

Does Experience Matter for Hedge Fund Managers? Effects of Industry Expertise on Hedge Fund Activism

Ivan E. Brick, Yuzi Chen, Jun-Koo Kang, and Jin-Mo Kim*

This Version: November 2018

Preliminary Draft. Please do not cite or circulate.

ABSTRACT

In this paper, we examine whether hedge fund managers' experience affects their activism. We find that hedge fund managers are more likely to choose a target that operates in an industry in which they have previous executive and/or outside director experience. Compared to target firms in which hedge fund managers do not have target industry experience, those in which hedge fund managers have target industry experience realize higher abnormal announcement returns and these managers are more likely to serve as a director on the target's board. We further find a significant improvement in target post-acquisition operating performance when hedge fund managers have executive experience in the target industry. These findings suggest that a hedge fund manager's industry expertise is an important source of value gains in hedge fund activism.

JEL Classification: G14, G23, G30, G34

Keywords: Hedge fund activism, Manager, Industry experience, Merger and acquisition, Target, Independent director, Announcement return

* Brick and Kim are from the Rutgers Business School, Rutgers University, NJ, U.S.A. (E-mail: ibrick@business.rutgers.edu and kimjm@business.rutgers.edu, respectively), and Chen and Kang are from the Nanyang Business School, Nanyang Technological University, Singapore (chen0946@e.ntu.edu.sg and jkkang@ntu.edu.sg, respectively). We are grateful for comments from Feng Gao, and seminar participants at Temple University and Nanyang Technological University. We thank especially Alon Brav, Wei Jiang, and Hyunseob Kim for sharing their data on 13D filings by hedge funds.

Previous literature shows that human capital matters for corporate policies and corporate performance. For example, CEO-specific heterogeneity such as education, personality traits, and work experience affect firm policies (Malmendier and Tate (2005), Kaplan, Klebanov, and Sorensen (2012), Graham, Harvey, and Puri (2013, 2014)). There is also a growing body of research on the impact of human capital on various aspects of money management industry. Gadiesh and MacArthur (2008) and Kaplan and Strömberg (2009) argue that private equity fund managers can use their industry knowledge to identify attractive investments and to develop and implement value-creation plans for their portfolio companies. Chevalier and Ellison (1999) show that mutual fund managers graduated from undergraduate institutions with a higher average SAT score earn higher returns and Gottesman and Morey (2006) find that the average GMAT score of the manager's MBA program is positively related to their fund performance. Li, Zhao, and Zhang (2008) further document that hedge fund managers from higher-SAT undergraduate institutions experience higher returns and more inflows for their fund, and take less risk in their investments.

In this paper, we extend the previous literature on the importance of human capital in fund performance by exploring its role, particularly the role of fund managers' industry experience, in hedge fund activism. Fund managers' human capital can be particularly important to hedge funds. The high fee structure of hedge funds incentivizes them to attract good talents that help produce high fund profits.¹ In addition, unlike other institutional investors (e.g., banks and mutual funds) that tend to use an established investment process and a team-oriented approach, hedge funds tend to have a lower number of personnel in managing the funds, suggesting that the characteristics and abilities of key hedge fund managers have significant impact on fund performance. In this context,

¹ Hedge fund managers typically earn 20% of fund profits as performance fees.

Grossman (2005) characterizes investing in a hedge fund as investing in a manager, emphasizing the importance of hedge fund managers' human capital in fund success. To the extent that more experienced workers earn more (e.g., Becker (1964), Mincer (1974), Philippon and Reshef (2012)), this incentivizes hedge fund managers to create higher fund profits by identifying undervalued targets and providing their portfolio firms with superior monitoring/advising.² Industry expertise that hedge fund managers acquire through their previous managerial operating experience such as an executive³ or industry knowledge that they acquire by serving as an outside director or a security analyst⁴ can help improve fund profits by allowing them to use their industry-specific knowledge and expertise in selecting undervalued targets and influencing target management in a more effective way. For example, prior industry experience may provide fund managers with important skills to handle business problems and enable them to deal with managerial challenges unique to the industry (Bottazzi, Da Rin, and Hellmann (2008)). Long-standing work experience in the industry also helps build the network and know-how required to identify and respond effectively to promising investment opportunities (Gompers, Kovner, Lerner and Scharfstein (2008)). Moreover, the industry experience of hedge fund managers can be particularly important for efficient monitoring since special organization characteristics that are unique to hedge funds.

Using biographical information of the hedge fund managers obtained from TASS Hedge Fund Database and website sources, we classify acquisition targets into two groups, those acquired

² Klein and Zur (2009) find that hedge funds improve target performance through gaining board representation within one year after 13D filing. Brav et al. (2008) and Clifford (2008) attribute post-acquisition target outperformance to stonger monitoring incentive of hedge funds that have unique organization characteristics, such as performance-based compensation, lack of regulations inusing of leverage and derivatives, longer-lockup period, and less strictions on portfolio concentration.

³ Drucker (1967) defines firm executives as individual with "knowledge works, managers, or individual professionals who are expected by virtue of their position or their knowledge to make decisions in the normal course of their work that have impact on the performance and results of the whole."

⁴ Although the hedge fund managers do not have previous executive experience in the target industry, prior non-executive experience can also enable them to better interpret the factors that affect the operations, financial conditions and industries of their targets (Bradley, Gokkaya, and Liu (2017)).

by hedge funds whose managers have extensive prior industry experience in the target's industry (*Funds with Industry Experience*) and targets acquired by hedge funds whose managers do not have such industry expertise (*Funds with No Experience*). We further divide hedge fund managers with industry experience into three subgroups: hedge fund managers with previous experience as a former executive of a firm that operates in the same industry as the portfolio firms, hedge fund managers with previous experience as an analyst specialized in the portfolio firm's industry, and hedge fund managers with previous experience as an outside director in a firm that operates in the same industry as the portfolio firms.

We find that while the mean and median expected probabilities of firms being acquired by a hedge fund is 4.08% and 3.79%, respectively, the actual fraction of firms purchased by a hedge fund whose manager has experience in target industry experience is 23.2%. This finding suggests that hedge funds exhibit a significant bias toward acquiring firms in which they have industry expertise. Our likelihood analysis further shows that hedge funds are more likely to choose a target operating in an industry in which they have previous executive and outside director experience. Hedge fund managers who have prior experience in the target industry are also more likely to serve as a director on the target's board than are hedge fund managers with no such experience. These findings suggest that the industry expertise of hedge fund managers has an important effect on their target selection and their incentives to engage in governance activities in target firms.

In addition, we find that compared to targets of *Funds with No Experience*, those of *Funds with Industry Experience* realize higher abnormal announcement returns, higher post-acquisition operating performance, a greater reduction in CEO compensation, and a larger decrease in target operating expenses, suggesting that hedge fund managers' operational industry expertise helps improve target value and performance. To examine whether the superior performance of targets of

Funds with Industry Experience is due to managerial experience of hedge fund managers as executives in target industry or other experience gained as outside directors and analysts, we divide the *Funds with Industry Experience* targets into two groups, namely, *Funds with Executive Experience* and *Funds with Director/Analyst Experience*. We find that improvement in post-acquisition operating performance is mainly driven by *Funds with Executive Experience*. To the extent that hedge fund managers who acquire the industry expertise through their executive experience have better operational and managerial knowledge in the target industry than those who obtain the industry expertise through non-executive experience, these findings suggest that the source of value gains in hedge funds' acquisitions is related to the improvement of operational efficiencies in target firms.

By investigating the effect of hedge fund managers' past experience on hedge fund activism, we extend the existing literature in several important ways. First, to the best of our knowledge, our study is the first to examine the role of human capital in hedge fund activism. We show that *Funds with Industry Experience* are more likely to monitor target management by actively serving as a board member and their targets realize higher abnormal announcement returns and better post-acquisition operating performance. Therefore, our results suggest that human capital that hedge fund managers accumulate through their previous work experience foster monitoring activity and improve firm value and operating performance.

Second, our paper contributes to debate about the source of shareholder gains from hedge fund activism. Previous literature finds that targets of hedge fund activism enjoy significant abnormal returns around the dates of Schedule 13D filings. However, the literature shows mixed evidence on the source of these gains. Klein and Zur (2011) find that most of the gains are derived from the target's bondholders since hedge fund activists pressure target management to disgorge cash and

increase leverage. Greenwood and Schor (2009) find that the source of these gains are due to an increase in future takeover likelihood of targets. However, Brav, et al. (2008), Brav, Jiang, and Kim (2015), and Bebchuk, Brav, and Jiang (2015) document that the value increase is largely driven by an increase in target production efficiencies. Unlike these studies, we show that the industry expertise of hedge fund managers, particularly executive experience, constitutes an important source of value creation in hedge fund activism, suggesting that human capital that hedge fund managers bring to their target firms is a main channel through which hedge funds add value to the target firms.

Finally, our study contributes to the ongoing debate about whether hedge fund activism increases a firm's long-term value. The long-term effects of hedge fund activism (e.g., changes in operating performance following 13D filings) are controversial. For example, while Klein and Zur (2009) and Clifford (2008) find no improvement in mean profits and cash flow following 13D filings, Bebchuk, Brav, and Jiang (2015) find improvements in ROA and Tobin's q following the intervention of the activists, suggesting that hedge fund activism is associated with increased long-term firm value. In their recent paper, Cremers et al. (2015) show that after correcting for selection bias, there is no improvement in Tobin's q following the intervention of the activists. We show that targets outperform their industry benchmarks when hedge fund managers have previous executive experience in the target industry.

This paper is organized as follows. In Section I, we develop our hypotheses and review previous studies. In Section II, we describe our data and methodology. The empirical results are reported in Section III. Section IV concludes the paper.

I. Main Hypothesis and Literature Review

Previous studies show that CEO characteristics, such as such as education, personal characteristics, and work experience, affect corporate policies and performance (Malmendier and Tate (2005), Kaplan, Klebanov, and Sorensen (2012), Graham, Harvey, and Puri (2013, 2014)). For example, recent studies show that CEOs' previous professional experience affects corporate policies (Benmelech and Frydman (2015), Dittmar and Duchin (2016), and Schoar and Zuo (2016)) and that professional money manager characteristics affect their portfolio decisions and investment performance (Chevalier and Ellison (1999), Gottesman and Morey (2006), Li, Zhao, and Zhang (2008)). In particular, Gadiesh and MacArthur (2008) and Kaplan and Strömberg (2009) show that money managers use their industry expertise to develop and implement value-creation plans for their targets firms. Industry expertise can be particularly important for hedge fund managers. Unlike mutual funds and pension funds that are open to the public and subject to various federal securities laws, hedge funds cater to more sophisticated investors and are exempt from regulations, which allows them to concentrate their investments in fewer industries than other type of funds.⁵ For example, Clifford (2007) documents a high level of industry specialization in the hedge fund industry: about 21% of the hedge funds focus their investments in only one industry. This finding suggests that industry expertise of hedge fund managers play an important role in their investment decisions and performance.

Industry expertise that hedge fund managers acquire from their previous work experience may allow them to perform better in improving target value and operating performance. First, industry-expert hedge fund managers are better able to identify undervalued targets because they

⁵ Cohen, Polk, and Silli (2010) argue that the "prudent man" rule makes mutual funds more diversified because they are more likely to face investor litigation when they manage more concentrated funds and perform poorly.

have more value-relevant information in the industries in which the targets operate. Several papers examine the effects of mutual fund managers' prior work experience on their portfolio performance (Chevalier and Ellison (1999), Kacperczyk, Sialm, and Zheng (2005, 2007), Ding and Wermers (2009), Greenwood and Nagel (2009), Kempf, Manconi, Spalt (2013)). In particular, Kacperczyk, Sialm, and Zheng (2005, 2007) find a positive relation between industry concentration in mutual fund holdings and subsequent fund returns, possibly due to their informational advantages in such industries. In addition, Cici et al. (2014) show that mutual funds exhibit superior stock picking ability in industries in which they had prior work experience relative to other industries in which they had no such experience. These findings suggest that information advantages in industries in which hedge fund managers have prior work experience help them select undervalued targets in such industries. Industry experience can be particularly important for hedge funds because they tend to concentrate their investments in a small number of industries and manage their portfolio with sophistication and entrepreneurship. Unlike mutual fund managers who pool the investments of small investors, hold diversified portfolio, and invest the money with established process and teamwork (Grossman (2005), Li, Zhang and Zhao (2011)), hedge fund managers cater to a few wealthy individuals who agree to lock-up their investment for long time, maintain concentrated holdings, and try to make large risk-adjusted returns. Hence, talents of picking undervalued targets matter more for hedge fund managers than for mutual fund managers. Second, compared to managers of other funds, hedge fund managers who have industry-specific knowledge and expertise through their past working experience may be better able to influence the operational decisions of management. Unlike mutual funds, hedge funds are not subject to strict regulations on portfolio concentration and investment strategies. Hedge fund managers also have the flexibility to use leverage and derivative to increase effective ownership stakes in target and hence are more

incentivized to monitor and influence target firm operation (Clifford (2008)). While mutual fund managers are compensated in the form of fix management fee, hedge fund managers charge incentive fee. Moreover, hedge fund managers tie their wealth with fund performance and risk their wealth by investing their own money into the fund and by recouping loss before receiving incentive fee, as required by the pervasive high water mark provision. Finally, unlike mutual funds that provide finance service to portfolio firms, hedge funds are not subject to the conflict of interests. As a result, hedge funds are more likely push target management and boards to change policies through hostile tactics (Brav et al. (2008)). Grossman (2005) argues that hedge funds are a vehicle for acquiring the specialized talents that their managers possess to capture profits from a unique operational strategy. Moreover, if industry expertise that hedge fund managers acquire over their career can equip them to better access and/or process information about an industry, it is likely to help them engage in more effective monitoring/advising activities by exploiting their comparative information advantage over competitors. For example, industry-expert hedge fund managers may be more effective than non-expert hedge fund managers in their monitoring/advising activities since they are better able to detect problems in targets and deploy target assets in a more productive way. To the extent that hedge fund managers' industry expertise facilitates more effective monitoring/advising, and this in turn translates into better target performance, their targets should experience both higher abnormal announcement returns and better post-acquisition operating performance than other types of targets.

Overall, these arguments suggest that informational advantages arising from past industry experience help hedge fund managers identify undervalued assets and better monitor targets by influencing target mangers to make strategic and operational changes that lead to greater operational efficiencies. Thus, we expect that hedge fund managers are more likely to choose

targets operating in industries in which they have experience to exploit their expertise. We also expect that hedge fund managers with industry experience perform a more effective monitoring role and as a result, they are more likely to seek board representation in target boards. Finally, we expect informational advantages of hedge fund managers with industry experience are associated with higher acquisition announcement returns and better post-acquisition operating performance.

II. Data and Descriptive Statistics

A. Data

Our initial sample consists of 2,684 activist hedge fund acquisitions from 1994 to 2011 used in Brav, Jiang, and Kim (2015), which is an extension of the dataset of Brav et al. (2008). Using a completed sample of Schedule 13D filings, Brav, Jiang, and Kim (2015) identify activist hedge funds based on fund names and “Identity and Background” information on 13D filings. They further use web searches and phone calls to filter their samples.⁶ Since our focus in this paper is to examine how hedge fund managers’ non-financial industry experience affects their activism outcomes, we delete acquisitions by hedge funds whose managers have previous working experience in financial industries (industries with Fama-French 48 industry codes 44-47) from the sample. This restriction reduces our sample to 2,268 acquisition events. We also delete from the sample acquisitions by hedge funds whose managers’ biographical information is not available. This restriction further reduces our sample to 1,940 acquisition events. Finally, we delete acquisitions by hedge funds whose targets’ financial and stock return data are not available in

⁶ To obtain activist hedge fund acquisitions, Brav et al (2008) begin with the list of all Schedule 13D filings and exclude non-hedge funds, non-active hedge funds, filers involved in a bankruptcy reorganization or in financing of a distressed firm, files that engage in a merger and acquisition for their risk arbitrage activity, filers whose targets are closed-end fund or other non-regular corporations. This dataset is also used in Bebchuk et al. (2015) and Brav et al. (2015). For a more detailed discussion of data construction, see Brav et al. (2008).

Compustat and CRSP, respectively, resulting in a final sample of 1,618 acquisition events, involving 1,258 unique target firms and 353 unique activist hedge funds.⁷

To identify industries in which hedge fund managers have prior industry expertise, we carefully decipher managers' biographies and gather information on their prior experience. Specifically, we examine the biographies of the hedge fund manager using TASS Hedge Fund Database, the homepage of the hedge fund firm, Bloomberg, LinkedIn, and Google. We classify acquisitions into two groups according to whether hedge fund managers have prior work experience in the target industry. We define industry using the Fama-French 48 industry classification. *Funds with Industry Experience* is hedge funds whose managers have extensive prior industry experience in the target's industry (251 acquisitions) and *Funds with No Experience* is hedge funds whose managers do not have specific industry expertise in the target industry (1,367 acquisitions). We then further divide *Funds with Industry Experience* into two different subgroups according to type of hedge fund managers' industry experience. The first type of industry experience is a hedge fund manager's experience as an executive in the target industry (*Funds with Executive Experience*). For example, Courage Capital Management acquired more than 5% of outstanding shares of Shoneys Inc., a restaurant chain in July 2000. According to his bio, Richard Patton, the manager of Courage Capital Management, was a founder and CEO of another restaurant group prior to setting up Courage Capital Management. There are 108 acquisitions made by this type of fund managers. The second type of industry experience is a hedge fund manager's experience as an outside director in the target industry or as a security analyst specializing in the target industry (*Funds with Director/Analyst Experience*).⁸ We find that hedge fund managers with

⁷ In comparison, Clifford (2008) uses a sample of 778 activist hedge fund acquisitions from 1998 to 2005 and Brav et al. (2008) use a sample of 882 unique firms targeted by activist hedge funds from 2001 to 2006.

⁸ Since there are only five hedge fund managers that acquire industry expertise as a security analyst, we group this experience and experience as an outside director as one group.

outside director experience and those with analyst experience, respectively make 138 and 5 acquisitions.

Table 1 shows the sample distribution by year and hedge fund manager experience. We find that hedge fund activism is the highest during the 2005-2008 period (662 acquisition events (41% of the sample)) and the lowest in 1994 and 1995 (34 acquisition events (2% of the sample)). The fraction of *Funds with Industry Experience* accounts for 16% of the sample and their acquisitions also peak during the 2005-2008 period. In untabulated tests, we find that the industry in which hedge fund activism occurs the most frequently is Business Services, Retail, and Drugs (524 acquisition events).

B. Descriptive Statistics

Table 2 compares target and hedge fund manager characteristics between *Funds with Industry Experience* and *Funds with No Experience*. All continuous variables are winsorized at the 1% level in both tails to mitigate the effects of potential outliers. Panel A provides summary statistics for target firms. We measure target characteristics at the fiscal year-end that comes immediately before the announcement of the acquisition of block shares. Appendix A provides detailed variable definitions. We find that targets of *Funds with Industry Experience* are more highly valued (i.e., a lower book-to-market ratio (*BM*)) and have poorer performance (i.e., lower return on assets (*ROA*)) than those of *Funds with No Experience*.⁹ Compared to targets of *Funds with No Experience*, those of *Funds with Industry Experience* also have a higher ratio of cash to total assets (*TOTcash*), lower leverage (*TOTleverage*), lower dividend yield (*Divyld*), and higher

⁹ Brav et al. (2008a) argue that activist hedge funds resemble value investors, as they tend to target the firms that perform poorly prior to their interventions.

investments (i.e., a higher ratio of capital expenditures to total assets (*Capex*), a higher ratio of research and development expenses to total assets (*R&D*), and a higher ratio of total investment expense (*TOTexpense*)), suggesting that they have more severe free cash flow problems (Jensen (1986)). CEO total compensation (*Tdc1*), CEO option delta (*Optiondelta*), and CEO vega (*Vega*) are similar between targets of *Funds with Industry Experience* and those of *Funds with No Experience*. In sum, these results suggest that hedge fund managers with target industry expertise do not select the targets that are likely to be undervalued but tend to select the targets with high agency problems and operational inefficiencies.

In Panel B of Table 2, we show hedge fund managers' educational background. We find that hedge fund managers of *Funds with Industry Experience* targets are almost three times more likely to major in science fields than those of *Funds with No Experience* targets (14.3% compared to 5.1%). We also find hedge fund managers of *Funds with Industry Experience* are more likely to have a finance and economics educational background (28.7%) than those of *Funds with No Experience* (21.9%).

C. Hedge Fund Profile Differences

Table 3 compares biographical background of hedge fund managers between *Funds with Industry Experience* and *Funds with No Experience* acquisitions. We focus on three types of employment background: *Directorships* (the number of outside directorships that a hedge fund manager held in all firms before she acquired a target), *Non-top Executives* (the number of firms the hedge fund manager served as a non-top executive such as Vice-President or CFO before she acquired a target), and *Top Executives* (the number of firms that the hedge fund manager served as a CEO or President before she acquired a target). We find that the mean *Directorships* for *Funds*

with Industry Experience is 4.33, while the corresponding number for *Funds with No Experience* is only 1.58. The difference is significant at the 1% level. Similarly, the mean *Non-top Executives (Top Executives)* for *Funds with Industry Experience* is 0.48 (1.32), which is significantly higher than that for *Funds with No Experience* (0.30 (0.77)). These results suggest that managers of *Funds with Industry Experience* tend to have more director and executive experience compared to those of *Funds with No Experience*.

In Panel B of Table 3, we use only a subsample of *Funds with Industry Experience* targets and compare the employment background of hedge fund managers between *Funds with Executive Experience* and *Funds with Director/Analyst Experience*. As expected, the average *Directorships* for *Funds with Executive Experience* is significantly smaller than that for *Funds with Director/Analyst Experience* (3.30 compared to 5.11), while the average *Non-top Executives (Top Executives)* for *Funds with Executive Experience* is higher than that for *Funds with Director/Analyst Experience* (0.54 (1.61) compared to 0.43 (1.11)). These results indicate that while hedge fund managers in *Funds with Executive Experience* generally have more previous executive experience in other non-financial firms, those in *Funds with Director/Analyst Experience* have more previous experience in other non-financial firms as a board member.

III. Empirical Results

A. Extent of Industry Expertise Bias and Holding Periods of Block Ownership

Our hypothesis predicts that hedge fund managers are more likely to select targets operating in industries in which they have experience. To test this prediction, we first estimate the expected probability that a target is randomly acquired by a hedge fund assuming that all public firms could be a potential target of hedge funds. Hence, the fraction of all public firms in a certain industry

relative to all public firms in the U.S. will be the target's expected probability of being acquired. We use the universe of public firms from COMPUSTAT. Panel A of Table 4 shows the results. *Funds with Industry Experience* are involved in 1,076 acquisitions, of which 251 targets operate in industries identical to the managers' previous non-financial industrial experience. Therefore, 23.2% of all acquisitions made by this group involve the targets in which their hedge fund managers have prior industry experience. In comparison, the mean and median expected probabilities of being randomly acquired are 4.08% and 3.79%, respectively. Thus, hedge funds are almost six times more likely to choose targets in industry in which they have industry expertise. These findings suggest that hedge funds exhibit a significant bias toward firms where they have industry expertise, supporting our first hypothesis.

In Panel B of Table 4, we reports summary statistics for hedge funds' holding periods of block ownership in target firms. It shows that while 47% of *Funds with Industry Experience* hold block shares for longer than two years, the corresponding number for *Funds with No Industry Experience* is only 38%. Furthermore, 34% of *Funds with Industry Experience* hold block ownership less than one year, in comparison with 41% of *Funds with No Industry Experience*. These differences in holding periods between the two groups are statistically significant at least at the 5% level, indicating that hedge funds with industry experience tend to hold block shares for a longer period of time than those with no industry experience. If long-term institutional investors actively monitor management while short-term institutional investors behave like passive investors (Bushee (1988)), our results suggest that hedge funds with industry expertise are more likely to monitor target management.¹⁰

¹⁰ Our results are also consistent with those of Brav, et al. (2008), who argue that hedge funds' investment horizon is not as short as suggested by critics of hedge fund activism. Based on the analysis of portfolio turnover rates of hedge funds in their sample they show that hedge funds' holding periods is about 20 months.

B. Determinants of Target Selection

To provide additional insight into the selectivity process of hedge fund managers as a function of their previous industry experience, we perform logistic regressions in which the dependent variable is an indicator that takes the value of one if the acquisition is made by *Funds with Industry Experience*. The results are reported in Table 5. In column (1), we include target characteristics and year and industry fixed effects. We include as target characteristics the logarithm of the book value of total assets ($\text{Log}(AT)$), $TOTleverage$ (total debt divided by total assets), BM (book value of equity divided by the market value of equity), $Divyld$ (common dividend plus preferred dividend divided by the sum of market value of common stocks and book value of preferred stocks), and $Capex$ (capital expenditures divided by book value of assets of at the end of prior fiscal year). All these variables are measured at the fiscal-year end immediately before the acquisition. Following Brav et al. (2018), all standard errors are clustered by firm. We find that hedge funds whose managers have the same industry experience as the targets are more likely to acquire larger targets, poorly performing targets, and targets that pay lower dividends.

In column (2), we add hedge fund managers' characteristics as additional explanatory variables including Age (age of a hedge fund manager at the time of acquisition), $Prox$ (indicator that takes the value of one if the target is headquartered in the same state as the hedge fund firm, and zero otherwise), $Ivy\ league\ alumnus$ (indicator that takes the value of one if the hedge fund managers is an alumnus of an Ivy league university, and zero otherwise), and indicators for the type of degree earned by the hedge fund manager such as an MBA degree (MBA), an undergraduate degree in either finance or economics ($Fin/Econ$), an undergraduate degree in science fields ($Science$), and a law degree (Law). We control for $Directorships$ (the number of a hedge fund manager's previous experience as an outside director in firms operating in industries other than

target industry) and *Executives* (the number of a hedge fund manager's previous experience as an executive in firms operating in industries other than target industry) to make sure that our results are not driven by fund managers' experience in industries other than target industry. We find that hedge fund managers of *Funds with Industry Experience* are more likely to have an MBA degree, have an undergraduate science degree, and currently work for hedge fund firms that are located in the same states as those of the target headquarters. These results, together with those in column (1), suggest that *Funds with Industry Experience* tend to choose the targets that need more monitoring and advising services. Finally, we find that the coefficient on *BM* is negative and significant at the 5% level, indicating that *Funds with Industry Experience* are less likely choose the targets that tend to be undervalued.

C. Likelihood of Board Representation

To further examine whether industry-expert acquirers are more likely to select targets that need better monitoring, in this subsection, we examine whether these acquirers are more likely to seek board representation in their targets compared to non-expert acquirers. Table 6 summarizes the frequency of board representation in targets by industry expertise of hedge fund managers. Since hedge fund managers either seek board membership in targets by themselves or send their representatives, the table distinguishes these different board memberships by "Representation by fund managers" and "Representation by others." We find that *Funds with Industry Experience* are significantly more likely to seek representation on the target's board (27.9%) than *Funds with No Experience* (14.9%). Breaking down board memberships into *Representation by fund managers* and *Representation by others*, we find that the difference in board memberships between the two groups is primarily driven by stronger incentive of hedge fund managers with target industry

experience seeking for board directorship themselves. *Representation by fund managers* in *Funds with Industry Experience* is 20.3%, while *Representation by fund managers* in *Funds with No Experience* is only 9.0%. In contrast, *Representation by others* is statistically indistinguishable between the two groups (11.6% compared to 8.1%). These results support our hypothesis that fund managers with target industry experience are more likely to engage in monitoring activities.

Table 7 reports the results of logit regressions in which the dependent variable is an indicator that takes the value of one if the hedge fund manager (her representative) serves on the target board, and zero otherwise. Columns (1) and (2) show the results for the likelihood that the hedge fund manager serves on the board, columns (3) and (4) show the results for the likelihood that the hedge fund manager's representative serves on the board, and columns (5) and (6) show the results for the likelihood that either the hedge fund manager or her representative serves on the board. The main independent variable of interest is an indicator for *Funds with Industry Experience*. The control variables are the same as those used in Table 5. We find the coefficient on *Funds with Industry Experience* is positive and significant in all regressions except for column (4), suggesting that the likelihood of board representation in target firms by hedge fund managers or their representatives is positively related to hedge fund managers' previous industry experience in the target's industry. The coefficient estimate of 0.079 on *Funds with Industry Experience* in column (6) indicates that all else being equal, the probability of serving as the independent director on target boards by hedge fund managers or their representatives higher for *Funds with Industry Experience* than for *Funds with No Experience* by 7.9 percent. Given that an unconditional probability of serving as the independent director on target boards by hedge fund managers or their representatives for the full sample is 16.9 percent, this number is economically large and

significant. Overall, the results in Tables 5 and 6 support our hypothesis that hedge fund managers' human capital affects their activism in targets.

D. Effects of Fund Managers' Industry Experience on Target Announcement Returns and Operating Performance

To examine whether fund managers' industry experience in targets affects target value and performance, in this subsection we compare target cumulative abnormal returns (CARs) around hedge funds' Schedule 13D filings and post-acquisition target operating performance between *Funds with Industry Experience* and *Funds with No Experience*.

D.1 Target Announcement Returns

Table 8 compares target CARs around 13D filing dates between *Funds with Industry Experience* and *Funds with No Experience*. Abnormal returns are calculated using the market model. The market model parameters are estimated using 200 trading days of return data ending 31 days before the hedge fund's Schedule 13D filing date. We use the CRSP value-weighted stock return as the market portfolio return. Since the William Act requires investors to file Schedule 13D within ten days of the acquisition of more than 5% of a firm's equity (Mikkelson and Ruback (1985)) and it is possible that the Schedule 13D filing occurs after actual purchases of shares are made, there is a possibility that information about hedge funds' share acquisitions may be leaked. Thus, following the previous literature (Brav et al. (2008)), we report the CARs for longer event windows, including CAR (-10, 10), CAR (-20, 20), and CAR (-30, 30). We find that the average CARs (-10, 10), CARs (-20, 20), and CARs (-30,30) for targets of *Funds with Industry Experience* are all significantly greater than those for targets of *Funds with No Experience*, suggesting that

industry-expert acquirers have different abilities regarding their activism than non-expert acquirers, which translates into different valuation effects in the stock market. The results support our hypothesis that fund managers' human capital is an important source of value gain in hedge fund activism.

D.2 Cross-sectional Variation in Target Announcement Returns

To better understand the cross-sectional variation in target announcement returns, we perform ordinary least squares (OLS) regressions in which the dependent variables are CAR (-20, 20) and CAR (-30, 30), respectively. The results are summarized in Table 9. In the first two regressions, we regress CARs (-30, 30) on *Funds with Industry Experience* indicator and control variables. We find that the coefficient on *Funds with Industry Experience* is positive and significant at the 1% level in both regressions. The coefficient estimate of 0.084 for *Funds with Industry Experience* in column (2) suggests that all else constant, abnormal returns for the targets of industry-expert acquirers are higher than those for non-expertise acquirers by 8.4 percent. Thus, the effect of industry expertise on target returns is both statistically and economically significant. In the next two regressions, we use the CAR (-20, 20) as the dependent variable and find that our results do not change.

Turning to control variables, we find that the coefficient on *Prox* is positive and significant. This finding is consistent with Kang and Kim (2008), who show that targets of local block acquirers experience higher abnormal announcement returns. We also find that the CARs are negatively and positively related to *ROA* and *Capex*, respectively.

D.3 Changes in Target Post-Acquisition Operating Performance

If industry expertise that hedge fund managers acquire over their career allows them to better access and process information about an industry, we would expect them to utilize such expertise in their monitoring/advising activities and thus enable their targets to perform better. In particular, hedge fund managers who have acquired their industry expertise through executive experience may be more effective than those who have acquired their industry expertise through outside director or analyst experience since these hedge fund managers are better able to detect problems in targets and deploy of target assets using their operational experience and skills. Thus, we expect their industry expertise translates into better long-term operating performance of target firms.

Table 10 reports the average change in target operating performance for *Funds with Industry Experience* and *Funds with No Experience* from one year prior to the 13D filing to one (two, three) year(s) after the 13D filing. $\Delta IndROA_{-1,j}$ is the change in the industry-adjusted return on assets (EBITDA/total assets) from one year prior to the 13D filing to j years after the 13D filing. We find that $\Delta IndROA_{-1,1}$, $\Delta IndROA_{-1,2}$, and $\Delta IndROA_{-1,3}$ are all positive and significant for targets of *Funds with Industry Experience* but $\Delta IndROA_{-1,1}$ and $\Delta IndROA_{-1,2}$ are negative and significant for those of *Funds with No Experience*. These differences between the two groups are significant at the 1% level.

We then split *Funds with Industry Experience* into *Funds with Executive Experience* and *Funds with Director/Analyst Experience* to examine whether the type of experience matters for target operating performance. Consistent with our prediction, $\Delta IndROA_{-1,1}$, $\Delta IndROA_{-1,2}$, and

$\Delta IndROA_{-1,3}$ are all positive and significant for targets of *Funds with Executive Experience* but insignificant for *Funds with Director/Analyst Experience*.¹¹

In Table 11, we report the results from OLS regressions in which the dependent variables are $\Delta IndROA_{-1,1}$ (columns (1) and (2)), $\Delta IndROA_{-1,2}$ (columns (3) and (4)) and $\Delta IndROA_{-1,3}$ (columns (5) and (6)), respectively. In columns (1), (3) and (5), we find that the coefficients on *Funds with Industry Experience* are positive and significant, suggesting that the targets of hedge funds whose managers have experience in target industry outperform other targets up to three years following the block acquisition. These findings are consistent with Bebchuk, Brav and Jiang (2015), who find improvements in *ROA* following the intervention of hedge fund activists.

In columns (2), (4), and (6), we replace *Funds with Industry Experience* with *Funds with Executive Experience* and *Funds with Director/Analyst Experience*. Consistent with our expectation, we find that the results in the previous three regressions are mainly driven by hedge fund managers' executive experience in target industries. Table 11 also shows that a hedge fund manager from an Ivy League school improves operating performance of targets three years after the acquisition.

Overall, these findings support the hypothesis that the monitoring/advising activities of hedge fund managers are more effective when they accumulate their industry expertise through executive experience.

In Panel B of Table 11, we examine whether hedge fund managers' industry expertise is more valuable for targets that need more monitoring/advising. In particular, poor operating performance of the target might indicate inefficient management that requires more monitoring and advising. Alternatively, firms with poor performance may suffer from greater information

¹¹ Klein and Zur (2009) and Clifford (2008), however, find no improvement in post-acquisition mean profits and cash flow for their sample target firms.

asymmetries than those with good performance. In that case, the benefits of monitoring by hedge fund managers who have information advantages arising from industry expertise could be more pronounced.¹² We include the interaction terms between hedge fund managers' industry expertise and an indicator for targets with poor operating performance at the time of the acquisitions (*Low ROA*) that takes the value of one if target ROA is below the sample median, and zero otherwise. In column (1) in which the dependent variable is $\Delta IndROA_{-1, 1}$, the interaction term between *Funds with Industry Experience* and *Low ROA* and find that its coefficient is positive and significant at the 1% level, suggesting that hedge fund managers' experience in target industry is particularly helpful for poorly performing targets.

In column (2), we divide *Funds with Industry Experience* with *Funds with Executive Experience* and *Funds with Director/Analyst Experience* and interact these two indicators with *Low ROA*. The results show that the coefficient on the interaction term between *Funds with Executive Experience* and *Low ROA* is positive and significant at 1% level, while that on the interaction term between *Funds with Director/Analyst Experience* and *Low ROA* is insignificant. Thus, targets experience an improvement in their post-acquisition operating performance when hedge fund managers have executive experience in target industry. The results using $\Delta IndROA_{-1, 2}$ ($\Delta IndROA_{-1, 3}$) as the dependent variable in columns (3) and (4) (columns (5) and (6)) are almost identical.

To the extent that hedge fund managers have better operational expertise in target industry when they acquire their experience as an executive, these findings support the view that hedge

¹² Previous studies suggest that firms with poor performance tend to have greater information asymmetry than those with good performance. Lang and Lundholm (1993) and Miller (2002) show that firms are less likely to be forthcoming when they have bad news.

fund manager's operation expertise in target industry is an important source of value gains from hedge fund activism.

E. Post-acquisition Changes in CEO Compensation and Other Firm Policies

In this subsection, we examine how post-acquisition CEO compensation and other firm policies are different between firms targeted by hedge funds whose managers have expertise in target industry and those targeted by hedge funds whose managers do not have an expertise in target industry.

In Table 12, we examine the changes in a CEO compensation policy for the targets from the fiscal year prior to the acquisition to three years after the acquisition. We focus on three measures of the changes in CEO compensation policy: an industry-adjusted change in CEO total compensation ($\Delta Indtdc1$), an industry adjusted-change in the value of CEO stock option grants to a one percent change in a firm's market value of equity ($\Delta Indoptiondelta$), an industry-adjusted change in the wealth sensitivity of CEO compensation to a one percent change in stock volatility ($\Delta Indvega$). We find that the differences in these compensation variables between firms acquired by *Funds with Industry Experience* and those acquired by *Funds with No Experience* are not significant. However, when we divide firms acquired by *Funds with Industry Experience* into firms acquired by *Funds with Executive Experience* and firms acquired by *Funds with Director/Analyst Experience*, we find that firms acquired by *Funds with Executive Experience* have a significantly more decrease in industry-adjusted CEO total compensation than those acquired by *Funds with No Experience*. For example, while $\Delta Indtdc1_{-1, 1}$ is approximately -\$4.46 million for firms acquired by *Funds with Executive Experience*, it is only -\$0.27 million for those acquired by *Funds with No Experience*. We also find that $\Delta Indoptiondelta$ and $\Delta Indvega$ decrease for both firms acquired by

Funds with Executive Experience and those acquired by *Funds with No Experience* but the decrease is significantly larger for the former firms than for the latter firms. This result may suggest that compensation structures that are overly sensitive to risk might paradoxically result in less CEO risk-taking, leading to poor stock returns in the future (see, for example, Carpenter (2000), Ross (2004) and Hjortshoj (2007), Brick, Palmon and Wald (2012)). To mitigate the manager-owner agency costs associated with management risk-averse, hedge fund managers reduce pay-performance sensitivity and delta.

In Table 13, we examine post-acquisition changes in industry-adjusted leverage, payout (dividends and share repurchase), and investment (capital expenditure, R&D expenditures, and acquisition expenditures) for target firms. We find that compared to targets of *Funds with No Experiences*, those of *Funds with Industry Experience* increase payouts and decrease total investment, particularly R&D expenditures, after the acquisitions. A decrease in total investment and R&D expenditures are particularly evident when firms are acquired by *Funds with Executive Experience*, suggesting that these funds implement the strategies that reduce discretionary spending (Klein and Zur (2009)).¹³ One might argue that cutting R&D expenditures is not necessarily an improvement. However, we find that post-acquisition long-term ROA (up to three years) of targets of *Funds with Industry Experience* significantly improves, suggesting that the target has previously over invested in R&D.

Overall, the results in Tables 12 and 13 indicate that *Funds with Industry Experience*, particularly *Funds with Executive Experience*, implement policies that reduces the conflict of interest between managers and shareholders by curtailing excessive executive compensation and investments.

¹³ In contrast, Klein and Zur (2009) find no change in *R&D* and *Capex*.

F. With-in-fund analysis

To alleviate the concern that time-invariant fund characteristics drive the differences in our performance results between *Funds with Industry Experience* and *Funds with No Experience* acquisitions, we perform within-fund-analysis. Specifically, we focus only on hedge funds that engage in both types of acquisitions: where a fund manager has expertise in the target industry and where the same fund manager does not have any expertise in target industry. We delete all acquisitions by other hedge fund managers who engage in only one type of acquisition from the analysis. Our final sample consists of 596 acquisitions by 32 unique hedge funds, of which 192 are acquisitions in which hedge fund managers have industry expertise (*Acquisitions with Industry Experience*) and 404 are those in which hedge fund managers have no industry expertise (*Acquisitions with No Industry Experience*). By comparing performance of *Acquisitions with Industry Experience* and that of *Acquisitions with No Industry Experience* by the same hedge funds, we can control for the characteristics of hedge funds that might affect acquisition performance.

Panel A of Table 14 compares the average CARs and post-acquisition operating performance between *Acquisitions with Industry Experience* (sample size = 192) and *Acquisitions with No Industry Experience* (sample size = 404). The results show that *Acquisitions with Industry Experience* result in higher CARs than *Acquisitions with No Industry Experience*: the average CAR (-30, 30) and CAR (-20, 20) for the targets in *Acquisitions with Industry Experience* are 14.4% and 11.6%, respectively, both of which are significant at the 1% level. The corresponding CARs for the targets in *Acquisitions with No Industry Experience* are 6.3% and 5.3%, respectively, both of which are also significant at the 1% level. The differences in average CAR (-30, 30) and CAR (-20, 20) between the two groups are significant at the 1% level.

Turning to post-acquisition operating performance, we find that the average $\Delta IndROA_{-1,1}$, $\Delta IndROA_{-1,2}$, and $\Delta IndROA_{-1,3}$ for the targets in *Acquisitions with Industry Experience* are positive and significant, while the average $\Delta IndROA_{-1,1}$ and $\Delta IndROA_{-1,2}$ for the targets in *Acquisitions with No Industry Experience* are negative and significant. The differences in this post-acquisition operating performance between the two groups is significant. These results suggest that hedge funds' industry expertise plays an instrumental role in improving target performance.

In Panel B of Table 14, we compare average CARs and post-acquisition performance of targets according to the extent of hedge fund manager's industry expertise. We divide the sample used in Panel A of Table 14 according to the sample median ratio (0.286) of the number of *Acquisitions with Industry Experience* to the total number of acquisitions made by each hedge fund: *Acquisitions with High Industry Expertise Concentration* and *Acquisitions with Low Industry Expertise Concentration*. We find that targets in *Acquisitions with High Industry Expertise Concentration* outperform those in *Acquisitions with Low Industry Expertise Concentration*, further supporting our hypothesis that hedge fund managers' industry expertise is an important factor that affects the value gains arising from hedge fund activism.

Overall, the results from the with-in-fund analysis suggest that outperformance of targets of hedge funds with industry experience is not driven by funds managers' better skills or abilities at the fund-level but by the fund managers' expertise in specific targets' industry.

G. Robustness Tests: Endogeneity

Our results so far indicate that hedge fund managers' industry expertise is an important source of value gains from hedge fund activism. However, our results might be because hedge fund

managers with specialized industry experience are simply good at identifying targets that are more likely to improve firm performance in the future.¹⁴

To address this concern, we follow Brav et al. (2008) and Clifford (2008). A hedge fund files 13G with the SEC if it acquires more than 5% of the target's outstanding shares but has no intention to engage in corporate activism. However, after filing 13G, if the hedge fund decides to engage in activism activities, then it is required to file 13D with the SEC. In this case, it is logical to assume that information concerning the hedge fund manager's belief that the target's stock is undervalued would be reflected around the announcement of the 13G filing and the incremental value resulting from any intervention would be reflected in new 13D filings. In our sample, we find 108 acquisitions in which the hedge fund first filed a 13G and subsequently filed a 13D with the SEC. Of those, 17 acquisitions are made by *Funds with Industry Experience* and 91 acquisitions are made by *Funds with No Experience*.

Panel A of Table 15 provides the results for CAR (-20, 20), CAR (-30, 30), CAR(-30, -1), CAR(0, 30), and CAR (-1, 30). We find no significant difference in CARs (-20, 20) and CARs (-30, 30) between acquisitions made by *Funds with Industry Experience* and those made by *Funds with No Experience*. However, this result may not be surprising: the literature focuses on a longer window for 13D events that includes a long pre-announcement period such as CARs (-30, 30) since the law requires investors to file Schedule 13D within ten days of the acquisition of more than 5% of a firm's equity and the Schedule 13D filing may occur after actual purchases of shares are made. It is also possible that there is information leakage even before a hedge fund acquires more than

¹⁴ In table 5, the logit analysis of targeting shows that hedge funds with industry expertise tend to acquire targets with low BM, suggesting that they are less likely to choose undervalued targets. However, it is still possible that hedge funds with industry expertise can choose targets that are more likely to improve firm performance in the future.

5% of a target's equity. However, this should not be the case for switchers because they simply change their plans and file Schedule 13D to implement their corporate activism campaign. Consequently, we expect the stock market reaction to occur at or immediately after the 13D filing date (e.g., CAR(0, 30) and CAR(-1, 30)). Indeed, as shown in Figure 1 and Panel A of Table 15, the positive stock reaction starts to begin after the 13D filing date, suggesting that the market reacts to new information about shareholder activism, not merely to fund managers' stock picking ability. In particular, Panel A shows that the average CAR (-1, 30) for *Funds with Industry Experience* are significantly greater than that for *Funds with No Experience*. Furthermore, Panel B shows that the frequency of board representation is significantly higher for *Funds with Industry Experience* than for *Funds with No Experience*, which suggests that the positive announcement returns are also consistent with the ex post evidence of improved monitoring activities by hedge fund managers.

Overall, these results support the view that that the source of value gains created by hedge fund managers with specialized industry expertise is related to their corporate intervention activities to improve operational efficiency and/or better monitoring of management.

As an additional test, following a similar procedure to that of Brav et al. (2008), Clifford (2008), and Klein and Zur (2009, 2011), we match each target in the hedge fund acquisition by a target firm from the same 10×10 portfolios based on size (market value of equity) and book-to-market ratio in the same year and the same Fama-French 48 industry. Since there are many missing values due to lack of matched firms, to increase the sample size, when there are missing matched firms using the 10×10 portfolios, we find the matched firms from the same 5×5 size/book-to-market ratio sorted portfolios in the same year and the same industry.

Table 16 compares the average changes in matched-firm-adjusted ROA following the acquisitions between targets of *Funds with Industry Experience* and those of *Funds with No*

Experience acquisitions. We find that targets of *Funds with Industry Experience* on average realize a significantly larger increase in matched-firm-adjusted ROA than those of *Funds with No Experience*, which is consistent with our early results. The results using the matched-firm-adjusted median ROA are similar.

IV. Concluding Remarks

Previous literature shows that the target firm of a hedge fund activism enjoys significant abnormal returns around Schedule 13D filings. However, there is an ongoing debate about the sources of these gains. In this paper, we explore whether the hedge fund manager's human capital could be an important source of value creation. Using biographical information of the hedge fund managers, we identify industries in which hedge fund managers have specialized industry expertise. We find that hedge funds are more likely to choose a target in an industry in which their managers have expertise as an executive or as an outside director/analyst. We also find that targets of industry-expert acquirers realize higher abnormal announcement when hedge fund managers have expertise in target industry. To explain our results, we then examine whether the industry expertise of hedge fund managers influences their governance activities in targets and find that industry-expert acquirers are more likely to serve as a director on the target's board than are hedge fund managers with no such experience in the target industry. Finally, we find that targets realize higher post-acquisition operating performance when industry-expert acquirers obtain their industry expertise from past executive experience in the target industry, suggesting that hedge fund managers' operational experience and expertise increase a firm's long-term value.

Overall, our results suggest that hedge fund manager characteristics substantially influence hedge fund activism and that human capital that hedge fund managers bring to their target firms is an importance source of shareholder gains from hedge fund activism.

References

- Bebchuk, Lucian A, Alon Brav, and Wei Jiang, 2015, The long-term effects of hedge fund activism, (National Bureau of Economic Research).
- Becker, Gary S, 1964, Human capital theory, *Columbia, New York* 1964.
- Benmelech, Efraim, and Carola Frydman, 2015, Military ceos, *Journal of Financial Economics* 117, 43-59.
- Bottazzi, Laura, Marco Da Rin, and Thomas Hellmann, 2008, Who are the active investors?: Evidence from venture capital, *Journal of Financial Economics* 89, 488-512.
- Bradley, Daniel, Sinan Gokkaya, and Xi Liu, 2017, Before an analyst becomes an analyst: Does industry experience matter?, *The Journal of Finance* 72, 751-792.
- Brav, A., W. Jiang, and H. Kim, 2015, The real effects of hedge fund activism: Productivity, asset allocation, and labor outcomes, *Review of Financial Studies* 28, 2723-2769.
- Brav, Alon, Wei Jiang, Frank Partnoy, and Randall Thomas, 2008, Hedge fund activism, corporate governance, and firm performance, *The Journal of Finance* 63, 1729-1775.
- Brick, Ivan E, Oded Palmon, and John K Wald, 2012, Too much pay-performance sensitivity?, *Review of Economics and Statistics* 94, 287-303.
- Carpenter, Jennifer N, 2000, Does option compensation increase managerial risk appetite?, *The journal of finance* 55, 2311-2331.
- Chevalier, Judith, and Glenn Ellison, 1999, Are some mutual fund managers better than others? Cross-sectional patterns in behavior and performance, *The journal of finance* 54, 875-899.
- Cici, Gjergji, Monika Gehde-Trapp, Marc-André Göricke, and Alexander Kempf, 2014, What they did in their previous life: The investment value of mutual fund managers' experience outside the financial sector, (CFR Working Paper).
- Clifford, Christopher P, 2008, Value creation or destruction? Hedge funds as shareholder activists, *Journal of Corporate Finance* 14, 323-336.
- Cohen, Randolph B, Christopher Polk, and Bernhard Silli, 2010, Best ideas.
- Cremers, Martijn, Erasmo Giambona, Simone M Sepe, and Ye Wang, 2015, Hedge fund activism and long-term firm value.
- Ding, Bill, and Russ Wermers, 2012, Mutual fund performance and governance structure: The role of portfolio managers and boards of directors.

- Dittmar, Amy, and Ran Duchin, 2015, Looking in the rearview mirror: The effect of managers' professional experience on corporate financial policy, *The Review of Financial Studies* 29, 565-602.
- Gadiesh, Orit, and Hugh MacArthur, 2008. *Lessons from private equity any company can use* (Harvard Business Press).
- Gompers, Paul, Anna Kovner, Josh Lerner, and David Scharfstein, 2008, Venture capital investment cycles: The impact of public markets, *Journal of Financial Economics* 87, 1-23.
- Gottesman, Aron A, and Matthew R Morey, 2006, Manager education and mutual fund performance, *Journal of empirical finance* 13, 145-182.
- Graham, John R, Campbell R Harvey, and Manju Puri, 2013, Managerial attitudes and corporate actions, *Journal of financial economics* 109, 103-121.
- Graham, John R, Campbell R Harvey, and Manju Puri, 2015, Capital allocation and delegation of decision-making authority within firms, *Journal of Financial Economics* 115, 449-470.
- Greenwood, R., and M. Schor, 2009, Investor activism and takeovers, *Journal of Financial Economics* 92, 362-375.
- Greenwood, Robin, and Stefan Nagel, 2009, Inexperienced investors and bubbles, *Journal of Financial Economics* 93, 239-258.
- Grossman, Sanford J, 2005, Talent required, *The Wall Street Journal*.
- Hjortshoj, Toke, 2007, Managerial risk-shifting incentives of option-based compensation: Firm risk, leverage, and moneyness.
- Kacperczyk, Marcin, Clemens Sialm, and Lu Zheng, 2005, On the industry concentration of actively managed equity mutual funds, *The Journal of Finance* 60, 1983-2011.
- Kang, Jun-Koo, and Jin-Mo Kim, 2008, The geography of block acquisitions, *The Journal of Finance* 63, 2817-2858.
- Kaplan, Steven N, Mark M Klebanov, and Morten Sorensen, 2012, Which ceo characteristics and abilities matter?, *The Journal of Finance* 67, 973-1007.
- Kaplan, Steven N, and Per Stromberg, 2009, Leveraged buyouts and private equity, *Journal of Economic Perspectives* 23, 121-46.
- Kempf, Elisabeth, Alberto Manconi, and Oliver G Spalt, 2017, Learning by doing: The value of experience and the origins of skill for mutual fund managers.
- Klein, A., and E. Zur, 2011, The impact of hedge fund activism on the target firm's existing bondholders, *Review of Financial Studies* 24, 1735-1771.

- Klein, April, and Emanuel Zur, 2009, Entrepreneurial shareholder activism: Hedge funds and other private investors, *The Journal of Finance* 64, 187-229.
- Li, Haitao, Xiaoyan Zhang, and Rui Zhao, 2011, Investing in talents: Manager characteristics and hedge fund performances, *Journal of Financial and Quantitative Analysis* 46, 59-82.
- Malmendier, Ulrike, and Geoffrey Tate, 2005, Ceo overconfidence and corporate investment, *The journal of finance* 60, 2661-2700.
- Mikkelson, Wayne H, and Richard S Ruback, 1985, An empirical analysis of the interfirm equity investment process.
- Mincer, Jacob, and Solomon Polachek, 1974, Family investments in human capital: Earnings of women, *Journal of political Economy* 82, S76-S108.
- Peter, F Drucker, 1967, The effective executive, *New York, Harper&Row*.
- Philippon, Thomas, and Ariell Reshef, 2012, Wages and human capital in the u.S. Finance industry: 1909–2006*, *The Quarterly Journal of Economics* 127, 1551-1609.
- Ross, Stephen A, 2004, Compensation, incentives, and the duality of risk aversion and riskiness, *The Journal of Finance* 59, 207-225.
- Schoar, Antoinette, and Luo Zuo, 2016, Does the market value ceo styles?, *American Economic Review* 106, 262-66.
- Zheng, L, M Kacperczyk, and C Sialm, 2007, Industry concentration and mutual fund performance.

Appendix: Definitions of Target Characteristic Variables

Variable	Definition	Data source
Firm characteristics		
<i>AT</i> (\$1,000,000)	The book value of total assets.	Compustat
<i>MV</i> (\$1,000,000)	The market value of common shares outstanding.	Compustat
<i>BM</i>	The book value of equity divided by market value of equity.	Compustat
<i>TOTleverage</i>	The sum of long-term and short-term debt divided by total assets.	Compustat
<i>LTleverage</i>	The ratio of long-term debt to total assets.	Compustat
<i>Divyld</i>	The common dividend plus preferred dividend divided by the sum of market value of common stocks and book value of preferred stocks.	Compustat
<i>TOTpayout</i>	The sum of dividend and share repurchases scaled by market value of equity at the beginning of fiscal year.	Compustat
<i>TOTcash</i>	The sum of the cash holding and short term investments divided by total assets	Compustat
<i>Capex</i>	The capital expenditures and R&D expense divided by the book value of total assets at end of prior fiscal year.	Compustat
<i>R&D</i>	The research and development expense divided by the book value of assets at end of prior fiscal year.	Compustat
<i>TOTexpense</i>	The sum of the capital expenditures, R&D and acquisition expense divided by the book value of total assets at end of prior fiscal year.	Compustat
<i>ROA</i>	Earnings before interest, taxes, depreciation, and amortization divided by the book value of assets at end of prior fiscal year.	Compustat
<i>Tdc1</i> (\$1,000)	The total contracted CEO pay including options value granted.	ExecuComp
<i>Optiondelta</i>	The change in the dollar value of the CEO options holding for a 1% change in the market value of common stock.	ExecuComp, CRSP
<i>Vega</i>	The change in the dollar value of the CEO wealth for a 1% change in the annualized standard deviation of stock returns.	ExecuComp, CRSP
<i>CAR</i>	$CAR(i,j)$ the cumulative abnormal returns from day i to day j , where $t = 0$ is the announcement date (the date that the hedge fund manager files SC-13D form with the SEC). The abnormal returns is estimated using the market model with parameters estimated using 200 trading days of return data ending 31 days before the shareholder meeting. The CRSP value-weighted return is used as the market return.	CRSP
Fund characteristics		
<i>Sciences</i>	Dummy variable equals one if the hedge fund manager concentrated in one of the sciences (e.g. science, technology, engineering, and mathematics), and zero otherwise.	TASS, web search
<i>Fin/Econ</i>	Dummy variable equals one if the hedge fund manager concentrated in Finance or Economics, and zero otherwise.	TASS, web search
<i>MBA</i>	Dummy variable equals one if the key hedge fund manager earned an MBA degree, and zero otherwise.	TASS, web search

<i>Law</i>	Dummy variable equals one if the hedge fund manager has a law degree, and zero otherwise.	TASS, web search
<i>Ivy League Alumnus</i>	Dummy variable equals one if the hedge fund manager is an alumnus of one of the Ivy League schools, and zero otherwise.	TASS, web search
<i>Age</i>	The age of the hedge fund manager at the time of acquisition.	TASS, web search
<i>Directorships</i>	The number of a hedge fund manager's previous experience as an outside director in firms operating in industries other than target industry.	TASS, web search
<i>Executives</i>	The number of a hedge fund manager's previous experience as an executive in firms operating in industries other than target industry.	TASS, web search
<i>Top Executives</i>	The number of firms that the hedge fund manager served as a CEO or President before acquisition.	TASS, web search
<i>Non-top executives</i>	The number of firms the hedge fund manager served as a non-top executive such as Vice-President or CFO before acquisition.	TASS, web search
<i>Prox</i>	Dummy variable equal to one if the target is headquartered in the same state as the hedge fund manager, and zero otherwise.	TASS, web search
<i>Funds with Industry Experience</i>	Dummy variable equal to one if the hedge fund manager had extensive prior industry experience in the target's industry, and zero otherwise.	TASS, web search
<i>Funds with Executive Experience</i>	Dummy variable equal to one if the hedge fund manager previously served as an executive or manager in the target's industry, and zero otherwise.	TASS, web search
<i>Funds with Director/Analyst Experience</i>	Dummy variable equal to one if the hedge fund manager served either as an outside director or a stock analyst for a specific industry of the target, and zero otherwise.	TASS, web search

Table 1: Sample distribution. This table summarizes the number of hedge fund acquisitions by year for the full sample and by acquisition type. An acquisition belongs to the *Funds with Industry Experience* if the biography indicates that the hedge fund manager has extensive prior industry experience in the target’s industry. *Funds with No Experience* acquisitions are those acquisitions made by a hedge fund manager who did not have specific industry expertise in the target’s industry.

Year	Full Sample	<i>Funds with Industry Experience</i>		<i>Funds with No Experience</i>	
	Number of Acquisitions	Number of Acquisitions	Fraction of Acquisitions (%)	Number of Acquisitions	Fraction of Acquisitions (%)
1994	8	0	0.00	8	100.00
1995	26	0	0.00	26	100.00
1996	60	3	5.00	57	95.00
1997	109	5	4.59	104	95.41
1998	80	16	20.00	64	80.00
1999	55	9	16.36	46	83.64
2000	63	6	9.52	57	90.48
2001	52	12	23.08	40	76.92
2002	71	15	21.13	56	78.87
2003	78	8	10.26	70	89.74
2004	82	11	13.41	71	86.59
2005	136	29	21.32	107	78.68
2006	161	23	14.29	138	85.71
2007	184	35	19.02	149	80.98
2008	181	32	17.68	149	82.32
2009	76	18	23.68	58	76.32
2010	100	19	19.00	81	81.00
2011	96	10	10.42	86	89.58
Total	1618	251	15.51	1367	84.49

Table 2: Summary statistics of target characteristics. This table summarizes the target characteristics (Panel A) and Hedge Fund Manager Characteristics (Panel B) of full sample, *Funds with Industry Experience* acquisitions and *Funds with No Experience* acquisitions. An acquisition belongs to the *Funds with Industry Experience* if the biography indicates that the hedge fund manager had extensive prior industry experience in the target's industry. *Funds with No Experience* acquisitions are those acquisitions made by a hedge fund manager who did not have specific industry expertise in the target's industry. Total assets (*AT*) is defined as book value of total assets; book to market ratio (*BM*) defined as book value of equity divided by the market value of equity; firm leverage (*TOTleverage*) defined as the sum of long- and short-term debt divided by total assets; dividend yield (*Divyld*) defined as the common dividend plus preferred dividend divided by the sum of market value of common stocks and book value of preferred stocks; total payout (*TOTpayout*) defined as the sum of dividends and share repurchases scaled by market value of equity at the beginning of fiscal year; cash holdings (*TOTcash*) defined as the sum of the cash holding and short term investments divided by total assets; return on assets (*ROA*) defined as the earnings before interest, depreciation and amortization divided by the book value of assets of at the end of prior fiscal year; total capital expenditures (*Capex*) defined as the capital expenditures divided by book value of assets of at the end of prior fiscal year; R&D expense (*R&D*) defined as the research and development expense divided by book value of assets of at the end of prior fiscal year; total CEO compensation (*Tdc1*) defined as the total contracted CEO pay including options value granted; delta of the CEO options holding (*Optiondelta*) defined as change in the dollar value of the CEO options holding for a 1% change in the market value of common stock; vega of CEO wealth (*Vega*) defined as the change in the dollar value of the CEO wealth for a 1% change in the annualized standard deviation of stock returns. $CAR(i,j)$ represents the cumulative abnormal returns from day i to day j , where $t = 0$ is the announcement date (the date that the hedge fund manager files SC-13D form with the SEC). *MBA* is a dummy variable equal to one if the key hedge fund manager earned an MBA degree; *Fin/Econ* is a dummy variable equals one if the hedge fund manager concentrated in Finance or Economics; *Science* is a dummy variable equals one if the hedge fund manager concentrated in one of the sciences; and *Law* is a dummy variable equals one if the hedge fund manager has a law degree; *Ivy League Alumnus* equals one if the hedge fund manager is an alumnus of one of the Ivy League schools; and *age* is the age of the hedge fund manager at the time of acquisition. All variables are defined in the appendix. All data are winsorized at 1%/99% percentile. The numbers in the test-of-difference columns denote p-values. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Panel A Target Firm Characteristics

Variables	Full Sample			<i>Funds with Industry Experience</i>			<i>Funds with No Experience</i>			Test of Difference	
	N	Mean	Median	N	Mean	Median	N	Mean	Median	t-test	Wilcoxon z-test
<i>AT</i>	1,559	908.675	191.092	248	879.718	227.9	1,311	914.153	187.139	0.822	0.357
<i>BM</i>	1,490	0.729	0.541	239	0.636	0.495	1,251	0.747	0.552	0.023**	0.024**
<i>TOTleverage</i>	1,552	0.227	0.165	246	0.198	0.084	1,306	0.233	0.181	0.040**	0.001***
<i>Divyld</i>	1,288	0.008	0	241	0.004	0	1,094	0.008	0	0.001***	0.000***
<i>TOTpayout</i>	1,398	0.029	0.004	194	0.024	0.004	1,178	0.03	0.004	0.213	0.496
<i>TOTCash</i>	1,559	0.22	0.118	248	0.326	0.228	1,311	0.201	0.105	0.000***	0.000***
<i>ROA</i>	1,511	0.036	0.099	247	-0.082	0.074	1,264	0.059	0.103	0.000***	0.000***
<i>Capex</i>	1,506	0.068	0.035	245	0.072	0.035	1,261	0.067	0.035	0.448	0.799
<i>R&D</i>	1,513	0.074	0	247	0.157	0.012	1,266	0.058	0	0.000***	0.000***
<i>TOTexpense</i>	1,453	0.187	0.102	235	0.271	0.148	1,218	0.171	0.096	0.000***	0.000***
<i>Tdc1 (\$1000)</i>	466	3,997.37	2,244.66	77	4,563.52	2,176.25	389	3,885.30	2,273.19	0.418	0.782
<i>Optiondelta</i>	424	180.616	79.356	69	220.611	72.279	355	172.842	80.02	0.338	0.419
<i>Vega</i>	456	110.281	42.311	75	138.421	40.773	381	104.742	44.016	0.353	0.778

Panel B Hedge Fund Manager Characteristics

Variables	N	Mean	Median	N	Mean	Median	N	Mean	Median	t-test	Wilcoxon z-test
<i>Science</i>	1,618	0.066	0	251	0.143	0	1,367	0.051	0	0.000***	0.000***
<i>Fin/Econ</i>	1,618	0.23	0	251	0.287	0	1,367	0.219	0	0.020**	0.020**
<i>Law</i>	1,618	0.059	0	251	0.04	0	1,367	0.062	0	0.167	0.167
<i>MBA</i>	1,618	0.467	0	251	0.474	0	1,367	0.465	0	0.796	0.796
<i>Ivy League Alumnus</i>	1,573	0.589	1	245	0.596	1	1,328	0.587	1	0.802	0.802
<i>Age</i>	1,612	59.674	58	251	60.108	56	1,361	59.594	58	0.537	0.568

Table 3: Hedge Fund Manager Profile by Industry Expertise Groups. This table summarizes the average profile of three hedge fund manager groups. Panel A summarizes professional biographical differences between *Funds with Industry Experience* acquisitions and *Funds with No Experience* acquisitions. An acquisition belongs to the *Funds with Industry Experience* if the biography indicates that the hedge fund manager had extensive prior industry experience in the target’s industry. *Funds with No Experience* acquisitions are those acquisitions made by a hedge fund manager who did not have specific industry expertise in the target’s industry. Panel B summarizes professional biographical experiences among the three target acquisition types. A hedge fund acquisition belongs to the *Funds with Executive Experience* if the biography of the hedge fund manager indicates a previous employment as an executive or manager in the target’s industry. A hedge fund acquisition belongs to the *Funds with Director/Analyst Experience* if the biography of the hedge fund manager indicates that she served either as an outside director or a stock analyst for a specific industry of the target. *Directorships* is defined as the number of outside directorships that a hedge fund manager held in all firms before she acquired a target; *Non-top Executives* defines as the number of firms the hedge fund manager served as a non-top executive such as Vice-President or CFO before she acquired a target; *Top Executives* defined as the number of firms that the hedge fund manager served as a CEO or President before she acquired a target. The numbers in the test-of-difference columns denote *p*-values for *t*-statistics. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Panel A Biographical background of hedge fund managers					
Variables	<i>Funds with Industry Experience</i> (A) N=251		<i>Funds with No Experience</i> (D) N=1,367		Test of the Difference (A-D)
<i>Directorships</i>	251	4.327	1367	1.582	0.000***
<i>Non-top Executives</i>	251	0.478	1367	0.304	0.000***
<i>Top Executives</i>	251	1.323	1367	0.772	0.000***

Panel B Biographical background of hedge fund managers with industry experience					
Variables	<i>Funds with Executive Experience</i> (B) N=108		<i>Funds with Director/Analyst Experience</i> (C) N=143		Test of the Difference (B-C)
<i>Directorships</i>	108	3.296	143	5.105	0.002***
<i>Non-top Executives</i>	108	0.537	143	0.434	0.153
<i>Top Executives</i>	108	1.611	143	1.105	0.016**

Table 4: Extent of Industry Expertise Bias and Holding Periods of Block Ownership

Panel A summarizes the percentage of targets acquired whose fund manager have prior industry experience. Panel B summarizes professional biographical differences between *Funds with Industry Experience* acquisitions and *Funds with No Experience* acquisitions. An acquisition belongs to the *Funds with Industry Experience* if the biography indicates that the hedge fund manager had extensive prior industry experience in the target's industry. *Funds with No Experience* acquisitions are those acquisitions made by a hedge fund manager who did not have specific industry expertise in the target's industry. The numbers in the test-of-difference columns denote p -values for t -statistics. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Panel A The probability of being acquired			
The percentage of targets acquired whose fund manager have prior industry experience			23.2%
The Mean probability that a firm in that industry would be acquired			4.08%
The Median probability that a firm in that industry would be acquired			3.79%

Panel B: Distribution by holding periods of block ownership			
Holding period	<i>Funds with Industry Experience</i> (A)	<i>Funds with No Experience</i> (D)	Test of Difference (A-D)
Less than one year	34%	41%	0.03**
More than one year	66%	59%	0.03**
More than two years	47%	38%	0.01***
More than three years	31%	27%	0.16

Table 5: Logit Regression Estimates (Marginal Effects) of the industry expertise acquisitions on target and fund manager characteristics. This table presents the estimates of logit regressions of industry expertise indicator on firm and fund manager characteristics. The dependent variable is a dummy variable equals one if acquisition is made by a hedge fund manager who has previously served as an executive or an outside director or a security analyst in the target's industry (*Funds with Industry Experience*). *Log (AT)* is defined as the logarithm of total assets; *TOTleverage* is defined as total debt divided by total assets; *ROA* is defined as the earnings before interest, depreciation and amortization divided by the book value of assets at the end of prior fiscal year; *BM* is defined as book value of equity divided by the market value of equity; *Divyld* is the common dividend plus preferred dividend divided by the sum of market value of common stocks and book value of preferred stocks; *Capex* is defined as the capital expenditures divided by book value of assets of at the end of prior fiscal year; *Ivy League Alumnus* equals one if the hedge fund manager graduated from an Ivy League school; *Directorships* is the number of a hedge fund manager's previous experience as an outside director in firms operating in industries other than target industry; *Executives* is the number of a hedge fund manager's previous experience as an executive in firms operating in industries other than target industry; *Prox* is a dummy variable equal to one if the target is headquartered in the same state as the hedge fund manager; *MBA* is a dummy variable equal to one if the key hedge fund manager earned an MBA degree; *Fin/Econ* is a dummy variable equal to one if the hedge fund manager concentrated in Finance or Economics; *Science* is a dummy variable equal to one if the hedge fund manager concentrated in one of the sciences; and *Law* is a dummy variable equal to one if the hedge fund manager has a law degree. Robust *p*-values are in parentheses. All standard errors are clustered by firm. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Variables	(1)	(2)
<i>Log (AT)</i>	0.022*** (0.001)	0.008 (0.266)
<i>TOTleverage</i>	-0.053 (0.303)	0.000 (0.998)
<i>ROA</i>	-0.137*** (0.000)	-0.124*** (0.000)
<i>BM</i>	-0.025 (0.117)	-0.036** (0.033)
<i>Divyld</i>	-1.995*** (0.002)	-2.249*** (0.002)
<i>Capex</i>	0.041 (0.713)	0.027 (0.801)
<i>Age</i>		-0.001 (0.503)
<i>Directorships</i>		0.020*** (0.000)
<i>Executives</i>		0.012 (0.162)
<i>Prox</i>		0.062*** (0.008)
<i>Ivy League alumnus</i>		-0.004 (0.850)
<i>MBA</i>		0.054*** (0.006)
<i>Fin/Econ</i>		0.022 (0.353)
<i>Science</i>		0.144*** (0.000)
<i>Law</i>		0.011 (0.797)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Observations	1,419	1,370
Pseudo R-square	0.111	0.213

Table 6: Frequency of Board Representation Activity in Targets by Industry Expertise of Hedge Fund Managers. This table reports the average frequency of key hedge fund managers and/or non-key hedge fund managers from the hedge fund company sitting on targets' board by industry expertise group. *Funds with Industry Experience* are those acquisitions whereby the hedge fund manager has previously served as an executive or an outside director or a security analyst in the target's industry. *Funds with No Experience* acquisitions are those acquisitions made by a hedge fund manager who did not have specific industry expertise in the target's industry. The numbers in the test-of-difference columns denote *p*-values for *t*-statistics. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Variables	<i>Funds with Industry Experience</i>		<i>Funds with No Experience</i>		Test of Difference (A-D)
	(A) N=251		(D) N=1367		
Representation by fund managers	251	20.30%	1367	9.00%	0.000***
Representation by others	251	11.60%	1367	8.10%	0.075
All hedge fund representation	251	27.90%	1367	14.90%	0.000***

Table 7: Logit Regression Estimates (Marginal Effects) of the Board Representation on Industry Expertise of Hedge Fund.

This table presents the estimates of logit regressions of key hedge fund managers and/or non-key hedge fund managers from the hedge fund company sitting on targets' board on industry expertise indicators, firm and hedge fund manager characteristics. *Funds with Industry Experience* are those acquisitions whereby the hedge fund manager has previously served as an executive or an outside director or a security analyst in the target's industry. *Log (AT)* is defined as the logarithm of total assets; *TOTLeverage* is defined as total debt divided by total assets; *ROA* is defined as the earnings before interest, depreciation and amortization divided by the book value of assets at the end of prior fiscal year; *BM* is defined as book value of equity divided by the market value of equity firm; *Divyld* is the common dividend plus preferred dividend divided by the sum of market value of common stocks and book value of preferred stocks; *Capex* is defined as the capital expenditures divided by book value of assets of at the end of prior fiscal year; *Ivy League Alumnus* equals one if the hedge fund manager graduated from an Ivy League school; *Directorships* is the number of a hedge fund manager's previous experience as an outside director in firms operating in industries other than target industry; *Executives* is the number of a hedge fund manager's previous experience as an executive in firms operating in industries other than target industry; *Prox* is a dummy variable equal to one if the target is headquartered in the same state as the hedge fund manager; *MBA* is a dummy variable equal to one if the key hedge fund manager earned an MBA degree; *Fin/Econ* is a dummy variable equal to one if the hedge fund manager concentrated in Finance or Economics; *Science* is a dummy variable equal to one if the hedge fund manager concentrated in one of the sciences; and *Law* is a dummy variable equal to one if the hedge fund manager has a law degree. Robust *p*-values are in parentheses. All standard errors are clustered by firm. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Variables	Representation by fund managers		Representation by others		All Hedge Fund Representation	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Funds with Industry Experience (Indicator)</i>	0.097*** (0.000)	0.092*** (0.000)	0.034* (0.080)	0.004 (0.851)	0.108*** (0.000)	0.079*** (0.003)
<i>Log(AT)</i>	-0.012* (0.091)	-0.007 (0.307)	0.012** (0.037)	0.005 (0.379)	-0.004 (0.634)	-0.005 (0.524)
<i>TOTLeverage</i>	0.058 (0.143)	0.034 (0.398)	0.045 (0.193)	0.054 (0.129)	0.053 (0.273)	0.042 (0.384)
<i>ROA</i>	0.068 (0.132)	0.094** (0.036)	-0.030 (0.569)	-0.042 (0.482)	0.024 (0.696)	0.027 (0.676)
<i>BM</i>	0.016 (0.146)	0.008 (0.502)	0.013 (0.245)	0.011 (0.400)	0.027* (0.057)	0.017 (0.254)
<i>Divyld</i>	0.277 (0.491)	0.211 (0.619)	-0.678 (0.183)	-0.760 (0.170)	-0.195 (0.710)	-0.274 (0.623)
<i>Capex</i>	0.099 (0.185)	0.117 (0.108)	-0.082 (0.306)	-0.104 (0.247)	0.028 (0.789)	0.020 (0.857)
<i>Age</i>		-0.002*** (0.003)		0.000 (0.952)		-0.001 (0.121)
<i>Directorships</i>		-0.005 (0.159)		0.008*** (0.003)		0.006 (0.128)
<i>Executives</i>		0.024*** (0.000)		-0.000 (0.943)		0.019** (0.022)
<i>Prox</i>		0.020 (0.351)		0.004 (0.855)		0.002 (0.941)
<i>Ivy League alumnus</i>		-0.016 (0.372)		0.027 (0.118)		-0.006 (0.794)
<i>MBA</i>		-0.063*** (0.002)		-0.011 (0.508)		-0.056** (0.013)
<i>Fin/Econ</i>		0.009 (0.707)		0.009 (0.649)		0.014 (0.605)
<i>Science</i>		-0.019 (0.570)		0.028 (0.363)		0.016 (0.668)
<i>Law</i>		0.051 (0.143)		-0.085* (0.070)		0.013 (0.774)
Year FE	Y	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y	Y
Observations	1,398	1,349	1,419	1,370	1,450	1,401
Pseudo R-square	0.071	0.128	0.058	0.091	0.064	0.095

Table 8: Cumulative Abnormal Returns (CARs) for Targets around the Announcement Date. This table summarizes the targets' average cumulative abnormal returns around 13D filing by industry expertise group. *Funds with Industry Experience* are those acquisitions whereby the hedge fund manager has previously served as an executive or an outside director or a security analyst in the target's industry. *Funds with No Experience* acquisitions are those acquisitions made by a hedge fund manager who did not have specific industry expertise in the target's industry. $CAR(i,j)$ represents the cumulative abnormal returns from day i to day j , where $t = 0$ is the announcement date (the date that the hedge fund manager files SC-13D form with the SEC). The numbers in the test-of-difference columns denote p -values for t -statistics. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Variables	<i>Funds with Industry Experience</i> (A) N=250	<i>Funds with No Experience</i> (D) N=1,360	Test of Differences (A-D)
$CAR(-30,-2)$	0.047*** (0.005)	0.016*** (0.008)	0.042**
$CAR(+2,+30)$	0.072*** (0.000)	0.023*** (0.000)	0.000***
$CAR(-10,+10)$	0.087*** (0.000)	0.054*** (0.000)	0.011**
$CAR(+20,+20)$	0.127*** (0.000)	0.060*** (0.000)	0.000***
$CAR(+30,+30)$	0.151*** (0.000)	0.061*** (0.000)	0.000***

Table 9: OLS Regression of Cumulative Abnormal Returns for Targets. This table reports the estimates of OLS regressions of cumulative abnormal return around 13D filing on industry expertise indicators, firm and hedge fund manager characteristics. *Funds with Industry Experience* are those acquisitions whereby the hedge fund manager has previously served as an executive or an outside director or a security analyst in the target's industry. *Log(AT)* is defined as the logarithm of total assets; *TOTLeverage* is defined as total debt divided by total assets; *ROA* is defined as the earnings before interest, depreciation and amortization divided by the book value of assets at the end of prior fiscal year; *BM* is defined as book value of equity divided by the market value of equity firm; *Divyld* is the common dividend plus preferred dividend divided by the sum of market value of common stocks and book value of preferred stocks; *Capex* is defined as the capital expenditures divided by book value of assets of at the end of prior fiscal year; *Ivy League Alumnus* equals one if the hedge fund manager graduated from an Ivy League school; *Directorships* is the number of a hedge fund manager's previous experience as an outside director in firms operating in industries other than target industry; *Executives* is the number of a hedge fund manager's previous experience as an executive in firms operating in industries other than target industry; *Prox* is a dummy variable equal to one if the target is headquartered in the same state as the hedge fund manager; *MBA* is a dummy variable equal to one if the key hedge fund manager earned an MBA degree; *Fin/Econ* is a dummy variable equal to one if the hedge fund manager concentrated in Finance or Economics; *Science* is a dummy variable equal to one if the hedge fund manager concentrated in one of the sciences; and *Law* is a dummy variable equal to one if the hedge fund manager has a law degree. Robust *p*-values are in parentheses. All standard errors are clustered by firm. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Variables	(1)	(2)	(3)	(4)
	CAR(-30,30)	CAR(-30,30)	CAR(-20,20)	CAR(-20,20)
<i>Funds with Industry Experience (Indicator)</i>	0.081*** (0.003)	0.084*** (0.005)	0.061*** (0.009)	0.061** (0.013)
Log of book value of total assets	-0.004 (0.471)	-0.003 (0.573)	-0.005 (0.253)	-0.006 (0.214)
<i>TOTLeverage</i>	0.012 (0.749)	0.015 (0.714)	-0.008 (0.822)	-0.013 (0.727)
<i>ROA</i>	-0.103** (0.026)	-0.096** (0.043)	-0.068** (0.048)	-0.067* (0.054)
<i>BM</i>	0.007 (0.617)	0.002 (0.917)	-0.005 (0.690)	-0.006 (0.643)
<i>Divyld</i>	-0.636 (0.162)	-0.656 (0.170)	-0.195 (0.674)	-0.196 (0.688)
<i>Capex</i>	0.217* (0.059)	0.204* (0.081)	0.177* (0.053)	0.153 (0.109)
<i>Age</i>		-0.000 (0.863)		0.001 (0.404)
<i>Directorships</i>		0.002 (0.556)		0.001 (0.851)
<i>Executives</i>		-0.005 (0.537)		-0.003 (0.706)
<i>Prox</i>		0.050* (0.057)		0.037* (0.099)
<i>Ivy League alumnus</i>		-0.023 (0.233)		-0.009 (0.555)
<i>MBA</i>		-0.030 (0.137)		-0.029* (0.071)
<i>Fin/Econ</i>		0.001 (0.961)		0.003 (0.885)
<i>Science</i>		-0.027 (0.538)		-0.022 (0.560)
<i>Law</i>		-0.013 (0.710)		-0.059** (0.041)
Year FE	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y
Observations	1,447	1,398	1,446	1,397
Adjusted R-squared	0.033	0.036	0.027	0.034
<i>F</i> -statistics	2.234	2.145	2.177	2.097

Table 10: Change in Industry-adjusted Operating Performance Following Block Share Purchase. This table summarizes the average change in (Fama French 48) industry adjusted operating performance by industry expertise group. $\Delta IndROA_{i,j}$ is the industry-adjusted change in firms' return on asset (ROA) from fiscal i to fiscal year j . *Funds with Industry Experience* are those acquisitions whereby the hedge fund manager has previously served as an executive or an outside director or a security analyst in the target's industry. *Funds with Executive Experience* are those acquisitions whereby the hedge fund manager has previously served as an executive in a firm in the target's industry. *Funds with Director/Analyst Experience* acquisitions are those acquisitions made by hedge fund managers who previously served as an outside director or a security analyst in the target's industry. *Funds with No Experience acquisitions* are those acquisitions whereby the hedge fund manager has no specific or specialized knowledge of the target's industry. The numbers in the test-of-difference columns denote p -values for t -statistics. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Variables	<i>Funds with Industry Experience</i> (A)	<i>Funds with Industry Experience</i>		<i>Funds with No Experience</i> (D)	Test of Difference (A-D)	Test of Difference (B-D)	Test of Difference (C-D)
		<i>Funds with Executive Experience</i> (B)	<i>Funds with Director/Analyst Experience</i> (C)				
$\Delta IndROA_{-1,1}$	0.070** (0.018)	0.155** (0.010)	0.008 (0.758)	-0.020*** (0.001)	0.000***	0.000***	0.149
$\Delta IndROA_{-1,2}$	0.099** (0.013)	0.205** (0.024)	0.030 (0.305)	-0.014** (0.038)	0.000***	0.000***	0.047*
$\Delta IndROA_{-1,3}$	0.096** (0.020)	0.215** (0.017)	0.009 (0.749)	-0.005 (0.465)	0.000***	0.000***	0.529

Table 11: OLS Regression of Operating Performance Changes. This table reports the estimates of OLS regressions of targets' change in operating performance on industry expertise indicators, firm and hedge fund manager characteristics. Panel A presents the results of regression controlling for industry expertise indicators. *Funds with Industry Experience* indicator equals one if the acquisition is made by a hedge fund manager who was either an executive of a firm, outsider director of a firm or specialized security analysts of the target's industry. $\Delta IndROA_{i,j}$ is the industry-adjusted change in variable *ROA* from fiscal *i* to fiscal year *j*. *ROA* is defined as the ratio of EBITDA to the total assets of the target of the previous fiscal year. *Funds with Executive Experience* are those acquisitions whereby the hedge fund manager has previously served as an executive in a firm in the target's industry. *Funds with Director/Analyst Experience* acquisitions are those acquisitions made by hedge fund managers who previously served as an outside director or a security analyst in the target's industry. *Funds with No Experience* acquisitions are those acquisitions whereby the hedge fund manager has no specific or specialized knowledge of the target's industry. Panel B shows the results of regressions controlling for interaction terms of industry expertise indicators and indicator for poor performance. A target is defined as *Low ROA* firm if its *ROA* at the time of 13-D filing announcement is below the sample median. $\log(AT)$ is defined as the logarithm of total assets; *TOTLeverage* is defined as total debt divided by total assets; *ROA* is defined as the earnings before interest, depreciation and amortization divided by the book value of assets at the end of prior fiscal year; *BM* is defined as book value of equity divided by the market value of equity firm; *Divyld* is the common dividend plus preferred dividend divided by the sum of market value of common stocks and book value of preferred stocks; *Capex* is defined as the capital expenditures divided by book value of assets of at the end of prior fiscal year; *Ivy League Alumnus* equals one if the hedge fund manager graduated from an Ivy League school; *Directorships* is the number of a hedge fund manager's previous experience as an outside director in firms operating in industries other than target industry; *Executives* is the number of a hedge fund manager's previous experience as an executive in firms operating in industries other than target industry; *Prox* is a dummy variable equal to one if the target is headquartered in the same state as the hedge fund manager; *MBA* is a dummy variable equal to one if the key hedge fund manager earned an MBA degree; *Fin/Econ* is a dummy variable equal to one if the hedge fund manager concentrated in Finance or Economics; *Science* is a dummy variable equal to one if the hedge fund manager concentrated in one of the sciences; and *Law* is a dummy variable equal to one if the hedge fund manager has a law degree. Robust p-values are in parentheses. All standard errors are clustered by firm. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Panel A Operating Performance of Target Firms after Hedge Fund Activism

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	$\Delta IndROA_{-1,1}$	$\Delta IndROA_{-1,1}$	$\Delta IndROA_{-1,2}$	$\Delta IndROA_{-1,2}$	$\Delta IndROA_{-1,3}$	$\Delta IndROA_{-1,3}$
<i>Funds with Industry Experience (Indicator)</i>	0.071*** (0.009)		0.088** (0.011)		0.091** (0.014)	
<i>Funds with Executive Experience (Indicator)</i>		0.148*** (0.005)		0.177** (0.018)		0.186** (0.014)
<i>Funds with Director/Analyst Experience (Indicator)</i>		0.013 (0.590)		0.028 (0.335)		0.022 (0.499)
<i>Log(AT)</i>	0.001 (0.871)	0.000 (0.986)	0.000 (0.959)	-0.001 (0.929)	-0.001 (0.828)	-0.002 (0.741)
<i>TOTLeverage</i>	0.039 (0.287)	0.041 (0.244)	0.040 (0.343)	0.042 (0.302)	0.068* (0.099)	0.073* (0.071)
<i>BM</i>	0.009 (0.354)	0.009 (0.364)	0.009 (0.430)	0.009 (0.445)	0.008 (0.520)	0.007 (0.565)
<i>Divyld</i>	0.563 (0.149)	0.606 (0.121)	0.723 (0.107)	0.779* (0.082)	0.848 (0.115)	0.926* (0.085)
<i>Capex</i>	0.213 (0.230)	0.202 (0.242)	0.285 (0.229)	0.281 (0.224)	0.280 (0.282)	0.269 (0.283)
<i>Age</i>	-0.001 (0.143)	-0.001 (0.159)	-0.001* (0.079)	-0.001* (0.083)	-0.002** (0.049)	-0.002* (0.052)
<i>Directorships</i>	-0.002 (0.354)	-0.001 (0.809)	-0.003 (0.318)	-0.001 (0.674)	-0.003 (0.404)	-0.001 (0.819)
<i>Executives</i>	0.004 (0.448)	-0.000 (0.965)	-0.001 (0.941)	-0.005 (0.416)	-0.002 (0.826)	-0.007 (0.316)
<i>Prox</i>	0.015 (0.468)	0.015 (0.450)	0.021 (0.368)	0.020 (0.374)	0.015 (0.513)	0.014 (0.541)
<i>Ivy League alumnus</i>	0.018 (0.208)	0.019 (0.193)	0.009 (0.576)	0.009 (0.570)	0.031* (0.056)	0.031* (0.054)
<i>MBA</i>	-0.006 (0.676)	-0.008 (0.578)	0.002 (0.912)	-0.000 (0.993)	-0.011 (0.529)	-0.015 (0.405)
<i>Fin/Econ</i>	-0.003 (0.841)	0.003 (0.861)	0.022 (0.324)	0.028 (0.221)	0.028 (0.220)	0.035 (0.138)
<i>Science</i>	-0.024 (0.551)	-0.043 (0.275)	0.006 (0.923)	-0.016 (0.767)	-0.033 (0.516)	-0.058 (0.252)
<i>Law</i>	-0.017	-0.020	-0.043	-0.044	-0.019	-0.020

	(0.438)	(0.351)	(0.274)	(0.262)	(0.556)	(0.535)
Year FE	Y	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y	Y
Observations	1,295	1,295	1,110	1,110	1,003	1,003
Adjusted R-squared	0.042	0.052	0.041	0.050	0.054	0.066
F-statistics	1.545	1.577	1.367	1.349	1.619	1.608

Panel B Operating Performance of High vs. Low ROA Target Firms after Hedge Fund Activism

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	$\Delta\text{IndROA}_{-1,1}$	$\Delta\text{IndROA}_{-1,1}$	$\Delta\text{IndROA}_{-1,2}$	$\Delta\text{IndROA}_{-1,2}$	$\Delta\text{IndROA}_{-1,3}$	$\Delta\text{IndROA}_{-1,3}$
<i>Funds with Industry Experience (Indicator)</i>	-0.017 (0.430)		-0.008 (0.766)		-0.000 (0.991)	
<i>Funds with Industry Experience (Indicator)*Low ROA(Indicator)</i>	0.134*** (0.006)		0.138** (0.022)		0.135** (0.033)	
<i>Funds with Executive Experience (Indicator)</i>		-0.031 (0.322)		-0.023 (0.631)		0.020 (0.682)
<i>Funds with Director/Analyst Experience (Indicator)</i>		-0.007 (0.790)		0.001 (0.986)		-0.010 (0.782)
<i>Funds with Executive Experience (Indicator) *Low ROA(Indicator)</i>		0.262*** (0.003)		0.264** (0.019)		0.228* (0.053)
<i>Director/Analyst Experience (Indicator)) * Low ROA(Indicator)</i>		0.025 (0.578)		0.035 (0.495)		0.042 (0.448)
<i>Low ROA (Indicator)</i>	0.099*** (0.000)	0.098*** (0.000)	0.136*** (0.000)	0.134*** (0.000)	0.145*** (0.000)	0.144*** (0.000)
<i>Log (AT)</i>	0.007 (0.227)	0.006 (0.308)	0.008 (0.218)	0.006 (0.274)	0.007 (0.216)	0.006 (0.289)
<i>TOTLeverage</i>	0.057 (0.112)	0.059* (0.085)	0.056 (0.170)	0.058 (0.141)	0.084** (0.033)	0.088** (0.022)
<i>BM</i>	-0.009 (0.412)	-0.007 (0.497)	-0.015 (0.215)	-0.015 (0.237)	-0.019 (0.167)	-0.019 (0.163)
<i>Divyld</i>	0.480 (0.201)	0.546 (0.147)	0.569 (0.198)	0.626 (0.155)	0.728 (0.166)	0.806 (0.126)
<i>Capex</i>	0.298* (0.088)	0.285* (0.089)	0.394* (0.091)	0.382* (0.087)	0.411 (0.108)	0.393 (0.105)
<i>Age</i>	-0.001 (0.135)	-0.001 (0.146)	-0.002* (0.055)	-0.001* (0.062)	-0.002** (0.031)	-0.002** (0.034)
<i>Directorships</i>	-0.002 (0.496)	-0.000 (0.886)	-0.002 (0.471)	-0.001 (0.702)	-0.002 (0.502)	-0.001 (0.838)
<i>Executives</i>	0.004 (0.478)	0.001 (0.850)	-0.001 (0.911)	-0.003 (0.622)	-0.002 (0.767)	-0.006 (0.423)
<i>Prox</i>	0.011 (0.599)	0.015 (0.434)	0.018 (0.413)	0.024 (0.269)	0.017 (0.436)	0.020 (0.351)
<i>Ivy League alumnus</i>	0.014 (0.338)	0.015 (0.291)	0.002 (0.921)	0.004 (0.814)	0.021 (0.188)	0.024 (0.134)
<i>MBA</i>	-0.010 (0.472)	-0.014 (0.331)	-0.002 (0.919)	-0.006 (0.751)	-0.016 (0.356)	-0.020 (0.230)
<i>Fin/Econ</i>	-0.014 (0.383)	-0.006 (0.709)	0.008 (0.685)	0.017 (0.439)	0.014 (0.509)	0.023 (0.284)
<i>Science</i>	-0.029 (0.455)	-0.054 (0.161)	-0.003 (0.956)	-0.027 (0.604)	-0.046 (0.340)	-0.074 (0.134)
<i>Law</i>	-0.030 (0.147)	-0.035* (0.091)	-0.053 (0.166)	-0.055 (0.157)	-0.031 (0.299)	-0.033 (0.272)
Year FE	Y	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y	Y
Observations	1,295	1,295	1,110	1,110	1,003	1,003
Adjusted R-squared	0.101	0.116	0.114	0.125	0.138	0.151
F-statistics	3.444	3.356	3.335	3.237	3.482	3.350

Table 12: Changes in CEO Compensation. This table provides the average changes in the (Fama French 48) industry adjusted total compensation ($\Delta IndIndtc1$), the industry adjusted change in the value of the CEO's stock option grant compensation to a 1% change in the total value of equity ($\Delta Indoptiondelta$), the industry adjusted change in the wealth sensitivity of CEO compensation to a 1% change in the stock volatility ($\Delta Indvega$) and the change of the relative percentages option, stock and equity of total compensation of the CEO. *Funds with Industry Experience* are those acquisitions whereby the hedge fund manager has previously served either as an outside director in a firm or as a specialized security analyst in the target's industry. *Funds with Executive Experience* are those acquisitions whereby the hedge fund manager has previously served as an executive in a firm in the target's industry. *Funds with Director/Analyst Experience* acquisitions are those acquisitions made by hedge fund managers who previously served as an outside director or a security analyst in the target's industry. *Funds with No Experience* acquisitions are those acquisitions whereby the hedge fund manager has no specific or specialized knowledge of the target's industry. The numbers in the test-of-difference columns denote p -values for t -statistics. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Variables	<i>Funds with Industry Experience</i>				Test of Difference (A-D)	Test of Difference (B-D)	Test of Difference (C-D)
	<i>Funds with Industry Experience</i> (A)	<i>Funds with Executive Experience</i> (B)	<i>Funds with Director/Analyst Experience Group</i> (C)	<i>Funds with No Experience</i> (D)			
$\Delta IndIndtc1_{-1,1}$	-1,593.169 (0.207)	-4,460.643 (0.240)	-221.769 (0.676)	-265.329 (0.347)	0.116	0.004**	0.957
$\Delta Indoptiondelta_{-1,1}$	-88.523 (0.300)	-332.365 (0.196)	30.271 (0.271)	-33.375*** (0.002)	0.215	0.000***	0.040*
$\Delta Indvega_{-1,1}$	-59.964 (0.318)	-226.377 (0.215)	21.394 (0.101)	-12.923*** (0.005)	0.099	0.000***	0.010*
$\Delta IndIndtc1_{-1,2}$	-92.518 (0.927)	-2,154.724 (0.288)	797.980 (0.492)	-41.226 (0.865)	0.942	0.053	0.279
$\Delta Indoptiondelta_{-1,2}$	-97.149 (0.353)	-437.971 (0.255)	29.443 (0.357)	-79.465*** (0.001)	0.802	0.007**	0.093
$\Delta Indvega_{-1,2}$	-73.977 (0.299)	-277.010 (0.244)	12.312 (0.557)	-33.482** (0.021)	0.37	0.003**	0.246
$\Delta IndIndtc1_{-1,3}$	-1,805.725 (0.178)	-3,669.829 (0.403)	-1,032.804 (0.138)	-905.565** (0.038)	0.43	0.182	0.915
$\Delta Indoptiondelta_{-1,3}$	-53.993 (0.635)	-392.445 (0.305)	83.503* (0.090)	-59.569** (0.019)	0.941	0.015*	0.042*
$\Delta Indvega_{-1,3}$	-71.511 (0.376)	-304.445 (0.256)	28.318 (0.231)	-28.704* (0.083)	0.405	0.003**	0.218
$CEO\ turnover_{-1,3}$	0.738*** (0.000)	0.840*** (0.000)	0.691*** (0.000)	0.714*** (0.000)	0.674	0.174	0.720

Table 13: Change in Firm Policies. This table provides the average changes in the (Fama French 48) industry adjusted measures of firm capital structure, investment and payout policies. $\Delta X_{i,j}$ is the industry-adjusted change in variable X from fiscal i to fiscal year j . $IndLTleverage$ is the industry adjusted ratio of long term debt to total assets; $IndTOTpayout$ is the industry adjusted payout to common shareholder, where payout is the ratio of the sum of dividends and share repurchase to the market value of equity at the beginning of the year; $IndCapex$ is the industry adjusted capital expenditures divided by book value of assets of at the end of prior fiscal year; $IndR\&D$ is the industry adjusted research and development expense divided by the book value of assets at end of prior fiscal year; $IndTOTpayout$ is the sum of capital expenditures, R&D and acquisition expense divided by the book value of total assets at end of prior fiscal year. The *Funds with Industry Experience* are those acquisitions whereby the hedge fund manager has previously served as an executive, outside director and/or specialize security analyst in the target's industry; *Funds with Executive Experience* acquisitions are those acquisitions whereby the hedge fund manager has previously served as an executive in a firm in the target's industry. *Funds with Director/Analyst Experience* acquisitions are those acquisitions made by hedge fund managers who previously served as an outside director or a security analyst in the target's industry. *Funds with No Experience* acquisitions are those acquisitions whereby the hedge fund manager has no specific or specialized knowledge of the target's industry. The numbers in the test-of-difference columns denote p -values for t -statistics. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Variables	<i>Funds with Industry Experience</i> (A)	<i>Funds with Industry Experience</i>		<i>Funds with No Experience</i> (D)	Test of Difference (A-D)	Test of Difference (B-D)	Test of Difference (C-D)
		<i>Funds with Executive Experience</i> (B)	<i>Funds with Director/Analyst Experience</i> (C)				
$\Delta IndLTleverage_{-1,1}$	0.018 (0.157)	0.030 (0.201)	0.009 (0.513)	0.008* (0.075)	0.410	0.206	0.964
$\Delta IndTOTpayout_{-1,1}$	0.025*** (0.010)	0.018 (0.261)	0.031** (0.015)	0.006** (0.018)	0.009**	0.269	0.006**
$\Delta IndCapex_{-1,1}$	-0.019*** (0.003)	-0.028** (0.017)	-0.012* (0.091)	-0.013*** (0.000)	0.362	0.098	0.868
$\Delta IndR\&D_{-1,1}$	-0.060*** (0.001)	-0.107*** (0.005)	-0.026* (0.068)	-0.007*** (0.001)	0.000***	0.000***	0.017*
$\Delta IndTOTexpense_{-1,1}$	-0.082*** (0.001)	-0.155*** (0.002)	-0.029 (0.219)	-0.032*** (0.000)	0.021*	0.000***	0.884
$\Delta IndLTleverage_{-1,2}$	0.030 (0.140)	0.075** (0.049)	0.001 (0.979)	0.015** (0.011)	0.358	0.015*	0.457
$\Delta IndTOTpayout_{-1,2}$	0.011* (0.053)	0.007 (0.317)	0.013* (0.099)	0.019*** (0.000)	0.384	0.421	0.620
$\Delta IndCapex_{-1,2}$	-0.033** (0.018)	-0.055* (0.097)	-0.018** (0.010)	-0.016*** (0.000)	0.067	0.005**	0.868
$\Delta IndR\&D_{-1,2}$	-0.063*** (0.004)	-0.126** (0.011)	-0.022 (0.152)	-0.008*** (0.002)	0.000***	0.000***	0.115
$\Delta IndTOTexpense_{-1,2}$	-0.111*** (0.000)	-0.197*** (0.001)	-0.054** (0.019)	-0.036*** (0.000)	0.002**	0.000***	0.525
$\Delta IndLTleverage_{-1,3}$	0.036 (0.148)	0.081* (0.068)	0.004 (0.900)	0.022*** (0.002)	0.486	0.045*	0.449
$\Delta IndTOTpayout_{-1,3}$	0.021*** (0.004)	0.029** (0.036)	0.016* (0.053)	0.019*** (0.000)	0.858	0.613	0.867
$\Delta IndCapex_{-1,3}$	-0.037** (0.020)	-0.063* (0.080)	-0.017** (0.013)	-0.015*** (0.000)	0.021*	0.001***	0.834
$\Delta IndR\&D_{-1,3}$	-0.055** (0.019)	-0.141*** (0.009)	0.008 (0.385)	-0.008*** (0.004)	0.000***	0.000***	0.076
$\Delta IndTOTexpense_{-1,3}$	-0.099*** (0.002)	-0.201*** (0.004)	-0.021 (0.267)	-0.028*** (0.001)	0.002**	0.000***	0.800

Table 14: Within Fund Performance of the Funds with Industry Experience. This table reports the targets' average performance around 13D filing announcement using the sample consisting of acquisitions by a hedge fund that is involved with both industry and non-industry expertise. Panel A compares the overall performance of the hedge fund managers whose targets are classified as *Acquisitions with Industry Experience* with those that do not (*Acquisitions with No Industry Experience*). In Panel B we dichotomize the sample by the percentage of total number of acquisitions of the hedge fund manager that are regarded as *Funds with Industry Experience*. We rank each hedge fund manager by the ratio of *Funds with Industry Experience* acquisitions to the total number of acquisitions made by the hedge fund manager. Acquisitions by those hedge funds with a ratio higher than the sample median are considered to have high concentration of industrial experience (*Acquisitions with High Industry Expertise Concentration*) and acquisitions by those lower than the sample median are *Acquisitions with Low Industry Expertise Concentration*. $CAR(i,j)$ represents the cumulative abnormal returns from day i to day j , where $t = 0$ is the announcement date (the date that the hedge fund manager files SC-13D form with the SEC). $\Delta IndROA$ is the industry adjusted ROA of the target where ROA is defined as the ratio of EBITDA to the total assets of the target of the previous fiscal year. The numbers in the test-of-difference columns denote p -values for t -statistics. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Panel A Within-fund Performance Analysis

Variables	Acquisitions with Industry Experience	Acquisitions with No Industry Experience	Test of Difference (p -values for t -statistic)
$CAR(-30,30)$	0.144*** (0.000)	0.063*** (0.000)	0.003***
$CAR(-20,20)$	0.116*** (0.000)	0.053*** (0.000)	0.006***
$\Delta IndROA_{-1,1}$	0.066* (0.062)	-0.020** (0.016)	0.001***
$\Delta IndROA_{-1,2}$	0.097** (0.048)	-0.027*** (0.002)	0.001***
$\Delta IndROA_{-1,3}$	0.091* (0.074)	-0.013 (0.182)	0.004***

Panel B Performance by Fund Industry Expertise Concentration

Variables	High Industry Expertise Concentration	Low Industry Expertise Concentration	Test of Difference
$CAR(-30,30)$	0.126*** (0.000)	0.053*** (0.001)	0.005***
$CAR(-20,20)$	0.099*** (0.000)	0.049*** (0.000)	0.019**
$\Delta IndROA_{-1,1}$	0.032 (0.166)	-0.015 (0.183)	0.062*
$\Delta IndROA_{-1,2}$	0.069** (0.035)	-0.040*** (0.000)	0.001***
$\Delta IndROA_{-1,3}$	0.068** (0.043)	-0.027*** (0.006)	0.004***

Table 15: Abnormal Returns of SC-13G to SC-13D switchers. This table reports the average cumulative abnormal return surrounding SC-13D filing dates and board representation frequency of a sample of targets in which we observe a switch from schedule 13G filing to schedule 13D filing. Panel A summarizes the cumulative abnormal return surrounding the 13G-to-13D (hedge fund switch from 13G to 13D filing) dates. Panel B summarizes the frequency of key hedge fund managers and/or non-key hedge fund managers from the hedge fund company sitting on targets' board after 13D filings. *Funds with Industry Experience* acquisitions are acquisitions whereby the hedge fund manager has either served as an executive, outsider director or a specialized security analysts within the target's industry prior to its acquisition. *Funds with No Experience* acquisitions are those acquisitions made by a hedge fund manager who did not have specific industry expertise in the target's industry. $CAR(i,j)$ represents the cumulative abnormal returns from day i to day j , where $t = 0$ is the announcement date (the date that the hedge fund manager files SC-13D form with the SEC). The numbers in the test-of-difference columns denote p -values for t -statistics. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Panel A Target Firm Cumulative Abnormal Return around 13D Filing Date

Variables	<i>Funds with Industry Experience</i> (A)	<i>Funds with No Experience</i> (D)	Test of Difference (A-D)
CAR (-20,20)	0.048 (0.604)	0.013 (0.707)	0.804
CAR (-30,30)	0.048 (0.604)	0.013 (0.707)	0.690
CAR (-30,-1)	-0.075 (0.304)	-0.044* (0.071)	0.620
CAR (0,+30)	0.139** (0.020)	0.058*** (0.007)	0.133
CAR (-1,+30)	0.155** (0.020)	0.053** (0.017)	0.071*

Panel B Frequency of Board Representation Activity in Targets by Industry Expertise of Hedge Fund Managers

Variables	<i>Funds with Industry Experience</i> (A)	<i>Funds with No Experience</i> (D)	Test of Difference (A-D)
Representation by fund managers	0.412*** (0.004)	0.133*** (0.000)	0.006***
Representation by others	0.059 (0.332)	0.067** (0.013)	0.906
All hedge fund representation	0.412*** (0.004)	0.189*** (0.000)	0.044**

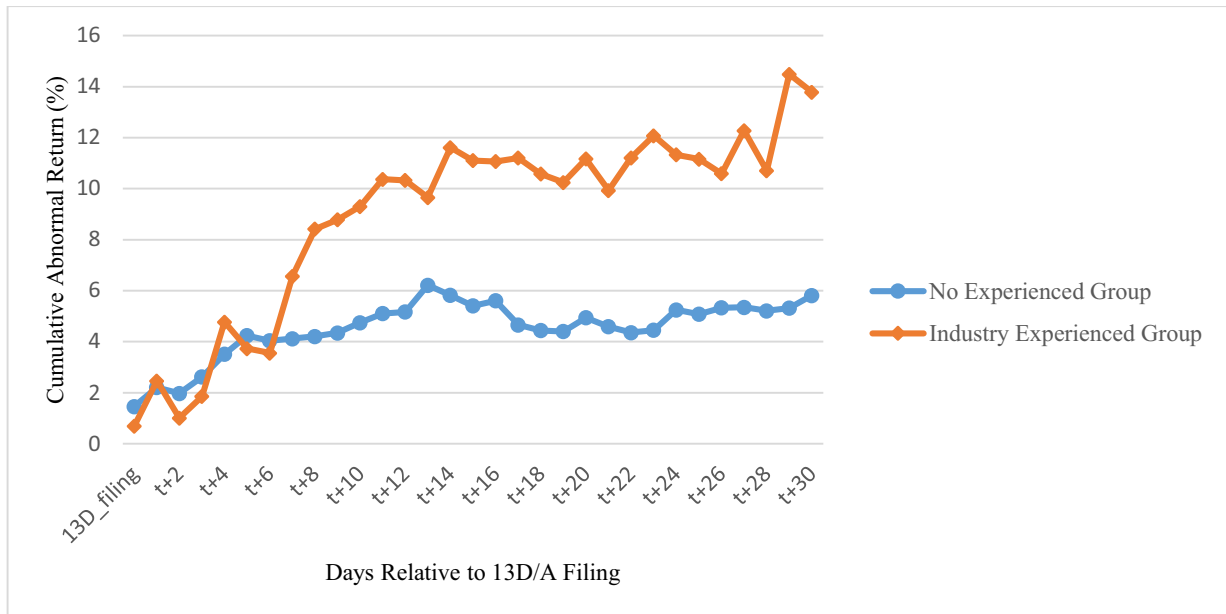


Figure 1 Cumulative Abnormal Returns over $(t, t+30)$ at Schedule 13D/A Filing (Hedge Fund Activists Switching from Schedule 13G to Schedule 13D). The x-axis indicates days relative to 13D/A filing. Two lines plot average $CAR(0, +30)$ around the SC 13D filing dates a sample of targets in which we observe a switch from schedule 13G filing to schedule 13D/A filing. The line jointed by diamonds represents the *Funds with Industry Experience* acquisitions whereby the hedge fund manager has either served as an executive, outsider director or a specialized security analysts within the target's industry prior to its acquisition. The line jointed by round dots represent *Funds with No Experience* acquisitions made by a hedge fund manager who did not have specific industry expertise in the target's industry.

Table 16: Change in matched-firm adjusted Operating Performance Following Block Share Purchase. This table reports the average change in operating performance adjusted the mean of performance of matched firms by industry expertise group. The matched firms are defined as firms falling into the same 10×10 portfolios based on size (*MV*) and book-to-market ratio (*BM*) in the same year and the same Fama-French 48 industry classification as the target firms. For targets firms that miss matched firms in the 10×10 portfolios, we redefine the matched firms by 5×5 portfolios. $\Delta ROA_{match_{i,j}}$ is the matched-firm adjusted change in return on asset from fiscal *i* to fiscal year *j*. The *Funds with Industry Experience* are those acquisitions whereby the hedge fund manager has previously served as an executive, outside director and/or specialize security analyst in the target’s industry; *Funds with No Experience* acquisitions are those acquisitions whereby the hedge fund manager has no specific or specialized knowledge of the target’s industry. The numbers in the test-of-difference columns denote *p*-values for *t*-statistics. The symbols ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Variable	<i>Funds with Industry Experience</i> (A)	<i>Funds with No Experience</i> (D)	Test of Difference (A-D)
$\Delta ROA_{match-1,1}$	0.076 (0.310)	-0.014 (0.439)	0.090*
$\Delta ROA_{match-1,2}$	0.118 (0.263)	0.022 (0.321)	0.164
$\Delta ROA_{match-1,3}$	0.383*** (0.111)	-0.037 (0.079)	0.000***