ERASMUS UNIVERSITY ROTTERDAM
ERASMUS SCHOOL OF ECONOMICS
Bachelor Thesis Economics & Business Economics

Strategies for Success: Activist Hedge Funds' Command over Campaign Performance

How do demands, wolf-packs and reputation impact the performance of activist hedge fund campaigns?

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Finish date:	8th July 2023

Abstract

In this paper, I investigate three determinants of hedge fund activist campaigns abnormal returns: demand types, presence of wolf-packs and reputation of activists. Additionally, I introduce a moderator, success of a campaign, to study the relationship between demands and performance. I use the novel shareholder activism database of the Bloomberg Terminal focusing on the years 2014-2023 to construct a dataset of 2,780 interventions. Ten demand types, including a new environmental and social (E&S) category, are created and three reputation proxies, median market capitalization of past targets, number of campaigns, and past returns, are used. Results indicate that certain campaign demands, such as the ones related to the capital structure or the governance of companies, produce higher abnormal returns than others, that wolf-packs are not associated with higher abnormal returns and that the reputation of activists, when measured with past returns, are linked to abnormal returns. Also, the success of campaigns is associated with higher abnormal return for certain demands. These results imply that activist should focus on certain demands, such as governance, capital structure and M&A, to generate higher abnormal returns, that institutional investors such as pension funds should focus on past returns to select hedge fund investments and that researchers should investigate the disappearance of the positive relationship between abnormal returns and wolf-packs in the years 2014-2023.

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Chapter 1 Introduction

An increasing number of companies are being approached by activist hedge funds. A recent example of a target of a hedge fund activist campaign is Bayer, the chemicals and pharmaceuticals giant. The company has been approached by several hedge funds, Bluebell Capital Partners, Elliott Management, and Inclusive Capital Partners (Kuchler and Storbeck, 2023), due to its poor performance following its acquisition of Monsanto. The activists have been calling for the replacement of the CEO, a change of the board of directors and a split of its crop science and pharmaceuticals divisions. Activism is defined by Cloyd (2015) as "[…] a range of activities by one or more of a publicly traded corporation's shareholders that are intended to result in some change in the corporation." Specifically, this paper seeks to investigate the performance of hedge fund activist campaigns.

Researching this topic is important for two reasons. First, it will enhance the literature on activist hedge funds. Denes et al.'s (2017) literature review shows that activism has been studied through different lenses: types of shareholder proposals, effects on earnings or types of firms targeted. However, few focus on the relationship between type of campaign launched by hedge funds and their performance. Second, activism impacts a growing number of companies. Several databases, such as Bloomberg Law (2023), show that a record number of companies were approached in 2022. It is of interest for managers, board of directors and hedge funds to understand the determinants of activism performance.

Previous research by Becht et al. (2017) shows that activist campaign performance can be predicted by the type of campaign. They study the cumulative abnormal return (CAR) of activists by categorizing the types of campaigns into buckets: "board change", "payout" (share buyback, increased dividend), "takeover" and "restructuring" (divestitures, spin-offs, blocking of M&A). Campaigns that include more than one outcome are grouped under two categories: "Multiple + Takeover" and "Multiple + NoTakeover". The event windows used are 10 and 20 days around the outcome announcement days. Results show an average CAR of 6.4% for all announced outcome, statistically significant at the 1% level. Multiple + Takeover generates an average CAR of 18.1%, board change 4.48%, payout is not statistically significant. Europe is the region with the highest average CAR at 8.8%.

The literature identifies three elements that affect performance: ESG, wolf-packs and reputation. This paper will contribute to the literature by uncovering whether ESG campaigns, wolf-packs, and reputation influence performance, thanks to the use of new data.

The three following questions are unanswered and merit greater interest and research. Do ESG campaigns affect the performance of these campaigns? ESG campaigns have never been studied by the literature as data was simply nonexistent as these engagements were rare prior to 2020. This should be

included in the regression as a new type and will reveal if ESG campaigns are a determinant of activist performance as the importance of ESG grows for investors.

What is the impact of several activist attacking one company on the campaign performance? Becht et al. (2017) studied the impact of wolf-packs on performance. However, more recent data on wolf-packs exists as it has dramatically increased. This recent increase should be investigated as the probability of campaigns succeeding increases, impacting the performance of these engagements.

What is the impact of the reputation of the hedge fund activist on the campaign performance? Reputation have been documented as important determinants of performance by Krishnan et al. (2016) but it remains unclear whether this relationship still holds as their study was completed between 2008 and 2014 "the period after the financial crisis which distorted various aspect of market intervention". This research will determine whether the recent period of high government intervention in public markets has led to a breaking down of this relationship or has kept it intact.

How does the types of engagement, wolf-packs and reputation impact the performance of activist hedge fund campaigns?

To study this research question, this paper uses cross-sectional OLS regressions with campaign performance as the dependent variable, type of campaigns, wolf-packs and reputation as independent variables, and several controls such as country, firm size, year, and industry. Performance is defined as the abnormal return of the campaign in percentage terms. The abnormal return of the campaign is obtained by calculating the difference between the expected performance based on the capital asset pricing model (CAPM) and the actual return in percentage during the observation period. The observation period starts at the public announcement time of the campaign by the hedge fund and ends when the hedge fund closes its position in the stock of the target company. Ten campaign types are created: stake only, management or board, governance, M&A, capital structure, operational (for instance, cost cutting), E&S (for instance, child labor in supply chain), other, Multiple + M&A and Multiple + no M&A. The campaign types are dummies and thus, have no units; wolf-pack is a dummy variable indicating whether one or several funds have approached a target; reputation and expertise are defined by the average market capitalization of targets, number of campaigns already conducted and the past returns of each fund.

I analyze activist interventions in 23 countries, in both developed and emerging markets. The observation period is from 2014 up until March 2023. The sample size is of 2,780 campaigns and the sources of data are the Bloomberg terminal and Refinitiv Eikon.

I expect to find that the most transformative campaigns, the ones pushing for a restructuring or an increase in payout, have a greater impact on performance than the ones pushing for lighter changes such as operational improvements or board changes. A spinoff of a division of a firm should generate more value for shareholders than a management change.

Also, I expect to find that E&S campaigns, reputation, and wolf-packs have a significant positive effect on performance. E&S campaigns should have a significant positive effect as institutional investors increasingly focus on E&S attributes when investing in companies. Reputation should have an effect as it acts as a signaling tool. If a successful investor believes that value is hidden in a company, then the market should react positively to this. Wolf-packs should have a significant positive effect as more activists leads to a higher likelihood of success for a campaign.

This study will have limitations as reputation is hard to define, and wolf-pack campaigns are more likely for larger companies. But it will shed some light on the impact of ESG engagements, reputation, and wolf-packs on the performance of activist campaigns.

Several elements distinguish this paper from previous research on hedge fund activism performance and thus, makes it valuable. First, the database used, the Bloomberg Terminal, has not been used in other research papers on this topic as it has been created recently. Second, the period studied, 2014 to 2023, is unique as research on hedge fund activism performance has diminished after 2015 as researchers started to investigate new topics of hedge fund activism. Third, the introduction of the type E&S, capturing environmental and social campaign is new. Fourth, the use of a moderating variable, success, to study the relationship between demand types and performance is also new and is made possible by the use of the Bloomberg Terminal database. Finally, results obtained with wolf-packs are different from previous research and thus, enrich our knowledge on the relationship between wolf-packs and performance.

The remainder of this paper is structured as follows. Chapter 2 discusses the history of shareholder activism, the theory behind hedge fund activism and examples of campaigns. Chapter 3 describes the dataset, cleaning procedure and variables. Chapter 4 discusses the models used. Chapter 5 presents the results, interprets them, and discusses their implication. Chapter 6 concludes this paper and proposes new research questions on hedge fund activism.

Chapter 2 Theoretical Framework

In the previous section, I discussed that the performance of hedge fund activist campaigns is determined by three elements: the type of campaign or demands of the activist(s), the reputation of the fund(s) approaching the company and the presence of a wolf-pack. This section will first review and describe the main concepts of hedge fund activism, review the existing literature of the three determinants of performance and finally, will formulate several hypotheses linked to these determinants.

2.1 Shareholder activism

2.1.1 Historical background

Shareholder activism, the act of pressuring a management team by acquiring an equity stake and calling for changes in the company's strategy, capital structure, operations, or board composition, has a long history. The first occurrence of shareholder activism dates to 1609 when Isaac Le Maire, the largest shareholder of the Dutch East India Company, initiated a conflict against the company's board by sending a letter to Johan van Oldenbarnevelt, a powerful politician and a member of the board (Koppell, 2011, p.1). Le Maire was unsatisfied by the company's use of cash (including high executive and board compensation) and its rising debt levels.

In more modern times, the activism movement gained importance following the 1929 crash as legislation such as the Securities and Exchange Act of 1934, specifically Rule 14a-8 was passed in the United States. It gave the ability to individual shareholders to vote during annual general meetings and challenge boards (Marens, 2002 and Gillian & Starks, 1998). This led to a first wave of activists, such as Lewis Gilbert, who were fighting for similar objectives to those of Le Maire: accountability of boards and executives, executive compensation, and consideration of shareholders by management teams (Sloane, 1993).

This period was followed by the professionalization of large institutional investors such as pension funds which started in 1985 with the creation of the Council of Institutional Investors (Gillian & Starks, 1998 and Denes et al., 2017). This led to better coordination and organization of pension funds with matters such as submitting of shareholder proposals, voting and standard setting in the area of corporate governance.

Following the dot-com bubble crash, institutional investors allocated an increasing larger percentage of their assets to hedge funds, rendering them mainstream. From 1990 to 2006, assets managed by hedge funds grew from $50 billion to $1 trillion (Stulz, 2007). The first activist hedge funds were launched in that period: Icahn Partners (Serwer, 2004) and Pershing Square Capital Management in 2004 (About Pershing Square Holdings Ltd, 2023) and Trian Fund Management in 2005 (About Us Trian Partners, 2023).

2.1.2 What is an activist hedge fund and what function do they serve?

Hedge funds are investment funds that pool money from institutional investors to invest in liquid securities. These hedge funds are more sophisticated that mutual funds as they can use financial instruments such as derivatives to generate returns and are less regulated than mutual funds. Also, managers of hedge funds are incentivized to perform well as the fee structure is usually composed of a fixed "management" fee of 1.5-2% of assets and a variable "performance" fee of 20-25% of profits above a certain threshold. These characteristics mean that hedge fund employ strategies that differ from mutual funds. They fall under four broad categories: macro, directional, relative value and event-driven. Activist hedge funds belong to the last category (Baker & Filbeck, 2017, p.207).

These hedge funds take minority stakes (between a few percent up to 15-20%) in a few companies (10 to 30) because they believe that the company's stock is undervalued or that significant value could be created by implementing their proposals. They are called activists as they call for change in the company's organization, strategy and governance and want these changes to be accomplished in a short amount of time as the usual holding period is short: between 12 and 20 months (Brav et al., 2008). They usually start by proposing these changes to the company's board and management privately, through letters and meetings. When these management teams are not receptive, activists will go public and will use all the modern communication tools at their advantage (press releases, websites, presentations, media appearances). A recent example of that is Elliott Management's investment in Goodyear (Herbst-Bayliss, 2023).

The principle-agent problem has been widely discussed in economics. Two elements are necessary for it to arise: asymmetric information and differing objectives between the agent and the principal. The relationship between shareholders and management is an example of this problem. Multiple papers (Karpoff (2001), Romano (2001), Gillian & Starks (2000)) have shown that "classic", relatively more passive institutional shareholders such as pension funds and mutual funds have a poor track record of pushing for change at companies that underperform, rarely leading to performance improvements. As a result, activist hedge funds can play a key role by regulating markets, making them more efficient and pushing underperforming companies to change, thereby reducing the principle-agent problem.

2.1.3 Activist campaign types and examples

When approaching their target, activists make several proposals to the board of directors and management team. They are not mutually exclusive as an activist can have several demands. These demands can be classified under four buckets: Mergers & Acquisitions (M&A), Corporate Governance, Capital Structure and Operations. M&A demands include demands such as forcing the management to find a buyer for the company ("sell the company"); selling the company to the hedge fund; spinning-off a division of the firm; blocking an announced merger or acquisition by the target; or in the case of

an announced acquisition of the target by a third-party, ask for better terms such as a higher price. Corporate Governance demands can include changing the CEO or other executives; changing certain members of the board; require a separation of the chairman and CEO roles; request lower remuneration or better alignment of it to shareholders' interests; or revoke an existing poison pill. Capital structure propositions include demands to reduce or increase debt; conducting a dividend recapitalization; buy back some of the outstanding shares; pay a special dividend; or reduce the level of cash. Finally, the operations bucket is the most diverse as it can be anything that impacts the company's operations and strategy: increase efficiency by reducing costs; improve the go-to-market strategy; increase the R&D budget; or focus on a certain growth area. Two examples of recent campaigns are presented below.

Danone was attacked by Bluebell Capital, Artisan Partners and Corvex Management who took a stake in the company between 2017 and 2021. The activists complained about the poor share price performance compared to rivals Nestlé and Unilever which was due to "a combination of poor operational record and questionable capital allocation choices" (Abboud, 2021). Shareholders of Danone grew frustrated by Danone's CEO focus on environmental and social goals whilst it was not able to attain its financial targets. The company announced a change of CEO in March 2021. Following this change, the company has sold several non-core assets, renewed its board of directors, and improved its operational execution.

Airbus was approached by The Children's Investment Fund Management (TCI) in February 2023. In a letter sent to the CEO of Airbus, the fund opposed Airbus's contemplated purchase of a minority stake in Evidian, a division of Atos. The fund claimed that this acquisition would be "value destructive" and was "politically motivated". They also said that Airbus could continue having a "mutually productive and profitable relationship with Evidian" without taking a stake (Pfeifer et al., 2023). The campaign was successful after Airbus announced it would not pursue a deal with Evidian and would instead seek a "partnership" (Hepher & Donovan, 2023).

2.1.4 Wolf-pack

In recent years, a new trend has emerged. Instead of approaching companies alone, activists have often approached companies with other funds. An extreme example of such case is the letter sent by TCI to the supervisory board of Deutsche Börse, claiming the support of eight other funds to oppose Deutsche Börse's proposed acquisition of the London Stock Exchange (Becht et al., 2017).

However, activists remain careful to not be seen as acting in concert as they could be considered a "group" in the sense of Section (13)(d) of the SEC Act of 1934 (Coffee & Palia, 2015). There are several reasons for not wanting to be seen as a group. First, it delays the moment at which the 13D Schedule – which must be filed when a fund owns a stake of 5% or more of a company – must be filed. Second, if

one fund was to be sued by the company, several members of the group would be legally involved in the lawsuit. Third, when activists appear as a group, companies can adopt poison pills which will limit the ability of the activists to buy more shares.

Wolf-pack activism has two main advantages. First, for activists, it gives them the ability to pool their financial resources and expertise, reducing the cost of control (Lu, 2016). Second, for existing (passive) shareholders of the companies, wolf-pack activism leads to effective monitoring of the board and management team. La Porta et al. (1999) and Dlugosz et al. (2006) argue that a single blockholder with a stake of at least 20% is required to exert monitoring and control and that only 15 to 20% of US companies had that characteristic at the beginning of the 2000s.

2.1.5 Reputation

When activists target companies, they also target the individuals that are at the helm of those companies. Public companies are headed by a management team, often called an executive committee, board of management or operating committee depending on the country, which is held accountable by a board of directors. Generally, the most senior member of the management team, the CEO, as well as the Chairman (who can be the same individual), care about their position, the prestige and power it entails, and the economic benefits that can be derived from it. Also, being attacked by an activist usually involves some element of surprise for the management team and the board. Thus, when a company is attacked by an activist, other, less rational elements such as reputation can influence individuals' decisions and reactions. Several activists have been able to build a credible reputation for success and expertise over the years. The most famous example is the one of Elliott Management which has been labelled as the "Most Feared Investor" by numerous media (Ahmed et al., 2017).

2.2 Results from previous empirical studies

This section focuses on the previous research that has been conducted on hedge fund activism performance, activist demands, wolf-packs, and reputation. It also develops six hypotheses.

2.2.1 Activist demands and the impact of success

Numerous papers document the relationship between a campaign's performance and the demands of the activist.

Becht et al. (2017) use a sample of 1,740 successful campaigns between January 2000 and December 2010 across Asia, Europe, and North America. They study several elements of a campaign's performance: the abnormal return around the disclosure date, the holding period returns and the

abnormal return depending on the demands of the activist around their announcement. The abnormal returns depending on the demands of the activist are studied with two windows: 21 days (-10, 10) and 41 days (-20, 20) around the announcement. Both windows indicate a positive effect of all demands on performance at the 1% significance level, except for the payout demands. The demands with the highest performance impact for the 41 days window are the "Multiple + Takeover" demands, which includes several demands and a takeover demand, the "Takeover" demand and the "Multiple + No Takeover" demands with 18.1%, 9.73% and 9.04% abnormal return, respectively, significant at the 1% level. "Restructuring", which include spin-offs and divestitures demands have an abnormal return of 5.6% and "Board" demands have an abnormal return of 4.48%, both significant at the 1% level. By looking at regions, we can see that Europe and North America tend to have higher abnormal returns across most demands. For instance, "Takeover" demands lead to an abnormal return of 10.8% and 9.54% for Europe and North America, respectively, both significant at the 1% level. However, Asia's abnormal return is not significant.

Klein and Zur (2009) study the same question between January 2003 and December 2005 but incorporate a larger set of investors by including individual investors, ex-officers of the targeted firm, advisors to wealthy investors and private investment vehicles. This leads to an overall sample of 305 campaigns and 235 activists. The authors study the abnormal return around the 13D filing date using a 61 days (-30, 30) window. When focusing on the firms targeted by hedge funds, the cumulative abnormal return is the highest for "other reasons", "higher buyback", "intention of buying firm" and "change in composition of board of directors" with 19.4% (significant at the 10% level), 16.88% (significant at the 10% level), 13.06% (significant at the 5% level) and 12.6% (significant at the 1% level), respectively. However, several motives such as "pursuing strategic alternatives", "replace the CEO" or "cut the CEO's salary" have a coefficient not significantly different than zero. Additionally, the authors show that the success of a campaign (measured by whether the activist has obtained the stated demands) impacts its performance. For the periods (-30,5) and (-30,30), there is a significance difference of performance between successful and non-successful campaigns at the 5% level. However, for the period (30, 365), abnormal returns are not significantly different than zero at the 10% level.

Similarly, Brav et al.'s (2008) paper studies the impact of the motive on performance by using 13D filings between 2001 and 2006. The event window is of 41 days (-20, 20). The highest abnormal return can be observed when activists demand the sale of the company, followed by an announcement to intervene but with no stated goals ("general") and then when activists demand a change in the strategy of the firm. These objectives produce abnormal returns of 8.54%, 6.28% and 5.95%, respectively, all significant at the 5% level. Other motives' coefficients, capital structure and governance, are not significantly different than zero at the 10% level.

Greenwood & Schor (2009), who cover the years 1993 to 2006, use a database of 980 events. Their study covers both daily and monthly cumulative abnormal returns over 9 different windows for daily returns and 6 windows for monthly returns. When focusing on 1-month cumulative abnormal returns, they observe a significant positive effect of most activism types. "blocking mergers", "proxy contest" and "asset sale" types have the largest effect on abnormal returns at 11.02%, 10.74% and 7.63%, respectively, all significant at the 1% level. Certain coefficients, such as "corporate strategy" and "strategic alternatives", are not significant at the 10% level.

Becht et al. (2010), conduct a study on the same relationship but focused on European campaigns between 2000 and 2008. This leads to 274 observable outcomes. When focusing on the 41 days window (-20, 20), the coefficient is positive and significant at the 5% level for three out of four types: takeover, spin-offs and payouts with abnormal returns of 15.37%, 3.65% and 3.32%, respectively. The board type is not significant at the 10% level. Thus, the literature points to the following hypotheses:

> **H1:** *There is a positive relationship between M&A demands and cumulative abnormal returns of activist campaigns.*
> **H2:** *There is a positive relationship between capital structure demands and cumulative abnormal returns of activist campaigns.*
> **H3:** *There is a positive relationship between governance demands and cumulative abnormal returns of activist campaigns.*

Finally, in the last few years, several campaigns have centered around Environmental, Social and Governance (ESG) topics. Examples include Carl Icahn's proxy fight with McDonald's over the treatment of pigs (Temple-West, 2022) or Engine No. 1's highly publicized fight with ExxonMobil over the reduction of its carbon footprint (Phillips, 2021). The impact of ESG on firm performance is highly discussed by the literature but few papers focus on ESG and hedge fund activism. Friede et al.'s (2015) review show that around 90% of papers find a positive relationship between ESG factors and financial performance. Abbate et al. (2021) find a positive relationship between the ESG rating of European mutual funds and their performance. Ameer & Othman (2012) document the positive relationship between the sustainability practice of a company and its financial performance measured by profit before tax, cash flow from operations and return on assets. This leads me to formulate the following hypothesis:

> **H4:** *There is a positive relationship between environmental and social demands and the cumulative abnormal returns of activist campaigns.*

2.2.2 The impact of wolf-packs

The emergence of wolf-packs is a recent trend. A significant part of the literature focuses on the legal aspects of wolf-packs but few focus on their impact on likelihood of campaign success and performance. Becht et al's (2017) is one of them. Almost a quarter (22%) of the campaigns included in their 2000-2010 dataset involve wolf-packs, with 77% of these being with two hedge funds and 23% with three hedge funds or more. By partnering, wolf-packs can garner a higher stake in the target firm than alone (13.4% compared to 8.3% on average). Additionally, the authors show that wolf-packs engagement lead to much higher abnormal returns at the announcement date and much higher probability of success. Abnormal returns at the announcement date are 5.99% for individual hedge fund campaigns and 14.05% for wolf-packs campaigns, both significant at the 1% level. The difference of 8.06% is significant at the 1% level. When focusing on the 21 days window, abnormal returns from engagement outcome are higher for wolf-packs than for stand-alone campaigns but their difference is not significantly different than zero. However, the probability of successful outcomes is higher for wolf-packs than stand-alone campaigns. For instance, board demands have a 32% probability of success with wolf-packs compared to 12% for stand-alone, and the difference is significant at the 1% level. Other authors have shown a positive effect of wolf-packs on campaign performance. Wong (2020) shows that the presence of a wolf-pack leads to an abnormal return of 8.4% above a non-wolf pack campaign, significant at the 1% level. When measuring performance 7 days around the campaign announcement (-3, 3), Bessler et al. (2015) show that wolf-packs lead to an abnormal return of 2.72% compared to non-wolf-pack campaigns. This is significant at the 10% level.

As Becht et al. (2017), Wong (2020) shows that wolf-packs also have an impact on the probability of success of a campaign. By using two probit regressions, he shows that the average marginal effect of wolf-pack on the success of the campaign is 7.5% and significant at the 5% level. The average marginal effect of wolf-pack on the probability of obtaining a board seat is 8.5% and significant at the 1% level. Hartmann (2023) shows that wolf-packs tend to target companies that are on average 2.3 times larger when measured by revenue than single activist campaigns. He also shows that wolf-pack campaigns have a higher success ratio than standalone campaigns: 69% compared to 51%, significantly different at the 5% level. Finally, by using several logistic regressions, Gonzalez & Calluzzo's (2020) show that companies are 50% more likely to be attacked by other activists if an activist is already a shareholder. These results point to the following hypothesis:

> **H5:** *There is a positive relationship between the presence of wolf-packs and the cumulative abnormal return of activist campaigns.*

2.2.3 The impact of reputation

The effect of reputation on performance of activist hedge funds has been widely studied by researchers. However, several measures of reputation have been used.

Krishnan et al. (2016) focus on three areas of reputation: frequency of intervention, past success and financial clout and expertise. Specifically, hedge funds with a high frequency of intervention, those with at least 5 interventions in the last 3 years of observations, are called "Most Active Hedge Funds"; hedge funds with a strong track record, those with a 21-day announcement period abnormal returns of at least 10% and at least 3 interventions in the past 3 years, are called "Top Return Hedge Funds"; hedge funds with financial clout and expertise, the ones present in the top 10 of aggregate dollar investments in the past 3 years, are called "Top Investor Hedge Funds". The dataset focuses on campaigns that occurred between January 2008 and May 2014. The authors regress three windows of cumulative abnormal returns, 3 days, 7 days, and 21 days, on the three definitions of hedge fund reputation. The results show that the most active hedge funds generate the lowest announcement period abnormal return, the coefficients are not significant. The authors' explanation is that the most active hedge funds take too many positions and thus, do not focus enough of their time and effort on each intervention, resulting in underperformance. However, top return hedge funds and top investor hedge funds produce higher abnormal returns than their non-top return and non-top investor counterparts, respectively. Top return hedge funds produce an abnormal return of 5%, above non-top return hedge funds, significant at the 5% level, and top investor hedge funds produce an abnormal return of 12% above non-top investor hedge funds, significant at the 1% level. Both are measured during the 21 days announcement period.

Wiersema et al. (2020) define reputation differently. They argue that the existing research on reputation fails to consider the behavioral aspect of an activist campaign. Contrary to activist who research the company deeply before investing in it, management teams and boards often do not know the activist attacking them. Thus, they focus on the activist's reputation for being confrontational as this might influence the board and management team and lead them to accept the activist's demands more easily. They believe that this higher tendency to settle with activists would lead to an increased probability of success and thus, higher campaign performance. An activist is labelled as confrontational when it has participated in at least one proxy fight in the three years following its founding. The dataset contains 424 campaigns initiated by 49 funds that occurred between 2008 and 2014. Results show that the average marginal effect of reputation on likelihood of success is positive and significant. An activist that does not have a reputation for being confrontational has a campaign success rate of 61%. Activists with 1 proxy fight in their first three years have a success rate of 68% and those with 2 proxy fights have a success rate of 74%.

Other authors are even more creative. Bessler and al. (2008) use the log of the number of citations of the activist in the Genios database up to five years prior to the event date as a proxy of reputation. Genios is a German press database that aggregates news articles and information. The 7-days abnormal return model supports the hypothesis that reputation has a significant positive effect on announcement abnormal return. However, the effect of reputation on abnormal return disappears in the 1-year abnormal return as the coefficients are not significant.

Zur (2008) tests four elements of a fund's reputation. The first is whether the fund gained at least one seat on the board of its previous target, the second is whether the fund's previous target increased its dividend payment following the campaign, the third is failure which is defined as when a fund threatens to start a proxy fight but does not gain at least one board seat, and the fourth is whether the fund threatened the previous target of a proxy fight. The results show a positive relationship between 11-days abnormal returns and the first two elements, board seat and dividend payments, showing that funds can gain a reputation for being successful. Also, funds can lose this reputation for being successful as results show a negative relationship between failure and abnormal returns. Finally, the proxy fight threat coefficient is not significant, indicating that being aggressive is not rewarded by the market in subsequent campaigns. These results led me to formulate the following hypothesis:

H6: *There is a positive relationship between the reputation of an activist and the cumulative abnormal returns generated by its campaigns.*

Chapter 3 Data

3.1 Variables

The sources of data of this paper are the Bloomberg Terminal and Refinitiv Eikon, two financial software and databases widely used by researchers and financial professionals. The list of activist hedge fund campaigns is derived from Bloomberg Intelligence's "Database of shareholder activists". It contains 4,477 observations of hedge fund attacks and 3,222 single campaign observations between June 2014 and May 2023.

The following variables are present in this database. *Company name*, defined as the name of the target of the campaign, *Activist* defined as the name of the hedge fund that launches the campaign, *Sector* and *Industry* defined as the sector and the industry of the target, respectively, *Outcome* a categorical variable defined as the outcome of the campaign, classified as partial success, success, unsuccessful or not applicable, *Country* which is defined as the country in which the company is listed, *Proxy fight* which is a dummy indicating whether there was a proxy fight, *Settlement* a dummy indicating whether the management team accepted a settlement with the activist, *Number of funds* defined as the number of hedge fund(s) in a single campaign, *Board seats won* indicating how many board seats the hedge fund(s) have won and *Market Capitalization* which is defined as the equity market capitalization of the target at the start of the campaign. *Start date* is defined as the announcement date of the campaign. This announcement can occur through a filing required by the local stock market authorities if the stake is sufficiently large and/or through a public announcement which takes the form of a press release, presentation, or media appearance by the hedge fund. *End date* is defined as the moment at which the hedge fund sells its stake or significantly reduces it. Similarly to the *Start date*, this date is obtained through a filing or a public announcement that the hedge fund is reducing or selling its stake. *Year* is defined as the year of the *Start date*. *Campaign length* is defined as the length in days of the campaign and is obtained by calculating the difference between the *End date* and *Start date*. *Stake size* is defined as the highest stake in percentage the hedge fund has held during the campaign.

The *Hp Return* is defined as the return the hedge fund has produced over the course of a campaign in percentage. *Hp Expected Return* is defined as the percentage expected return of the stock of the target during the campaign based on the Capital Asset Pricing Model (CAPM) as defined by Sharpe (1964), Lintner (1965) and Mossin (1966):

$$Hp\ Expected\ Return_i = Rf_i + \beta_i * ERP_i$$

Rf is defined as the average 1-year government bond yield of the target's *Country* in the year of the campaign. *Rf* is obtained on Refinitiv Eikon's chart tool. β is defined as the 5-year monthly beta of the

target at the start of the campaign, obtained on Refinitiv Eikon's Screener tool and calculated in the following way:

$$\beta = \frac{Cov(r_i, r_m)}{Var(r_m)}$$

r_i is the monthly return of the target over the previous 5 years and r_m is the return of the market (the S&P 500) over the same period. *ERP is* the equity risk premium in the *Country* of the target at the start of the year of the campaign and is obtained on Refinitiv Eikon's ERP tool.

Hp Excess Return is defined as the difference between *Hp Return* and *Hp Expected Return*[1]*:*

$$Hp\ Excess\ Return = Hp\ Return - Hp\ Expected\ Return$$

Demands is defined as the list of demands of the hedge fund. Based on these demands, ten *demand types*, which are dummies, have been created: *Stake only*, *Management Board*, *Governance*, *M&A*, *Capital Structure*, *Operational*, *E&S*, *Other*, *Multiple+M&A* and *Multiple+No M&A*. *Stake only* corresponds to campaigns that do not have any publicly observable demands, as the activist might be submitting them privately to the target. *Management Board* corresponds to demands of personnel change at the board level or the management level. This can include a change in the CEO, CFO, Chairman, or the removal of certain directors because they are deemed as not competent for this specific industry. *Governance* demands intend to improve the overall governance of the target by introducing best practices such as the separation of the Chairman and CEO roles, the removal of a poison pill if there is any, better voting rights for shareholders, a cancellation of dual-class share systems when they exist or improving the independence of directors. *M&A* demands include all demands related to the sale of the company or part of the company such as obtaining a higher price if a merger has been proposed by a third party, the spin-off of a division or the breakup of the target. *Capital Structure* demands include demands that push for the payment of a special dividend or buyback, the reduction of the cash position of the target or reduction of debt. *E&S* demands include demands centered around environmental or social objectives and are mainly composed of demands targeting the reduction of greenhouse gas emissions by the target. *Multiple+M&A* corresponds to demands that include at least 2 demands from *Management Board*, *Governance*, *Capital Structure*, *Operational*, *E&S* and include an M&A demand and *Multiple+No M&A* corresponds to demands that include at least 2 demands from *Management Board*, *Governance*, *Capital Structure*, *Operational*, *E&S* but have no M&A demands. Finally, the *Other* type includes all demands that do not correspond to any of the mentioned categories.

A full list of the words corresponding to each *type* can be found in appendix A.

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[1] For instance, the activist campaign of Bluebell Capital Partners Ltd on UniCredit SpA has a *Hp Return* of -6.62% and a *Hp Expected Return* of 6.75%, leading to a *Hp Excess Return* of -13.37%.

Wolf-pack is defined as a dummy variable that takes a value of 1 if more than one hedge fund attacks the same firm, otherwise it takes a value of 0.

Finally, reputation of an activist hedge fund is measured by three variables: *Reputation number of campaigns*, *Reputation market cap* and *Reputation return*. *Reputation number of campaigns* is defined as the number of activist campaigns that the activist hedge fund has launched, *Reputation market cap* is defined as the historical median target market capitalization of the activist hedge fund and *Reputation return* is the historical campaign average holding period return of the activist hedge fund. This data is obtained on the Bloomberg Terminal, under the category "activist returns" of the "Database of shareholder activists".

3.2 Data cleaning

Campaigns that do not have an *End date* and do not have a *Hp Return* are removed from the sample, leading to a sample size of 3,239 observations from 4,477. Campaigns that have "investment fund" as their sector are also removed as they do not correspond to the definition of hedge fund activism of this paper, leading to a sample size of 3,072 observations. Observations with 0 as their "stake at start" as well as no "number of seats sought" and *Market Capitalization* are removed, leading to a sample size of 3,052 observations. All campaigns that contain "discussions only" as their objective are also removed as they do not correspond to this paper's research scope which reduces the sample to 2,816 observations. Finally, in line with papers on hedge fund activism, I remove countries that have less than five observations as it can lead to a skewing of their respective control variable. This leads to a deletion of 36 observations and the final sample is of 2,780 observations.

The reputation dataset is smaller than the overall dataset at 1,487 observations as only a subset of the 2,780 observations have been approached by a hedge fund contained in Bloomberg's reputation database. Note that as the reputation dataset did not include any observations in Brazil, this country is not contained in the reputation analysis.

3.3 Data analysis

It is interesting to note than the average company attacked in this sample is large as the average market capitalization is above $6.5 billion but still below the threshold of $10 billion, level at which a company is considered as a large capitalization. Also, the average campaign length is short at less than one year and a half. Finally, for funds that have reputation data available, it can be observed that the average fund is quite experienced with more than 34 campaigns conducted and that the average return is above the sample *Hp Return*.

Table 1 Descriptive statistics

Variable	Mean	Standard deviation	Min	Max	Observations
Board seats won	0.526	1.186	0.000	12.000	2,780
Campaign length	518.217	452.347	1.000	3034.000	2,780
Hp Excess Return	14.419%	119.421%	-117.083%	3065.170%	2,780
Hp Expected Return	7.016%	3.594%	-16.091%	36.012%	2,780
Hp Return	21.436%	119.320%	-99.999%	3071.841%	2,780
Market capitalization	6,550.757	31,928.548	0.273	899,733.625	2,780
Number of funds	1.983	1.370	1.000	9.000	2,780
Proxy fight	0.161	0.368	0.000	1.000	2,780
Reputation market cap	3,617.562	10,093.841	3.116	176,233.000	1,487
Reputation number of campaigns	34.412	42.332	1.000	166.000	1,487
Reputation return	23.793%	27.371%	-63.778%	352.922%	1,487
Settlement	0.157	0.364	0.000	1.000	2,780
Stake size	8.626%	10.554%	0.000%	100.000%	2,780
Wolf-pack	0.503	0.500	0.000	1.000	2,780

This table showcases the descriptive statistics of the main variables of this paper. The columns show the variable name, mean, standard deviation, minimum, maximum, and number of observations. The reputation variables have less observations as the data available covers a fraction of the campaigns of the initial dataset. *Campaign length* is presented in days and *market capitalization* and *reputation market cap* in millions of US dollars. *Hp Excess Return*, *Hp Expected Return*, *Hp Return*, *Reputation return,* and *Stake size* are given in percentages. All other variables have no units.

A significant proportion of campaigns (around 87.5%) occur in five countries: Australia, Canada, Japan, the United Kingdom, and the United States, reflecting the size and importance of their capital markets. The most represented industries are Oil & Gas Producers, Software, Metals & Mining, Biotech & Pharma, Retail – Discretionary, and Leisure Facilities & Services. These six industries represent 30.4% of the observations. The years with the highest number of observations are 2019, 2018 and 2020. The years 2021, 2022 and 2023 have high number of reported campaigns but most of them are ongoing and are thus, not included in the sample. Finally, the most represented demand types are *Multiple + M&A*, *Stake only* and *Management Board*. Few campaigns are classified under the *E&S* type as these campaigns are more recent and most of them are still ongoing.

Table 2 Activist engagements by country, industry, year, and demand types

A.   Activist campaign by target's country of listing

Country	Frequency	Percentage of total
Australia	149	5.36%
Austria	15	0.54%
Belgium	5	0.18%
Brazil	12	0.43%
Canada	189	6.80%
Finland	5	0.18%
France	34	1.22%

Table 2 (continued)

Germany	57	2.05%
Greece	5	0.18%
Hong Kong	23	0.83%
India	11	0.40%
Italy	35	1.26%
Japan	318	11.44%
Netherlands	21	0.76%
Norway	8	0.29%
Singapore	20	0.72%
South Korea	29	1.04%
Spain	11	0.40%
Sweden	13	0.47%
Switzerland	31	1.12%
Taiwan	11	0.40%
United Kingdom	175	6.29%
United States	1603	57.66%
Observations	2780	100%

B.   Activist campaign by target's industry

Industry	Frequency	Percentage of total
Advertising & Marketing	23	0.83%
Aerospace & Defense	24	0.86%
Apparel & Textile Products	27	0.97%
Asset Management	82	2.95%
Automotive	43	1.55%
Banking	99	3.56%
Beverages	16	0.58%
Biotech & Pharma	135	4.86%
Cable & Satellite	7	0.25%
Chemicals	59	2.12%
Commercial Support Services	61	2.19%
Construction Materials	19	0.68%
Consumer Services	20	0.72%
Containers & Packaging	9	0.32%
Diversified Industrials	6	0.22%
E-Commerce Discretionary	12	0.43%
Electricity & Gas Marketing & Trading	4	0.14%
Electric Utilities	37	1.33%
Electrical Equipment	45	1.62%
Engineering & Construction	62	2.23%
Entertainment Content	28	1.01%
Food	42	1.51%
Forestry, Paper & Wood Products	9	0.32%
Gas & Water Utilities	15	0.54%

Table 2 (continued)

Health Care Facilities & Services	65	2.34%
Home & Office Products	11	0.40%
Home Construction	25	0.90%
Household Products	16	0.58%
Industrial Intermediate Production	15	0.54%
Industrial Support Services	20	0.72%
Institutional Financial Services	29	1.04%
Insurance	46	1.65%
Internet Media & Services	73	2.63%
Leisure Facilities & Services	114	4.10%
Leisure Products	14	0.50%
Machinery	63	2.27%
Medical Equipment & Devices	53	1.91%
Metals & Mining	147	5.29%
Oil & Gas Producers	163	5.86%
Oil & Gas Services & Equipment	38	1.37%
Publishing & Broadcasting	42	1.51%
REIT	96	3.45%
Real Estate Owners & Developers	45	1.62%
Real Estate Services	15	0.54%
Renewable Energy	17	0.61%
Retail – Consumer Staples	40	1.44%
Retail – Consumer Discretionary	126	4.53%
Semiconductors	55	1.98%
Software	160	5.76%
Specialty Finance	50	1.80%
Steel	10	0.36%
Technology Hardware	110	3.96%
Technology Services	62	2.23%
Telecommunications	58	2.09%
Tobacco & Cannabis	14	0.50%
Transportation & Logistics	72	2.59%
Transportation Equipment	8	0.29%
Wholesale – Consumer Staples	10	0.36%
Wholesale – Consumer Discretionary	14	0.50%
Observations	2,780	100.00%

C. Activist campaign by year

Year	Frequency	Percentage of total
2014	115	4.14%
2015	227	8.17%
2016	223	8.02%
2017	360	12.95%
2018	456	16.40%
2019	484	17.41%
2020	395	14.21%
2021	351	12.63%
2022	162	5.83%
2023	7	0.25%
Observations	2,780	100.00%

D. Activist campaign by demand type

Demand type	Frequency	Percentage of total
Stake only	521	18.74%
Management Board	457	16.44%
Governance	41	1.47%
M&A	364	13.09%
Capital structure	86	3.09%
Operational	51	1.83%
E&S	11	0.40%
Other	45	1.62%
Multiple + M&A	905	32.55%
Multiple + No M&A	299	10.76%
Observations	2,780	100%

This table showcases the distribution of activist campaigns in the main sample by country in table A, industry in table B, year in table C and demand type in table D. The columns show the country, industry, year and demand type in table A, B, C and D, respectively as well as the frequency, and percentage out of the total number of observations. Percentage numbers may add up to more than 100% as they are rounded to the nearest hundredth.

Chapter 4 Method

This paper uses ordinary least square (OLS) regressions with robust standard errors and an ANOVA to study the impact of demand types, wolf-packs, and reputation on the abnormal return of activist hedge fund campaigns. Robust standard errors are used for all regressions except one as Breusch-Pagan tests were conducted and indicated heteroskedasticity in almost all cases. The results of these tests are available in Appendix E. The dependent variable in all models is the holding period excess return.

To answer hypothesis 1, 2, 3, and 4, the independent variable used is *demand types*. The independent variable used to answer hypothesis 5 is *wolf pack*. Finally, the independent variables *Reputation number of campaigns*, *Reputation market cap* and *Reputation return* are used successively to answer hypothesis 6.

The following control variables are used: *Industry*, *Country*, *Year*, *number of funds*, *Campaign length*, *Market Capitalization*, *Stake size*, *Proxy fight*, *Settlement*, *Outcome* and *Board seats won*. This leads to the following models.

For the first four hypotheses:

$$Hp\ Excess\ Return_i = \beta_0 + \beta_1 demand\ types_i + \beta_2 \textbf{Control variables} + \varepsilon_i$$

$$Hp\ Excess\ Return_i = \beta_0 + \beta_1 demand\ types_i + \beta_2 demand\ types_i * success_i + \beta_3 \textbf{Control variables} + \varepsilon_i$$

For the fifth hypothesis:

$$Hp\ Excess\ Return_i = \beta_0 + \beta_1 Wolf\ pack_i + \beta_2 \textbf{Control variables} + \varepsilon_i$$

For the sixth hypothesis:

$$Hp\ Excess\ Return_i = \beta_0 + \beta_1 Reputation\ market\ cap_i + \beta_2 \textbf{Control variables} + \varepsilon_i$$

$$Hp\ Excess\ Return_i = \beta_0 + \beta_1 Reputation\ number\ of\ campaigns_i + \beta_2 \textbf{Control variables} + \varepsilon_i$$

$$Hp\ Excess\ Return_i = \beta_0 + \beta_1 Reputation\ return_i + \beta_2 \textbf{Control variables} + \varepsilon_i$$

Chapter 5 Results & Discussion

5.1 Results & Discussion

This section describes the results of the three questions asked by this paper. First, it describes the impact of the demand types on the holding period excess return of activist hedge fund campaigns, thereby testing hypothesis 1 to 4. Then, it describes the impact of wolf-packs on activist hedge fund campaigns' excess returns, testing hypothesis 5. Finally, hypothesis 6 is tested by using three measures of an activist's reputation – median market capitalization of company attacked, number of campaigns launched and average holding period return – analyzing their respective impact on excess return.

5.1.1 Demand type

I investigated the relationship between the demands made by activist hedge funds and the resulting holding period excess return. Table 3 reports the six model specifications where *Hp Excess Return* is the dependent variable and *demand types* are the independent variables. The fifth and sixth specifications are the most noteworthy as they include all control variables and model six uses an interaction effect to explain *Hp Excess Return*.

The first model specification, shown in column 1, regresses *Hp Excess Return* on *demand types* without using any control variables. Three coefficients are significantly different than 0: *Other*, *Operational* and *E&S*, significant at the 1%, 5% and 10% level, respectively. The three coefficients are negative indicating that the *Other*, *Operational* and *E&S* demand types are associated with a negative excess return of 32.8%, 20.8% and 17.5%, respectively, on average and compared to the type *Stake only*.

The second specification, shown in the second column, adds the dummy *Country* as control variables. This leads to no change in the coefficients that are significant and a slight change in the value of these coefficients. *Operational* and *E&S* slightly decrease and *Other* slightly increases.

The third specification adds *Industry* and *Years* as control variables. The E&S coefficient becomes insignificant at the 10% level and similarly to the second specification, this leads to a small change in the value of the coefficients with *Operational* and *Other* decreasing.

The fourth specification adds seven control variables: *Number of funds*, *Campaign length*, *Market capitalization, Stake size*, *Proxy Fight*, *Board seats won* and *Settlement*. The coefficients of *demand types* are close to the third specification with *Operational* and *Other* increasing.

The fifth specification, which adds *Outcome* as a control variable, has different results. The coefficients of the demand types *Management board*, *Governance*, *M&A*, *Capital structure*, and *Multiple + M&A* become significant at the 5% level. The coefficients of the demand types *Operational* and *Other* become non-significant. The five significant coefficients are positive, indicating that these demand types

generate a significantly higher abnormal return than the reference category, *Stake only*. The highest coefficient is for the demand type *Capital structure* which is associated with a higher abnormal return of 34.5%, on average compared to the *Stake only* type. The lowest coefficient is for the demand type *Multiple + M&A*, which is associated with a higher abnormal of 19.3%, on average compared to the *Stake only* type. I note that the *E&S* coefficient is not significantly different than zero. This allows me to accept hypothesis 1, 2 and 3 and reject hypothesis 4. The results of the fifth specification are in line with what was found by Becht et al. (2017) and Klein and Zur (2009) for the types *Management board*, *M&A*, *Capital structure*, and *Multiple + M&A* in terms of significance. The magnitude of the coefficients is also comparable to what was found by previous researchers.

Table 3 Excess returns dependent on demand types

	(1) Hp Excess Return	(2) Hp Excess Return	(3) Hp Excess Return	(4) Hp Excess Return	(5) Hp Excess Return	(6) Hp Excess Return
Demand type						
Management board	0.118	0.113	0.113	0.066	0.273**	0.112
	(0.113)	(0.125)	(0.127)	(0.107)	(0.130)	(0.160)
Governance	0.110	0.141	0.120	0.132	0.331**	0.105
	(0.127)	(0.129)	(0.138)	(0.134)	(0.151)	(0.167)
M&A	-0.048	-0.059	-0.028	0.007	0.197**	-0.030
	(0.046)	(0.049)	(0.052)	(0.055)	(0.088)	(0.120)
Capital structure	0.105	0.151	0.112	0.130	0.345**	0.165
	(0.113)	(0.115)	(0.115)	(0.116)	(0.142)	(0.177)
Operational	-0.208**	-0.230**	-0.236***	-0.195**	0.009	-0.154
	(0.087)	(0.091)	(0.089)	(0.090)	(0.114)	(0.150)
E&S	-0.175*	-0.176*	-0.109	-0.203	-0.000	-0.267
	(0.091)	(0.095)	(0.130)	(0.131)	(0.147)	(0.175)
Other	-0.328***	-0.324***	-0.350***	-0.322***	-0.106	-0.326**
	(0.093)	(0.096)	(0.089)	(0.095)	(0.121)	(0.146)
Multiple + M&A	-0.021	-0.028	-0.007	-0.013	0.193**	-0.064
	(0.041)	(0.045)	(0.046)	(0.048)	(0.084)	(0.110)
Multiple + no M&A	-0.017	-0.028	-0.052	-0.094	0.112	-0.112
	(0.070)	(0.072)	(0.070)	(0.084)	(0.111)	(0.124)
Number of funds				-0.016	-0.012	-0.009
				(0.013)	(0.014)	(0.014)
Campaign length				0.000***	0.000***	0.000***
				(0.000)	(0.000)	(0.000)
Market capitalization				0.000	0.000	0.000
				(0.000)	(0.000)	(0.000)
Stake size				-0.003	-0.003	-0.003
				(0.003)	(0.003)	(0.003)
Proxy Fight				0.050	0.062	0.073
				(0.094)	(0.096)	(0.102)
Board seats won				0.039	0.022	-0.001
				(0.045)	(0.042)	(0.037)

Table 3 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)
Settlement				-0.109 (0.138)	-0.133 (0.142)	-0.114 (0.134)
Outcome						
Not Applicable					0.276*** (0.095)	0.026 (0.118)
Partial Success					-0.007 (0.081)	-0.004 (0.086)
Success					0.114** (0.052)	-0.366** (0.156)
Interaction effects						
Management board*Success						0.811*** (0.245)
Governance*Success						0.382 (0.369)
M&A*Success						0.398** (0.165)
Capital structure*Success						0.165 (0.271)
Operational*Success						0.227 (0.231)
E&S*Success						0.528* (0.274)
Other*Success						0.286 (0.249)
Multiple + M&A*Success						0.488*** (0.163)
Multiple + no M&A*Success						0.417* (0.217)
Countries		✓	✓	✓	✓	✓
Industries			✓	✓	✓	✓
Years			✓	✓	✓	✓
Observations	2780	2780	2780	2780	2780	2780
R^2	0.004	0.011	0.060	0.067	0.069	0.074
Adjusted R^2	0.001	0.000	0.026	0.031	0.032	0.033

The table provides the results of six OLS regressions where the dependent variable is the holding period return of the activist campaign, and the independent variables is the type of demands made by the activist, classified in ten different types: Stake only, Management Board, Governance, M&A, Capital Structure, Operational, E&S, Other, Multiple + M&A and Multiple + No M&A. The reference categories for categorical and dummy variables are the following. Demand type's reference category is Stake only, the country reference category is United States, the industry is Wholesale-Discretionary, the year is 2014, Proxy Fight is No Proxy Fight, Settlement is No Settlement and Outcome is Unsuccessful. The number of observations, R^2 and Adjusted R^2 can be read at the bottom of the table.

Standard errors are in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Finally, a sixth specification was run, adding interaction effects between the demand types and the *Outcome* success. It was added because the relationship between *Hp Excess Return* and *demand types* depends on whether the campaign was successful. All the demand coefficients become non-significant, except for the type *Other*, significant at the 5% level and negative. To interpret the results, two further analyses were conducted: a two-way ANOVA and marginal effects. They are presented in table 4 and 5, respectively. Results of table 3 show that the success of a campaign is an important determinant of its abnormal return. Table 4 also shows that the interaction between demand type and success is significant at the 5% level. This means that the abnormal return of a campaign also depends on the success of the campaign. Table 5 shows the abnormal returns of each demand type depending on whether the campaign is successful. Similarly, to specification 5, we can see that the *Governance* type has one of the highest abnormal returns, both when the campaign is successful and when it is not. For the successful campaigns, five types have significant coefficients, with the types *Management Board*, *Governance*, *M&A* and *Multiple + M&A* all showing positive abnormal returns of 49.4%, 28.2%, 16.3% and 21.9%, respectively. These results are not in line with findings from Klein and Zur (2009) who had found a significant difference for abnormal returns between successful and unsuccessful campaigns but only for short time periods. The (30, 365) window had led to non-significant results.

Table 4 Two-way ANOVA of demand type and success

Source	Partial SS	Prob > F
Model	48.952	0.016
Demand type	22.550	0.069
Success	0.000	0.995
Demand type*Success	25.373	0.037
Total	3963.26	-

This table showcases a two-way ANOVA of demand type and success. Columns show the source, partial sum of squares and p-value.

Table 5 Marginal effects of interaction regression

Variable	Margins	Delta-method standard error
Success=0		
Stake only	0.160*	0.091
Management Board	0.048	0.100
Governance	0.265**	0.129
M&A	0.130***	0.058
Capital Structure	0.325	0.143
Operational	0.006	0.108
E&S	-0.107	0.138
Other	-0.165	0.104
Multiple + M&A	0.097**	0.042
Multiple + No M&A	0.048	0.076
Success=1		
Stake Only	-0.205*	0.109
Management Board	0.494**	0.194
Governance	0.282**	0.314
M&A	0.163**	0.062
Capital Structure	0.125	0.173
Operational	-0.133	0.147
E&S	0.056	0.211
Other	-0.245	0.186
Multiple + M&A	0.219***	0.054
Multiple + No M&A	0.099	0.139

This table showcases the marginal effect of the sixth regression which contains an interaction term between demand types and success. The columns present the variables, margins coefficients and delta-method standard errors. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

5.1.2 Wolf-pack

I investigated the relationship between the presence of a wolf-pack and the excess return of campaigns. Results are shown in table 6. Five model specifications are presented with *Hp Excess Return* as dependent variable and the dummy variable *Wolf-pack* as independent variable.

The first model specification regresses *Hp Excess Return* on *Wolf-pack* without using any control variables. The coefficient of *Wolf-pack* is not significantly different than zero at the 10% level. Adding the controls *Country* in specification 2, *Industry* and *Year* in specification 3, *Number of funds*, *Campaign length*, *Market capitalization, Stake size*, *Proxy Fight*, *Board seats won* and *Settlement* in specification 4 and *Outcome* in specification 5 does not affect the significance of *wolf-packs'* coefficient.

This result is particularly interesting for three reasons.

First, it allows me to reject the fifth hypothesis which supported that wolf-packs should have a positive effect on the excess return of a campaign. Second, this result is in opposition to what has been found by other researchers. Becht et al. (2017) found a significant (1%) and positive effect of wolf-packs on abnormal returns 11 days and 21 days around the campaign disclosure date with a sample focused on the years 2000-2010. Additionally, Wong (2020) and Bessler et al. (2015) also found a positive significant effect of wolf-packs on abnormal returns with samples focused on the years 1998-2014 and 2000-2006, respectively. Third, because the results are contrary to what was found by previous papers, it raises several questions. Why is there no effect of wolf-pack on excess return in this study? Is it because two of these studies focus on a shorter return window? Could it be due to the period studied? The papers mentioned focus on the years prior to 2014 and this relationship might not be prevalent post-2014. These questions remain unanswered for now but offer new avenues for future research.

Table 6 Excess returns dependent on wolf-pack

	(1) Hp Excess Return	(2) HP Excess Return	(3) Hp Excess Return	(4) Hp Excess Return	(5) Hp Excess Return
Wolf-pack	-0.024 (0.045)	-0.031 (0.049)	-0.019 (0.047)	0.023 (0.050)	0.020 (0.050)
Number of funds				-0.022 (0.014)	-0.021 (0.014)
Campaign length				0.000^{***} (0.000)	0.000^{***} (0.000)
Market capitalization				0.000 (0.000)	0.000 (0.000)
Stake size				-0.003 (0.003)	-0.003 (0.003)
Proxy Fight				0.058 (0.089)	0.077 (0.092)
Board seats won				0.043 (0.047)	0.029 (0.044)
Outcome					
Settlement				-0.116 (0.140)	-0.136 (0.144)
Not Applicable					0.081^{*} (0.048)
Partial Success					-0.016 (0.076)
Success					0.105^{**} (0.049)
Countries		✓	✓	✓	✓
Industries			✓	✓	✓
Year			✓	✓	✓
Constant	0.156^{***} (0.038)	0.176^{***} (0.050)	0.194 (0.224)	0.042 (0.223)	0.012 (0.224)
Observations	2780	2780	2780	2780	2780
R^2	0.000	0.007	0.056	0.064	0.066
Adjusted R^2	0.000	0.000	0.024	0.030	0.031

The table provides the results of five OLS regressions where the dependent variable is the holding period return of the activist campaign, and the independent variable is wolf-pack, a dummy variable indicating whether more than one activist has attacked the target. The reference categories for categorical and dummy variables are the following. Wolf-pack's reference category is no wolf-pack, the country reference category is United States, the industry is Wholesale-Discretionary, the year is 2014, Proxy Fight is No Proxy Fight, Settlement is No Settlement and Outcome is Unsuccessful. The number of observations, R^2 and Adjusted R^2 can be read at the bottom of the table.

Standard errors are in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

5.1.3 Reputation

I investigated the relationship between the reputation of the activist and the excess return of campaigns. Three proxies of reputation were used: *Reputation market cap*, *Reputation number of campaigns* and *Reputation return* with results shown in table 7, 8 and 9, respectively.

The first model regresses *Hp Excess Return* on *Reputation market cap*. The initial specification shows a non-significant coefficient at the 10% level. Successively adding controls for *Country*; *Industry* and *Year*; *Campaign length*, *Number of funds*, *Market capitalization, Stake size*, *Proxy Fight*, *Board seats won* and *Settlement*; and *Outcome* does not change the significance of the regression estimator. This allows me to partly reject the sixth hypothesis. These results cannot be compared to previous research as no other researchers has used the median market capitalization of previous targets as a proxy of reputation.

Table 7 Excess return dependent on activist's reputation – median market capitalization

	(1) Hp Excess Return	(2) Hp Excess Return	(3) Hp Excess Return	(4) Hp Excess Return	(5) Hp Excess Return
Reputation market cap	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Campaign length				0.000^{***}	0.000^{***}
				(0.000)	(0.000)
Number of funds				-0.041^{***}	-0.038^{**}
				(0.016)	(0.016)
Market capitalization				-0.000	-0.000
				(0.000)	(0.000)
Stake size				-0.005^{*}	-0.006^{**}
				(0.003)	(0.003)
Proxy Fight				0.033	0.052
				(0.075)	(0.077)
Board seats won				-0.023	-0.036
				(0.032)	(0.032)
Settlement				0.071	0.048
				(0.075)	(0.076)
Outcome					
Not Applicable					0.083
					(0.056)
Partial Success					-0.088
					(0.060)
Success					0.094
					(0.058)
Countries		✓	✓	✓	✓
Industries			✓	✓	✓

Table 7 (continued)

Years			✓	✓	✓
Constant	0.162***	0.154***	0.496	0.352	0.321
	(0.022)	(0.027)	(0.305)	(0.300)	(0.302)
Observations	1487	1487	1487	1487	1487
R^2	0.000	0.016	0.101	0.125	0.131
Adjusted R^2	0.000	0.000	0.044	0.065	0.069

The table provides the results of five OLS regressions where the dependent variable is the holding period return of the activist campaign, and the independent variable is reputation market cap, a variable indicating the median market capitalization of targets attacked by the activist approaching the company studied. When several activist approach a company, the largest fund's median market capitalization of targets attacked is taken. The reference categories for categorical and dummy variables are the following. Country's reference category is United States, industry's is Wholesale-Discretionary, year is 2014, Proxy Fight is No Proxy Fight, Settlement is No Settlement and Outcome is Unsuccessful. The number of observations, R^2 and Adjusted R^2 can be read at the bottom of the table.

Standard errors are in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

The second model regresses *Hp Excess Return* on *Reputation number of campaigns*. Similarly to the model using median market capitalization as a proxy of reputation, the results show a non-significant coefficient at the 10% level for all model specifications, except for the initial one which is significant at the 10% level. These results are in line with the findings of Krishnan et al. (2016) who had used frequency of intervention as a one of their proxies for reputation and had found nonsignificant coefficients for all the time windows studied.

Table 8 Excess return dependent on activist's reputation – number of campaigns

	(1) Hp Excess Return	(2) Hp Excess Return	(3) Hp Excess Return	(4) Hp Excess Return	(5) Hp Excess Return
Reputation number of campaigns	-0.001*	-0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Campaign length				0.000***	0.000***
				(0.000)	(0.000)
Number of funds				-0.041***	-0.038**
				(0.016)	(0.016)
Market Capitalization				0.000	0.000
				(0.000)	(0.000)
Stake size				-0.005*	-0.006**
				(0.003)	(0.003)
Proxy Fight				0.031	0.050
				(0.075)	(0.077)
Board seats won				-0.021	-0.035
				(0.032)	(0.032)
Settlement				0.072	0.047
				(0.076)	(0.077)

Table 8 (continued)

Outcome					
Not Applicable					0.085
					(0.056)
Partial Success					-0.082
					(0.060)
Success					0.101*
					(0.059)
Countries		✓	✓	✓	✓
Industries			✓	✓	✓
Years			✓	✓	✓
Constant	0.185***	0.172***	0.507*	0.363	0.333
	(0.027)	(0.031)	(0.305)	(0.301)	(0.302)
Observations	1487	1487	1487	1487	1487
R^2	0.001	0.016	0.100	0.124	0.130
Adjusted R^2	0.000	0.001	0.043	0.065	0.069

The table provides the results of five OLS regressions where the dependent variable is the holding period return of the activist campaign, and the independent variable is reputation number of campaigns, a variable indicating the number of campaigns launched by the activist approaching the company studied. When several activist approach a company, the largest fund's number of campaigns is taken. The reference categories for categorical and dummy variables are the following. Country's reference category is United States, industry's is Wholesale-Discretionary, year is 2014, Proxy Fight is No Proxy Fight, Settlement is No Settlement and Outcome is Unsuccessful. The number of observations, R^2 and Adjusted R^2 can be read at the bottom of the table.

Standard errors are in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

The third model regresses *Hp Excess Return* on *Reputation return*. The first specification shows a positive and significant (1%) relationship between past returns of the activist and the return of a campaign. Adding several control variables in the second, third, fourth and fifth specifications leads to a decrease in the coefficient of *Reputation return*. However, it is still significant at the 1% level. In the final model, a one percentage point increase in *Reputation return* is associated with a 0.787 percentage point increase in *Hp Excess Return*, on average, holding all other variables constant. I cannot determine with certainty whether the relationship is causal as omitted variable bias might exist in this model. Unobservable variables that are determinants of *Hp Excess Return* and correlated with *Reputation return* could be missing, leading to a positive or negative bias.

This result is in line with Krishnan et al. (2016) who found significantly higher abnormal returns for "Top Return Hedge Funds" compared to non "Top Return Hedge Funds".

Table 9 Excess return dependent on activist's reputation – past returns

	(1) Hp Excess Return	(2) Hp Excess Return	(3) Hp Excess Return	(4) Hp Excess Return	(5) Hp Excess Return
Reputation return	0.863***	0.855***	0.839***	0.798***	0.787***
	(0.144)	(0.145)	(0.141)	(0.136)	(0.137)
Campaign length				0.000***	0.000***
				(0.000)	(0.000)
Number of funds				-0.033**	-0.030*
				(0.016)	(0.016)
Market capitalization				-0.000	-0.000
				(0.000)	(0.000)
Stake size				-0.005**	-0.006**
				(0.003)	(0.003)
Proxy Fight				0.012	0.025
				(0.070)	(0.073)
Board seats won				-0.019	-0.026
				(0.032)	(0.032)
Settlement				0.069	0.060
				(0.075)	(0.076)
Outcome					
Not Applicable					0.045
					(0.054)
Partial Success					-0.087
					(0.057)
Success					0.033
					(0.057)
Countries		✓	✓	✓	✓
Industries			✓	✓	✓
Years			✓	✓	✓
Constant	-0.040	-0.052	0.287	0.191	0.180
	(0.030)	(0.035)	(0.212)	(0.218)	(0.219)
Observations	1487	1487	1487	1487	1487
R^2	0.094	0.105	0.180	0.196	0.199
Adjusted R^2	0.093	0.091	0.129	0.141	0.142

The table provides the results of five OLS regressions where the dependent variable is the holding period return of the activist campaign, and the independent variable is reputation return, a variable indicating the average return of the past campaigns launched by that activist. When several activist approach a company, the largest fund's historical return is taken. The reference categories for categorical and dummy variables are the following. Country's reference category is United States, industry's is Wholesale-Discretionary, year is 2014, Proxy Fight is No Proxy Fight, Settlement is No Settlement and Outcome is Unsuccessful. The number of observations, R^2 and Adjusted R^2 can be read at the bottom of the table.

Standard errors are in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Chapter 6 Conclusion

This paper has studied three determinants of the performance of hedge fund activist campaigns: demand types, the presence of a wolf-pack and the reputation of the activist. The impact of demands of activist on campaign performance has been heavily researched in the years 2000 to 2015. However, more recently researchers have diverted their studies of hedge fund activism towards other topics. As a result, researching this topic was particularly important as hedge fund activism has changed in the last eight years with an increase in the number of campaigns, a professionalization of the investors and new demands, such as the ones centered around the environment, arising. Similarly, wolf-pack activism has markedly increased in the past years and analyzing if the relationship to performance still existed was important. Finally, reputation was important to study as new variables were made available recently, giving me the opportunity to analyze whether different definitions of reputation had an impact on performance.

I used OLS regression models and an ANOVA to answer the hypotheses. Excess returns have been regressed on the ten demand types, the dummy variable wolf-pack as well as the three measures of reputation, median market capitalization of previous targets, number of campaigns conducted and past returns.

This paper is innovative in the way it studies the performance of hedge fund activist campaigns for several reasons. First, I exploited a recently created database, the shareholder activism database of the Bloomberg Terminal, which, from my knowledge, had never been used before to study activist campaigns. Second, I used a moderator, Success, to better study the relationship between demand types and performance. This would not have been possible with other databases as this variable is only available on the Bloomberg Terminal. Third, a new demand type was created, E&S, encapsulating demands centered around the environment and society.

The results show that certain demands of activist hedge funds and a metric of reputation are associated with abnormal returns. More specifically, demands centered around management or board changes, governance improvements, M&A, capital structure or multiple demands combined with M&A demands can be linked to significant abnormal return over passive investments. The use of the moderation variable *Success* has also shown that the abnormal return of a campaign depends on whether it is successful or not. Also, past returns of an activist are associated with the future performance of their campaigns. However, contrary to previous findings, I do not find a positive association between the presence of a wolf-pack and abnormal return of campaigns as the coefficient was non-significant.

These results have several implications for researchers, activists, and institutional investors. For researchers, takeaways are that the previously observed positive relationship between demand types and abnormal returns still hold over the period 2014-2023 but that wolf-packs are not drivers of abnormal returns anymore. Additionally, the new measure of reputation, median market capitalization of previous targets, and the new demand type *E&S* are not drivers of abnormal returns. For activists, results imply that certain demands, such as the ones centered around capital structure and governance, can lead to much higher abnormal returns than others. Thus, advocating for capital structure and governance changes such as dividend increases or chairman independence should be a greater focus, especially when considering that these demands form a small fraction of overall demands today. Activists will also be interested to learn that agitating for change alongside other funds is not associated with abnormal returns. For institutional investors, such as pension funds, that invest in activist hedge funds, results indicate that greater focus should be put on the reputation of the activist, measured by past returns, when selecting funds.

Limitations of this paper and of all research studying the relationship between demand types, wolf-packs and reputation proxies and abnormal returns is the difficulty to interpret the results in a causal manner. Introducing an instrumental variable, something that has not yet been done due to the nature of the model, would allow the research community to establish a causal link between the two variables. Additionally, a smaller dataset was used when studying the relationship between abnormal return and reputation as not all the funds had available data for reputation variables which could lead to biases. A potential improvement to my paper would be to include all the campaigns by obtaining reputation data on all hedge funds. Finally, subsequent studies should investigate the breakdown of the relationship between the presence of a wolf-pack and abnormal returns which existed in the years prior to 2014.

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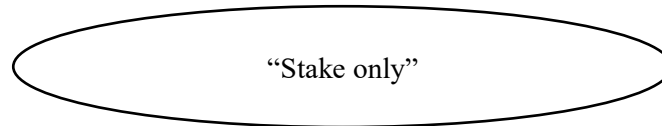
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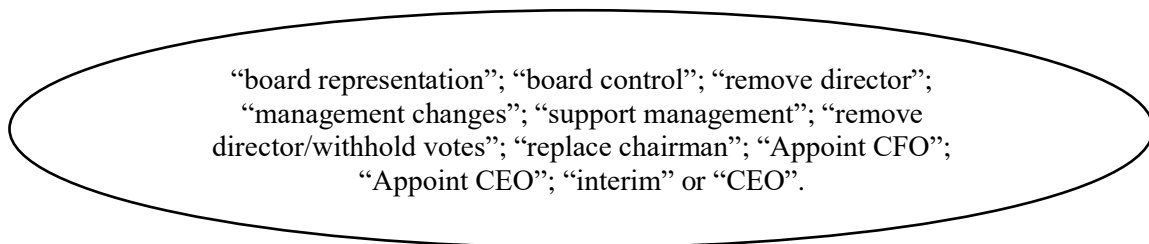
Appendix A Words corresponding to each demand type

The Bloomberg Terminal's shareholder activism database contains a column listing the objectives, or demands, of each activist. The following figures showcase the words that were mapped to each demand type described in the data section.
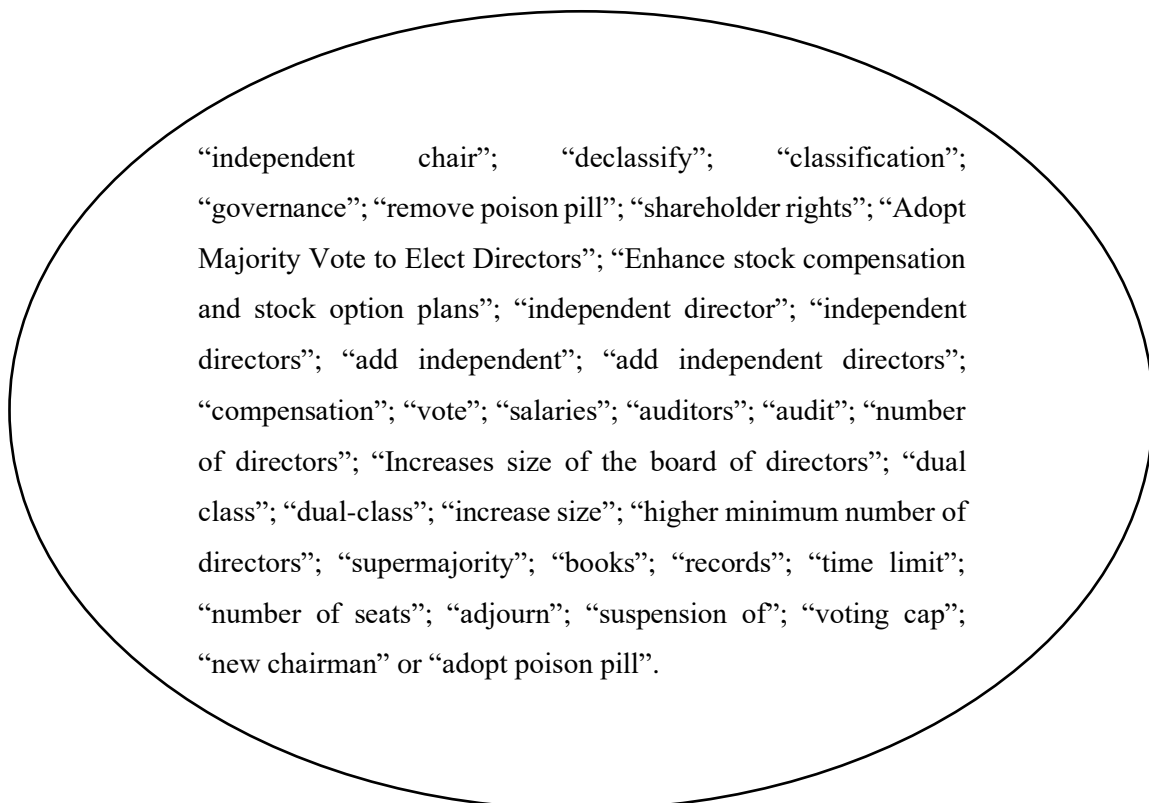
"Stake only"

Figure 1: Words associated to the type *Stake only*
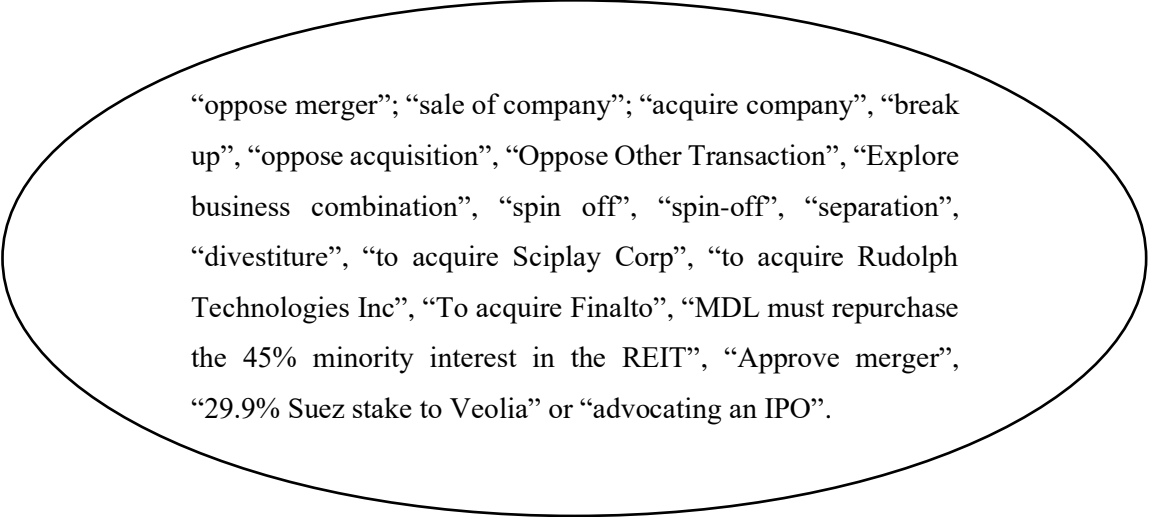
"board representation"; "board control"; "remove director"; "management changes"; "support management"; "remove director/withhold votes"; "replace chairman"; "Appoint CFO"; "Appoint CEO"; "interim" or "CEO".

Figure 2: Words associated to the type *Management Board*
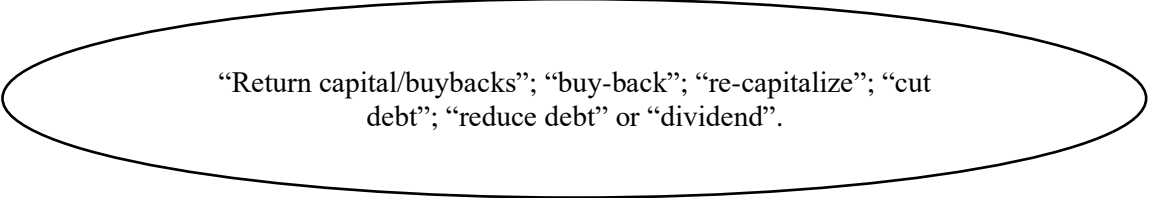
"independent chair"; "declassify"; "classification"; "governance"; "remove poison pill"; "shareholder rights"; "Adopt Majority Vote to Elect Directors"; "Enhance stock compensation and stock option plans"; "independent director"; "independent directors"; "add independent"; "add independent directors"; "compensation"; "vote"; "salaries"; "auditors"; "audit"; "number of directors"; "Increases size of the board of directors"; "dual class"; "dual-class"; "increase size"; "higher minimum number of directors"; "supermajority"; "books"; "records"; "time limit"; "number of seats"; "adjourn"; "suspension of"; "voting cap"; "new chairman" or "adopt poison pill".

Figure 3: Words associated to the type *Governance*
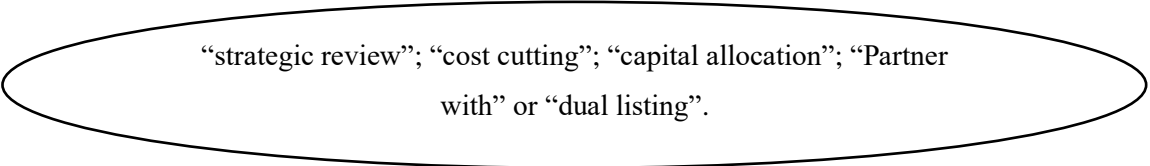
"oppose merger"; "sale of company"; "acquire company", "break up", "oppose acquisition", "Oppose Other Transaction", "Explore business combination", "spin off", "spin-off", "separation", "divestiture", "to acquire Sciplay Corp", "to acquire Rudolph Technologies Inc", "To acquire Finalto", "MDL must repurchase the 45% minority interest in the REIT", "Approve merger", "29.9% Suez stake to Veolia" or "advocating an IPO".

Figure 4: Words associated to the type *M&A*
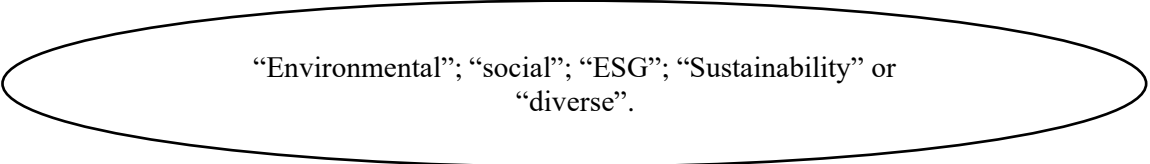
"Return capital/buybacks"; "buy-back"; "re-capitalize"; "cut debt"; "reduce debt" or "dividend".

Figure 5: Words associated to the type *Capital structure*
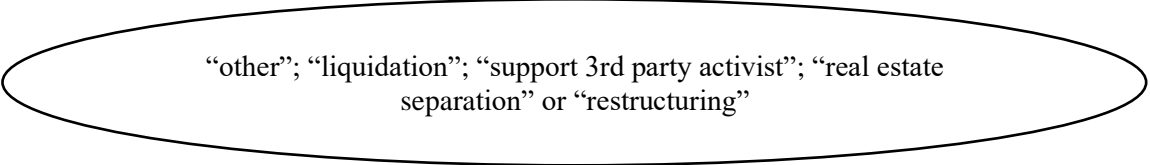
"strategic review"; "cost cutting"; "capital allocation"; "Partner with" or "dual listing".

Figure 6: Words associated to the type *Operational*

"Environmental"; "social"; "ESG"; "Sustainability" or "diverse".

Figure 7: Words associated to the type *E&S*

"other"; "liquidation"; "support 3rd party activist"; "real estate separation" or "restructuring"

Figure 8: Words associated to the type *Other*

Appendix B Demand type models

Table B1 Excess returns dependent on demand type

	(1) Hp Excess Return	(2) Hp Excess Return	(3) Hp Excess Return	(4) Hp Excess Return	(5) Hp Excess Return	(6) Hp Excess Return
Demand type						
Management board	0.118	0.113	0.113	0.066	0.273**	-0.112
	(0.113)	(0.125)	(0.127)	(0.107)	(0.130)	(0.160)
Governance	0.110	0.141	0.120	0.132	0.331**	0.105
	(0.127)	(0.129)	(0.138)	(0.134)	(0.151)	(0.167)
M&A	-0.048	-0.059	-0.028	0.007	0.197**	-0.030
	(0.046)	(0.049)	(0.052)	(0.055)	(0.088)	(0.120)
Capital structure	0.105	0.151	0.112	0.130	0.345**	0.165
	(0.113)	(0.115)	(0.115)	(0.116)	(0.142)	(0.177)
Operational	-0.208**	-0.230**	-0.236***	-0.195**	0.009	-0.154
	(0.087)	(0.091)	(0.089)	(0.090)	(0.114)	(0.150)
E&S	-0.175*	-0.176*	-0.109	-0.203	-0.000	-0.267
	(0.091)	(0.095)	(0.130)	(0.131)	(0.147)	(0.175)
Other	-0.328***	-0.324***	-0.350***	-0.322***	-0.106	-0.326**
	(0.093)	(0.096)	(0.089)	(0.095)	(0.121)	(0.146)
Multiple + M&A	-0.021	-0.028	-0.007	-0.013	0.193**	-0.064
	(0.041)	(0.045)	(0.046)	(0.048)	(0.084)	(0.110)
Multiple + no M&A	-0.017	-0.028	-0.052	-0.094	0.112	-0.112
	(0.070)	(0.072)	(0.070)	(0.084)	(0.111)	(0.124)
Country						
Australia		0.094	0.021	0.002	-0.002	0.002
		(0.127)	(0.146)	(0.153)	(0.154)	(0.155)
Austria		0.059	0.104	0.089	0.065	0.039
		(0.114)	(0.122)	(0.125)	(0.129)	(0.130)
Belgium		-0.444***	-0.564*	-0.617*	-0.604**	-0.630**
		(0.161)	(0.298)	(0.323)	(0.292)	(0.296)
Brazil		-0.229	-0.072	-0.163	-0.151	-0.187
		(0.198)	(0.203)	(0.240)	(0.235)	(0.239)
Canada		0.133	0.045	0.034	0.043	0.042
		(0.150)	(0.119)	(0.119)	(0.119)	(0.119)
Finland		-0.043	-0.303*	-0.345*	-0.376**	-0.394**
		(0.178)	(0.181)	(0.188)	(0.187)	(0.178)
France		-0.062	-0.110	-0.116	-0.124	-0.137
		(0.080)	(0.086)	(0.092)	(0.097)	(0.095)
Germany		0.053	-0.081	-0.104	-0.116	-0.152
		(0.104)	(0.120)	(0.128)	(0.132)	(0.135)
Greece		-0.249***	-0.404*	-0.542*	-0.563*	-0.454
		(0.096)	(0.237)	(0.302)	(0.289)	(0.282)
Hong Kong		-0.529***	-0.444***	-0.506***	-0.497***	-0.515***
		(0.106)	(0.108)	(0.136)	(0.136)	(0.142)

Table B1 (continued)

India	-0.271	-0.367	-0.397	-0.384	-0.395
	(0.237)	(0.231)	(0.242)	(0.240)	(0.242)
Italy	-0.187***	-0.131	-0.174*	-0.162*	-0.168*
	(0.068)	(0.088)	(0.096)	(0.096)	(0.091)
Japan	-0.052	-0.058	-0.087	-0.107*	-0.121**
	(0.043)	(0.052)	(0.056)	(0.057)	(0.057)
Netherlands	-0.055	-0.096	-0.144	-0.150	-0.143
	(0.118)	(0.103)	(0.115)	(0.116)	(0.117)
Norway	-0.030	-0.038	-0.083	-0.050	-0.085
	(0.272)	(0.275)	(0.289)	(0.282)	(0.275)
Singapore	-0.320***	-0.379***	-0.372**	-0.356**	-0.349**
	(0.104)	(0.132)	(0.144)	(0.149)	(0.154)
South Korea	-0.285***	-0.240**	-0.286***	-0.279***	-0.278**
	(0.103)	(0.107)	(0.107)	(0.107)	(0.108)
Spain	0.024	-0.149	-0.153	-0.144	-0.162
	(0.107)	(0.131)	(0.125)	(0.120)	(0.126)
Sweden	-0.076	0.017	0.012	0.017	0.018
	(0.112)	(0.130)	(0.142)	(0.144)	(0.154)
Switzerland	-0.035	-0.083	-0.073	-0.079	-0.098
	(0.103)	(0.106)	(0.109)	(0.106)	(0.110)
Taiwan	-0.357***	-0.418***	-0.448***	-0.417***	-0.364**
	(0.108)	(0.122)	(0.153)	(0.154)	(0.152)
United Kingdom	-0.195***	-0.224***	-0.241***	-0.247***	-0.244***
	(0.055)	(0.058)	(0.069)	(0.070)	(0.070)
Industry					
Advertising & Marketing		-0.224	-0.192	-0.207	-0.193
		(0.279)	(0.280)	(0.278)	(0.275)
Aerospace & Defense		-0.200	-0.164	-0.164	-0.102
		(0.243)	(0.240)	(0.240)	(0.235)
Apparel & Textile Products		-0.218	-0.152	-0.149	-0.165
		(0.248)	(0.247)	(0.248)	(0.248)
Asset Management		-0.220	-0.193	-0.206	-0.191
		(0.236)	(0.233)	(0.233)	(0.229)
Automotive		-0.228	-0.191	-0.208	-0.184
		(0.249)	(0.247)	(0.247)	(0.244)
Banking		-0.155	-0.146	-0.161	-0.140
		(0.228)	(0.225)	(0.225)	(0.221)
Beverages		-0.229	-0.213	-0.212	-0.173
		(0.284)	(0.272)	(0.275)	(0.270)
Biotech & Pharma		-0.063	-0.024	-0.025	-0.003
		(0.332)	(0.328)	(0.327)	(0.328)
Cable & Satellite		0.403	0.429	0.463	0.459
		(0.323)	(0.315)	(0.307)	(0.307)
Chemicals		-0.126	-0.107	-0.111	-0.089
		(0.259)	(0.257)	(0.257)	(0.255)

Table B1 (continued)

Commercial Support Services	-0.136	-0.104	-0.115	-0.086
	(0.241)	(0.238)	(0.237)	(0.234)
Construction Materials	0.126	0.152	0.134	0.160
	(0.409)	(0.397)	(0.396)	(0.389)
Consumer Services	0.197	0.249	0.258	0.312
	(0.465)	(0.454)	(0.455)	(0.460)
Containers & Packaging	-0.011	0.062	0.060	0.101
	(0.270)	(0.269)	(0.268)	(0.268)
Diversified Industrials	-0.187	-0.184	-0.250	-0.217
	(0.300)	(0.332)	(0.322)	(0.323)
E-Commerce Discretionary	0.533	0.607	0.590	0.614
	(0.578)	(0.583)	(0.580)	(0.564)
Electricity & Gas Marketing & Trading	-0.011	0.145	0.149	0.160
	(0.301)	(0.313)	(0.308)	(0.309)
Electric Utilities	-0.024	0.018	0.007	0.031
	(0.247)	(0.247)	(0.246)	(0.243)
Electrical Equipment	-0.188	-0.138	-0.148	-0.114
	(0.244)	(0.242)	(0.243)	(0.240)
Engineering & Construction	0.191	0.222	0.226	0.243
	(0.280)	(0.276)	(0.277)	(0.274)
Entertainment Content	-0.088	-0.046	-0.045	-0.014
	(0.265)	(0.264)	(0.265)	(0.262)
Food	-0.129	-0.132	-0.141	-0.105
	(0.240)	(0.241)	(0.240)	(0.236)
Forestry, Paper & Wood Products	0.590	0.625*	0.607	0.636
	(0.376)	(0.373)	(0.386)	(0.395)
Gas & Water Utilities	-0.101	-0.068	-0.070	-0.048
	(0.242)	(0.235)	(0.232)	(0.228)
Health Care Facilities & Services	-0.234	-0.200	-0.215	-0.206
	(0.241)	(0.238)	(0.238)	(0.235)
Home & Office Products	0.372	0.401	0.371	0.355
	(0.340)	(0.320)	(0.319)	(0.311)
Home Construction	-0.291	-0.222	-0.229	-0.199
	(0.247)	(0.245)	(0.246)	(0.243)
Household Products	-0.044	-0.064	-0.101	-0.073
	(0.377)	(0.374)	(0.378)	(0.384)
Industrial Intermediate Production	-0.254	-0.277	-0.296	-0.275
	(0.251)	(0.253)	(0.254)	(0.247)
Industrial Support Services	0.196	0.232	0.226	0.266
	(0.301)	(0.296)	(0.294)	(0.291)
Institutional Financial Services	-0.252	-0.196	-0.198	-0.181
	(0.250)	(0.249)	(0.249)	(0.245)
Insurance	-0.188	-0.171	-0.178	-0.154
	(0.234)	(0.232)	(0.232)	(0.228)

Table B1 (continued)

Internet Media & Services	-0.188	-0.113	-0.116	-0.113
	(0.241)	(0.240)	(0.240)	(0.237)
Leisure Facilities & Services	0.012	0.051	0.028	0.039
	(0.254)	(0.250)	(0.248)	(0.244)
Leisure Products	-0.199	-0.128	-0.146	-0.134
	(0.361)	(0.354)	(0.349)	(0.338)
Machinery	-0.193	-0.171	-0.184	-0.150
	(0.237)	(0.234)	(0.234)	(0.230)
Medical Equipment & Devices	-0.092	-0.047	-0.048	-0.022
	(0.237)	(0.235)	(0.235)	(0.231)
Metals & Mining	0.082	0.127	0.119	0.137
	(0.287)	(0.278)	(0.278)	(0.275)
Oil & Gas Producers	-0.315	-0.273	-0.275	-0.240
	(0.233)	(0.230)	(0.230)	(0.227)
Oil & Gas Services & Equipment	-0.406	-0.332	-0.336	-0.319
	(0.278)	(0.278)	(0.277)	(0.274)
Publishing & Broadcasting	-0.248	-0.225	-0.224	-0.209
	(0.240)	(0.237)	(0.237)	(0.233)
REIT	-0.164	-0.117	-0.122	-0.096
	(0.230)	(0.227)	(0.227)	(0.223)
Real Estate Owners & Developers	-0.129	-0.089	-0.084	-0.030
	(0.239)	(0.236)	(0.235)	(0.231)
Real Estate Services	-0.135	-0.088	-0.112	-0.083
	(0.281)	(0.277)	(0.274)	(0.271)
Renewable Energy	-0.583[*]	-0.532[*]	-0.507	-0.443
	(0.316)	(0.312)	(0.314)	(0.310)
Retail - Consumer Staples	-0.004	0.060	0.072	0.073
	(0.270)	(0.268)	(0.268)	(0.266)
Retail - Discretionary	-0.212	-0.175	-0.177	-0.149
	(0.237)	(0.235)	(0.235)	(0.232)
Semiconductors	0.035	0.091	0.085	0.088
	(0.238)	(0.234)	(0.234)	(0.231)
Software	-0.074	-0.031	-0.043	-0.024
	(0.234)	(0.231)	(0.231)	(0.227)
Specialty Finance	0.090	0.143	0.135	0.178
	(0.469)	(0.474)	(0.465)	(0.468)
Steel	0.070	0.082	0.077	0.083
	(0.470)	(0.470)	(0.473)	(0.477)
Technology Hardware	-0.093	-0.058	-0.076	-0.056
	(0.236)	(0.232)	(0.232)	(0.228)
Technology Services	-0.125	-0.090	-0.103	-0.075
	(0.252)	(0.250)	(0.251)	(0.247)
Telecommunications	-0.201	-0.169	-0.187	-0.158
	(0.234)	(0.231)	(0.230)	(0.227)

Table B1 (continued)

Tobacco & Cannabis	-0.239	-0.230	-0.225	-0.201
	(0.402)	(0.406)	(0.406)	(0.401)
Transportation & Logistics	-0.016	0.013	0.008	0.036
	(0.250)	(0.247)	(0.247)	(0.243)
Transportation Equipment	-0.391	-0.318	-0.343	-0.338
	(0.273)	(0.271)	(0.273)	(0.271)
Wholesale - Consumer Staples	0.163	0.179	0.180	0.231
	(0.243)	(0.233)	(0.233)	(0.236)
Year				
2015	0.093	0.065	0.065	0.073
	(0.073)	(0.076)	(0.076)	(0.076)
2016	0.385**	0.375**	0.381**	0.395**
	(0.159)	(0.152)	(0.153)	(0.156)
2017	0.060	0.080	0.086	0.084
	(0.075)	(0.077)	(0.077)	(0.077)
2018	0.010	0.051	0.060	0.063
	(0.072)	(0.075)	(0.074)	(0.074)
2019	0.031	0.095	0.110	0.112
	(0.080)	(0.080)	(0.080)	(0.081)
2020	0.595***	0.678***	0.690***	0.695***
	(0.106)	(0.108)	(0.110)	(0.108)
2021	-0.080	0.023	0.037	0.045
	(0.071)	(0.074)	(0.073)	(0.073)
2022	-0.092	0.020	0.037	0.046
	(0.074)	(0.078)	(0.078)	(0.078)
2023	0.033	0.206	0.223	0.220
	(0.146)	(0.170)	(0.164)	(0.168)
Number of funds		-0.016	-0.012	-0.009
		(0.013)	(0.014)	(0.014)
Campaign length		0.000***	0.000***	0.000***
		(0.000)	(0.000)	(0.000)
Market capitalization		0.000	0.000	0.000
		(0.000)	(0.000)	(0.000)
Stake size		-0.003	-0.003	-0.003
		(0.003)	(0.003)	(0.003)
Proxy Fight		0.050	0.062	0.073
		(0.094)	(0.096)	(0.102)
Board seats won		0.039	0.022	-0.001
		(0.045)	(0.042)	(0.037)
Settlement		-0.109	-0.133	-0.114
		(0.138)	(0.142)	(0.134)
Outcome				
Not Applicable			0.276***	0.026
			(0.095)	(0.118)

Table B1 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)
Partial Success					-0.007 (0.081)	-0.004 (0.086)
Success					0.114** (0.052)	-0.366** (0.156)
Interaction effects						
Management board*Success						0.811*** (0.245)
Governance*Success						0.382 (0.369)
M&A*Success						0.398** (0.165)
Capital structure*Success						0.165 (0.271)
Operational*Success						0.227 (0.231)
E&S*Success						0.528* (0.274)
Other*Success						0.286 (0.249)
Multiple + M&A*Success						0.488*** (0.163)
Multiple + no M&A*Success						0.417* (0.217)
Constant	0.145*** (0.031)	0.170*** (0.039)	0.168 (0.235)	0.025 (0.236)	-0.217 (0.252)	0.008 (0.256)
Observations	2780	2780	2780	2780	2780	2780
R^2	0.004	0.011	0.060	0.067	0.069	0.074
Adjusted R^2	0.001	0.000	0.026	0.031	0.032	0.033

The table provides the results of six OLS regressions where the dependent variable is the holding period return of the activist campaign, and the independent variables is the type of demands made by the activist, classified in ten different types: Stake only, Management Board, Governance, M&A, Capital Structure, Operational, E&S, Other, Multiple + M&A and Multiple + No M&A. The reference categories for categorical and dummy variables are the following. Demand type's reference category is Stake only, the country reference category is United States, the industry is Wholesale-Discretionary, the year is 2014, Proxy Fight is No Proxy Fight, Settlement is No Settlement and Outcome is Unsuccessful. The number of observations, R^2 and Adjusted R^2 can be read at the bottom of the table.

Standard errors are in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Appendix C Wolf-pack models

Table C1 Excess returns dependent on wolf-pack

	(1) Hp Excess Return	(2) HP Excess Return	(3) Hp Excess Return	(4) Hp Excess Return	(5) Hp Excess Return
Wolf-pack	-0.024	-0.031	-0.019	0.023	0.020
	(0.045)	(0.049)	(0.047)	(0.050)	(0.050)
Country					
Australia		0.124	0.049	0.024	0.029
		(0.116)	(0.137)	(0.141)	(0.143)
Austria		0.046	0.096	0.083	0.079
		(0.115)	(0.124)	(0.125)	(0.130)
Belgium		-0.419***	-0.541*	-0.585*	-0.600**
		(0.142)	(0.283)	(0.316)	(0.298)
Brazil		-0.220	-0.065	-0.166	-0.148
		(0.176)	(0.192)	(0.230)	(0.227)
Canada		0.148	0.064	0.053	0.062
		(0.151)	(0.119)	(0.117)	(0.118)
Finland		-0.123	-0.358**	-0.361**	-0.385**
		(0.160)	(0.171)	(0.183)	(0.181)
France		-0.056	-0.101	-0.101	-0.105
		(0.074)	(0.081)	(0.086)	(0.090)
Germany		0.066	-0.066	-0.091	-0.093
		(0.097)	(0.112)	(0.119)	(0.124)
Greece		-0.158**	-0.336	-0.522*	-0.532*
		(0.064)	(0.240)	(0.307)	(0.298)
Hong Kong		-0.462***	-0.382***	-0.458***	-0.441***
		(0.077)	(0.093)	(0.116)	(0.118)
India		-0.209	-0.309	-0.330	-0.312
		(0.248)	(0.234)	(0.244)	(0.243)
Italy		-0.176**	-0.128	-0.170*	-0.159*
		(0.069)	(0.089)	(0.096)	(0.096)
Japan		-0.039	-0.050	-0.065	-0.086
		(0.045)	(0.048)	(0.056)	(0.055)
Netherlands		-0.068	-0.105	-0.150	-0.145
		(0.118)	(0.103)	(0.115)	(0.117)
Norway		-0.038	-0.030	-0.048	-0.011
		(0.272)	(0.273)	(0.282)	(0.275)
Singapore		-0.287***	-0.343***	-0.330**	-0.316**
		(0.098)	(0.126)	(0.139)	(0.143)
South Korea		-0.240**	-0.202**	-0.232**	-0.215**
		(0.099)	(0.101)	(0.103)	(0.105)
Spain		-0.001	-0.165	-0.176	-0.166
		(0.110)	(0.125)	(0.114)	(0.111)
Sweden		-0.097	0.009	0.010	0.021
		(0.118)	(0.140)	(0.152)	(0.153)

Table C1 (continued)

Switzerland	-0.029	-0.064	-0.055	-0.054
	(0.105)	(0.107)	(0.108)	(0.107)
Taiwan	-0.276***	-0.340***	-0.393***	-0.358***
	(0.070)	(0.109)	(0.135)	(0.134)
United Kingdom	-0.201***	-0.223***	-0.233***	-0.231***
	(0.054)	(0.059)	(0.066)	(0.067)
Industry				
Advertising & Marketing		-0.241	-0.230	-0.251
		(0.269)	(0.270)	(0.267)
Aerospace & Defense		-0.199	-0.180	-0.195
		(0.233)	(0.230)	(0.230)
Apparel & Textile Products		-0.238	-0.187	-0.187
		(0.240)	(0.237)	(0.238)
Asset Management		-0.269	-0.248	-0.260
		(0.229)	(0.224)	(0.224)
Automotive		-0.287	-0.256	-0.272
		(0.242)	(0.239)	(0.238)
Banking		-0.167	-0.159	-0.172
		(0.221)	(0.216)	(0.216)
Beverages		-0.265	-0.258	-0.254
		(0.275)	(0.260)	(0.263)
Biotech & Pharma		-0.093	-0.061	-0.070
		(0.327)	(0.318)	(0.319)
Cable & Satellite		0.385	0.373	0.380
		(0.329)	(0.316)	(0.314)
Chemicals		-0.138	-0.133	-0.141
		(0.253)	(0.248)	(0.249)
Commercial Support Services		-0.160	-0.143	-0.154
		(0.232)	(0.232)	(0.232)
Construction Materials		0.101	0.126	0.099
		(0.408)	(0.393)	(0.394)
Consumer Services		0.152	0.208	0.207
		(0.459)	(0.448)	(0.449)
Containers & Packaging		-0.042	0.025	0.019
		(0.261)	(0.259)	(0.259)
Diversified Industrials		-0.220	-0.202	-0.260
		(0.293)	(0.320)	(0.309)
E-Commerce Discretionary		0.517	0.584	0.572
		(0.583)	(0.583)	(0.581)
Electricity & Gas Marketing & Trading		-0.068	0.076	0.070
		(0.298)	(0.300)	(0.297)
Electric Utilities		-0.063	-0.026	-0.038
		(0.239)	(0.237)	(0.237)
Electrical Equipment		-0.219	-0.175	-0.180
		(0.235)	(0.231)	(0.232)

Table C1 (continued)

Engineering & Construction	0.172	0.193	0.197
	(0.269)	(0.266)	(0.266)
Entertainment Content	-0.113	-0.083	-0.079
	(0.258)	(0.255)	(0.256)
Food	-0.141	-0.156	-0.166
	(0.233)	(0.233)	(0.232)
Forestry, Paper & Wood Products	0.573	0.603*	0.569
	(0.370)	(0.366)	(0.379)
Gas & Water Utilities	-0.106	-0.077	-0.089
	(0.235)	(0.225)	(0.224)
Health Care Facilities & Services	-0.247	-0.226	-0.239
	(0.234)	(0.229)	(0.229)
Home & Office Products	0.406	0.410	0.386
	(0.340)	(0.318)	(0.317)
Home Construction	-0.298	-0.244	-0.259
	(0.237)	(0.235)	(0.235)
Household Products	-0.066	-0.097	-0.145
	(0.365)	(0.365)	(0.371)
Industrial Intermediate Prod	-0.298	-0.332	-0.350
	(0.245)	(0.245)	(0.247)
Industrial Support Services	0.155	0.196	0.188
	(0.295)	(0.290)	(0.288)
Institutional Financial Services	-0.304	-0.263	-0.263
	(0.243)	(0.240)	(0.240)
Insurance	-0.212	-0.204	-0.211
	(0.227)	(0.223)	(0.223)
Internet Media & Services	-0.204	-0.133	-0.135
	(0.234)	(0.230)	(0.231)
Leisure Facilities & Services	-0.006	0.027	0.008
	(0.247)	(0.241)	(0.240)
Leisure Products	-0.196	-0.144	-0.157
	(0.360)	(0.350)	(0.345)
Machinery	-0.204	-0.195	-0.208
	(0.230)	(0.225)	(0.225)
Medical Equipment & Devices	-0.094	-0.067	-0.073
	(0.228)	(0.224)	(0.224)
Metals & Mining	0.072	0.102	0.090
	(0.283)	(0.269)	(0.268)
Oil & Gas Producers	-0.348	-0.306	-0.319
	(0.226)	(0.221)	(0.221)
Oil & Gas Services & Equip	-0.417	-0.352	-0.353
	(0.271)	(0.269)	(0.268)
Publishing & Broadcasting	-0.270	-0.253	-0.247
	(0.233)	(0.228)	(0.228)

Table C1 (continued)

REIT	-0.189	-0.152	-0.160
	(0.223)	(0.218)	(0.218)
Real Estate Owners & Developers	-0.164	-0.127	-0.133
	(0.232)	(0.227)	(0.228)
Real Estate Services	-0.146	-0.105	-0.134
	(0.273)	(0.266)	(0.264)
Renewable Energy	-0.612**	-0.572*	-0.580*
	(0.310)	(0.306)	(0.311)
Retail - Consumer Staples	-0.023	0.036	0.043
	(0.262)	(0.259)	(0.258)
Retail - Discretionary	-0.230	-0.202	-0.205
	(0.231)	(0.226)	(0.227)
Semiconductors	-0.005	0.047	0.039
	(0.229)	(0.223)	(0.223)
Software	-0.085	-0.055	-0.072
	(0.227)	(0.221)	(0.222)
Specialty Finance	0.084	0.122	0.110
	(0.473)	(0.475)	(0.471)
Steel	0.045	0.061	0.056
	(0.459)	(0.461)	(0.465)
Technology Hardware	-0.113	-0.086	-0.104
	(0.228)	(0.223)	(0.223)
Technology Services	-0.131	-0.102	-0.123
	(0.245)	(0.241)	(0.243)
Telecommunications	-0.248	-0.222	-0.241
	(0.228)	(0.223)	(0.223)
Tobacco & Cannabis	-0.273	-0.257	-0.257
	(0.396)	(0.400)	(0.401)
Transportation & Logistics	-0.040	-0.019	-0.029
	(0.241)	(0.237)	(0.237)
Transportation Equipment	-0.419	-0.343	-0.371
	(0.263)	(0.262)	(0.263)
Wholesale - Consumer Staples	0.122	0.127	0.108
	(0.234)	(0.223)	(0.224)
Year			
2015	0.087	0.062	0.058
	(0.073)	(0.075)	(0.075)
2016	0.385**	0.374**	0.379**
	(0.161)	(0.153)	(0.153)
2017	0.068	0.087	0.090
	(0.074)	(0.076)	(0.076)
2018	0.011	0.050	0.055
	(0.071)	(0.074)	(0.073)

2019			0.032	0.093	0.102
			(0.080)	(0.079)	(0.079)
2020			0.593***	0.675***	0.681***
			(0.106)	(0.110)	(0.111)
2021			-0.077	0.027	0.035
			(0.068)	(0.072)	(0.072)
2022			-0.087	0.030	0.043
			(0.073)	(0.077)	(0.077)
2023			0.017	0.202	0.209
			(0.143)	(0.170)	(0.165)
Number of funds				-0.022	-0.021
				(0.014)	(0.014)
Campaign length				0.000***	0.000***
				(0.000)	(0.000)
Market capitalization				0.000	0.000
				(0.000)	(0.000)
Stake size				-0.003	-0.003
				(0.003)	(0.003)
Proxy Fight				0.058	0.077
				(0.089)	(0.092)
Board seats won				0.043	0.029
				(0.047)	(0.044)
Settlement				-0.116	-0.136
				(0.140)	(0.144)
Outcome					
Not Applicable					0.081*
					(0.048)
Partial Success					-0.016
					(0.076)
Success					0.105**
					(0.049)
Constant	0.156***	0.176***	0.194	0.042	0.012
	(0.038)	(0.050)	(0.224)	(0.223)	(0.224)
Observations	2780	2780	2780	2780	2780
R^2	0.000	0.007	0.056	0.064	0.066
Adjusted R^2	0.000	0.000	0.024	0.030	0.031

The table provides the results of five OLS regressions where the dependent variable is the holding period return of the activist campaign, and the independent variable is wolf-pack, a dummy variable indicating whether more than one activist has attacked the target. The reference categories for categorical and dummy variables are the following. Wolf-pack's reference category is no wolf-pack, the country reference category is United States, the industry is Wholesale-Discretionary, the year is 2014, Proxy Fight is No Proxy Fight, Settlement is No Settlement and Outcome is Unsuccessful. The number of observations, R^2 and Adjusted R^2 can be read at the bottom of the table.

Standard errors are in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Appendix D Reputation models

Table D1 Excess return dependent on activist's reputation – median market capitalization

	(1) Hp Excess Return	(2) Hp Excess Return	(3) Hp Excess Return	(4) Hp Excess Return	(5) Hp Excess Return
Reputation market cap	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Country					
Australia		0.493	0.473	0.469	0.514
		(0.324)	(0.345)	(0.343)	(0.347)
Austria		0.331*	0.550***	0.586***	0.642***
		(0.175)	(0.195)	(0.185)	(0.191)
Belgium		-0.540***	-0.632**	-0.745**	-0.752**
		(0.119)	(0.312)	(0.317)	(0.300)
Canada		0.258	0.239	0.256	0.272
		(0.202)	(0.169)	(0.170)	(0.170)
Finland		0.112	-0.178	-0.216	-0.246
		(0.135)	(0.201)	(0.208)	(0.232)
France		-0.047	-0.044	-0.057	-0.043
		(0.095)	(0.111)	(0.121)	(0.125)
Germany		0.119	0.067	0.072	0.089
		(0.117)	(0.120)	(0.120)	(0.122)
Greece		-0.051	0.031	0.050	-0.009
		(0.064)	(0.130)	(0.120)	(0.124)
Hong Kong		-0.207	-0.198	-0.388	-0.340
		(0.254)	(0.353)	(0.388)	(0.372)
India		0.227***	0.078	0.060	0.102
		(0.026)	(0.129)	(0.135)	(0.137)
Italy		-0.128	-0.081	-0.055	-0.053
		(0.098)	(0.111)	(0.102)	(0.107)
Japan		0.010	0.049	0.024	-0.005
		(0.045)	(0.058)	(0.063)	(0.066)
Netherlands		-0.115	-0.144	-0.146	-0.130
		(0.123)	(0.116)	(0.125)	(0.122)
Norway		-0.224***	0.016	0.012	0.002
		(0.027)	(0.116)	(0.119)	(0.116)
Singapore		-0.016	0.057	0.077	0.100
		(0.079)	(0.106)	(0.112)	(0.123)
South Korea		-0.268	-0.162	-0.225	-0.207
		(0.165)	(0.170)	(0.168)	(0.172)
Spain		-0.034	-0.025	-0.025	-0.033
		(0.132)	(0.143)	(0.120)	(0.115)
Sweden		0.196	0.182	0.180	0.172
		(0.120)	(0.211)	(0.217)	(0.208)
Switzerland		-0.040	-0.100	-0.071	-0.079
		(0.156)	(0.155)	(0.157)	(0.153)

Table D1 (continued)

Taiwan	-0.164***	-0.264**	-0.235*	-0.231
	(0.062)	(0.128)	(0.140)	(0.142)
United Kingdom	-0.135**	-0.113*	-0.137**	-0.136**
	(0.065)	(0.062)	(0.067)	(0.066)
Industry				
Advertising & Marketing		-0.311	-0.254	-0.278
		(0.349)	(0.340)	(0.339)
Aerospace & Defense		-0.538*	-0.520*	-0.535*
		(0.311)	(0.304)	(0.303)
Apparel & Textile Products		-0.538	-0.466	-0.448
		(0.339)	(0.335)	(0.334)
Asset Management		-0.611*	-0.522*	-0.517*
		(0.317)	(0.308)	(0.307)
Automotive		-0.467	-0.414	-0.413
		(0.365)	(0.359)	(0.356)
Banking		-0.389	-0.426	-0.422
		(0.302)	(0.294)	(0.294)
Beverages		-0.373	-0.348	-0.312
		(0.310)	(0.302)	(0.296)
Biotech & Pharma		-0.522*	-0.448	-0.461
		(0.313)	(0.303)	(0.303)
Cable & Satellite		-0.362	-0.290	-0.299
		(0.356)	(0.369)	(0.360)
Chemicals		-0.471	-0.457	-0.457
		(0.323)	(0.315)	(0.313)
Commercial Support Services		-0.307	-0.282	-0.287
		(0.312)	(0.306)	(0.304)
Construction Materials		-0.587*	-0.529*	-0.551*
		(0.314)	(0.307)	(0.307)
Consumer Services		0.246	0.345	0.350
		(0.714)	(0.697)	(0.699)
Containers & Packaging		-0.428	-0.364	-0.377
		(0.346)	(0.339)	(0.339)
Diversified Industrials		-0.758**	-0.708**	-0.745**
		(0.344)	(0.361)	(0.345)
E-Commerce Discretionary		0.498	0.534	0.526
		(0.929)	(0.923)	(0.918)
Electric Utilities		-0.375	-0.383	-0.414
		(0.323)	(0.315)	(0.315)
Electrical Equipment		-0.440	-0.298	-0.289
		(0.318)	(0.312)	(0.313)
Engineering & Construction		-0.393	-0.351	-0.329
		(0.310)	(0.301)	(0.299)
Entertainment Content		-0.641**	-0.567*	-0.560*
		(0.304)	(0.297)	(0.297)

Table D1 (continued)

Food	-0.341	-0.284	-0.307
	(0.323)	(0.319)	(0.318)
Forestry, Paper & Wood Products	0.347	0.429	0.409
	(0.510)	(0.508)	(0.519)
Gas & Water Utilities	-0.346	-0.356	-0.350
	(0.325)	(0.307)	(0.308)
Health Care Facilities & Services	-0.555*	-0.489	-0.481
	(0.315)	(0.306)	(0.305)
Home & Office Products	0.093	0.087	0.079
	(0.460)	(0.423)	(0.423)
Home Construction	-0.675**	-0.625*	-0.621*
	(0.326)	(0.321)	(0.325)
Household Products	-0.068	-0.055	-0.092
	(0.504)	(0.491)	(0.497)
Industrial Intermediate Production	-0.655*	-0.689**	-0.697**
	(0.335)	(0.333)	(0.333)
Industrial Support Services	0.062	0.108	0.094
	(0.404)	(0.389)	(0.386)
Institutional Financial Services	-0.325	-0.251	-0.233
	(0.324)	(0.323)	(0.324)
Insurance	-0.503	-0.505*	-0.496
	(0.310)	(0.304)	(0.303)
Internet Media & Services	-0.439	-0.341	-0.324
	(0.333)	(0.328)	(0.330)
Leisure Facilities & Services	-0.397	-0.338	-0.343
	(0.306)	(0.297)	(0.297)
Leisure Products	-0.473	-0.413	-0.381
	(0.555)	(0.549)	(0.537)
Machinery	-0.482	-0.443	-0.458
	(0.308)	(0.299)	(0.298)
Medical Equipment & Devices	-0.353	-0.292	-0.303
	(0.311)	(0.301)	(0.300)
Metals & Mining	-0.235	-0.182	-0.178
	(0.410)	(0.397)	(0.395)
Oil & Gas Producers	-0.648**	-0.546*	-0.548*
	(0.313)	(0.304)	(0.304)
Oil & Gas Services & Equipment	-0.522	-0.396	-0.387
	(0.429)	(0.421)	(0.421)
Publishing & Broadcasting	-0.586*	-0.560*	-0.537*
	(0.315)	(0.305)	(0.304)
REIT	-0.574*	-0.494*	-0.496*
	(0.302)	(0.293)	(0.293)
Real Estate Owners & Developers	-0.708**	-0.655**	-0.662**
	(0.311)	(0.304)	(0.305)

Table D1 (continued)

Real Estate Services	-0.413	-0.340	-0.362
	(0.373)	(0.362)	(0.360)
Renewable Energy	-0.231	-0.211	-0.206
	(0.660)	(0.640)	(0.662)
Retail - Consumer Staples	-0.557*	-0.433	-0.421
	(0.312)	(0.304)	(0.304)
Retail - Discretionary	-0.462	-0.397	-0.389
	(0.315)	(0.308)	(0.309)
Semiconductors	-0.348	-0.256	-0.252
	(0.311)	(0.301)	(0.301)
Software	-0.309	-0.246	-0.252
	(0.308)	(0.297)	(0.297)
Specialty Finance	-0.619**	-0.567*	-0.578*
	(0.311)	(0.302)	(0.303)
Steel	-0.355	-0.327	-0.317
	(0.595)	(0.588)	(0.599)
Technology Hardware	-0.407	-0.358	-0.363
	(0.307)	(0.298)	(0.298)
Technology Services	-0.577*	-0.521*	-0.548*
	(0.313)	(0.306)	(0.306)
Telecommunications	-0.480	-0.414	-0.427
	(0.307)	(0.297)	(0.297)
Tobacco & Cannabis	-0.726**	-0.635*	-0.578*
	(0.345)	(0.337)	(0.350)
Transportation & Logistics	-0.531*	-0.494	-0.496*
	(0.311)	(0.301)	(0.300)
Transportation Equipment	-0.698**	-0.609*	-0.631*
	(0.335)	(0.324)	(0.324)
Wholesale - Consumer Staples	-0.225	-0.178	-0.187
	(0.314)	(0.303)	(0.305)
Year			
2015	0.052	0.031	0.024
	(0.087)	(0.085)	(0.084)
2016	0.207**	0.224**	0.232***
	(0.090)	(0.088)	(0.087)
2017	0.105	0.137	0.136
	(0.093)	(0.091)	(0.090)
2018	0.055	0.123	0.130
	(0.091)	(0.091)	(0.091)
2019	-0.003	0.074	0.087
	(0.086)	(0.084)	(0.084)
2020	0.424***	0.525***	0.529***
	(0.113)	(0.113)	(0.112)

Table D1 (continued)

2021			-0.110 (0.083)	0.013 (0.084)	0.023 (0.083)
2022			-0.067 (0.096)	0.083 (0.097)	0.101 (0.097)
2023			-0.180 (0.116)	0.016 (0.124)	-0.007 (0.121)
Campaign length				0.000*** (0.000)	0.000*** (0.000)
Number of funds				-0.041*** (0.016)	-0.038** (0.016)
Market capitalization				-0.000 (0.000)	-0.000 (0.000)
Stake size				-0.005* (0.003)	-0.006** (0.003)
Proxy Fight				0.033 (0.075)	0.052 (0.077)
Board seats won				-0.023 (0.032)	-0.036 (0.032)
Settlement				0.071 (0.075)	0.048 (0.076)
Outcome					
Not Applicable					0.083 (0.056)
Partial Success					-0.088 (0.060)
Success					0.094 (0.058)
Constant	0.162*** (0.022)	0.154*** (0.027)	0.496 (0.305)	0.352 (0.300)	0.321 (0.302)
Observations	1487	1487	1487	1487	1487
R^2	0.000	0.016	0.101	0.125	0.131
Adjusted R^2	0.000	0.001	0.044	0.065	0.069

The table provides the results of five OLS regressions where the dependent variable is the holding period return of the activist campaign, and the independent variable is reputation market cap, a variable indicating the median market capitalization of targets attacked by the activist approaching the company studied. When several activist approach a company, the largest fund's median market capitalization of targets attacked is taken. The reference categories for categorical and dummy variables are the following. Country's reference category is United States, industry's is Wholesale-Discretionary, year is 2014, Proxy Fight is No Proxy Fight, Settlement is No Settlement and Outcome is Unsuccessful. The number of observations, R^2 and Adjusted R^2 can be read at the bottom of the table.

Standard errors are in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Table D2 Excess return dependent on activist's reputation – number of campaigns

	(1) Hp Excess Return	(2) Hp Excess Return	(3) Hp Excess Return	(4) Hp Excess Return	(5) Hp Excess Return
Reputation number of campaigns	-0.001* (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Country					
Australia		0.485 (0.324)	0.469 (0.345)	0.467 (0.343)	0.510 (0.347)
Austria		0.325* (0.176)	0.548*** (0.196)	0.585*** (0.186)	0.638*** (0.191)
Belgium		-0.547*** (0.117)	-0.655** (0.314)	-0.757** (0.316)	-0.764** (0.298)
Canada		0.248 (0.201)	0.227 (0.169)	0.246 (0.170)	0.261 (0.170)
Finland		0.171 (0.140)	-0.151 (0.196)	-0.182 (0.207)	-0.202 (0.229)
France		-0.028 (0.091)	-0.016 (0.110)	-0.035 (0.120)	-0.021 (0.124)
Germany		0.133 (0.114)	0.082 (0.116)	0.087 (0.117)	0.105 (0.118)
Greece		-0.058 (0.065)	0.033 (0.128)	0.054 (0.119)	-0.009 (0.123)
Hong Kong		-0.193 (0.237)	-0.181 (0.344)	-0.370 (0.376)	-0.317 (0.358)
India		0.213*** (0.031)	0.076 (0.129)	0.059 (0.135)	0.102 (0.137)
Italy		-0.113 (0.096)	-0.055 (0.111)	-0.032 (0.103)	-0.028 (0.108)
Japan		0.008 (0.045)	0.044 (0.058)	0.022 (0.062)	-0.006 (0.065)
Netherlands		-0.098 (0.122)	-0.127 (0.115)	-0.129 (0.124)	-0.112 (0.121)
Norway		-0.231*** (0.030)	0.025 (0.117)	0.018 (0.119)	0.010 (0.116)
Singapore		-0.028 (0.080)	0.044 (0.107)	0.066 (0.112)	0.084 (0.124)
South Korea		-0.255 (0.168)	-0.163 (0.171)	-0.227 (0.166)	-0.207 (0.170)
Spain		0.002 (0.130)	0.026 (0.147)	0.020 (0.121)	0.015 (0.115)
Sweden		0.216* (0.111)	0.191 (0.204)	0.190 (0.212)	0.183 (0.202)
Switzerland		-0.036 (0.154)	-0.088 (0.153)	-0.066 (0.157)	-0.074 (0.153)

Table D2 (continued)

Taiwan	-0.178***	-0.269**	-0.241*	-0.238*
	(0.063)	(0.130)	(0.141)	(0.144)
United Kingdom	-0.123*	-0.102*	-0.127*	-0.126*
	(0.065)	(0.062)	(0.067)	(0.066)
Industry				
Advertising & Marketing		-0.315	-0.257	-0.283
		(0.349)	(0.340)	(0.339)
Aerospace & Defense		-0.522*	-0.510*	-0.525*
		(0.311)	(0.304)	(0.303)
Apparel & Textile Products		-0.544	-0.472	-0.455
		(0.339)	(0.335)	(0.334)
Asset Management		-0.611*	-0.521*	-0.517*
		(0.317)	(0.308)	(0.307)
Automotive		-0.430	-0.384	-0.382
		(0.359)	(0.354)	(0.351)
Banking		-0.393	-0.430	-0.428
		(0.301)	(0.294)	(0.293)
Beverages		-0.381	-0.355	-0.320
		(0.308)	(0.300)	(0.294)
Biotech & Pharma		-0.518*	-0.447	-0.460
		(0.313)	(0.303)	(0.302)
Cable & Satellite		-0.319	-0.265	-0.271
		(0.342)	(0.358)	(0.348)
Chemicals		-0.462	-0.450	-0.450
		(0.322)	(0.314)	(0.313)
Commercial Support Services		-0.312	-0.285	-0.290
		(0.311)	(0.306)	(0.304)
Construction Materials		-0.592*	-0.533*	-0.558*
		(0.314)	(0.307)	(0.307)
Consumer Services		0.242	0.342	0.345
		(0.714)	(0.697)	(0.699)
Containers & Packaging		-0.420	-0.356	-0.365
		(0.345)	(0.339)	(0.339)
Diversified Industrials		-0.691**	-0.674*	-0.712**
		(0.339)	(0.365)	(0.350)
E-Commerce Discretionary		0.505	0.542	0.535
		(0.931)	(0.925)	(0.919)
Electric Utilities		-0.356	-0.367	-0.397
		(0.321)	(0.314)	(0.314)
Electrical Equipment		-0.440	-0.299	-0.291
		(0.317)	(0.312)	(0.313)
Engineering & Construction		-0.390	-0.348	-0.326
		(0.309)	(0.300)	(0.299)
Entertainment Content		-0.626**	-0.560*	-0.554*
		(0.304)	(0.297)	(0.297)

Table D2 (continued)

Food	-0.339	-0.291	-0.318
	(0.322)	(0.319)	(0.318)
Forestry, Paper & Wood Products	0.359	0.438	0.417
	(0.517)	(0.512)	(0.524)
Gas & Water Utilities	-0.360	-0.368	-0.364
	(0.325)	(0.307)	(0.307)
Health Care Facilities & Services	-0.546*	-0.481	-0.473
	(0.314)	(0.305)	(0.304)
Home & Office Products	0.088	0.082	0.071
	(0.459)	(0.422)	(0.421)
Home Construction	-0.667**	-0.617*	-0.612*
	(0.326)	(0.321)	(0.325)
Household Products	-0.020	-0.030	-0.067
	(0.491)	(0.484)	(0.491)
Industrial Intermediate Production	-0.656**	-0.690**	-0.697**
	(0.334)	(0.333)	(0.332)
Industrial Support Services	0.069	0.114	0.099
	(0.404)	(0.389)	(0.386)
Institutional Financial Services	-0.322	-0.250	-0.233
	(0.325)	(0.323)	(0.324)
Insurance	-0.500	-0.503*	-0.495
	(0.309)	(0.304)	(0.302)
Internet Media & Services	-0.437	-0.347	-0.331
	(0.332)	(0.327)	(0.329)
Leisure Facilities & Services	-0.398	-0.339	-0.346
	(0.306)	(0.296)	(0.296)
Leisure Products	-0.478	-0.418	-0.388
	(0.555)	(0.549)	(0.536)
Machinery	-0.479	-0.442	-0.457
	(0.308)	(0.298)	(0.298)
Medical Equipment & Devices	-0.351	-0.291	-0.302
	(0.311)	(0.301)	(0.300)
Metals & Mining	-0.235	-0.185	-0.181
	(0.411)	(0.397)	(0.396)
Oil & Gas Producers	-0.632**	-0.535*	-0.538*
	(0.312)	(0.303)	(0.303)
Oil & Gas Services & Equipment	-0.521	-0.394	-0.386
	(0.434)	(0.426)	(0.426)
Publishing & Broadcasting	-0.594*	-0.566*	-0.545*
	(0.315)	(0.305)	(0.304)
REIT	-0.567*	-0.488*	-0.489*
	(0.301)	(0.293)	(0.293)
Real Estate Owners & Developers	-0.707**	-0.654**	-0.661**
	(0.311)	(0.304)	(0.305)

Table D2 (continued)

Real Estate Services	-0.415	-0.341	-0.364
	(0.372)	(0.362)	(0.359)
Renewable Energy	-0.235	-0.214	-0.211
	(0.655)	(0.636)	(0.658)
Retail - Consumer Staples	-0.550*	-0.427	-0.416
	(0.311)	(0.304)	(0.304)
Retail - Discretionary	-0.464	-0.398	-0.391
	(0.315)	(0.308)	(0.309)
Semiconductors	-0.343	-0.254	-0.248
	(0.310)	(0.301)	(0.300)
Software	-0.308	-0.243	-0.248
	(0.307)	(0.297)	(0.297)
Specialty Finance	-0.624**	-0.571*	-0.583*
	(0.310)	(0.302)	(0.303)
Steel	-0.357	-0.328	-0.318
	(0.594)	(0.586)	(0.597)
Technology Hardware	-0.402	-0.354	-0.359
	(0.306)	(0.298)	(0.298)
Technology Services	-0.572*	-0.516*	-0.543*
	(0.312)	(0.306)	(0.306)
Telecommunications	-0.482	-0.421	-0.435
	(0.307)	(0.297)	(0.297)
Tobacco & Cannabis	-0.704**	-0.611*	-0.549
	(0.347)	(0.340)	(0.355)
Transportation & Logistics	-0.514*	-0.480	-0.482
	(0.310)	(0.300)	(0.299)
Transportation Equipment	-0.697**	-0.607*	-0.631*
	(0.334)	(0.324)	(0.325)
Wholesale - Consumer Staples	-0.210	-0.167	-0.178
	(0.314)	(0.302)	(0.304)
Year			
2015	0.056	0.035	0.028
	(0.087)	(0.085)	(0.084)
2016	0.205**	0.223**	0.231***
	(0.090)	(0.088)	(0.087)
2017	0.105	0.137	0.137
	(0.093)	(0.091)	(0.090)
2018	0.057	0.124	0.132
	(0.091)	(0.091)	(0.091)
2019	0.002	0.078	0.090
	(0.085)	(0.084)	(0.084)
2020	0.426***	0.526***	0.530***
	(0.113)	(0.114)	(0.113)

Table D2 (continued)

2021			-0.105	0.018	0.028
			(0.083)	(0.084)	(0.083)
2022			-0.064	0.083	0.101
			(0.096)	(0.097)	(0.097)
2023			-0.174	0.021	-0.002
			(0.117)	(0.125)	(0.122)
Campaign length				0.000^{***}	0.000^{***}
				(0.000)	(0.000)
Number of funds				-0.041^{***}	-0.038^{**}
				(0.016)	(0.016)
Market Capitalization				0.000	0.000
				(0.000)	(0.000)
Stake size				-0.005^{*}	-0.006^{**}
				(0.003)	(0.003)
Proxy Fight				0.031	0.050
				(0.075)	(0.077)
Board seats won				-0.021	-0.035
				(0.032)	(0.032)
Settlement				0.072	0.047
				(0.076)	(0.077)
Outcome					
Not Applicable					0.085
					(0.056)
Partial Success					-0.082
					(0.060)
Success					0.101^{*}
					(0.059)
Constant	0.185^{***}	0.172^{***}	0.507^{*}	0.363	0.333
	(0.027)	(0.031)	(0.305)	(0.301)	(0.302)
Observations	1487	1487	1487	1487	1487
R^2	0.001	0.016	0.100	0.124	0.130
Adjusted R^2	0.000	0.001	0.043	0.065	0.069

The table provides the results of five OLS regressions where the dependent variable is the holding period return of the activist campaign, and the independent variable is reputation number of campaigns, a variable indicating the number of campaigns launched by the activist approaching the company studied. When several activist approach a company, the largest fund's number of campaigns is taken. The reference categories for categorical and dummy variables are the following. Country's reference category is United States, industry's is Wholesale-Discretionary, year is 2014, Proxy Fight is No Proxy Fight, Settlement is No Settlement and Outcome is Unsuccessful. The number of observations, R^2 and Adjusted R^2 can be read at the bottom of the table.

Standard errors are in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Table D3 Excess return dependent on activist's reputation – past returns

	(1) Hp Excess Return	(2) Hp Excess Return	(3) Hp Excess Return	(4) Hp Excess Return	(5) Hp Excess Return
Reputation return	0.863***	0.855***	0.839***	0.798***	0.787***
	(0.144)	(0.145)	(0.141)	(0.136)	(0.137)
Country					
Australia		0.299	0.307	0.305	0.342
		(0.319)	(0.338)	(0.337)	(0.339)
Austria		0.215	0.412**	0.441**	0.488**
		(0.166)	(0.186)	(0.182)	(0.190)
Belgium		-0.680***	-0.780***	-0.860***	-0.868***
		(0.148)	(0.204)	(0.221)	(0.218)
Canada		0.254	0.240	0.252	0.265*
		(0.181)	(0.153)	(0.155)	(0.154)
Finland		0.204	-0.056	-0.094	-0.113
		(0.134)	(0.181)	(0.189)	(0.200)
France		0.092	0.108	0.086	0.101
		(0.094)	(0.104)	(0.114)	(0.117)
Germany		0.081	0.052	0.055	0.072
		(0.103)	(0.106)	(0.106)	(0.108)
Greece		0.060	0.156	0.158	0.131
		(0.063)	(0.134)	(0.128)	(0.131)
Hong Kong		-0.157	-0.089	-0.252	-0.225
		(0.238)	(0.291)	(0.317)	(0.304)
India		0.490***	0.402***	0.372***	0.387***
		(0.042)	(0.135)	(0.139)	(0.138)
Italy		-0.050	0.035	0.049	0.052
		(0.098)	(0.118)	(0.113)	(0.114)
Japan		0.044	0.072	0.052	0.031
		(0.043)	(0.055)	(0.059)	(0.062)
Netherlands		0.053	0.011	-0.003	0.012
		(0.116)	(0.111)	(0.119)	(0.120)
Norway		-0.011	0.152	0.131	0.114
		(0.035)	(0.112)	(0.116)	(0.112)
Singapore		0.026	0.072	0.081	0.108
		(0.079)	(0.103)	(0.107)	(0.116)
South Korea		-0.184	-0.064	-0.121	-0.110
		(0.163)	(0.160)	(0.159)	(0.164)
Spain		0.009	0.030	0.021	0.019
		(0.125)	(0.137)	(0.118)	(0.115)
Sweden		0.114	0.120	0.122	0.124
		(0.120)	(0.143)	(0.173)	(0.177)
Switzerland		-0.037	-0.085	-0.066	-0.072
		(0.119)	(0.121)	(0.124)	(0.125)
Taiwan		-0.140**	-0.163	-0.144	-0.150
		(0.061)	(0.149)	(0.156)	(0.157)

Table D3 (continued)

United Kingdom	-0.114*	-0.090	-0.110	-0.105
	(0.064)	(0.063)	(0.067)	(0.067)
Industry				
Advertising & Marketing		-0.241	-0.196	-0.207
		(0.264)	(0.261)	(0.261)
Aerospace & Defense		-0.487**	-0.479**	-0.484**
		(0.231)	(0.229)	(0.229)
Apparel & Textile Products		-0.443*	-0.385	-0.371
		(0.245)	(0.248)	(0.249)
Asset Management		-0.582**	-0.508**	-0.499**
		(0.229)	(0.227)	(0.228)
Automotive		-0.445*	-0.406	-0.402
		(0.264)	(0.265)	(0.264)
Banking		-0.502**	-0.524**	-0.512**
		(0.210)	(0.209)	(0.210)
Beverages		-0.476*	-0.451*	-0.422
		(0.257)	(0.273)	(0.271)
Biotech & Pharma		-0.497**	-0.435**	-0.441**
		(0.221)	(0.219)	(0.220)
Cable & Satellite		-0.213	-0.166	-0.176
		(0.286)	(0.300)	(0.297)
Chemicals		-0.440*	-0.429*	-0.426*
		(0.237)	(0.237)	(0.236)
Commercial Support Services		-0.273	-0.251	-0.253
		(0.225)	(0.226)	(0.226)
Construction Materials		-0.595**	-0.541**	-0.547**
		(0.243)	(0.246)	(0.245)
Consumer Services		0.134	0.223	0.235
		(0.673)	(0.664)	(0.665)
Containers & Packaging		-0.418	-0.372	-0.383
		(0.279)	(0.281)	(0.281)
Diversified Industrials		-0.713**	-0.681**	-0.686**
		(0.305)	(0.324)	(0.313)
E-Commerce Discretionary		0.567	0.594	0.593
		(0.841)	(0.843)	(0.842)
Electric Utilities		-0.384*	-0.394*	-0.412*
		(0.225)	(0.224)	(0.225)
Electrical Equipment		-0.389*	-0.277	-0.269
		(0.231)	(0.235)	(0.236)
Engineering & Construction		-0.339	-0.303	-0.286
		(0.222)	(0.219)	(0.219)
Entertainment Content		-0.549***	-0.494**	-0.488**
		(0.208)	(0.209)	(0.210)
Food		-0.346	-0.297	-0.305
		(0.237)	(0.240)	(0.241)

Table D3 (continued)

Forestry, Paper & Wood Products	0.160 (0.506)	0.237 (0.506)	0.229 (0.510)
Gas & Water Utilities	-0.346 (0.241)	-0.356 (0.227)	-0.351 (0.230)
Health Care Facilities & Services	-0.480** (0.221)	-0.429* (0.220)	-0.417* (0.221)
Home & Office Products	0.066 (0.373)	0.064 (0.347)	0.065 (0.347)
Home Construction	-0.621** (0.246)	-0.581** (0.250)	-0.575** (0.256)
Household Products	0.003 (0.391)	0.011 (0.395)	-0.010 (0.399)
Industrial Intermediate Production	-0.591** (0.256)	-0.617** (0.259)	-0.628** (0.260)
Industrial Support Services	0.063 (0.289)	0.107 (0.288)	0.100 (0.288)
Institutional Financial Services	-0.282 (0.230)	-0.221 (0.238)	-0.208 (0.241)
Insurance	-0.491** (0.224)	-0.491** (0.225)	-0.476** (0.226)
Internet Media & Services	-0.376 (0.241)	-0.298 (0.244)	-0.286 (0.246)
Leisure Facilities & Services	-0.371* (0.213)	-0.322 (0.211)	-0.320 (0.212)
Leisure Products	-0.420 (0.354)	-0.372 (0.361)	-0.345 (0.356)
Machinery	-0.475** (0.216)	-0.445** (0.213)	-0.452** (0.215)
Medical Equipment & Devices	-0.332 (0.219)	-0.285 (0.217)	-0.289 (0.218)
Metals & Mining	-0.311 (0.331)	-0.262 (0.325)	-0.254 (0.325)
Oil & Gas Producers	-0.616*** (0.220)	-0.534** (0.219)	-0.529** (0.220)
Oil & Gas Services & Equipment	-0.409 (0.354)	-0.311 (0.353)	-0.304 (0.355)
Publishing & Broadcasting	-0.477** (0.223)	-0.456** (0.220)	-0.443** (0.220)
REIT	-0.468** (0.205)	-0.410** (0.205)	-0.408** (0.206)
Real Estate Owners & Developers	-0.637*** (0.221)	-0.596*** (0.221)	-0.600*** (0.223)
Real Estate Services	-0.512* (0.291)	-0.447 (0.285)	-0.457 (0.286)

Table D3 (continued)

Renewable Energy	-0.353	-0.324	-0.314
	(0.568)	(0.557)	(0.573)
Retail - Consumer Staples	-0.461**	-0.365	-0.355
	(0.224)	(0.224)	(0.225)
Retail - Discretionary	-0.456**	-0.402*	-0.393*
	(0.229)	(0.229)	(0.231)
Semiconductors	-0.345	-0.271	-0.267
	(0.217)	(0.216)	(0.217)
Software	-0.250	-0.199	-0.201
	(0.215)	(0.212)	(0.213)
Specialty Finance	-0.644***	-0.594***	-0.599***
	(0.225)	(0.223)	(0.224)
Steel	-0.274	-0.250	-0.241
	(0.525)	(0.523)	(0.533)
Technology Hardware	-0.332	-0.289	-0.290
	(0.217)	(0.215)	(0.216)
Technology Services	-0.568**	-0.519**	-0.532**
	(0.226)	(0.227)	(0.228)
Telecommunications	-0.471**	-0.419**	-0.421**
	(0.214)	(0.212)	(0.213)
Tobacco & Cannabis	-0.553**	-0.487*	-0.447
	(0.277)	(0.281)	(0.305)
Transportation & Logistics	-0.479**	-0.448**	-0.446**
	(0.215)	(0.213)	(0.213)
Transportation Equipment	-0.782**	-0.695**	-0.696**
	(0.318)	(0.308)	(0.306)
Wholesale - Consumer Staples	-0.241	-0.209	-0.208
	(0.228)	(0.229)	(0.231)
Year			
2015	0.038	0.026	0.021
	(0.084)	(0.082)	(0.082)
2016	0.180**	0.197**	0.202**
	(0.087)	(0.085)	(0.085)
2017	0.100	0.129	0.128
	(0.087)	(0.086)	(0.085)
2018	0.033	0.090	0.095
	(0.085)	(0.086)	(0.086)
2019	-0.025	0.038	0.047
	(0.082)	(0.080)	(0.080)
2020	0.391***	0.474***	0.475***
	(0.104)	(0.104)	(0.103)
2021	-0.079	0.016	0.021
	(0.079)	(0.079)	(0.079)

Table D3 (continued)

	(1)	(2)	(3)	(4)	(5)
2022			-0.148 (0.096)	-0.027 (0.094)	-0.017 (0.094)
2023			-0.199 (0.123)	-0.049 (0.129)	-0.063 (0.126)
Campaign length				0.000*** (0.000)	0.000*** (0.000)
Number of funds				-0.033** (0.016)	-0.030* (0.016)
Market capitalization				-0.000 (0.000)	-0.000 (0.000)
Stake size				-0.005** (0.003)	-0.006** (0.003)
Proxy Fight				0.012 (0.070)	0.025 (0.073)
Board seats won				-0.019 (0.032)	-0.026 (0.032)
Settlement				0.069 (0.075)	0.060 (0.076)
Outcome					
Not Applicable					0.045 (0.054)
Partial Success					-0.087 (0.057)
Success					0.033 (0.057)
Constant	-0.040 (0.030)	-0.052 (0.035)	0.287 (0.212)	0.191 (0.218)	0.180 (0.219)
Observations	1487	1487	1487	1487	1487
R^2	0.094	0.105	0.180	0.196	0.199
Adjusted R^2	0.093	0.091	0.129	0.141	0.142

The table provides the results of five OLS regressions where the dependent variable is the holding period return of the activist campaign, and the independent variable is reputation return, a variable indicating the average return of the past campaigns launched by that activist. When several activist approach a company, the largest fund's historical return is taken. The reference categories for categorical and dummy variables are the following. Country's reference category is United States, industry's is Wholesale-Discretionary, year is 2014, Proxy Fight is No Proxy Fight, Settlement is No Settlement and Outcome is Unsuccessful. The number of observations, R^2 and Adjusted R^2 can be read at the bottom of the table.

Standard errors are in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Appendix E Breusch-Pagan tests

Table E1: Breusch-Pagan tests demand type regressions

Specification	χ^2	P-value	Result
1	816.77	0.000	Heteroskedasticity
2	608.38	0.000	Heteroskedasticity
3	1538.29	0.000	Heteroskedasticity
4	3355.89	0.000	Heteroskedasticity
5	3432.23	0.000	Heteroskedasticity
6	3906.95	0.000	Heteroskedasticity

This table showcases the result of the Breusch-Pagan tests conducted to understand whether the demand type models exhibited homoskedasticity or heteroskedasticity. The columns show the model specification, the test statistic, p-value, and result.

Table E2: Breusch-Pagan tests wolf-pack regressions

Specification	χ^2	P-value	Result
1	227.84	0.000	Heteroskedasticity
2	430.64	0.000	Heteroskedasticity
3	1603.63	0.000	Heteroskedasticity
4	3034.47	0.000	Heteroskedasticity
5	3094.60	0.000	Heteroskedasticity

This table showcases the result of the Breusch-Pagan tests conducted to understand whether the wolf-pack models exhibited homoskedasticity or heteroskedasticity. The columns show the model specification, the test statistic, p-value, and result.

Table E3: Breusch-Pagan tests reputation regressions – median market capitalization

Specification	χ^2	P-value	Result
1	0.43	0.5124	Homoskedasticity
2	140.23	0.000	Heteroskedasticity
3	612.57	0.000	Heteroskedasticity
4	785.69	0.000	Heteroskedasticity
5	788.97	0.000	Heteroskedasticity

This table showcases the result of the Breusch-Pagan tests conducted to understand whether the reputation models using median market capitalization exhibited homoskedasticity or heteroskedasticity. The columns show the model specification, the test statistic, p-value, and result.

Table E4: Breusch-Pagan tests reputation regressions – number of campaigns

Specification	χ^2	P-value	Result
1	58.20	0.000	Heteroskedasticity
2	160.62	0.000	Heteroskedasticity
3	625	0.000	Heteroskedasticity
4	794.66	0.000	Heteroskedasticity
5	799.32	0.000	Heteroskedasticity

This table showcases the result of the Breusch-Pagan tests conducted to understand whether the reputation models using number of campaigns exhibited homoskedasticity or heteroskedasticity. The columns show the model specification, the test statistic, p-value, and result.

Table E5: Breusch-Pagan tests reputation regressions – past returns

Specification	χ^2	P-value	Result
1	794.79	0.000	Heteroskedasticity
2	829.47	0.000	Heteroskedasticity
3	1106.03	0.000	Heteroskedasticity
4	1155.38	0.000	Heteroskedasticity
5	1159.21	0.000	Heteroskedasticity

This table showcases the result of the Breusch-Pagan tests conducted to understand whether the reputation models using past returns exhibited homoskedasticity or heteroskedasticity. The columns show the model specification, the test statistic, p-value, and result.