

Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors

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ABSTRACT

We examine recent confrontational activism campaigns by hedge funds and other private investors. The main parallels between the groups are a significantly positive market reaction for the target firm around the initial Schedule 13D filing date, significantly positive returns over the subsequent year, and the activist's high success rate in achieving its original objective. Further, both activists frequently gain board representation through real or threatened proxy solicitations. Two major differences are that hedge funds target more profitable firms than other activists, and hedge funds address cash flow agency costs whereas other private investors change the target's investment strategies.

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In this paper, we examine recent aggressive campaigns by entrepreneurial shareholder activists. In the spirit of Pound (1992), we define an entrepreneurial activist as an investor who buys a large stake in a publicly held corporation with the intention to bring about change and thereby realize a profit on the investment.

We conduct our analyses on two samples of entrepreneurial activists. The common feature to both groups is that the investor is relatively free from the regulatory controls of the Securities Act of 1933, the Securities Exchange Act of 1934, and most notably the Investment Company Act of 1940. The first sample consists of 151 hedge fund activist campaigns conducted primarily between 2003 and 2005. Hedge fund activism has received widespread attention, both in the popular press and by legal and financial scholars.¹ Our paper complements and extends this research by examining the determinants, methods, and consequences of hedge fund managers who undertake confrontational activist campaigns. The second sample contains 154 other entrepreneurial confrontational activist campaigns over the same time period. These activists consist primarily of individuals, private equity funds, venture capital firms, and asset management groups for wealthy investors. Although these investor-activists have generated widespread interest, there is little large-sample evidence on the determinants or outcomes of these campaigns. Thus, our paper contributes to the recent shareholder activism literature by examining this group alone and also by comparing them to hedge fund activists.

We define the beginning of a confrontational activist campaign as the filing of an initial SEC Schedule 13D in which the activist clearly professes in the “purpose” statement of the filing its goal to redirect managements’ efforts. A Schedule 13D is triggered after an investor directly or indirectly acquires the beneficial ownership of 5%

or higher of any equity security in a publicly traded firm with the stated intent of influencing the firm's policies. The redirections stated in the Schedule 13D purpose statement include (but are not limited to) seeking seats on the company's board, opposing an existing merger or liquidation of the firm, pursuing strategic alternatives, or replacing the CEO. We exclude 13D filings that are filed because the investor is "unwilling to give up the option of affecting the firm" (Clifford (2007)). We also exclude 13D filings if the investor states an interest in working with or communicating with management on a regular basis. These restrictions limit our analyses to activist campaigns that can be characterized as aggressive or confrontational.

We find similarities and disparities between our samples of hedge fund and other entrepreneurial activists. The three main parallels are a significantly positive market reaction around the 13D filing date, a further significant increase in share price over the subsequent year, and the activist's success in achieving its original objective.

Specifically, hedge fund targets earn 10.2% average abnormal stock returns during the period surrounding the initial Schedule 13D. Other activist targets experience a significantly positive average abnormal return of 5.1% around the SEC filing window. These findings suggest that, on average, the market believes activism creates shareholder value. Our findings are consistent with those of Holderness and Sheehan (1985), who document significant price increases for firms targeted by "notorious" corporate raiders of the late 1970s and early 1980s, and also with those of Bethel, Liebeskind, and Opler (1998), who show similar results for firms targeted by individuals, rather than corporate or institutional large shareholders. The positive abnormal returns also are consistent with the work of Brav et al. (2007), who find positive market reactions for a sample of confrontational and nonconfrontational hedge fund Schedule 13D filings. Furthermore,

our target abnormal returns do not dissipate in the one-year period following the initial Schedule 13D. Instead, hedge fund targets earn an additional 11.4% abnormal return during the subsequent year, and other activist targets realize a 17.8% abnormal return over the year following the activists' interventions.

We also find that entrepreneurial activists experience great success in getting existing management to acquiesce to their demands as articulated in the initial Schedule 13D. Hedge funds enjoy a success rate of 60%, and other entrepreneurial activists accomplish their objectives 65% of the time. Moreover, ex ante, the market is able to differentiate between overall successful and unsuccessful campaigns. For both groups of activists, the abnormal return surrounding the initial Schedule 13D filing is significantly higher for firms in which the activist gains its objective within one year, when compared to those firms in which the activist is unsuccessful.

However, there are two striking differences between hedge fund and other entrepreneurial activism. The two main differences relate to the types of companies each group targets and the activists' post-13D filing strategies.

Hedge fund activists target more profitable and financially healthy firms than other entrepreneurial activists. Prior studies on activism almost always find that shareholder activists are more likely to target poorly performing firms (e.g., Gordon and Pound (1993), Bethel, Liebeskind, and Opler (1998), Faleye (2004), Becht et al. (2007)). Our results suggest that other entrepreneurial activists employ a similar screening mechanism to prior activists, but that hedge fund activists invest in a different subset of companies.

Given that the groups target firms with different characteristics, we expect and find that hedge funds and other entrepreneurial activists dissimilarly redirect target firms.

Hedge funds appear to address the free cash flow problem, as articulated by Jensen (1986). Under this theory, firms can reduce agency conflicts between managers and shareholders by reducing excess cash on hand, and by obligating managers to make continuous payouts in the form of increased dividends and interest payments to creditors. Consistent with this view, hedge fund targets initially have higher levels of cash on hand than do other entrepreneurial activist targets. In addition, hedge fund activists frequently demand that the target firm buy back its own shares, cut the CEO's salary, or initiate dividends, whereas other activists do not make these demands. Consequently, over the fiscal year following the initial Schedule 13D, hedge fund targets, on average, double their dividends, significantly increase their debt-to-assets ratio, and significantly decrease their cash and short-term investments.

In contrast, other entrepreneurial activists appear to redirect the investment strategies of their targeted firms. In their initial Schedule 13Ds, they most frequently demand changes in the targets' operating strategies. Consistent with these requests, when comparing hedge fund and other entrepreneurial activist targets, we find significant differences in changes in R&D and capital expenditures in the year following the 13D filing, with the other entrepreneurial activist targets experiencing significant declines in both parameters.

Finally, we ask how the activist achieves these results. Overall, we find evidence that hedge fund and other entrepreneurial activists use the proxy solicitation process to gain board representation within one year of the initial 13D filing. We note that oftentimes the activist does not actually initiate a proxy fight, but instead threatens a proxy fight, which results in one or more board seats. These findings are inconsistent

with earlier evidence on shareholder activism, which finds limited use of the proxy solicitation process as a weapon (e.g., Bebchuk (2005, 2007)).

The paper proceeds as follows. Section I traces the recent history of shareholder activism and explains how the two samples fit the mold of a successful entrepreneurial activist. Section II describes the activist data, including the firms activists target. Section III examines the pre-13D filing market, financial, and discretionary spending characteristics of the target firms. In Section IV, we examine the market's response to initial 13D filings by hedge funds and other entrepreneurial activists. Sections V and VI present the outcomes of the activists' campaigns, both in terms of the activists achieving their stated goals, and changes in firm characteristics for the one-year period between the pre- and post-13D filing dates. Section VII summarizes and concludes the paper.

I. Shareholder Activism

A. The Entrepreneurial Activist: Hedge Funds, Venture Capital Funds, Private Equity Funds, and Individual Investors

Hedge funds, asset management groups, private equity funds, and venture capital funds fall under a similar investment umbrella. Broadly, they can be characterized as classes of investments that are relatively free from the regulatory controls of the Securities Act of 1933, the Securities Exchange Act of 1934, and most notably the Investment Company Act of 1940.² They maintain their exemption from securities and mutual fund registration by limiting the number of investors and by allowing only experienced investors with significantly high net worth.³ The funds are almost always organized as limited partnerships (LPs) or occasionally as limited liability corporations (LLCs), and are managed by a small group of highly incentivized managers who are free

from pay-for-performance restrictions imposed on mutual fund managers by the Investment Advisors Act of 1940. For example, whereas Kahan and Rock (2007) report that 97% of mutual funds charge investors a flat-rate fee based on the mutual fund's assets alone, a hedge fund manager's compensation typically includes both a percentage of invested funds and a percentage of the funds' profits, usually 5% to 40% over 0% or the risk-free rate. Private Equity Intelligence Ltd. (2007) reports similar percentages for private equity and venture capital funds.

The main difference among asset management groups, hedge funds, private equity funds, and venture capital funds lies in their investment strategies. Private equity funds tend to have large investments in a small number of private firms. Often, they invest in publicly traded companies and subsequently take them private. Venture capital funds invest in start-up or young companies, usually with new technologies or products. Hedge funds and asset management groups appear to be more eclectic investors and are more difficult to define by their investment strategies. Individual investors are also immune from most regulatory controls and generally are less diversified investors.

Pound (1992) discusses the active, entrepreneurial investor, whom he describes as an investor who buys stakes in publicly held corporations with the intention of bargaining with management to bring about productive change and thereby realize profits on his investments (p. 7). Pound reviews the history of entrepreneurial investors from the mid-1800s on and concludes that several primary characteristics distinguish successful activists from passive investors or unsuccessful activists.

Many of these characteristics are consistent with those described above for our hedge fund and other entrepreneurial investor samples. First, as articulated by Pound, entrepreneurial investors are independent from corporate and financial power structures.

This independence allows them to take positions without fear of economic or political reprisals.

Second, activists operate through small entities, for example, investment partnerships. This trait also minimizes their economic and political risks from their actions, thereby giving the general partners a great deal of control over their investment strategies.

Third, the entrepreneurial activist is relatively undiversified and can risk a relatively large proportion of its wealth on individual ventures. Individual investors, hedge funds, asset management groups, private equity funds, and venture capital funds are wholly unrestricted in how they can invest in terms of diversification, illiquid assets, short-selling, and leverage. The funds need not have sufficient capital to cover redemptions and can restrict investors from exiting their funds. Furthermore, because the underlying investors are relatively wealthy, the activists have the financial resources to absorb large financial losses.

In addition to Pound's (1992) list, we note that our activists are not required to disclose their investment strategies, short-selling positions, or leverage ratios. One ramification of these disclosure exemptions is that activists have used the stock-lending (Christoffersen et al. (2007)) or derivative markets (Hu and Black (2007)) to acquire voting rights without owning a long position in the company's underlying stock. Thus, an activist can build up voting rights in a target company to buttress a threat of an impending proxy fight. Moreover, we argue that the pay-for-performance compensation structure described above for fund managers is consistent with them pursuing confrontational activism if they believe this activism results in meaningful increases in the target's share price.

B. Prior Waves of Shareholder Activism

We trace shareholder activism over the past 30 years to allow comparisons between current and former waves of activism. Specifically, we discuss previous studies on the corporate raider, the large non-hedge fund blockholder, the institutional shareholder, and the hedge fund activist.⁴

Holderness and Sheehan (1985) and Walsh and Kosnik (1993) examine firms targeted by a handful of “corporate raiders” during the 1977 to 1983 period.⁵ In many respects, these raiders fit Pound’s (1992) profile of the entrepreneurial activist. Most germane, their often-confrontational methods closely resemble those used by the managers and individual activists we examine in this paper. Together, Holderness and Sheehan (1985) and Walsh and Kosnik (1993) find that although the stock market reacts positively to the public revelation of a raider’s existence, there is little to no evidence that the raider influences the firm beyond, in several cases, subsequently buying out the raider at a profit to the raider. In particular, neither paper documents increased rates of board or top management turnover, nor an increased tendency for the targeted firm to be taken over or reorganized. In addition, Walsh and Kosnik (1993) report no association between prior firm performance and whether a firm is targeted by the raider.

Concurrent with and following the corporate raider is the large non-hedge fund blockholder (1978 to 1989).⁶ These large shareholders include individuals, corporations, and financial institutions. Generally, a firm’s stock price increases around the 13D filing date that identifies a new blockholder, indicating that the market interprets this event as value-increasing. The positive abnormal stock returns occur whether the block is bought on the open market (e.g., Mikkelson and Ruback (1985), Shome and Singh (1995)) or

through a negotiated transaction with the firm or a single shareholder of the firm (e.g., Barclay and Holderness (1989, 1991)).

Shleifer and Vishny (1986) theoretically examine the positive monitoring effects of a large shareholder. They predict that the presence of a large shareholder increases (1) the probability of a takeover (either by the blockholder or a third party) and (2) the target firm's future earnings over time. Shleifer and Vishny primarily envision the blockholder as achieving its goals through nonconfrontational means. For example, they predict that it is not in the large shareholder's economic interests to pursue a proxy fight to achieve board representation or a successful takeover. In defense of the latter prediction, Shleifer and Vishny cite Dodd and Warner (1983), who report only 71 proxy contests over a 17-year period and a success rate of just 25%. Bebchuk (2005, 2007), using more recent data, comes to similar conclusions with regard to a shareholder's success in replacing sitting members of boards of directors.

The empirical literature on large blockholders both supports and refutes Shleifer and Vishny's (1986) conjectures. Barclay and Holderness (1991) find a positive correlation between the advent of an outside blockholder and the probability of a future takeover of the target over the 1978 to 1982 sample period. In contrast, Bethel, Liebeskind, and Opler (1998) report a reduction in merger activity in the period after the activist investor stock purchase for their sample of targets from 1980 through 1989. This drop in M&A activity might be a reflection of the overall decline in hostile or contested M&A activity that Holmstrom and Kaplan (2001) and Pound (1992) document for the post-1987 period.⁷ In addition, Barclay and Holderness (1991) find that the reported positive abnormal returns surrounding the 13D filing are more likely only if the targeted firm is subsequently acquired either by the blockholder (usually a corporation) or a third

party. As further evidence, they report that the original increase in stock price around the 13D dissipates within the first year after the filing if the firm is not subsequently acquired, whereas the abnormal return increases further if the firm is acquired within the first year. Thus, these blockholder studies envision the activist as a conduit to an eventual takeover.

Two studies measure changes in the target firms' future earnings. Bethel, Liebeskind, and Opler (1998) find a modest increase in the target's ROA the second and third year after a blockholder-activist targets a firm (both changes around 1% each year), but report no changes in firm performance for corporate or institutional blockholders.⁸ Shome and Singh (1995) report a 3.83% increase in operating income to total assets between years -3 and +2, but do not show which part of the increase occurs before and after the block purchase.

Beginning in the mid-1980s, financial institutions, most commonly pension funds and mutual funds, began a wave of nonconfrontational shareholder activism. First, using Rule 14a-8, they tried to prod firms to make changes to their corporate governance and antitakeover provisions by introducing shareholder proposals at annual corporate meetings. By and large, these proposals were unsuccessful and met with indifference by the market (e.g., Gordon and Pound (1993), John and Klein (1994), Wahal (1996), Del Guercio and Hawkins (1999), Gillan and Starks (2000)). Second, large pension funds, for example, TIAA-CREF (Carleton, Nelson, and Weisbach (1998)) and CalPERS (Smith (1996), Barber (2006)), tried to engage firms through private negotiations or other relational investing techniques to influence corporate policies. These campaigns also had little impact on future firm performance or current stock price.

The main explanations offered by financial and legal scholars for these findings are that political costs and regulatory barriers exist that prevent mutual funds and pension funds from being entrepreneurial activists. Romano (2001), Woidtke (2002), Davis and Kim (2007), and Kahan and Rock (2007) analyze conflicts of interest that mutual funds and public pension funds face in voting against management. Black (1990, 1998) describes regulatory constraints that inhibit mutual funds from engaging in confrontational activism, including rules on maintaining liquidity, holding large blocks of any one company, and insider trading.

The most recent type of shareholder activism that has been examined is by the hedge fund activist. Bratton (2007), Briggs (2007), and Kahan and Rock (2007) present anecdotal data on hedge fund activism in the United States. These papers give interesting and often illuminating examples of the types of successful activist campaigns of hedge funds over the past few years. Becht et al. (2007) conduct a clinical study of one large U.K. pension fund, the Hermes U.K. Focus Fund, which is the pension fund of British Telecom. They find that this fund primarily targets poorly performing companies, but, contrary to most other blockholder studies, realizes a significantly negative abnormal return of -3.7% over a $[-5,+5]$ window surrounding the notification by the Hermes Fund of their original stakehold in their U.K. companies.⁹ They also document the fund's capacity to make significant changes to its target firms, most notably board changes and asset restructurings. One major difference between their study and ours is that Becht et al. describe almost all of the interactions between the Hermes fund and its target firms as nonconfrontational, although they note that the fund uses the threat of calling a special or extraordinary shareholder meeting to vote on a shareholder proposal as a potent weapon toward achieving its goals.

Brav et al. (2007) analyze 888 events in the United States by 131 activist hedge funds from 2001 through 2005. Their larger sample size can be attributed to including both confrontational and nonconfrontational activist events, to containing some events in which the hedge fund activist owns less than 5% of the target's shares, and their use of a longer time period. Despite these differences, many of our findings for hedge fund targets are consistent with their paper; for example, both report significantly positive price reactions around the initial 13D filing dates. However, there are several divergent results between the two studies, which might be due to the differences in sample selection.¹⁰ Most notably, we report a decrease in operating performance and an increase in leverage for the target firm in the year following the Schedule 13D, whereas Brav et al. (2007) find an increase in operating performance and no such change in debt.¹¹

II. Sample Selection and Data Description

A. Selection Criteria

We initially examine Schedule 13D and 13D/A filings between January 1, 2003 and December 31, 2005. Investors are required to file a schedule 13D with the SEC within 10 days after acquiring more than 5% of any publicly traded equity security class with the intent of influencing the firm's management.¹² A Schedule 13D/A is an amended filing by the same investor for the same firm and is filed subsequent to the original Schedule 13D. Because we are interested in examining first filings only, we trace these 13D/A schedules backwards in time to find the first event in time.

In either filing, the investor identifies name, background (including any criminal convictions within the last five years), number and type of shares purchased, the percentage of the class of equity owned, and the purpose of the transaction. For the

hedge fund sample, we select only those transactions in which the investments (1) are in a U.S. publicly traded firm, (2) are purchased by a hedge fund or hedge fund manager, and (3) present an activist agenda in its purpose statement. For the other entrepreneurial activist sample, we use criteria (1) and (3), but select only those transactions that are purchased by individuals, venture capital firms, or private equity or asset management groups that invest for wealthy investors. Most importantly, we eliminate all activists that are required to file under the Investment Company Act of 1940 or the 1934 Securities Exchange Act, most notably mutual funds and corporations (both U.S. and foreign). The one exception is GAMCO, formerly known as Gabelli Asset Management, a publicly traded fund.

Since there is no institutional or regulatory definition of a hedge fund, private equity fund, or venture capital fund, we rely on several sources to verify a blockholder's classification. These include the funds' Internet web sites, investor journals, Factiva, and newspaper and magazine articles to determine if the filer is recognized as being a hedge fund or other type of fund. We use these sources to determine if the individual investors in our other entrepreneurial activist sample are investing for themselves (or him/herself if a solo investor) or are acting on behalf of a different entity's account. We also rely on the information in the 13D filing itself to help us determine the identity of the actual investor. When in doubt, we eliminate the filing, a rare event. We recognize that this search process may be imperfect, but we are confident that we correctly classify almost all (if not all) of our investors.

B. Descriptive Data

Table I describes the composition of the two samples of activist–target pairs. As Panel A shows, the hedge fund sample consists of 101 activists and 151 target events. The sample of other entrepreneurial activists consists of 134 investors and 154 target events. These activists fall into several categories: 58 are individual investors; 8 are ex-officers of the targeted firm; 38 are investment advisors to wealthy investors; 16 are private asset management firms; nine are private equity funds; and the remaining five are venture capital firms. We note that, although each sample contains roughly the same number of targets, hedge funds tend to be repeat activists when compared to the other activists in the sample. Twenty-four of the 101 hedge funds targeted two or more companies over our time period, with two, Steel Partners II and Carl Icahn’s Hedge Fund, taking activist positions in eight or more firms. In contrast, only 12 of the 134 other entrepreneurial activists targeted more than one company, with only one investor, Gabelli Asset Management, engaging in a confrontational activist campaign against more than three firms.

[Place Table I near here]

As Panel B illustrates, most activists filed their original Schedule 13D from 2003 through 2005. However, we find a few examples of long-term activism. Carl Icahn’s hedge fund filed its first Schedule 13D on National Energy Group in 1995, and Steel Partners II filed its first Schedule 13D on Ronson in 1998. Gabelli Asset Management originally invested in Liberty Corporation in 1998, and the Aokis began their activist campaign against Benihana (of which Rocky Aoki was the founder) in 1998.

In terms of trading venue, Panel C shows that hedge funds and other entrepreneurial activists invest in firms trading in a variety of markets, including the OTC

bulletin board and the pink sheets. In addition, examination of whether these firms are in the S&P 500 Index reveals (not tabulated) that only 10 (seven) hedge fund targets (other entrepreneurial activist targets) were part of this Index. Thus, entrepreneurial activists tend to target relatively smaller companies.

We also tabulate the target firms' industries. The hedge fund (other entrepreneurial activist) targets hail from 36 (42) of the 48 Fama and French (1997) industry classifications. As Panel D shows, only two industries yield at least 10 firms for the hedge fund sample: business services with 29 firms and pharmaceutical products with 10 firms. The top two industries in which other entrepreneurial activists invest are restaurants, hotels, and motels with 19 firms and banking with 17 firms.

Panel E presents the primary reasons stated in the original 13D filing for the investment under Item 4: "Purpose of Transaction." For the hedge fund sample, the most frequently stated purpose is to change the board's composition (41 filings), with the hedge fund manager usually asking to fill one or more seats. Pursuing alternative strategic goals is the second-most frequently cited reason, accounting for 29 filings. Opposing a merger (18) or supporting a merger (16) are common goals, as is the threat that the hedge fund would like to take over the firm in the future (12). In contrast, other activists are less concerned with merger and acquisition activity, but instead are more interested in steering the firm toward alternative strategic goals (40), buying the target firm themselves (24), or becoming more active investors (10). We note, however, that similar to hedge funds, other activists frequently demand changes in the composition of board of directors (35). To determine if the differences in purpose statements are statistically significant, we use a χ^2 test of independence for the 13 groups. The χ^2 value

is 26.8 ($p < 0.01$); hence, we reject the null hypothesis that hedge fund activists and other entrepreneurial activists make a similar set of demands in their purpose statements.

C. Examples of Hedge Fund and Other Entrepreneurial Activism

In this subsection, we describe two confrontational campaigns to allow the reader to understand what is presented in the purpose statement and how these campaigns progress over time. The first example is a hedge fund that uses the 13D filing process to publicly wage its fight against the target firm. The second example is a venture capital fund that tried but failed to take over its target firm.

C.1. Pirate Capital (A Hedge Fund) and Cornell Companies, Inc.

On June 23, 2004, Pirate Capital (Pirate) filed a Schedule 13D indicating that it owned 5.2% of Cornell Companies, Inc. (Cornell). In the purpose statement, Pirate wrote:

“Pirate Capital LLC... may make proposals to the board of directors, seek to change the composition of and/or seek representation on the board of directors and/or solicit proxies or written consents from other shareholders of the Issuer.”

We consider this to be a confrontational activist filing and classify the purpose statement as indicating that the hedge fund wishes to gain board representation.

Between July 9, 2004 and August 11, 2005, Pirate filed 12 subsequent 13D/A filings. The overall purposes of these filings were to disclose additional holdings in the firm (which peaks at 14.8%) and, also, to make further demands of the company.

- July 12, 2004 (second filing): includes a letter to the CEO and Chairman Harry Phillips and to Cornell’s Board of Directors, in which Pirate requests a complete list of

shareholders and states that they “are prepared to take every step necessary to maximize our investment including the removal of directors at the next annual meeting.”

- August 5, 2004 (third filing): includes another letter that proposes a special meeting of shareholders to vote on whether a sale of the company should be explored. In this letter, Pirate asks: “How many failures will it take for you to actually start protecting the interests of shareholders?”

- August 25, 2004 (fourth filing) and August 31, 2004 (fifth filing): enclose letters to the Board and to Mr. Phillips, respectively, asking Cornell to immediately remove Mr. Phillips as Chairman of the Board and CEO.

By October 2004, Pirate Capital owned 11.8% of Cornell’s shares and Mr. Phillips had resigned as CEO of the firm.

- November 5, 2004 (seventh filing): submits a plan to the Board for Mr. Phillips and another director to resign from the Board and for Pirate to be given these two seats.

- January 31, 2005 (ninth filing): intends to run its own slate of board nominees at the next annual meeting.

- February 24, 2005 (tenth filing): intends to commence a proxy fight.

- April 5, 2005 (11th filing): files a preliminary proxy statement with the SEC with respect to the director slate.

The 12th filing, dated May 17, 2005, discusses a letter of agreement between Pirate and Cornell, in which Cornell agrees to nominate seven Pirate Capital candidates (and two other candidates) to the Board and to reimburse Pirate for up to \$750,000 in its proxy solicitation costs. In the last filing, dated August 11, 2005, it is revealed that the head of Pirate, Thomas Hudson, assumed the lead directorship of Cornell.

C.2. Columbia Ventures Corporation (A Venture Capital Fund) and International Aluminum Corporation

On June 5, 2000, Columbia Ventures Corporation (Columbia) filed a Schedule 13D in which they disclosed that they owned a 6.4% stake in International Aluminum Corporation. In their purpose statement, they propose a transaction in which they would acquire all of the outstanding common stock of International Aluminum for \$18.25. The filing also contains a letter to the target's Board of Directors in which they "noted with disappointment the significant operating difficulties which have been reported recently" as well as the "severe decline in the share price over the last several months." The letter reiterates their desire to purchase the firm.

From Factiva, we find that on June 16, 2000, the firm rejected the takeover offer. However, on October 16, 2000, it is reported that Kenneth D. Peterson, Jr., the CEO of Columbia, was elected to serve on the company's Board of Directors.

On June 12, 2002, Columbia filed a Schedule 13D in which they make another unsolicited offer to acquire 100% of International Aluminum's common stock. On July 5, 2004, a Schedule 13D/A reveals that Columbia had reduced its position in International Aluminum to under 5%.

International Aluminum remained a publicly traded company on the NYSE until April 2, 2007, when it was acquired by Genstar Capital LLC, a private equity firm, for \$53.00 a share.

III. Properties of Targeted Firms Prior to 13D Filing Dates

What type of companies do entrepreneurial activists target? To address this research question, we examine the characteristics of hedge fund and other entrepreneurial

activist targets. We make two comparisons. First, for each class of activist, we compare the properties of the target firms (for the year before they are targeted) to a matched sample of firms, where each target firm is matched with another firm by industry, size, and book-to-market ratio. Our matching algorithm is as follows. For each firm, we choose the 10 closest firms in revenues (five above and five below) from all firms in the same Fama-French (1997) 48-industry classification. From these 10 possible matches, we choose the one firm with the closest book-to-market ratio. Second, we compare hedge fund targets to other entrepreneurial activist targets. This allows us to see if each group invests in firms with similar or different characteristics. In Section A, we present univariate tests on mean and median values. In Section B, we use logistic and probit models to identify the partial effects of all covariates.

A. Summary Statistics and Univariate Tests

Table II presents summary statistics. To give the reader a flavor of how the sample firms compare to their respective control samples, we show their means (medians) side-by-side. Columns 1 and 2 present the statistics for hedge fund targets and their control group, respectively. Columns 3 and 4 show the statistics for the other entrepreneurial activist targets and their control group, respectively. Columns 1 and 3 also present significance levels for tests for differences between sample and control firms' means and medians. Column 5 shows the t -statistic and the Z -statistic tests for differences between hedge fund target and other entrepreneurial activist target means and medians. For all tests, the t -statistics are for differences in means, assuming unequal variances between samples. The Z -statistics are from a Wilcoxon signed rank test, which does not require the assumption that the populations are normally distributed.

[Place Table II near here]

The first attribute we examine is firm performance. A firm's abnormal stock return is the difference between its buy-and-hold return from one year prior to the 13D filing date to 30 trading days before the date and the buy-and-hold return for the same time period on the appropriate Fama-French size-matched portfolio of firms.¹³ As Table II shows, hedge funds target good-performing firms, as evidenced by the prior one-year mean abnormal return for hedge fund targets of 12.3%. Furthermore, when we compare this return to the control sample's mean abnormal return of 8.1%, we find that the 4.2% difference is statistically significant at 0.01 level. In contrast, other entrepreneurial activist targets earn an average abnormal return of 2.8%, which is significantly less than their control group's mean abnormal return of 5.6% ($p < 0.05$). Testing for differences in the mean abnormal return between hedge fund and other activist targets yields a t -statistic of 1.74, suggesting that hedge fund activists target firms that perform better than those targeted by other entrepreneurial activists. Median values produce similar conclusions.

Table II also presents three measures of prior-period accounting profitability and financial health, namely, return on assets, defined as EBITDA/Assets, cash flows from operations (CFO), defined as CFO/Assets, and Altman's (1968) Z-score. These metrics are calculated over the one year ending on the fiscal year preceding the 13D filing date.¹⁴ We present both raw and industry-adjusted metrics; the latter is defined as the difference between the firm's measure and the industry's median measure (Shah (1994)).

Consistent with the market return data, hedge funds target firms with positive earnings, (the mean EBITDA/Assets of hedge fund targets is 0.062) and positive cash flows from operations (the average CFO/Assets ratio of hedge fund targets is 0.033).¹⁵

When compared to their sample of control firms, hedge fund targets have significantly higher earnings but similar cash flows from operations. Despite the fact that several hedge funds describe their investment strategies as investing in struggling or distressed companies (e.g., Contrarian Capital Management, Schultze Asset Management), the average Altman's Z-score, a predictor of bankruptcy, is 2.47, well above the predictive level of bankruptcy. Other entrepreneurial activist targets have similar EDITDA and CFO to their control sample, but significantly lower Altman Z-scores ($p < 0.05$). More significantly, perhaps, when we compare hedge fund targets to other activist targets, we find that hedge fund targets have significantly higher EBITDA/Assets and Z-scores than other entrepreneurial activist targets. We note that raw and industry-adjusted performance measures yield similar results. Thus, whether we examine stock returns or accounting data, we conclude that hedge fund activists, on average, target better-performing firms than do other entrepreneurial activists.

These findings make an interesting comparison to those reported by Bethel, Liebeskind, and Opler (1998), who find that between 1980 and 1989, activist investors were more likely to purchase large blocks of shares in firms with relatively low EBITDA/Assets. In particular, our results support their findings when we focus on other entrepreneurial activists, but contrast with their findings when we examine hedge fund activists. Furthermore, our hedge fund target market returns are inconsistent with those reported by Becht et al. (2007) for the Hermes U.K. Focus Fund; they find that more than 40% of Hermes' targets are in the bottom quintile of performance in the six months prior to this fund's initial investment. They also differ from Barclay and Holderness (1991), who report negative market- and industry-adjusted returns for the three-year period (to day -40) for 106 negotiated block trades between 1978 and 1982.

Table II also presents data on discretionary spending items, for example, capital expenditures, research and development (R&D) expenditures, and dividends paid to common shareholders. We find no qualitative differences between either activist group and its control sample. Moreover, hedge fund targets and other entrepreneurial activist targets have similar discretionary spending ratios. Thus, these activists are neither more nor less apt to target firms with above- or below-average spending on investments or dividends paid to common shareholders.

We next examine prior-period cash holdings and debt-to-asset ratios. It has been argued in the financial press that hedge fund activists target firms to extract excess cash from them, either in terms of stock repurchases or increased stock dividends (Eisinger (2005), Wynn (2005)). This claim is analogous to Jensen's (1986) discussion of agency costs between shareholders and management over "free" cash flow. Under Jensen's theory, managers have incentives to grow their company beyond its optimal size and therefore may hoard cash to facilitate these purchases. Jensen (1986) also argues that excess cash-based agency costs are inversely related to the amount of firm debt because required interest payments reduce free cash flow. Under Jensen's theory, targeted firms should have relatively high amounts of cash and relatively low amounts of debt on their balance sheet.

Cash is from the firm's balance sheet and, following generally accepted accounting rules (SFAS 95), is defined as cash plus interest-denominated investments with maturities of three months or less. We include a second measure, cash plus short-term investments, where the latter is defined as interest-denominated investments with maturities between three months and one year, or passive equity instruments.¹⁶ Debt is

measured as short-term (due within one year), long-term, and total debt. All variables are divided by total assets.

Table II supports the view that targets of hedge funds have substantially more cash than do other entrepreneurial activist targets on their balance sheets, be it cash or cash plus investments. Thus, there may be some basis to the argument that hedge funds target cash-rich companies, although we also note that none of the activist samples' cash ratios are significantly different from their control samples' ratios. There are no discernible differences in debt between the activist groups or between the activist groups and their control samples.

Table II also presents firm size and book-to-market data. Consistent with our earlier observation that few target firms are in the S&P 500 Index, activists, on average, target relatively small companies. The median assets for firms targeted by hedge funds (other entrepreneurial activists) is \$208.49 (\$140.07) million; the mean assets is \$946.81 (\$931.80) million. These means compare to \$927 million for firms targeted by activist blockholders between 1980 and 1989 (a full 20 years earlier than our sample) studied by Bethel, Liebeskind, and Opler (1998). Similar observations can be made when using revenues or market value of equity as measures of firm size. Moreover, if we use revenues or market value as measures of firm size, we find that other entrepreneurial activists invest in smaller companies than hedge funds. For example, the median market value of equity for other entrepreneurial activist targets is \$69.97 million, compared to \$133.09 million for the hedge fund targets ($p < 0.01$ for difference). Finally, consistent with Brav et al. (2007), the hedge fund and other activist target samples have relatively low market-to-book ratios.

Taken together, our findings suggest that, when compared to each other, hedge funds and other entrepreneurial activists target firms with different characteristics. The targets of hedge funds have higher earnings, are financially healthier, and have more cash on their balance sheets when compared to targets of other entrepreneurial activists, who instead tend to target smaller firms in terms of revenues and market capitalization.

B. Logistic Models

We expand on the univariate analyses by using pooled logistic models. We fit the models separately for the pooled hedge fund activist–control samples, other entrepreneurial activist–control samples, and hedge fund activist–other entrepreneurial activist samples. The results, presented in Table III, are consistent with the univariate tests presented above. When compared to their respective control samples, hedge funds are more likely to target firms with higher earnings and cash plus investments, and to have lower Altman Z-scores, whereas other entrepreneurial activists are more likely to invest in firms with higher capital expenditures, total debt, and cash plus investments. Finally, when comparing hedge fund targets to other entrepreneurial activist targets, hedge funds activists are more likely to invest in firms with lower debt-to-asset ratios and Altman Z-scores.¹⁷

[Place Table III near here]

IV. Market Response to Initial 13D Filings

Next, to determine how the market reacts to planned activism, we compute abnormal share price reactions around the initial 13D filing date. We define the filing

date, as reported in www.sec.gov, as “day 0.” Our event window begins on day –30 to allow for the 10-day 13D filing window, possible prior leakage of information, and pre-filing price pressure that may occur due to the activist accruing a large stake in a relatively short period of time. We extend the event window to day +5, and alternatively to day +30 to accommodate subsequent press coverage of the filing event.

To facilitate comparisons between our study and previous studies, we calculate and present three measures of abnormal stock returns. The target’s size-adjusted return is the difference between its buy-and-hold return over a selected time period and the buy-and-hold return for the same time period on the Fama-French size-matched portfolio of firms. The market-adjusted return is the difference between the target’s buy-and-hold return and the value-weighted NYSE/Amex/NASDAQ index from CRSP. The industry-adjusted return is the difference between the target’s buy-and-hold return and the return for all firms (target excluded) in the target’s Fama-French (1997) 48-industry code.

A. All 13D Filings

Table IV presents abnormal stock returns and both parametric and nonparametric test statistics to evaluate whether these returns are different from zero. Columns 1 and 2 present abnormal returns and significance levels for the [–30,+5] event window. Columns 4 and 5 show the abnormal returns and significance levels for the longer event window. Columns 3 and 6 contain test statistics for differences in means and medians between hedge fund and other activist targets for the shorter (column 3) and longer (column 6) windows.

[Place Table IV near here]

We begin by discussing size-adjusted market returns. This measure is comparable to those presented by Bethel, Liebeskind, and Opler (1998). The portfolio of hedge fund targets earns statistically significant mean size-adjusted returns of 7.3% over the $[-30,+5]$ window, and 10.2% over the $[-30,+30]$ window. The medians are respectively 4.9% and 8.9%, also statistically different from zero. Thus, the market perceives substantial benefits upon learning that a firm is targeted by a hedge fund activist. Other entrepreneurial activist targets earn significantly positive mean (median) size-adjusted returns of 4.4% (3.6%) over the $[-30,+5]$ window and 5.1% (6.7%) over the $[-30,+30]$ window. These abnormal returns are consistent with those of Bethel, Liebeskind, and Opler (1998) for their sample of activist targets. When we compare abnormal returns between targets of hedge fund and other entrepreneurial activists, we find little to no statistical differences between the two groups. Thus, even though the size-adjusted returns for the hedge fund activists are larger than those for the other entrepreneurial activists, they are not statistically larger.

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. Using this metric, we find that hedge fund targets earn a mean (median) market-adjusted return of 5.7% (4.6%) over the $[-30,+5]$ window and 7.2% (5.4%) for the $[-30,+30]$ period. The size and significance levels of these abnormal returns are consistent with those of Brav et al. (2007), who use a similar methodology for their sample of hedge fund activism, and with results of previous studies on corporate raiders (Holderness and Sheehan (1985)) and block purchases (Barclay and Holderness (1989, 1991)). They differ dramatically, however, from previous studies on institutional activism, which show little to no price reaction (see Karpoff (2001) for a summary of these studies). These

differences can most likely be attributed to the fact that we are studying confrontational block purchase activism, whereas Karpoff summarizes papers that examine non-confrontational shareholder activism.

In contrast to the hedge fund targets, other entrepreneurial activist targets record smaller market-adjusted returns. The mean (median) abnormal return is 2.2% (3.0%) for the $[-30,+5]$ time period and 1.9% (2.6%) for the $[-30,+30]$ period. Although all are statistically significant at conventional levels, the t - and Z -statistics are lower than those reported for the size-adjusted returns. In addition, when we test for differences in market-adjusted returns between hedge fund activists and other entrepreneurial activists, we find statistically greater abnormal returns for hedge funds three out of four times.

We also present industry-adjusted returns to partially control for collinearities and possible contagion effects among firms in the same industry. Targets of hedge fund activists and other activists earn significantly positive abnormal returns around the 13D filing date. In addition, for the longer window, the abnormal returns for hedge fund activists' targets exceed those for the other entrepreneurial activists' targets.

In summary, Table IV shows that the market reacts positively to activism in general and that the positive abnormal returns are robust across different methodologies. Table IV also presents evidence that the market reacts more favorably to hedge fund activism than other entrepreneurial activism, particularly when comparing abnormal stock returns around the longer $[-30,+30]$ window.

B. Abnormal Stock Returns by Purpose of Initial 13D Filing

Table V presents mean and median size-adjusted stock returns, for the -30 through $+30$ period surrounding the 13D filing date, by the stated purpose in the initial

13D filing. Since the number of occurrences of some of the cells are small, we concentrate only on the abnormal returns for which there are at least 11 occurrences. As the table shows, there are distinctly different market reactions by group (hedge fund vs. other entrepreneurial activists) and by purpose statement. First, although the market reacts favorably to all hedge fund purpose statements (including those in cells with less than 11 observations), investors seem most intrigued when the hedge fund activist asks for at least one seat on the board (mean abnormal return = 12.60%) or hints at increasing its stake with the intention of buying the firm (mean abnormal return = 13.06%). In contrast, market reaction is relatively low when the hedge fund asks the firm to pursue alternative strategies (mean abnormal return = 4.30%). The latter two returns are consistent with those reported by Greenwood and Schor (2007) for a different sample of hedge fund targets.

[Place Table V near here]

Second, other entrepreneurial activist targets' mean abnormal returns are highest for the group of firms in which the activist intends to buy more stock in the firm (15.93%) or expects to become more active (12.50%). The latter result is in contrast to hedge fund targets, which record a mean abnormal return of just 2.30%. Finally, when other activists ask for a seat on the board, the mean abnormal return is 3.12%, well below the 12.60% recorded by the hedge fund activist target firms.

V. Are Activists Successful in Achieving their Goals?

In this section, we document the success rates that activists have in achieving their initial goals, as articulated in the initial 13D filings. We also examine the association

between success or nonsuccess and activists' methods in trying to achieve these objectives. Finally, we compare market reactions around 13D filings by success and non-success, and also by certain outcomes to see if the market anticipates and values these outcomes.

A. Purpose of Investment and Success Rates

Table VI, Panel A, shows success rates for hedge fund and other entrepreneurial activists categorized by the purpose statements from the original 13D filings. We define success as achievement of the activist's goal within one year of the 13D filing. We gather this information by examining subsequent 13D/A filings and news articles disclosed on Factiva.

[Place Table VI near here]

Hedge fund activists enjoy a 60% success rate. Most strikingly, they gain representation on the target's board 30 out of 41 times, for an achievement rate of 73%. They are 100% successful in getting the firm to buy back its own stock, replace the current CEO, and initiate a cash dividend. Approximately 50% of the time, the target firm changes its operating strategies, drops its merger plans, or agrees to be taken over or merged.

Other entrepreneurial activists achieve their goals 65% of the time. Similar to hedge funds, other activists gain board representation 25 out of 35 times, for an achievement rate of 71%. They are 70% successful in getting the firm to pursue alternative strategies and 75% successful when wanting to change the company's corporate governance. We note that, unlike hedge funds, other activists do not demand

that the company buy back its own stock or initiate a dividend. Instead, they appear to be most interested and successful in getting the firm to make organic changes to corporate governance (including board structure) and operations.

We interpret these high success percentages as evidence that both classes of activists are effective in making significant changes to their target firms. These findings are contrary to prior activism studies; in particular, they run counter to Bebchuk's (2007) evidence that U.S. shareholders' ability to replace the board of directors is "largely a myth." However, our results are consistent with Becht et al.'s (2007) study on U.K. shareholder activism, in which they document the Hermes pension fund's capacity to make significant changes to its target firms, most notably board changes and asset restructurings.

B. Possible Reasons for Success Rates

We offer and examine several possible reasons behind the success rates of hedge fund and other activists. First, we consider whether the success rate is related to the relative level of aggressiveness of the initially stated objectives in the 13D. For example, management might be more willing to acquiesce to outside shareholders' demands if they believe the outcomes are less costly to the firm or to management itself. On the other hand, management might resist making concessions to aggressive demands for fear that future and more onerous demands might be in the offering.

We categorize eight of the 13 purposes in Table VI, Panel A as aggressive: change board, oppose a merger, sell the firm, buy more stock with intention of buying the firm, buy back its own stock, replace CEO, cut CEO's salary, and pay cash dividend.¹⁸ This categorization is similar to that of Brav et al. (2007), with the exception that they

consider board representation to be nonaggressive. Using our definition, we find that 98 (65%) of the hedge fund activists' initially stated purposes are aggressive and 53 (35%) are not (not tabulated). Of the 98 aggressive objectives, 66 (67%) ultimately are successful, whereas 32 (33%) are not. Of the 53 nonaggressive objectives, 25 (47%) are successful, whereas 28 (53%) are not. Using a χ^2 test to determine if there is an association between the success rate and the purpose (aggressive or not) yields a χ^2 statistic of 5.85 ($p < 0.02$). Thus, we find a *positive* association between aggressive objectives and success rates for hedge fund activists-targets.

When we examine other entrepreneurial activists, a different picture emerges. For this group, 71 (46%) initial purpose statements are classified as aggressive, and 83 (54%) are nonaggressive (not tabulated). For the 71 aggressive objectives, the activist is successful 44 (62%) times; for the 83 nonaggressive objectives, the activist succeeds 49 (59%) times. The χ^2 statistic for testing the association between aggression and success is 0.13, insignificant at conventional levels, suggesting *no* association between the two.

Next, we turn to the use of proxy fights by hedge fund managers and other activists, respectively, against the target firms. Bebchuk (2005, 2007), Briggs (2007), and Kahan and Rock (2007) suggest that a proxy fight is the shareholder's only effective weapon to bring about significant change in the target firm.

Table VI, Panel B presents data on actual and threatened proxy fights for both samples of targets. Proxy solicitations are from the Georgeson Shareholder website, which presents a comprehensive list of "contested solicitations" for each year in our data sample. Georgeson lists the target company, the dissident, the contested issue, and also whether the dissident or management won, or whether there was a settlement between the two parties. Threatened proxy fights are from Factiva and consist of all news reports that

the activist was threatening to begin a proxy solicitation, but never got to the SEC level of an actual solicitation.

We find that 40% (12% + 28%) of the hedge fund campaigns involved an actual or threatened proxy solicitation. Of the 18 realized proxy solicitations, Opportunity Partners engaged in three proxy fights, Steel Partners II and Santa Monica had two proxy fights apiece, and 11 other hedge funds were involved in one proxy fight each. In the remaining 91 cases (60% of the sample), there was no public information of an actual or threatened proxy fight, although we acknowledge there might be private correspondences between the activist and the firm did not come to our attention. Other entrepreneurial activists initiated 13 proxy solicitations and publicly threatened 35 other proxy fights, for an overall rate of 31%. Of the 13 proxy solicitations, five were conducted by individuals, two were by venture capital funds, and six were by asset management firms. No other entrepreneurial activist engaged in more than one proxy fight.

To gauge market reaction to these explicit and threatened proxy challenges, we calculate share price effects (size-adjusted returns) for the days $[-5, +5]$, where day 0 is the first public disclosure from Factiva about the dissident's threat or initiation of a proxy challenge (not tabulated). For the hedge fund targets, the mean (median) abnormal return is 4.48% (4.15%), each significant at the 0.01 level. For the other entrepreneurial activist targets, the mean (median) abnormal return is 5.08% (2.57%), each significant at the 0.01 level. These findings support the view that investors treat activists' campaigns as value-increasing events.

We next examine if the overall success rates reported in Table VI, Panel A are related to whether the activist used or threatened a proxy fight. As Panel B shows, the 91 successful hedge fund outcomes were accompanied by 13 actual proxy fights, 26

threatened proxy solicitations, and 52 instances of no public action. For the 60 unsuccessful hedge fund campaigns, the activist filed a proxy solicitation five times, threatened a proxy fight 16 times, but did not publicly use the proxy solicitation process 39 times. When examining proxy fights and outcomes for the other entrepreneurial activism outcomes, we find that of the 101 successful campaigns, the investor initiated 11 proxy fights, threatened 21 proxy solicitations, and did not use the process 69 times. For the remaining 53 unsuccessful events, the other activists engaged in two actual proxy fights, threatened 14 proxy fights, and had 37 non-engagements.

To test for the association between the proxy solicitation process and the success rate of each group of activists, we perform a 2x2 χ^2 test, where we lump actual and threatened proxy fights together and compare them to non-engagements. For hedge fund activists, we report a χ^2 statistic of 0.93, insignificant at conventional levels. Similarly, the χ^2 statistic for other entrepreneurial activists is 0.03, also insignificant at conventional levels. Thus, we find no evidence of a relationship between proxy fights and the rate of success.

However, a perusal of the Georgeson database reveals that the vast majority of contested proxy solicitations are over board composition. We therefore determine if there is an association between proxy fights and whether a hedge fund or other activist gains at least one seat on the target firm's board of directors, independent of whether that change is in their original purpose statement.

As Table VI, Panel B shows, 44% of the 151 hedge fund targets (67 events) resulted in the activist getting at least one seat on the target's board of directors. Of these firms, 13 were engaged in a proxy fight with the activist, 24 were threatened with a proxy solicitation, and 30 were not public recipients of a real or threatened proxy fight. A 2x2

χ^2 test on the relation between proxy fights (real or threatened) and success in gaining board representation yields a χ^2 statistic of 12.06, indicating a significant association between the two. We find similar results for the other activists. Of the 65 board successes, nine activists engaged the firm in a proxy fight, 22 threatened a proxy fight, and 34 did not use the proxy solicitation as a threat. A χ^2 test on the relation between groups and success in gaining board representation yields a significant χ^2 statistic of 14.31.

In summary, an explicit or implicit proxy threat is positively related to whether an activist successfully gains a seat on the target's board. We interpret this finding as consistent with the activist's choice of tactics and probability of success being endogenous to the characteristics of the target firm. Similarly, we interpret the nonsignificant χ^2 values for the association between overall success and the proxy solicitation process as a reflection of the fact that most other demands made by activists are not voted on by shareholders, and thus the proxy ballot may not be the appropriate avenue to seek these changes.

C. 13D Abnormal Returns, Successful Campaigns, and Eventual Outcomes

In this section, we present size-adjusted stock returns around the initial 13D filings by (1) the eventual success/failure of the campaign, (2) whether the activist received at least one seat on the board (irrespective of whether it initially asked for it) within one year, and (3) whether the firm was taken over or merged within one year.

Table VII provides the results. When we compare abnormal returns between hedge funds that are successful in obtaining their goals within one year versus those that are not successful, we find sharp differences between the two groups of targets. As Table

VII, Panel A shows, the mean (median) abnormal return for successful campaigns over the $[-30,+5]$ window is 10.7% (7.1%), which is significantly greater than the 2.6% (1.5%) mean (median) abnormal return for unsuccessful outcomes. The $[-30,+30]$ window also produces significantly greater abnormal returns for the successful-outcome group than for the unsuccessful group.

[Place Table VII near here]

We find similar differences in abnormal returns between successful and unsuccessful campaigns for firms targeted by other entrepreneurial activists. The mean (median) $[-30,+5]$ initial Schedule 13D abnormal returns for successful outcomes is 6.4% (6.3%), which is significantly greater than the 1.1% (1.4%) abnormal return for the unsuccessful outcomes. The $[-30,+30]$ window produces similar differentials; for successful outcomes, the mean (median) abnormal return is 7.1% (7.2%); for unsuccessful outcomes, it is 0.3% (2.4%). Thus, we conclude that investors, on average, are able to differentiate, albeit with error, between successful and unsuccessful campaigns.

Table VII, Panel B presents abnormal stock returns by whether the activist obtains board representation within one year. These results differ from Panel A in that we observe significantly different abnormal returns between gaining or not gaining board seats for the hedge fund targets only. The mean (median) $[-30,+5]$ 13D abnormal stock return for the hedge fund targets is 11.94% (9.33%), which is significantly larger than the 4.92% (2.01%) for those targets in which the hedge fund does not eventually get on the board. The longer window yields similar differentials. For the other entrepreneurial activist targets, the means and medians between subgroups are not significantly different

from each other. We note that these results are similar to those reported in Table V, in which the market reaction to a purpose statement of board representation is relatively high for the hedge fund targets, but relatively low for the other entrepreneurial activist targets.

Finally, Barclay and Holderness (1991) find that the stock market reaction around the announcement date of the 13D filing date for a negotiated block trade is higher when the firm is acquired within one year. Barclay and Holderness (1991) examine 106 negotiated block trade announcements between 1978 and 1982. Their market-adjusted return for days -40 through 0 is 9.9% for the 65 firms that remain independent after one year of day 0 and 20.5% for the 41 firms that are acquired within one year.

For our sample of 151 hedge fund targets, 22 firms are merged or acquired within one year and 129 remain independent. For the sample of 154 other activist targets, 19 targets are merged or acquired within a year, while 135 remain independent. Thus, the incidence of activist targets (hedge fund or other) being taken over within one year is less than that reported by Barclay and Holderness (1991). One possible reason for the different acquisition rates is that the majority of blockholders studied by Barclay and Holderness are other companies, whereas our blockholders are predominantly hedge funds, private investors, venture capitalists, or private equity managers. For example, as Table VI, Panel A shows, hedge funds and other entrepreneurial activists typically do not seek control of the target.

As Table VII, Panel C shows, there are distinct differences in abnormal returns by type of activist and whether the firm is acquired or merged within one year. For hedge fund activists, there are no significant differences in abnormal returns between firms that are merged or acquired within one year and firms that remain independent. In contrast,

the abnormal returns are significantly greater for other entrepreneurial activists when the firm is acquired within one year when compared to firms that remain independent after one year. Over the $[-30, +5]$ window, the mean (median) abnormal return for merged or acquired firms is 17.39% (12.80%), which is significantly greater than the 3.25% (2.89%) mean (median) abnormal return for those firms not merged or acquired. The $[-30,+30]$ window also produces significantly greater abnormal returns for the merged group than for the group of targets that remain independent.

Taken together, these results suggest that the market places different weights on the 13D filing date on the probability that the target firm will be taken over in the future. These differences also reflect the disparity in incidences in which the activist professes an intent in having the target firm acquired, either by the activist or by a third party. Recall from Table I that other entrepreneurial activists declare an intention of buying more stock in the target firm 24 times versus 12 times for the hedge fund activist. Furthermore, as Table I shows, the incidence for both groups of activists to support or oppose a future merger is a wash.

VI. Subsequent Abnormal Returns and Changes in Operating and Financial Structures after the Initial Filing Date

In this section, we examine abnormal stock returns and changes in accounting performance, cash on hand, discretionary spending, leverage, and firm size for the one-year period after the initial 13D filing. Our primary purpose is to discern the short-term effects that activists have on the targeted firms.

Table VIII presents some of these results. Columns 1 and 2 contain the hedge fund targets and their control group, respectively. Columns 3 and 4 show the other

entrepreneurial activist targets and their control group, respectively. Columns 1 and 3 also present significance levels for tests for differences between sample and control firms' means and medians. Column 5 shows the t -statistic and the Z -statistic for tests for differences between hedge fund target and other entrepreneurial activist target means and medians.

A. One-Year Abnormal Stock Returns Following the Initial Schedule 13D Filing

We begin by computing size-adjusted stock returns for the target and control samples for the period from 30 trading days to one year *after* the filing date. The first row of Table VIII contains these returns. The mean one-year abnormal return for the sample of hedge fund targets is 11.35%, which is statistically different from zero at the 0.01 level, and is significantly greater than the abnormal return of 3.17% for the matched-firm sample. Similarly, other entrepreneurial activist targets earn a significant abnormal return of 17.82% over the subsequent one-year period, which is significantly greater than the 2.87% for their control sample ($p < 0.05$). Median abnormal returns yield the same conclusions. Thus, the jump in share price around the 13D filing date continues throughout the first year after the activist engages the firm.

[Place Table VIII near here]

To examine possible sources of the subsequent one-year abnormal returns, we calculate the abnormal returns for subgroups of firms based on the outcome of the activist campaign. Table VII contains these results. As the last column in the table illustrates, there are no significant differences in the one-year post-investment abnormal returns for hedge fund targets relative to whether the activist achieves its goal (Panel A), gains at

least one seat on the target's board (Panel B), or is subsequently acquired during the year (Panel C). In light of the differentials we find for the abnormal returns surrounding the 13D filings for the first two categories, these one-year returns suggest that (1) the market anticipated the success and/or the ability of the hedge fund activist to obtain board representation around the initial filing date and (2) the positive overall subsequent rise in stock price is not related to these two outcomes. The positive, but insignificantly different, subsequent abnormal returns for the merged versus not merged targets is consistent with the view that the market return is not related to whether the company remains independent after one year. This result is contrary to that of Barclay and Holderness (1991), who find that the positive abnormal return around the 13D for firms targeted by blockholders dissipates if the target firms are not subsequently acquired or merged within one year.

For other activists, we see some evidence that outcomes are related to the one-year stock return. While there is no difference in abnormal returns between success and nonsuccess (Table VII, Panel A), there is weak evidence that the abnormal return is greater when the activist receives board representation (Table VII, Panel B) and stronger evidence that the one-year abnormal return is higher for firms that are acquired within one year (Table VII, Panel C). Overall, the results support our previous findings that the market views hedge fund and other entrepreneurial activism as different types of activism.

B. One-Year Changes in Profitability, Discretionary Spending, Capital Structure, and Cash Reserves after the Initial Target Date

The one-year post-investment abnormal returns are consistent with the activist making short-term value-enhancing changes to the target firm. We explore several sources of these changes by calculating one-year changes in accounting profitability, cash balances, discretionary spending, leverage, and total assets. Specifically, we present mean and median changes in firm characteristics between the fiscal year after and prior to the filing of the initial Schedule 13D. Table VIII presents these changes for the activist firms and their control samples. Existing Compustat data extend to December 31, 2005, reducing our sample to 132 target and 129 control firms.¹⁹

We find no evidence that hedge fund targets become more profitable in terms of return on assets (EBITDA/Assets) or cash flows from operations. On the contrary, there appears to be a deterioration of profitability. The mean and median EBITDA/Assets ratios significantly decline, when measured in absolute (-0.024 ; -0.008) or industry-adjusted (-0.031 ; -0.015) terms. These decreases are statistically different from those reported for the control sample. We find weaker, but consistent, evidence that cash flows from operations drop in a similar manner. The median industry-adjusted change in CFO/Assets is -0.007 , significantly different at the 0.10 level than the -0.001 change for the control sample.

Other entrepreneurial activist targets experience similar changes in short-term profitability. The change in the targets' mean (median) EBITDA/Assets is -0.008 (-0.002) in the year following the 13D filing; the mean (median) change in industry-adjusted ratio is -0.015 (-0.002). For both measures, the median values are significantly different from the respective control sample's median at the 0.10 level. Cash flows from operations (CFO) and CFO/Assets decrease over the year, with median values (raw and industry-adjusted) that are significantly less than the control sample's values. Finally,

when we test for differences between hedge fund activists and other entrepreneurial activists, we find little to no significant *t*- or *Z*-statistics, supporting the view that both groups of target firms display similar drops in one-year accounting profitability measures.

When examining changes in cash balances (broadly and narrowly defined), we find overall reductions in average cash balances for both groups of activist targets. For the hedge fund targets, the mean industry-adjusted changes in Cash/Assets, Short-term Investments/Assets, and (Cash plus Short-term Investments)/Assets are each negative, indicating that cash on hand (relative to the industry norm) drops in the fiscal year following the initial 13D filing. Each measure is significantly less than its control sample mean. For the other entrepreneurial activist targets, both raw and industry-adjusted cash plus short-term investments drop significantly more than for the respective control sample, but the drop is due almost exclusively to a reduction in short-term investments and not to changes in cash balances.

Next, we examine changes in the target firms' discretionary spending, beginning with changes in the targets' investments in PP&E and R&D. For the hedge fund targets, there is little to no one-year change in capital expenditures or R&D expenditures. In contrast, there is a drop in mean R&D expenditures for the other entrepreneurial activist targets, which is significantly less than the increase reported for their control sample. Furthermore, testing for differences in means and medians between the two activist samples (column 5) produces significant *t*-statistics for all four measures, suggesting that the reductions in capital and R&D expenditures for other entrepreneurial activist targets are greater than the changes in expenditures for the hedge fund targets.

These findings are consistent with the activists' stated reasons in their initial 13D filings as well as the rates of success obtained by these activists. As Table I shows, the

most frequent demand made by other entrepreneurial activists is for the target to pursue strategic alternatives; moreover, from Table VI, these activists are successful in achieving this goal within one year 70% of the time. In contrast, hedge fund activists have a 48% success rate in achieving this goal, suggesting they are less successful in changing the target's investment expenditures.

Next, we examine changes in dividends per share, another discretionary expenditure. For the hedge fund targets, mean dividends per share rise 11.2 cents per share (median = 9.9 cents per share)—almost doubling in size from the prior period (see Table II). This change is significantly higher than the control sample mean dividend per share rise of one penny per share. We also find (not tabulated) that seven target firms initiate common stock dividends in the fiscal year following the 13D filing date, compared to four control firms. In contrast, average dividends per share for the other entrepreneurial activist targets rise by 4.1 cents per share (median = zero cents per share), which is not significantly different from these targets' control sample. We therefore conclude that the subsequent increase in dividends is most pronounced for the hedge fund targets.

The increase in dividends per share for the hedge fund targets is consistent with hedge funds addressing agency costs associated with Jensen's (1986) free cash flow theory. To investigate this further, we examine changes in leverage for the target firms. For the hedge fund targets, there are significant increases in leverage. The mean unadjusted Total Debt/Assets ratio rises by 0.016 and the industry-adjusted ratio increases by 0.020. The average Long-term Debt/Assets increases by 0.024 and the industry-adjusted Long-term Debt/Assets increases by 0.026. When comparing the sample of hedge fund targets to its control group, each change is significantly different

from each other, supporting the view that following the initial 13D filing, hedge fund targets increase the amount of debt in their capital structures. In contrast, we find no discernible changes in the debt ratios for the other entrepreneurial activist targets. These findings, together, are consistent with the view that hedge fund activists more frequently address free cash flow issues whereas other entrepreneurial activists are more focused on the targets' investing patterns.

We also present changes in total firm assets. Industry-adjusted assets decline for both hedge fund and other entrepreneurial activists' targets, suggesting that target firms sell off unwanted assets within one year. These results are similar to those reported by Bethel, Liebeskind, and Opler (1998) for their sample of individual activist targets.

In summary, we conclude that activism does not result in an immediate increase in the firm's accounting profitability—on the contrary, earnings and/or cash flows decline in the year following the initial 13D investment. However, we do find evidence that hedge funds and other entrepreneurial activists pursue different post-intervention strategies. Hedge funds appear to address agency costs associated with excess cash balances by increasing dividends and the target's leverage. Other entrepreneurial activists appear to be more concerned with the investment strategies of the target firms and reduce investments in R&D and capital expenditures.

Finally, to see if these findings persist or are reversed in the second fiscal year, we calculate two-year changes as well as changes in the second year subsequent to the initial 13D filing. Since our data end on December 2005, we lose additional firms, resulting in sample sizes of 69 for the hedge funds and 73 for the other activists. Because of the smaller sample sizes, we view these findings as preliminary and discuss them only briefly. Overall, there is no evidence that any of our one-year changes reverse in the

second year. Nor do we observe large continuations of profitability, discretionary expenditures, and changes in debt, cash, and assets. We cautiously conclude that changes to the target occur mainly in the first year subsequent to the activism.

VII. Summary and Conclusions

This paper examines recent confrontational entrepreneurial shareholder activism. We define confrontational entrepreneurial activism as instances in which an investor files a 13D filing after taking an initial stake of 5% or more in the company and clearly states in the filing's "purpose" section that it intends to proactively influence management's future decisions.

We examine two samples of entrepreneurial activists: hedge funds and other entrepreneurial investors, where the latter primarily consist of individuals, private equity funds, venture capital funds, and asset management firms. We find similarities and disparities between hedge fund and other entrepreneurial activism. The main parallels correspond to market returns and the activist's success in gaining its original objectives.

Hedge fund targets earn, on average, 10.2% abnormal stock returns during the period surrounding the initial Schedule 13D filing, and other activist targets experience abnormal returns of 5.1%. Furthermore, these returns do not dissipate in the one-year period following the initial 13D filings. Instead, hedge fund targets earn an additional 11.4% abnormal return during the subsequent year; other targets observe a 17.8% abnormal return.

Activists are extremely successful in getting existing management to acquiesce to their demands as articulated in the initial 13D filing, with hedge funds enjoying a success rate of 60% and non-hedge fund activists accomplishing their objectives 65% of the time.

Both groups are particularly successful at gaining board representation on the target firm within one year of the initial finding. We present evidence that this success is based on activists' use of the proxy solicitation process (both actual and threatened), a finding contrary to Bebchuk (2005, 2007) and Dodd and Warner (1983).

However, there are distinct differences between hedge fund and other entrepreneurial activism. Hedge fund activists target more profitable and financially healthy firms than do other entrepreneurial activists. Hedge fund targets also have higher levels of cash on hand than evidenced by other activist targets. After the initial investment, hedge funds differentially redirect target firms relative to the redirection implemented by other entrepreneurial activists. Hedge funds address the free cash flow problem by frequently demanding the target firm to buy back its own shares, cut the CEO's salary, and initiate dividends. In the fiscal year after the initial 13D filing, hedge fund targets, on average, double their dividends, significantly increase their long-term debt, and significantly decrease their cash and short-term investments. In contrast, other activists most frequently demand changes in operating strategies. Consistent with these requests, there are significant differences in changes in R&D and capital expenditures in the year following the 13D filing between targets of hedge funds and other activists. Other entrepreneurial activist targets reduce expenditures in these investments, and the reductions are significantly less than the slight increases recorded by hedge fund targets.

Although many of our findings are consistent with studies on prior waves of shareholder activism, we conclude that hedge funds and other current, entrepreneurial activists take different approaches from each other and that the current wave of confrontational entrepreneurial activism may represent a new breed of shareholder activist.

Appendix A: Variable Definitions for Tables II and VIII

Abnormal Stock Return is the difference between the firm's buy-and-hold return for the time period and the buy-and-hold return for the same time period on the appropriate Fama-French size-matched portfolio, as computed by Eventus. There are five size-matched portfolios.

EBITDA/Assets is earnings before interest, taxes, depreciation, and amortization divided by mean total assets, the latter defined as the average of beginning and ending total assets.

CFO/Assets is net cash flow from operating activities divided by mean total assets.

Z-Score uses the Altman (1968) model to determine the likelihood of bankruptcy amongst companies.

Capital Expenditures/Assets is capital expenditures less the sale of PP&E divided by mean total assets.

R&D Expenditures/Assets is research and development expense divided by mean total assets.

Dividends/Share is dividends per share—ex date.

Cash/Assets is total cash to total assets ratio.

(Cash plus Short-term Investments)/Assets is the ratio of the sum of cash plus short-term investments to total assets.

Total Debt/Assets is the ratio of sum of long- and short-term debt to total assets.

Short-term Debt/Assets variable is the ratio of debt in current liabilities to total assets.

Long-term Debt/Assets is the ratio of total long-term debt to total assets.

Assets are total assets of the company.

Revenues are net sales of the company.

Market Value of Equity is the dollar value of common equity.

Market-to-Book ratio is the ratio of the stock's market value to the difference in the value of total assets and total liabilities.

The Industry-adjusted variable is the difference in the firm's value and the median value for all firms in the company's Fama and French (1997) 48-industry classification.

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¹ In the next section, we include a literature review of past shareholder activism, as well as current studies on hedge fund activism. The articles on hedge fund activism we discuss include those by Brav et al. (2007), Bratton (2007), and Kahan and Rock (2007).

² They are not exempt, however, from filing SEC Form 13D or 13G when crossing the 5% threshold of ownership or from filing an SEC Form 13F. The 13G filings are required for passive investors who acquire at least a 5% interest in a publicly traded equity security. See Clifford (2007) for an examination of 13G filings by hedge funds. A 13F must be filed within 45 days after the end of March, June, September, and December by all institutional managers who exercise investment discretion over \$100 million or more in total securities. The 13F lists the securities, the number of shares owned, and the market value of each investment. It does not contain any indication of investment purpose.

³ 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.

⁴ See Gillan and Starks (2007) for an excellent and comprehensive review of shareholder activism.

⁵ These raiders include Carl Icahn, Irwin Jacobs, Carl Lindner, David Murdock, and Victor Posner.

⁶ With the exception of Bethel, Liebeskind, and Opler (1998), the studies we cite below combine individual and corporate activists into their samples. Bethel, Liebeskind, and Opler (1998) divide their sample into activists (individuals who currently announce their

intention to influence firm policies or in the past have done so), financial investors (banks, pension funds, mutual funds, and individuals who do not adopt a public activist position), and strategic investors (nonfinancial investors, mainly companies). In addition, all of the studies, Bethel, Liebeskind, and Opler included, combine confrontational and non-confrontational activism.

⁷ There are many reasons for this drop in M&A activity, including the rise of takeover defenses and state takeover laws, along with the decline in the high-yield bond market following the demise of Drexel Burnham Lambert in 1987.

⁸ Bethel, Liebeskind, and Opler (1998) attribute this result to the activist influencing the firm to be more focused, that is, less diversified following the initial stock purchase. However, it should be noted that their sample is for Fortune 500 firms in the 1980s, when investors viewed companies being overly diversified as value-decreasing (e.g., Berger and Ofek (1995)).

⁹ Under U.K. company law disclosure rules, all investments exceeding a 3% threshold must be disclosed.

¹⁰ Boyson and Mooradian (2007), for example, find that the post-intervention changes in performance and cash holdings are related to whether the hedge fund practices more or less aggressive activism.

¹¹ Clifford (2007) examines 13D and 13G filings by hedge funds from 1998 to 2005. He includes all blocks purchased by 197 hedge funds. Similar to our paper, Clifford (2007) finds a significant positive price reaction around the initial 13D filing date.

¹² Specifically, Rule 13d-1(a) states that “Any person who, after acquiring directly or indirectly the beneficial ownership of any equity security of a class which is specified in paragraph (i) of this section, is directly or indirectly the beneficial owner of more than

five percent of the class shall, within 10 days after the acquisition, file with the Commission a statement containing the information required by Schedule 13D.” Rule 13d-2(b) further states that the investor could file a Schedule 13G if “such person has acquired such securities in the ordinary course of his business and not with the purpose nor with the effect of changing or influencing the control of the issuer...”

¹³ We winsorize extreme observations by setting the values in the bottom and top 1% to the values of the 1st and 99th percentiles to present more meaningful mean statistics. For each activist sample, there are two observations below the 1st percentile and two observations above the 99th percentile, respectively. As a sensitivity check to this process, we redo the analyses after dropping these extreme observations. The empirical results with the smaller samples are qualitatively the same, and therefore we do not include them. We employ the same winsorizing process for all variables throughout the analyses and include these results only.

¹⁴ Compustat data are used for these and the other measures presented in Table II. Nine hedge fund targets and 12 other entrepreneurial activist targets trade on the pink sheets and are excluded because they are exempt from filing financial statements with the SEC. Missing data further reduces our sample to 134 hedge fund and 139 other activist targets. For accounting flow data, that is, EBITDA, CFO, Capital Expenditures, and Research and Development (R&D) expenditures, we divide by mean assets, the latter defined as the average of beginning and ending total assets. For accounting balances, that is, Cash, Short-term Investments, and Debt, we divide by total assets at the fiscal year-end preceding the 13D filing date.

¹⁵ As a sensitivity check, we also divide EBITDA by revenues, and by assets net of cash and short-term investments. Our results with these two specifications are qualitatively

the same as those reported in Tables II and VIII. For brevity, we do not report these numbers in the tables.

¹⁶ Between 2002 and 2005, the one-year Treasury constant maturity rate, as published by the Federal Reserve Bank of St. Louis, meandered between 1% and 3%. Thus, investments in short-term Treasury bills yield below-market returns, suggesting an additional agency cost of holding suboptimal assets. In addition, firms tend to place their excess cash in these short-term securities.

¹⁷ To determine the sensitivity of our results to the choice of a logistic model, we replicate our analyses using probit models. Because the cumulative normal distribution and the logistic distribution are very close to each other, except at the tails, similar results should be observed (Maddala (1993)). To examine the comparability of the two models, we examine the goodness-of-fit tests, the coefficients of the individual independent variables, and their significance levels. In all cases, the significance levels of the coefficients for the logistical and probit models are comparable to each other within a 0.02 range. The goodness-of-fit measures, the log likelihood ratios, are also comparable between specifications. Following Maddala (1993), we transform the logistic estimates into approximations of the probit estimates by multiplying the logistic estimates by 1/1.6. This transformation produces estimates that, in all cases, are within 0.01 of the point estimates for the probit models.

¹⁸ Alternatively, we include “get list of shareholders” as an aggressive purpose, and find similar results to those reported in this section.

¹⁹ The reductions in sample size are due to time constraints as well as some of the firms leaving the Compustat database. We conduct the analyses with annual Compustat data because quarterly data are not currently available past 2004. When using quarterly data

through 2004 for a smaller sample, we obtain qualitatively the same results as presented in Table VIII.

Table I
Descriptive Statistics

This table reports descriptive statistics for the final sample of hedge funds and other entrepreneurial activists along with their target firms. Panel A summarizes the number of activists and target firms in each of the samples. Panel B summarizes the number of firms targeted in each year by the hedge fund and other entrepreneurial activists. Panel C summarizes the number of target firms over the different exchanges or markets. Panel D summarizes the different industries of the target firms, where industry is defined according to Fama and French's (1997) 48-industry classifications. Panel E summarizes the activists' initial stated reasons for targeting the firms, as collected from the Schedule 13D's "Purpose of Transaction" section.

Panel A: Number of Activists and Target Firms

	Hedge Fund Activists	Other Entrepreneurial Activists
Total Number of Activists	101	134
Total Number of Target Firms	151	154
Number of Firms Targeted by 2 Activists	4	5
Number of Firms Targeted by 3 Activists	3	2
Number of Firms Targeted by 4 Activists	0	1
Number of Activists that Target:		
1 Firm	77	122
2 Firms	12	8
3 Firms	8	3
4 Firms	2	0
7 Firms	0	1
8 Firms	1	0
10 Firms	1	0

Panel B: Year of First 13D Filing

	Hedge Fund Activists	Other Entrepreneurial Activists
1995	1	0
1998	1	2
1999	3	0
2000	1	7
2001	3	4
2002	10	19
2003	28	31
2004	39	40
2005	65	51

Panel C: Exchange or Market where Target Firm Trades at Time of Initial Investment

	Hedge Fund Activists	Other Entrepreneurial Activists
New York Stock Exchange	45	56
American Stock Exchange	12	12
Nasdaq National Market	79	63
OTC Bulletin	6	11
Pink Sheets	9	12

Panel D: Industry of Target Firm (Eight or More Firms for Either Group)

	Hedge Fund Activists	Other Entrepreneurial Activists
Business Services	29	11
Pharmaceutical Products	10	5
Retail	9	3
Restaurants, Hotels, Motels	8	19
Banking	6	17
Communication	5	12

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

	Hedge Fund Activists	Other Entrepreneurial Activists
Change Board of Directors' Composition	41	35
Firm Should Pursue Strategic Alternatives	29	40
Oppose a Merger	18	5
Sell the Firm or Merge with Another Company	16	5
Buy More Stock with Intention of Buying the Firm	12	24
Firm Should Buy Back its Own Stock	4	0
Get List of Shareholders	4	8
Become an Active Investor	4	10
Expresses Concerns with Corporate Governance	3	8
Replace CEO	3	2
Cut CEO's Salary	2	0
Firm Should Pay a Cash Dividend	2	0
Other Reasons	13	17

Table II
Characteristics of Target Firms Prior to the 13D Filing Date

This table summarizes characteristics of firms targeted by hedge funds (column 1) and other entrepreneurial activists (column 3), as well as each group's control sample (based on industry, size, and book-to-market; columns 2 and 4). For each variable the mean [median] is reported. All data are winsorized at the 1% and 99% levels. Columns 1 and 3 also contain significance levels for tests for differences between the means (medians) between sample and control firms. Column 5 shows the *t*-statistic (*Z*-statistic) testing for differences between hedge fund and other entrepreneurial activists' means (medians). The abnormal stock return is from one year prior to the 13D filing date to 30 trading days before day 0, where day 0 is the SEC 13D filing date. The accounting data are during (for flows) or (for balances) on the end of the year previous to the filing of the initial Schedule 13D. See Appendix A for variable definitions. *** significant at the 0.01 level; ** significant at the 0.05 level; * significant at the 0.10 level.

	Hedge Fund Activist Target Firms	Hedge Fund Control Sample	Other Entrepreneurial Activist Target Firms	Other Entrepreneurial Activist Control Sample	<i>t</i> -statistic [<i>Z</i> - statistic] for diff. between columns 1 and 3
	(1)	(2)	(3)	(4)	(5)
Profitability					
Abnormal Stock Return	12.3%*** [6.5%]***	8.1% [4.0%]	2.8%** [0.5%]***	5.6% [6.8%]	1.74* [1.63]*
EBITDA/Assets	0.062** [0.071]***	0.014 [0.055]	0.042 [0.044]	0.040 [0.049]	1.77* [1.97]***
Industry-Adjusted	0.008** [0.008]**	-0.040 [-0.008]	-0.004 [-0.002]	-0.007 [-0.005]	1.85*** [1.88]**
CFO/Assets	0.033 [0.053]	0.024 [0.065]	0.035 [0.034]	0.033 [0.049]	0.27 [1.16]
Industry-Adjusted	-0.007 [0.006]	-0.017 [0.015]	0.001 [0.001]	0.003 [0.003]	0.32 [0.66]
Z-Score	2.47 [2.48]	2.91 [2.38]	1.75** [1.20]**	2.65 [2.61]	2.51** [3.72]***
Industry-Adjusted	0.728 [0.360]	0.746 [0.353]	0.599* [0.036]**	0.848 [0.046]	1.97** [1.56]
Discretionary Spending					
Capital Expenditures/Assets	0.032 [0.018]	0.023 [0.014]	0.029 [0.013]	0.023 [0.015]	1.03 [1.36]
Industry-Adjusted	0.017 [0.002]	0.012 [0.000]	0.017 [0.001]	0.016 [0.004]	0.18 [0.34]

R&D Expenditures/Assets	0.048 [0.000]	0.044 [0.000]	0.037 [0.000]	0.029 [0.000]	1.11 [0.92]
Industry-Adjusted	0.028 [0.000]	0.027 [0.000]	0.019 [0.000]	0.007 [0.000]	0.88 [1.06]
Dividends/Share	0.129 [0.000]	0.136 [0.000]	0.106 [0.000]	0.148 [0.000]	1.09 [0.53]
Industry-Adjusted	0.099 [0.000]	0.103 [0.000]	0.055 [0.000]	0.105 [0.000]	1.11 [0.38]
<hr/>					
Cash Balances and Debt					
Cash/Assets	0.137 [0.090]	0.118 [0.054]	0.094 [0.033]	0.100 [0.038]	2.73 ^{***} [4.09] ^{***}
Industry-Adjusted	0.109 [0.096]	0.095 [0.060]	-0.007 [0.006]	0.001 [0.010]	2.72 ^{***} [4.17] ^{***}
(Cash+Short-term Investments)/Assets	0.204 [0.118]	0.187 [0.091]	0.139 [0.055]	0.140 [0.060]	2.88 ^{***} [3.54] ^{***}
Industry-Adjusted	0.052 [0.056]	0.049 [0.046]	-0.160 [0.001]	-0.162 [0.006]	2.96 ^{***} [3.75] ^{***}
Total Debt/Assets	0.222 [0.162]	0.230 [0.186]	0.230 [0.161] [*]	0.260 [0.226]	0.75 [0.19]
Industry-Adjusted	-0.936 [-0.462]	-0.907 [-0.432]	-0.618 [-0.252]	-0.595 [-0.210]	0.99 [0.51]
Short-term Debt/Assets	0.049 [0.007]	0.051 [0.015]	0.042 [0.011]	0.065 [0.019]	0.71 [-0.09]
Industry-Adjusted	-0.717 [-0.210]	-0.697 [-0.244]	-0.487 [-0.116]	-0.475 [-0.111]	0.19 [-0.25]
Long-term Debt/Assets	0.162 [0.095]	0.181 [0.123]	0.190 [0.096]	0.195 [0.132]	0.57 [0.03]
Industry-Adjusted	-0.186 [-0.168]	-0.180 [-0.150]	-0.124 [-0.057]	-0.117 [-0.024]	0.51 [0.16]
<hr/>					
Firm Size and Book-to-Market Ratio					
Assets (\$ millions)	946.81	1,171.27	931.80	1,023.08	0.101

	[208.49]	[250.33]	[140.07]	[171.55]	[1.07]
Industry-Adjusted	848.74 [23.96]	967.94 [96.85]	840.29 [-23.91]	912.44 [-7.26]	0.64 [1.88]*
Revenues (\$ millions)	796.03 [148.31]	902.73 [130.25]	439.33** [68.42]**	657.93 [82.81]	2.84*** [4.44]***
Industry-Adjusted	591.45 [48.01]	680.08 [31.69]	571.69** [-7.99]*	635.01 [-2.84]	1.48 [1.83]*
Market Value of Equity (\$ millions)	717.89 [133.09]	1071.03 [180.75]	461.02 [69.97]	484.23 [70.81]	1.73* [3.51]***
Industry-Adjusted	635.15 [47.10]	935.41 [85.93]	312.89 [4.93]	341.75 [6.89]	1.45 [2.69]***
Market-to-Book Ratio	1.460 [1.241]	1.699 [1.303]	1.294 [1.095]	1.303 [1.080]	1.04 [0.91]
Industry-Adjusted	0.108 [0.080]	0.337 [0.091]	0.030 [-0.081]	0.040 [-0.069]	0.59 [0.34]
Number of Firms	134	134	139	139	134/139

Table III
Logistic Models Predicting Targeting

This table reports the results of logistic regressions of the firms that are targeted by hedge funds and other entrepreneurial activists. Column 1 uses the firms in the control sample (based on industry, size, and book-to-market) in addition to the firms targeted by hedge funds. Column 2 uses firms targeted by other entrepreneurial activists in addition to firms in the control sample (based on industry, size, and book-to-market). The third set uses firms targeted by hedge funds in addition to firms targeted by other entrepreneurial activists. See Appendix A for variable definitions. All data are winsorized at the 1% and 99% levels. The table shows the coefficients and (*p*-values). *** significant at the 0.01 level; ** significant at the 0.05 level ; * significant at the 0.10 level.

	Hedge Fund Targets vs. Control Sample (1)	Other Entrepreneurial Activist Targets vs. Control Sample (2)	Hedge Fund Target vs. Other Activist Targets (3)
Intercept	0.46 (0.38)	-0.684 (0.26)	0.564 (0.28)
Abnormal Stock Return	0.179 (0.34)	-0.183 (0.29)	0.341 (0.23)
EBITDA/Assets	1.974 (0.02) **	-0.778 (0.60)	1.300 (0.18)
Z-Score	-0.065 (0.02) **	0.008 (0.61)	-0.063 (0.05) **
Capital Expenditures/ Assets	1.089 (0.70)	12.756 (0.03) **	1.184 (0.59)
Dividends/Share	0.005 (0.95)	-0.163 (0.79)	-0.483 (0.19)
Total Debt/Assets	-0.703 (0.47)	1.236 (0.08) *	-1.957 (0.01) ***
Cash plus Short-term Investment/Assets	1.417 (0.06) *	2.012 (0.07) *	0.736 (0.40)
Log Likelihood Ratio	10.08	12.20	13.11
No. Of Observations	134/134	139/139	134/139

Table IV
Abnormal Stock Returns Surrounding the Initial Schedule 13D Filing Dates

This table shows the distributions of size-adjusted stock returns, market-adjusted stock returns, and industry-adjusted stock returns surrounding the initial Schedule 13D filing dates for 134 firms targeted by hedge fund activists and 139 firms targeted by other entrepreneurial activists. The target's size-adjusted return is the difference between its buy-and-hold return for the time period and the return on the matched Fama-French size portfolio as calculated on Eventus. The market-adjusted return is the difference between the target's buy-and-hold return and the value-weighted NYSE/Amex/NASDAQ index from CRSP. The industry-adjusted return is the difference between the target's buy-and-hold return and the return for all firms (target excluded) in the target's Fama-French (1997) 48-industry code. The abnormal return is for the 30 trading days prior to the filing day of the Schedule 13D (day 0) through the 5 (30) trading days after the filing day of the Schedule 13D. All data are winsorized at the 1% and 99% levels. *** significant at the 0.01 level; ** significant at the 0.05 level; * significant at the 0.10 level.

	Abnormal return [days -30,+5]			Abnormal return [days -30,+30]		
	Hedge Fund Targets	Other Entrepreneurial Activist Targets	<i>t</i> -stat. [Z-stat] for diff. between columns 1 and 2	Hedge Fund Targets	Other Entrepreneurial Activist Targets	<i>t</i> -stat. [Z-stat] for diff. between columns 4 and 5
	(1)	(2)	(3)	(4)	(5)	(6)
Size-Adjusted Returns						
Mean	7.3%***	4.4%***	1.34	10.2%***	5.1%***	1.97**
25%	-1.7	-4.2		0.1	-6.0	
50%	4.9***	3.6***	[0.88]	8.9***	6.7***	[1.49]
75%	13.9	15.9		20.3	17.8	
Market-Adjusted Returns						
Mean	5.7%***	2.2%*	1.53	7.2%***	1.9%*	2.03**
25%	-1.4	-6.1		-2.7	-7.5	
50%	4.6***	3.0**	[1.54]*	5.4***	2.6***	[1.92]**
75%	14.3	11.8		17.7	13.0	
Industry-Adjusted Returns						
Mean	7.0%***	4.4%***	1.04	9.8%***	4.8%***	1.85*
25%	-1.8	-4.2		-0.1	-6.2	
50%	4.8***	3.5***	[0.57]	8.5***	6.5***	[1.79]**
75%	15.1	15.8		20.3	17.4	

Table V
Abnormal Stock Returns by Reason Given in “Purpose Statement” in Initial 13D Filing

This table presents mean [median] size-adjusted stock returns surrounding the initial Schedule 13D filing dates for 134 firms targeted by hedge fund activists and by 139 other entrepreneurial activists. The target's size-adjusted return is the difference between its buy-and-hold return for days [-30,+30] and the return on the matched Fama-French size portfolio as calculated on Eventus. All data are winsorized at the 1% and 99% levels. *** significant at the 0.01 level; ** significant at the 0.05 level ; * significant at the 0.10 level

Reason	Hedge Fund Targets	Other Entrepreneurial Activist Targets
Change Board of Directors' Composition	12.60%*** [9.50%]*** N= 39	3.12% [4.18%] N= 33
Firm Should Pursue Strategic Alternatives	4.30% [2.21%] N= 27	3.19% [3.52%] N= 39
Oppose a Merger	8.37%*** [6.32%]*** N= 16	9.81%** [9.81%]** N= 1
Sell the Firm or Merge with Another Company	6.37%** [8.31%]** N= 13	-2.19% [-2.19%] N= 1
Buy More Stock with Intention of Buying the Firm	13.06%** [10.88%]*** N= 11	15.93%** [9.70%]*** N= 23
Firm Should Buyback its Own Stock	16.88%* [18.12%] N= 4	0.00% [0.00%] N= 0
Get List of Shareholders	5.99% [5.55%] N= 4	5.39% [9.43%] N= 8
Become an Active Investor	2.30% [2.20%] N= 4	12.50%** [11.10%]** N= 10
Expresses Concerns with Corporate Governance	11.88% [7.48%] N= 3	8.98% [7.16%]* N= 6
Replace the CEO	11.19% [20.43%] N= 3	-4.42% [-4.42%] N= 2
Cut CEO's Salary	11.11% [11.11%] N= 1	0.00% [0.00%] N= 0
Firm Should Pay a Cash Dividend	9.83% [9.83%] N= 2	0.00% [0.00%] N= 0
Other Reasons	19.40%* [20.28%]* N= 7	-2.56% [-0.19%] N= 16

Table VI
Outcomes of Hedge Fund and Other Entrepreneurial Activism and the Proxy Solicitation Process

This table reports statistics for the outcomes of hedge fund and other entrepreneurial activism. Panel A summarizes the activists' purposes for the activism as stated in the original Schedule 13D filings' "Purpose of Transaction," and the number and percentage of successes of these activist campaigns. We define a success as the activist having achieved its stated goal within one year of the initial 13D filing date. Panel B summarizes the relation between (proxy fight plus threaten proxy fight)/no proxy fight and the outcomes of the activist campaigns. Panel B also describes the relation between the proxy fight and the success in gaining a seat(s) on the target firm's board. ***significant at the 0.01 level.

Panel A: Stated Purposes in Schedule 13D's "Purpose of Transaction" and Success Rates of Achieving Their Stated Goals

Purpose	Hedge Fund Activists	Number of Successes (%)	Other Entrepreneurial Activists	Number of Successes (%)
Change Board of Directors' Composition	41	30 (73%)	35	25 (71%)
Firm Should Pursue Strategic Alternatives	29	14 (48%)	40	28 (70%)
Oppose a Merger	18	10 (56%)	5	4 (88%)
Sell the Firm or Merge with Another Company	16	9 (56%)	5	2 (40%)
Buy More Stock with Intention of Buying the Firm	12	7 (58%)	24	13 (54%)
Firm Should Buyback its Own Stock	4	4 (100%)	0	0 (N/A)
Get List of Shareholders	4	2 (50%)	8	5 (62%)
Become an Active Investor	4	4 (100%)	10	10 (100%)
Expresses Concerns with Corporate Governance	3	1 (33%)	8	6 (75%)
Replace CEO	3	3 (100%)	2	0 (N/A)
Cut CEO's Salary	2	1 (50%)	0	0 (N/A)
Firm Should Pay a Cash Dividend	2	2 (100%)	0	0 (N/A)
Other Reasons	13	4 (31%)	17	8 (47%)
Total Number	151 (100%)	91 (60%)	154 (100%)	101 (65%)

Panel B: Associations Between Proxy Fights and and Success Rates of Obtaining Their Stated Goals or Gaining at Least One Seat on the Target's Board

	Hedge Fund Activists					Other Entrepreneurial Activists				
	Number	Obtain Stated Goal?		Gain at Least One Seat on Target's Board?		Number	Obtain Stated Goal?		Gain at Least One Seat on Target's Board?	
		Yes	No	Yes	No		Yes	No	Yes	No
Proxy Fight	18 (12%)	13 (72%)	5 (28%)	13 (72%)	5 (28%)	13 (8%)	11 (84%)	2 (16%)	9 (69%)	4 (31%)
Threaten Proxy Fight	42 (28%)	26 (62%)	16 (38%)	24 (57%)	18 (43%)	35 (23%)	21 (60%)	14 (40%)	22 (63%)	13 (37%)
No Proxy Fight	91 (60%)	52 (57%)	39 (43%)	30 (33%)	61 (67%)	106 (69%)	69 (65%)	37 (35%)	34 (32%)	72 (68%)
Total	151 (100%)	91 (60%)	60 (40%)	67 (44%)	84 (56%)	154 (100%)	101(65%)	53 (35%)	65 (40%)	89 (60%)

χ^2 Statistic for Association between [Proxy Fight plus Threaten Proxy Fight]/ No Proxy Fight and the Outcome

0.93

12.06***

0.03

14.31***

Table VII
Abnormal Stock Returns Surrounding the Initial Schedule 13D Filing Dates by Outcomes

This table presents mean [median] size-adjusted stock returns surrounding the initial Schedule 13D filing dates for three different outcomes. The target's size-adjusted return is the difference between its buy-and-hold return for the time period and the return on the matched Fama-French size portfolio as calculated on Eventus. Day 0 is the Schedule 13D filing date. Panel A shows abnormal stock returns by whether the activist achieved its goal within one year of the initial 13D filing, as stated in the purpose statement of the initial Schedule 13D filing. Panel B contains the abnormal stock returns by whether the activist obtains at least one seat on the target's board of directors within one year of the initial filing. Panel C presents the abnormal returns by whether the firm is ultimately merged or taken over within one year of the filing date. All data are winsorized at the 1% and 99% levels. The table presents test statistics for significance of the means [medians] as well as differences between groups. ***significant at the 0.01 level; **significant at the 0.05 level; *significant at the 0.10 level.

Panel A: Activist Does or Does Not Obtain Its Goal Within One Year of Initial Schedule 13D Filing

Period	Activists Obtain Stated Goals (1)	Activists Do Not Obtain Stated Goals (2)	<i>t</i> -stat [Z-stat] for difference between (1) and (2)
Hedge Fund Targets			
[-30 to +5]	10.7%*** [7.1%]***	2.6% [1.5%]**	2.29** [2.95]***
[-30 to +30]	13.2%*** [9.8%]***	5.6%** [6.8%]***	2.03** [2.25]**
[+30 to +1yr]	12.3%*** [5.4%]***	10.0%** [4.2%]**	0.99 [0.81]
Other Entrepreneurial Activist Targets			
[-30 to +5]	6.4%*** [6.3%]***	1.1% [1.4%]	1.98** [1.79]**
[-30 to +30]	7.1%*** [7.2%]***	0.3% [2.4%]	1.99** [1.98]**
[+30 to +1yr]	16.7%*** [8.0%]***	19.9%** [5.4%]**	0.63 [0.21]

Panel B: Activist Does or Does Not Receive at Least One Seat on Target's Board

	Activists Receive Board Seat (1)	Activists Does Not Receive Board Seat (2)	<i>t</i> -stat [Z-stat] for difference between (1) and (2)
Hedge Fund Targets			
[-30 to +5]	11.94%*** [9.33%]***	4.92%*** [2.01%]***	1.91* [2.14]**
[-30 to +30]	14.62%*** [13.18%]***	7.30%*** [6.48%]***	1.89** [1.85]**
[+30 to +1yr]	10.18%** [4.33%]**	13.41%*** [7.36%]***	-0.41 [-0.28]
Other Entrepreneurial Activist Targets			
[-30 to +5]	2.94%** [2.78%]*	5.50%** [4.23%]***	-0.89 [-1.24]
[-30 to +30]	4.60%** [3.29%]**	5.72%*** [8.14%]***	-0.38 [-0.83]
[+30 to +1yr]	22.85%*** [14.60%]***	14.40%*** [3.78%]**	1.12 [1.49]*

Panel C: Firm is Merged or Not Within One Year of Initial 13D Filing

	Firm is Merged or Acquired (1)	Firm is Not Merged or Acquired (2)	<i>t</i> -stat [Z-stat] for difference between (1) and (2)
Hedge Fund Targets			
[-30 to +30]	2.66% [1.48%]	8.63%*** [5.17%]***	-1.51 [-0.99]
[-30 to +30]	7.10%* 6.74%**	10.95%*** [8.94%]***	-1.01 [-0.80]
[+30 to +1yr]	14.72%*** [7.05%]***	10.34%*** [6.56%]**	1.09 [0.59]
Other Entrepreneurial Activist Targets			
[-30 +5]	17.39%*** [12.80%]***	3.25%*** [2.89%]**	2.59*** [2.42]***
[-30 to +30]	12.24% [14.06%]	3.90%** [5.55%]***	1.81* [1.80]**
[+30 to +1yr]	21.50%*** [8.98%]***	14.30%*** [4.95%]**	2.42** [1.70]**

Table VIII
One-Year Changes in Target Firm Performance After Activism

This table summarizes changes (Δ) in firm characteristics between the fiscal year following and prior to the filing of the schedule 13D for firms targeted by hedge funds (column 1) and other entrepreneurial activists (column 3), as well as each group's control sample (based on industry, size, and book-to-market; columns 2 and 4). For each variable the mean [median] is reported. All data are winsorized at the 1% and 99% levels. The abnormal stock return is from 30 trading days after the 13D filing date to one year after day 0, where day 0 is the SEC 13D filing date. The accounting data are during (for flows) or (for balances) on the end of the year previous to the filing of the initial Schedule 13D. Columns 1 and 3 also contain significance levels for tests for differences between the means [medians] between sample and control firms. Column 5 shows the t -statistic (Z -statistic) testing for differences between hedge fund and other entrepreneurial activists' means [medians]. See Appendix A for variable definitions. *** significant at the 0.01 level; ** significant at the 0.05 level ; * significant at the 0.10 level.

	Hedge Fund Activist Target Firms	Hedge Fund Control Sample	Other Entrepren eural Activist Target Firms	Other Entrepren eural Activist Control Sample	t -statistic [Z-statistic] for diff. between columns (1) and (3)
	(1)	(2)	(3)	(4)	(5)
Profitability					
Abnormal Stock Return	11.35%*** [4.90%]***	3.17% [2.38%]	17.82%*** [7.09%]***	2.87% [2.11%]	1.97** [1.85]**
Δ EBITDA/Assets	-0.024* [-0.008]**	0.009 [0.002]	-0.008 [-0.002]*	-0.013 [-0.001]	-1.36 [-0.19]
Δ Industry-Adjusted	-0.031** [-0.015]**	0.003 [-0.003]	-0.015 [-0.002]*	-0.020 [-0.001]	-1.51 [-0.23]
Δ CFO/Assets	-0.001 [-0.001]	0.005 [-0.000]	-0.020 -0.008]**	-0.004 [0.000]	0.87 [1.00]
Δ Industry-Adjusted	-0.013 [-0.007]*	-0.003 [-0.001]	-0.022 [-0.011]**	-0.005 [-0.000]	0.69 [-0.43]
Cash Balances					
Δ Cash/Assets	-0.014 [-0.000]	-0.003 [0.000]	-0.003* [-0.001]	0.018 [0.002]	-0.76 [-0.80]
Δ Industry-Adjusted	-0.096*** [-0.000]	-0.049 [0.003]	-0.005 [0.001]	0.016 [0.001]	0.93 [-0.90]
Δ (Short-term Investments)/Assets	0.004 [-0.003]*	0.003 [0.000]	-0.005** [-0.000]	0.009 [0.001]	-1.48 [-0.56]
Δ Industry-Adjusted	-0.103*** [-0.002]	-0.013 [-0.001]	-0.009** [-0.003]	-0.032 [0.003]	-1.48 [-0.24]

$\Delta(\text{Cash}+\text{Short-term Investments})/\text{Assets}$	-0.011 [-0.003]	-0.000 [0.000]	-0.007** [-0.001]	0.023 [0.002]	-0.51 [-1.29]
$\Delta\text{Industry-Adjusted}$	-0.199*** [-0.001]	-0.045 [0.002]	-0.014*** [-0.003]	-0.019 [0.001]	-0.48 [-1.37]
<hr/>					
Discretionary Spending					
$\Delta\text{Capital Expenditures}/\text{Assets}$	0.004 [0.000]	-0.002 [0.000]	-0.004 [0.000]	-0.001 [0.000]	1.71* [1.13]
$\Delta\text{Industry-Adjusted}$	0.003 [0.000]	-0.003 [0.000]	-0.004 [0.000]	-0.001 [0.000]	1.78* [1.70]**
$\Delta\text{R\&D Expenditures}/\text{Assets}$	0.003 [0.001]	0.001 [0.000]	-0.008*** [-0.001]	0.005 [0.000]	2.35** [0.77]
$\Delta\text{Industry-Adjusted}$	0.003 [0.001]	0.002 [0.000]	-0.006*** [-0.000]	0.007 [0.001]	2.29** [1.27]
$\Delta\text{Dividends}/\text{Share}$	0.112** [0.099]	0.010 [0.001]	0.041 [0.003]	0.011 [0.000]	1.57 [1.55]
$\Delta\text{Industry-Adjusted}$	0.104** [0.005]*	-0.002 [-0.010]	0.035 [0.001]	0.008 [-0.000]	1.48 [0.50]
<hr/>					
Debt					
$\Delta\text{Total Debt}/\text{Assets}$	0.016* [0.001]	-0.001 [0.000]	0.001 [-0.000]	0.008 [-0.000]	0.49 [0.26]
$\Delta\text{Industry-Adjusted}$	0.020* [0.004]*	0.001 [-0.000]	0.009 [0.007]	0.017 [0.012]	0.34 [0.19]
$\Delta\text{Long-term Debt}/\text{Assets}$	0.024*** [0.046]***	-0.005 [0.000]	0.005 [0.000]	0.013 [-0.001]	1.32 [1.19]
$\Delta\text{Industry-Adjusted}$	0.026*** [0.006]***	-0.004 [-0.006]	0.008 [0.002]	0.016 [0.002]	1.18 [1.42]
$\Delta\text{Short-term Debt}/\text{Assets}$	-0.007** [0.000]	0.004 [0.000]	-0.004 [-0.001]	-0.008 [0.000]	-0.33 [-0.41]
$\Delta\text{Industry-Adjusted}$	-0.006** [0.000]	0.005 [0.000]	-0.001 [0.000]	-0.007 [0.001]	-0.74 [-0.48]
<hr/>					
Firm Size					
$\Delta\text{Ln}(\text{Assets})$	0.007 [0.026]	0.048 [0.041]	0.014 [0.016]	0.003 [0.032]	0.15 [0.11]
$\Delta\text{Industry-Adjusted}$	-0.135	-0.090	-0.091	-0.096	-1.39

	$[-0.106]^*$	$[-0.088]$	$[-0.072]$	$[-0.076]$	$[-1.33]$
Number of Firms	132	132	129	129	132/129