to the previous (ordinal) investment and only if the hedge fund successfully fulfills an event before the current investment. Previous Proxy Threaten is an indicator variable =1 when the hedge fund publicly threatens a proxy fight and =0 otherwise. Num of Days since Proxy the number of days between the publicly threaten date and the new investment date. Same Previous Industry is an indicator variable =1 when the hedge fund's current investment is in the same industry as the hedge fund's previous investment. Industry is defined according to the Fama and French (1997) 48 industry classifications. Previous Board X Same Industry is the product of Previous Success – Board and Same Previous Industry. Previous Dividend X Same Industry is the product of Previous Success – Dividend and Same Previous Industry. Previous Proxy Threaten X Same Industry is the product of Previous Proxy Threaten and Same Previous Industry. Previous Return is the excess return in the (-5, +5) window surrounding the initial 13D filing date of the hedge fund's prior investment. Investment number is the serial number of the hedge funds investment (2,3,4...). (Cash + Short-term Investments)/Assets is cash plus short term investments to total assets ratio. Total Debt/Assets is the sum of the long and short-term. EBITDA/Assets is earnings before depreciation, amortization, interest and taxes divided by average total assets. Adj. News (# months) is the number of articles containing the hedge fund's name in the # months prior to "day zero" minus the median value for all firms in the sample. All regressions are ordinary least squares estimates. (*t*-statistics are in brackets.) *, **, *** correspond to correlations that are significant at 10%, 5%, 1% level, two-tailed, respectively.

Table V

Success/Aggressive Signal (*in any Previous Investment*) Affect on Short-Run Excess Returns

	Dependent Variable = (-5,+5) Abnormal Returns					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	0.036 (1.29)	0.029 (1.36)	0.039 (1.49)	0.041 (1.48)	0.043* (1.77)	0.044* (1.75)
Board Success – 6 Months	0.097*** (3.66)	0.100*** (3.72)				
Num of Days since Board		-0.0006** (-2.11)				
Div Success – 6 Months			0.045* (1.83)	0.046* (1.76)		
Num of Days since Div Increased				0.00001 (0.21)		
Proxy Threaten – 6 Months					0.022 (0.88)	0.023 (0.95)
Num of Days Since Proxy						-0.00003 (-0.22)
Previous Return	0.180** (2.30)	0.184** (2.32)	0.171** (2.09)	0.172** (2.11)	0.161*** (3.28)	0.159*** (3.25)
Investment Number	-0.003 (-0.65)	-0.003 (-0.69)	-0.001 (-0.68)	-0.001 (-0.65)	-0.0009 (-0.69)	-0.0009 (-0.68)
(Cash+Short-term-Investments)/Assets	0.021** (2.29)	0.022* (1.90)	0.016 (1.39)	0.018 (1.42)	0.019** (2.15)	0.019** (2.03)
Total Debt/Assets	-0.016 (-0.44)	-0.018 (-0.41)	-0.016 (-0.39)	-0.017 (-0.37)	-0.023 (-0.54)	-0.023 (-0.52)
EBITDA/Assets	0.012 (1.07)	0.011 (1.10)	0.016 (0.98)	0.015 (0.99)	0.014 (1.01)	0.013 (1.05)
Adj R-Square	0.053	0.054	0.021	0.022	0.017	0.016

This table documents the cross-sectional relation between the target firm's event-window returns and different characteristics of the target firm and the hedge fund. The different proxies for the reputation are all related to any prior investment and only if the hedge fund successfully fulfill an event in the six months prior to the current investment. Board Success – 6 Months is an indicator variable =1 when the hedge fund successfully appointed a member to the board of any of its prior investments in the six months prior to the current investment and =0 other. Num of Days since Board is the number of days between the appointment date and the new investment date. Div Success – 6 Months is an indicator variable =1 when any of the prior hedge fund's targets initiated or increased the dividend payments in the six months prior to the current investment and =0 other. Num of Days since Div Increased is the number of days between the Dividend declaration date and the new investment date. Proxy Threaten – 6 Months is an indicator variable =1 when the hedge fund publicly threatens a proxy fight in the last six months against any of its prior targets and =0 otherwise. Num of Days since Proxy the number of days between the publicly threaten date and the new investment date. Previous Return is the excess return in the (-5, +5) window surrounding the initial 13D filing date of the hedge fund's prior investment. Investment Number is the serial number of the hedge funds investment (2,3,4...). (Cash + Short-term Investments)/Assets is cash plus short term investments to total assets ratio. Total Debt/Assets is the sum of the long and short-term. EBITDA/Assets is earnings before depreciation, amortization, interest and taxes divided by average total assets. All regressions are ordinary least squares estimates. (*t*-statistics are in brackets.) *, **, *** correspond to correlations that are significant at 10%, 5%, 1% level, two-tailed, respectively.

Table VI
Combination of Success and Aggressive Signal Affect on Short-Run Excess Returns

	Dependent Variable = (-5,+5) Abnormal Returns				
	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.56 ^{***} (2.91)	0.59 ^{***} (3.14)	0.57 ^{***} (2.77)	0.57 ^{***} (2.83)	0.54 ^{***} (3.17)
All Signals - Aggregate	0.107 ^{***} (3.66)				
Board & Dividend – Aggregate		0.108 ^{***} (3.78)			
Board – Aggregate			0.115 ^{***} (4.19)		
Dividend – Aggregate				0.101 ^{**} (2.48)	
Proxy – Aggregate					0.093 (1.44)
Previous Return	0.142 ^{**} (2.08)	0.140 ^{**} (2.15)	0.129 ^{**} (2.00)	0.139 ^{**} (2.15)	0.142 ^{***} (2.89)
Investment Number	-0.0003 (-0.08)	-0.003 (-0.04)	-0.002 (-0.08)	-0.003 (-0.06)	-0.004 (-0.06)
(Cash+Short-term Investments)/Assets	0.008 [*] (1.83)	0.007 [*] (1.79)	0.007 (1.59)	0.008 (1.61)	0.006 (1.57)
Total Debt/Assets	-0.030 (-0.98)	-0.036 (-0.99)	-0.031 (-0.98)	-0.034 (-0.91)	-0.031 (-0.91)
EBITDA/Assets	0.011 (0.25)	0.011 (0.22)	0.012 (0.23)	0.011 (0.21)	0.009 (0.34)
Adj R-Square	0.088	0.097	0.023	0.088	0.098

This table documents the cross-sectional relation between the target firm's event-window returns and different characteristics of the target firm and the hedge fund. The different proxies for the reputation are all related to any prior investment and only if the hedge fund successfully fulfill an event in the six months prior to the current investment. All Signals – Aggregate is the summing up of all different proxies for reputation (board, dividend and proxy fight) in the previous six months. Board & Dividend – Aggregate is the summing up of all different proxies of reputation for success (board and dividend) in the previous six months. Board – Aggregate is the summing up of the number of times when the hedge fund successfully appointed a member to the board of any of its prior investments in the six months prior to the current investment. Dividend – Aggregate is the summing up of the number of times that any of the prior hedge fund's targets initiated or increased the dividend payments in the six months prior to the current investment. Proxy – Aggregate is the summing up of the number of times that the hedge fund publicly threatens a proxy fight in the last six months against any of its prior targets. Previous Return is the excess return in the (-5, +5) window surrounding the initial 13D filing date of the hedge fund's prior investment. Investment number is the serial number of the hedge funds investment (2,3,4...). (Cash + Short-term Investments)/Assets is cash plus short term investments to total assets ratio. Total Debt/Assets is the sum of the long and short-term. EBITDA/Assets is earnings before depreciation, amortization, interest and taxes divided by average total assets. Adj. News (# months) is the number of articles containing the hedge fund's name in the # months prior to "day zero" minus the median value for all firms in the sample. All regressions are ordinary least squares estimates. (*t*-statistics are in brackets.) *, **, *** correspond to correlations that are significant at 10%, 5%, 1% level, two-tailed, respectively.

Table VII
The Learning Process (*Last Investment*) Over Time

Panel A: Board Representation by Month

	Dependent Variable = (-5,+5) Abnormal Returns	
	Model 1	Model 2
Intercept	0.031 [*] (1.94)	0.035 [*] (1.81)
Previous-Board X Month1	0.144 ^{***} (3.81)	0.157 ^{***} (3.51)
Previous-Board X Month2	0.093 ^{***} (3.04)	0.083 ^{***} (2.78)
Previous-Board X Month3	0.072 ^{**} (2.24)	0.060 ^{**} (2.02)
Previous-Board X Month4	0.033 [*] (1.79)	0.029 (1.62)
Previous-Board X Month5	0.006 (1.33)	0.008 (1.42)
Previous-Board X Month6	-0.008 (-0.02)	-0.010 (-0.06)
Previous-Board X Month7	0.110 (0.50)	0.105 (0.60)
Previous-Board X Month8	0.010 (0.02)	0.010 (0.09)
Previous-Board X Month9	-0.193 (-0.67)	-0.192 (-0.84)
Previous-Board X Month10	0.103 (0.34)	0.105 (0.53)
Previous-Board X Month11	0.150 (0.45)	0.139 (0.43)
Previous-Board X Month12	-0.041 (-0.50)	-0.043 (-0.52)
Previous-Board X Month (>12)	0.067 (0.13)	0.065 (0.11)
Previous Return	0.156 ^{***} (3.76)	0.159 ^{***} (2.97)
Investment Number	-0.001 (-0.82)	-0.001 (-0.91)
(Cash+Short-term Investments)/Assets		0.024 (1.59)
Total Debt/Assets		-0.030 (-0.29)
EBITDA/Assets		0.002 (0.28)
Adj R-Square	0.104	0.123

Panel B: Board Representation by Quarter

	Dependent Variable = (-5,+5) Abnormal Returns	
	Model 1	Model 2
Intercept	0.031** (2.36)	0.039* (1.89)
Previous-Board X Qtr1	0.102*** (3.33)	0.105*** (3.18)
Previous-Board X Qtr2	0.059 (1.25)	0.056 (1.39)
Previous-Board X Qtr3	-0.015 (-0.93)	-0.011 (-0.76)
Previous-Board X Qtr4	0.036 (0.25)	0.048 (0.56)
Previous-Board X Qtr (>4)	0.067 (0.07)	0.065 (0.16)
Previous Return	0.150*** (2.93)	0.153*** (3.01)
Investment Number	-0.001 (-0.30)	-0.001 (-0.29)
(Cash+Short-term Investments)/Assets		0.022 (1.21)
Total Debt/Assets		-0.035 (-0.18)
EBITDA/Assets		0.00001 (0.09)
Adj R-Square	0.096	0.106

This table documents the cross-sectional relation between the target firm's event-window returns and time trend variables to capture the impact of calendar time on the returns. Previous-BoardXMonth(t) is the interaction (product) of the indicator variables Previous Success – Board and Month(t). Month(t) variable =1 when hedge fund successfully appointed a member to the board of last investment in the month t before the current investment and =0 otherwise. Previous Success – Board is an indicator variable =1 when the hedge fund successfully appointed a member to the board of its last investment before the current investment and =0 otherwise. Previous-Board X Qtr(t) is the interaction (product) of the variables Previous Success – Board and Qtr(t). Qtr(t) variable =1 when hedge fund successfully appointed a member to the board of last investment in the quarter t before the current investment and =0 otherwise. Previous Return is the excess return in the (-5, +5) window surrounding the initial 13D filing date of the hedge fund's prior investment. Investment Number is the serial number of the hedge funds investment (2,3,4...). (Cash + Short-term Investments)/Assets is cash plus short term investments to total assets ratio. Total Debt/Assets is the sum of the long and short-term. EBITDA/Assets is earnings before depreciation, amortization, interest and taxes divided by average total assets. Adj. News (# months) is the number of articles containing the hedge fund's name in the # months prior to "day zero" minus the median value for all firms in the sample. All regressions are ordinary least squares estimates. (t-statistics are in brackets.) *, **, *** correspond to correlations that are significant at 10%, 5%, 1% level, two-tailed, respectively.

Table VIII
The Learning Process (*Last Six Months*) Over Time

Panel A: Board Representation by Month

	Dependent Variable = (-5,+5) Abnormal Returns	
	Model 1	Model 2
Intercept	0.035 ^{**} (2.01)	0.039 [*] (1.84)
Previous-6 Month – Board X Prior-Month1	0.129 ^{***} (3.25)	0.141 ^{***} (3.02)
Previous-6 Month – Board X Prior-Month2	0.057 ^{***} (2.76)	0.052 ^{**} (2.23)
Previous-6 Month – Board X Prior-Month3	0.015 [*] (1.84)	0.033 [*] (1.69)
Previous-6 Month – Board X Prior-Month4	0.026 (1.63)	0.028 (1.43)
Previous-6 Month – Board X Prior-Month5	-0.027 (-0.06)	-0.024 (-0.03)
Previous-6 Month – Board X Prior-Month6	-0.053 (-0.60)	-0.059 (-0.59)
Previous-6 Month - Board X Prior-Month (>6)	-0.031 (-0.84)	-0.033 (-0.67)
Previous Return	0.129 ^{***} (2.76)	0.122 ^{**} (2.04)
Investment Number	-0.001 (-0.73)	-0.001 (-0.60)
(Cash+Short-term Investments)/Assets		0.020 (1.23)
Total Debt/Assets		-0.026 (-0.55)
EBITDA/Assets		0.016 (0.03)
Adj R-Square	0.086	0.104

Panel B: Board Representation by Quarter

Dependent Variable = (-5,+5) Abnormal Returns		
	Model 1	Model 2
Intercept	0.034** (2.15)	0.035* (1.84)
Previous-6 Month-Board X Prior-Qtr1	0.090*** (0.319)	0.092*** (2.70)
Previous-6 Month – Board X Prior-Qtr2	0.029 (0.38)	0.027 (0.38)
Previous-6 Month – Board X Prior-Qtr (>2)	0.001 (0.05)	0.003 (0.08)
Previous Return	0.133*** (3.47)	0.131*** (3.68)
Investment Number	-0.001 (-0.01)	-0.0008 (-0.01)
(Cash+Short-term Investments)/Assets		0.016 (1.48)
Total Debt/Assets		-0.025 (-0.31)
EBITDA/Assets		0.012 (0.33)
Adj R-Square	0.074	0.077

This table documents the cross-sectional relation between the target firm's event-window returns and time trend variables to capture the impact of calendar time on the returns. Previous-6 Month-Board X Prior-Month(t) is the interaction (product) of the indicator variables Previous-6 Month - Board and Prior-Month(t). Prior-Month(t) variable =1 when hedge fund successfully appointed a member to the board of any past investment in the month t before the current investment and =0 otherwise. Previous-6 Month-Board is an indicator variable =1 when the hedge fund successfully appointed a member to the board of any of its previous investment in the last six months before the current investment and =0 otherwise. Previous-6 Month-Board X Prior-Qtr(t) is the interaction (product) of the variables Previous-6 Month - Board and Prior-Qtr(t). Prior-Qtr(t) variable =1 when hedge fund successfully appointed a member to the board of any of its prior investment in the quarter t before the current investment and =0 otherwise. Previous Return is the excess return in the (-5, +5) window surrounding the initial 13D filing date of the hedge fund's prior investment. Investment number is the serial number of the hedge funds investment (2,3,4...). (Cash + Short-term Investments)/Assets is cash plus short term investments to total assets ratio. Total Debt/Assets is the sum of the long and short-term. EBITDA/Assets is earnings before depreciation, amortization, interest and taxes divided by average total assets. Adj. News (# months) is the number of articles containing the hedge fund's name in the # months prior to "day zero" minus the median value for all firms in the sample. All regressions are ordinary least squares estimates. (t-statistics are in brackets.) *, **, *** correspond to correlations that are significant at 10%, 5%, 1% level, two-tailed, respectively.

Table IX

Corporate Governance Effects

Panel A: Free Cash Flow

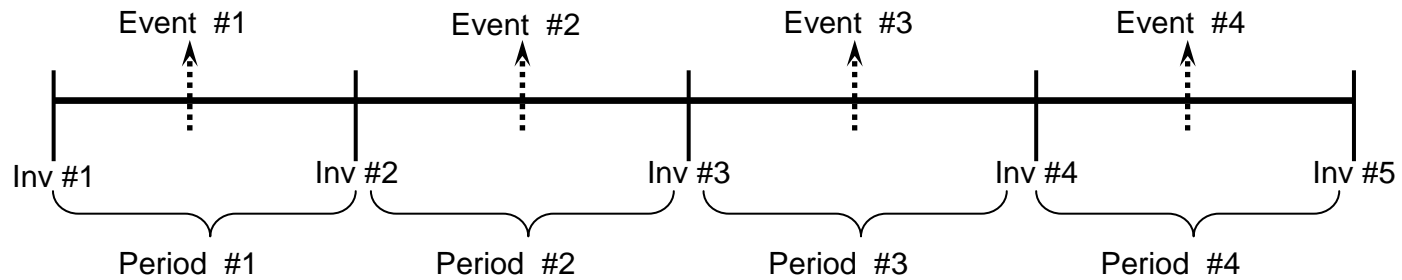
	Dependent Variable = (-5,+5) Abnormal Returns											
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
Intercept	0.002 (0.15)	0.001 (0.08)	0.046*** (2.84)	0.045*** (2.79)	0.047*** (2.84)	0.047 (2.80)	0.032 (1.37)	0.029 (1.24)	0.082*** (3.47)	0.073*** (3.14)	0.073*** (3.00)	0.073*** (3.07)
Previous Success – Board	0.113*** (6.03)	0.111*** (5.92)					0.103*** (4.07)	0.113*** (5.82)				
Previous Success - Dividend			0.032** (2.12)	0.037** (2.06)					0.056* (1.99)	0.053** (2.13)		
Previous Proxy Threaten					0.010 (1.43)	0.014 (1.31)					0.014 (0.95)	0.015 (0.93)
Board X Cash	0.075** (2.02)						0.051** (2.09)					
Board X FCF		0.083* (1.86)						0.097* (1.87)				
Dividend X Cash			0.197** (2.39)						0.341*** (2.60)			
Dividend X FCF				0.036* (1.66)						0.367* (1.83)		
Proxy X Cash					0.065 (0.80)						-0.002 (-0.03)	
Proxy X FCF						-0.00003 (-0.31)						-0.0003 (-0.34)
Previous Return	0.201*** (3.74)	0.203*** (3.78)	0.120** (2.18)	0.126** (2.20)	0.139** (2.52)	0.139** (2.52)	0.182*** (3.30)	0.182*** (3.31)	0.097* (1.71)	0.111* (1.95)	0.121** (2.14)	0.122** (2.14)
Investment Number	0.0001 (0.14)	0.0002 (0.15)	-0.001 (-0.84)	-0.001 (-0.81)	-0.003 (-0.36)	-0.003 (-0.36)	0.0004 (0.36)	0.0004 (0.43)	-0.0007 (-0.63)	-0.0005 (-0.47)	-0.0002 (-0.17)	-0.0002 (-0.14)
(Cash+Short-term-Investments)/Assets							0.121* (1.96)	0.107* (1.96)	0.156*** (2.63)	0.113** (1.98)	0.107* (1.66)	0.108* (1.89)
Total Debt/Assets							-0.034 (-1.22)	-0.035 (-1.23)	-0.025 (-0.85)	-0.026 (-0.88)	-0.025 (-0.87)	-0.025 (-0.86)
EBITDA/Assets							-0.036 (-0.90)	-0.035 (-0.88)	-0.035 (-0.71)	-0.034 (-0.82)	-0.032 (-0.74)	-0.032 (-0.75)
Adj R-Square	0.094	0.096	0.035	0.031	0.006	0.004	0.092	0.094	0.033	0.035	0.024	0.024

Panel B: Merger and Acquisition

	Dependent Variable = (-5,+5) Abnormal Returns					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	0.021 (1.25)	0.054*** (3.44)	0.051*** (3.24)	0.030 (1.25)	0.067*** (2.77)	0.064*** (2.64)
Previous Success – Board	0.084*** (3.13)			0.110*** (3.79)		
Previous Success - Dividend		0.035* (1.95)			0.057* (1.89)	
Previous Proxy Threaten			0.017 (0.73)			0.039 (1.40)
Board X M&A	0.013 (0.60)			0.0009 (0.40)		
Dividend X M&A		0.004 (0.18)			-0.001 (-0.50)	
Proxy X M&A			-0.002 (-1.10)			-0.004 (-0.98)
Previous Return	0.176*** (3.70)	0.114** (2.38)	0.123** (2.56)	0.181*** (3.28)	0.118** (2.08)	0.124** (2.19)
Investment Number	-0.001 (-0.92)	-0.001 (-1.32)	-0.0006 (-0.55)	0.0003 (0.28)	-0.001 (-1.09)	-0.0008 (-0.68)
(Cash+Short-term Investments)/Assets				0.106* (1.94)	0.106* (1.85)	0.107* (1.89)
Total Debt/Assets				-0.035 (-1.24)	-0.024 (-0.83)	-0.024 (-0.85)
EBITDA/Assets				-0.036 (-0.89)	-0.032 (-0.76)	-0.029 (-0.70)
Adj R-Square	0.078	0.023	0.019	0.092	0.031	0.24

This table documents the cross-sectional relation between the target firm’s event-window returns and corporate governance variables. Previous Success – Board is an indicator variable =1 when the hedge fund successfully appointed a member to the board of last investment before the current investment and =0 otherwise. Previous Success - Dividend is an indicator variable =1 when the dividend increased in the hedge fund’s last investment before the current investment and =0 otherwise. Previous Proxy Threaten is an indicator variable =1 when the hedge fund publicly threatens a proxy fight against the last target and =0 otherwise. Previous Return is the excess return in the (-5, +5) window surrounding the initial 13D filing date of the hedge fund’s prior investment. Investment number is the serial number of the hedge funds investment (2,3,4...). (Cash + Short-term Investments)/Assets is cash plus short term investments to total assets ratio. Total Debt/Assets is the sum of the long and short-term. EBITDA/Assets is earnings before depreciation, amortization, interest and taxes divided by average total assets. BoardXCash is the interaction (product) of the variables Previous Success – Board and (Cash + Short-term Investments)/Assets. BoardXFCF is the interaction (product) of the variables Previous Success – Board and the level of free cash flow as measured by Richardson (2006). DividendXCash is the interaction (product) of the variables Previous Success – Dividend and (Cash + Short-term Investments)/Assets. DividendXCash is the interaction (product) of the variables Previous Success – Dividend and the level of free cash flow as measured by Richardson (2006). ProxyXCash is the interaction (product) of the variables Previous Proxy Threaten and (Cash + Short-term Investments)/Assets. ProxyXCash is the interaction (product) of the variables Previous Proxy Threaten and the level of free cash flow as measured by Richardson (2006). BoardXM&A is the interaction (product) of the variables Previous Success – Board and whether the last target merged or was acquired with another firm. DividendXM&A is the interaction (product) of the variables Previous Success – Dividend and whether the last target merged or was acquired with another firm. ProxyXM&A is the interaction (product) of the variables Previous Proxy Threaten and whether the last target merged or was acquired with another firm. All regressions are ordinary least squares estimates. (*t*-statistics are in brackets.) *, **, *** correspond to correlations that are significant at 10%, 5%, 1% level, two-tailed, respectively.

Figure 1
Time Line of the Event



This figure describes the different time line events.

(1) Previous Success variable =1 when hedge fund successfully fulfills an event (Board appointment/Dividend increased/Proxy threaten) related to the previous (ordinal) investment before the current investment. For example, looking on previous success for the #4 investment of the hedge fund, a success will occur if and only if the hedge fund succeeded in achieving the goal in its investment #3 during period #3. The success will not occur if the goal for investment #3 was achieved in period #4, or if the goal for investment #2 was achieved in period #3.

(2) Success in prior 6 months variable =1 hedge fund successfully fulfills an event (Board appointment/Dividend increased/Proxy threaten) related to any of the previous investment before the current investment. For example, looking on previous success for the #4 investment of the hedge fund, a success will occur if the hedge fund succeeded in achieving the goal in its investments #1, 2 or 3 during periods #1, 2 or 3 (as long as the period is shorter than 6 months). For example, if Event #2 is achieving the goal for investment #1 and it is less than six months before investment #4, than the variable =1. The success will not occur if the goal for investment #1, 2 or 3 was achieved in period #4.