

Does Activist Investing Create Shareholder Value?

Bachelor Thesis

submitted to

Professor Dr. Lars Schweizer
UBS Endowed Chair of Business Administration, in particular
Strategic Management
Faculty of Economics and Business Administration
Johann Wolfgang Goethe University
Frankfurt am Main

By
Jakob Brunnengräber

Field of Study: Economics and Business Administration

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0 Directories

i) List of abbreviations

CAPM:	Capital Asset Pricing Model
CP:	Closing Price
ER:	Expected Return
EW:	Event Window
FF:	Fama French
HML:	High Minus Low
SMB:	Small Minus Big

ii) Symbol Directory

$1-\alpha$:	Confidence Level
$\hat{\beta}_1$:	Coefficient of Market Risk
$\hat{\beta}_2$:	Coefficient of SMB Factor
$\hat{\beta}_3$:	Coefficient of HML Factor
β_{Adj} :	Adjusted Coefficient of Market Risk
H_0 :	Zero Hypothesis
H_1 :	Counter Hypothesis
\ln :	Natural Logarithm
n :	Sample Size
\bar{r} :	Average Return
r^f :	Risk Free Interest Rate
r^m :	Market Portfolio Return
r^{HML} :	HML Return
r^{SMB} :	SMB Return
R :	Growth Factor (1+r)
μ :	Expected Value
S^2 :	Sample Variance
S :	Stock (Equity)
t :	Point in Time
t :	Test Size

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1 Introduction

Shareholder activism in public companies has become a phenomenon of high stock market relevance that receives strong media attention and coverage. It plays an important role, no longer as in the past mainly in the U.S., but also in Europe. Between 2013 and 2017, the capital invested in Europe by activist investors almost doubled, from \$24 billion to \$47 billion (Jahn, Köhler, Landgraf & Rickens, 2018). According to figures from Goldman Sachs, there were 19 cases in the first half of 2018 alone, where activist investors started campaigns (Jahn & Köhler, 2018). For the full year 2018, the annual shareholder activism report of the consulting firm and investment bank Lazard lists 58 new European campaigns, which implies an all-time high for the continent (Wood, 2018).

At the same time, the issue of shareholder activism is potentially controversial and there are diverging views on its impact, for instance on stakeholder value (Goranova & Ryan, 2014) and corporate social responsibility (David, Bloom, & Hillman, 2007). Policy initiatives took place that can be interpreted as resistance against activist investing. With the adoption of the "Florange" law in 2016, French policy makers created protective measures for potential target companies, by providing long-term shareholders, with a holding period of over two years, with double voting rights (Larsen, 2019).

However, this thesis is not directed at a socioeconomic or political analysis of activist behaviour, but focusses on the question, whether the activists create "societal value" in an economic sense. For financially driven campaigns this can be primarily measured by the impact of shareholder activism on shareholder value, to which activists often devote themselves (Denes, Karpoff, & McWilliams, 2016). For this reason, I examine the influence of shareholder activism on the companies concerned in terms of stock price development, strategic alignment and governance, based on previous scientific findings. I will also discuss which factors are decisive for successful activist campaigns and which characteristics qualify companies as potential targets.

Historically, shareholder activism has received the highest scientific attention in the USA, where framework conditions in many ways cannot be compared to Europe. Most of the literature evaluated, accordingly, relates to the American stock market, while, on the other hand, my empirical research, entirely refers to

activist campaigns in Europe. Consequently, one aim of this study also is to examine the applicability of selected findings from the largely American literature on activism to a European stock market environment.

The collected sample data supports the reports about a significantly increased number of activist campaigns in Europe in recent years. I evaluate 31 campaigns (thereof 24 launched by hedge funds) that I have identified from the analysis of over 300 companies listed in European prime indices. Using an event study framework I investigate whether shareholder activism in European blue chip companies generates short-term abnormal returns in the share prices of the target companies. The event study presents significant abnormal results and encourages a broader investigation of activist campaigns in Europe. I also present some in-depth analyses of the sample that improve the understanding of the contemporary phenomenon of shareholder activism in Europe. These include the realized excess returns against the background of the categorised campaign contents, the geographical distribution of the sample as well as the notorious reputation of a certain hedge fund. In addition, I investigate whether there is a correlation between the share purchased by activists at first entry and the realized excess returns.

The thesis is structured as follows: Part 2 discusses existing literature on shareholder activism and illuminates the phenomenon in its variety, with important implications for the classification of my empirical work. Part 3 is the empirical study that provides comprehensive explanations of my approach and an in depth analysis of the findings. In Part 4, I discuss the findings against the background of the existing literature and formulate a critical review of my research design and data adequacy. Part 5 presents the overall conclusion of the analysis.

2 Literature Review

2.1 What Is Shareholder Activism?

Different investors can be distinguished not only according to investment strategy, asset classes and origin of the invested funds, but also by their demands towards their investments. A form of investment, in which the demands on the management of the investment object are particularly central, is activist investing. The course of an activist investor is characterised by the circumstance that in case of disagreement or dissatisfaction with the management, the investor does not seek to leave or avoid the company, but tries to actively influence management, supervisory board and/or the other shareholders (Lin, 2015). Activist investors raise their claims against various backgrounds and practice activism in different ways. Ways that activist shareholders take to enforce their demands are shareholder proposals, opposition positions in elections, especially at the annual meeting, private negotiations, but also direct attacks against management and launching public campaigns. Examples of contexts in which shareholder activism occurs are proxy fights, persistent corporate crises and takeovers (Denes, Karpoff & McWilliams, 2016). A distinction can be also made between actors who practice shareholder activism, such as institutional investors or hedge funds and other entrepreneurial activists, but also according to the degree of confrontation that activists are entering into with management (confrontational vs. non-confrontational activism) (Klein & Zur, 2009).

In the remainder of the literature review, the phenomenon of shareholder activism will be examined in more depth, focusing in particular on the questions of which companies become targets, what change is brought by activism, and ultimately, under what conditions activist campaigns generate shareholder value.

2.2 A Brief History of (Modern) Shareholder Activism

Shareholder activism has existed as a scientifically delimited phenomenon at least since the beginning of the second half of the 20th century. Gillan and Starks (2007) have studied the development of shareholder activism since its modern inception and identify different overlapping phases with different actors as activists. While until the 1970s the activists were predominantly individual investors, shareholder activism rose as a relevant scientifically perceived phenomenon since the 1980s, accompanied by the growth of institutional investors as the new owners of publicly listed companies. The institutional

investors who appeared as activist investors at this early stage were often pension funds, which put pressure on the management of predominantly poorly performing companies by submitting shareholder proposals and also non-public demands regarding corporate reforms. The institutional investors formed councils to increase the weight of their proposals to management (some of these councils still exist today and can be regarded as lobby groups for institutional investors). According to Gillan and Starks (2000), typical activist campaign contents at this time were related to management's attempts of prevention against hostile takeovers, the contesting of cumulative voting and actions against greater management independence.

Over time, also Union Funds formed to intervene directly in corporate policy. For the passage of the 1990s, Gillan and Starks (2007) describe a declining share of pension funds in activist campaigns, while the share of union funds increased during this period. Prevost, Rao and Williams (2012) and Schwab and Thomas (1997) have studied activism through labour union funds and found that they used innovative methods of activism that included media campaigning, addressing individual managers, and directly proposing counterproposals during annual meetings.

In the 1990s, also hedge funds began to develop to important actors of shareholder activism. Gillan and Starks (2007) identify the campaign goals of activist hedge funds as follows:

“[...] changing management strategy or board decisions; seeking a board seat for either input, control, or information purposes; effecting corporate governance changes; forcing a buyout or sale of a division; and increasing cash distributions to shareholders through dividends or share repurchases.” (p.68).

Characteristically, the activism and monitoring by hedge funds differs from that of institutional investors. Brav, Jiang, Partnoy and Thomas (2008) explain those differences mainly with a different incentive situation compared to institutional investors. They argue that hedge fund managers have a low incentive problem, which in combination with the management of little regulated capital ensures that the practical influence on company boards and management decisions increases. Due to relatively less regulation, hedge funds can concentrate their investments on a few companies, while institutional investors, such as pension funds have to meet

higher diversification requirements. Hedge funds' effectiveness is enhanced by the use of leveraged positions, convertible instruments and derivatives (Christoffersen, Geczy, Musto, & Reed, 2007) and (Hu & Black, 2007). Thus they appear to be predestined for activist investing, due to their lower restrictions, higher risk taking potential and low incentive problems (the consideration of the realized returns is presented in section 2.4).

This could explain why shareholder activism developed into a phenomenon dominated by hedge funds and financial investors in the course of the 2000s. At least when considering the scientific coverage the appearance is awakened. Numerous much cited studies published after 2000 examine the characteristics and success of hedge fund activism, while dealing with institutional investors' activism rather negligibly, or by looking at the past of the 1980s and 1990s (the discussion of the most relevant papers will take place in the following sections). Shareholder activism has evolved as a phenomenon in the USA, which is why the majority of the literature also focuses on the US stock market. For the more recent past, however, studies on activism in Europe can also be found. Cziraki, Renneboog and Szilagyi (2010) examine proxy proposals initiated by shareholders in the United Kingdom and continental Europe. Mietzner and Schweizer (2014) analyse the value effect that the activism of hedge funds in comparison to private equity funds has on German target companies and Stadler, Knyhausen–Aufseß and Schweizer (2014) have investigated hedge fund activism in Germany against the background of a concentrated ownership environment.

Again, the later publication dates can be interpreted as an indication of a later emergence of activist investing in Europe. The strongly increased activism of the years 2017 and 2018 has so far received little published scientific treatment, which is probably primarily due to the short time lag between the present and the activists' entrances and ongoing campaigns.

2.3 Which Firms Get Targeted?

As already elaborated, there are different actors practicing shareholder activism and different occasions where activism is practiced. Especially between activism by institutional investors and hedge funds differences seem to exist, which might also affect the selection of target companies. Consequently, a homogeneous

profile of a predestined target company cannot be defined. In the following, various findings from empirical studies are presented and compared.

Denes, Karpoff and McWilliams (2016) find in their summary of 30 empirical studies, dealing with characteristics of firms attracting shareholder activism, that targets are typically large companies, which have a significant lower stock return performance relative to the market and control firms in the one to four year time horizon before the activism event. Low performance is also indicated by the observed targets' accounting figures. KPI's, as return on sales, sales growth, growth in operating income and market-to-book ratio are under the benchmarks. Those findings suggest that activists are predominantly targeting inefficient companies with optimization potential. But also other characteristics of companies, besides poor performance, are found correlated with activism. Gillan and Starks (2007) , who have also evaluated a large number of empirical studies on shareholder activism, find as frequently described characteristics of target companies high shares in the companies held by institutional investors, low degrees of inside ownership and poor governance structures. Norli, Ostergaard and Schindele (2015) have examined the relationship between the liquidity of a company's shares and shareholder activism. They find a positive effect of liquidity in stocks on the emergence of activist campaigns. However, the positive effect weakens for highly valued companies, which fits into the picture of previous findings. The link between liquidity and campaign revenue is particularly that activists are better able to cover the expenses of activism through informed trading, which is facilitated by increased liquidity.

The findings on hedge fund activism differ in some respects from the characteristics identified for non-hedge fund activism. The analyses of Denes, Karpoff and McWilliams (2016) find that the observed hedge fund targets contrast by having comparatively high return on assets prior to the events compared to benchmark companies. Klein and Zur (2009) find that, unlike other activist investors, hedge funds select more profitable and financially healthier companies as targets. In concrete terms, amongst other things, target companies possess higher amounts of excess cash than comparable companies. A further finding is that hedge funds target companies with free cash flow problems. In other words, target companies report a significantly lower free cash flow than control companies with identical operating results. In this way, the scientists argue, hedge

funds reduce agency problems. Specific claims made, are the reduction of excess cash through introduction or increase in dividend payments and the servicing of interest on outstanding debt. Share buyback programs as well as demands for the reduction of the salaries of the Management Board also fit into the pattern. Here again, optimization potential seems to be a crucial criterion: In the following year of activism, Klein and Zur (2009) note for their sample an average doubling of dividends, significant increases in debt asset ratios, as well as reductions in cash and short-term investments.

Another very important aspect in the context of shareholder activism is M&A, in particular hostile takeovers. Denes, Karpoff and McWilliams (2016) identify that target companies often practice takeover defence before being targeted by activists. This characteristic seems relevant against the background of the “disciplinary role of takeovers” Scharfstein (1988) describes in his equally named scientific paper. Scharfstein cites the problem of asymmetric information between shareholders and management as the reason for the emergence of inefficiencies in corporate management. In a dynamic business environment, the contract agreed between shareholders and management is lagging behind the environmental changes, creating room for inefficient management actions (Grossman & Hart, 1980). Following Scharfstein, under these conditions, the takeover of corporate control by a third party can lead to the modification of the principal agent contract to the changed environmental conditions and thus close the efficiency gap that has arisen. The disciplining effect of company takeovers can be derived from the potential renegotiation, as managers have an increased incentive not to reduce shareholder value, as this favours takeovers and weakens the position of management. If a company nevertheless becomes a takeover target, management can still try to defend against the takeover. As described above, companies that are targeted by activist investors have often defended themselves several times. In this light activism appears as a weaker form of management discipline against which management, unlike takeover bids, can hardly defend itself, as activists usually acquire a minority stake in companies (Brav, Jiang, Partnoy, & Thomas, 2008), however, with regard to hedge fund activism. Along with this argument, Denes, Karpoff and McWilliams (2016) also conclude that activism is an alternate form of management disciplining when the threat of takeovers is low.

2.4 Does Activist Investing Create Shareholder Value?

The central question in the context of shareholder activism is ultimately whether activist campaigns increase shareholder value. A large proportion of activist campaigns refer to the apparent value enhancement potential of their targets and the elimination of inefficiencies in management. In this respect, the increase in value of companies is the main justification for activism, driven by financial purposes. An assessment of the findings on this question is therefore of great importance. Primarily, however, the question of how target companies change as a result of activism is to be the focus of attention. Relevant objects of consideration are especially the development of profitability and the governance structure of target firms, as these areas are particularly often addressed by activist campaigns (Denes, Karpoff & McWilliams, 2016). Not only the potential exit value in the form of the share price is relevant for shareholders, but also the ongoing capital income from dividend payments, as well as the binding of management to shareholder interests.

2.4.1 What Impact Do Activist Campaigns Have on Target Companies?

For activism through shareholder proposals and direct negotiations, by non-hedge fund activists, a number of studies find no significant improvement in profitability. Del Guercio and Hawkins (1999), investigating campaigns in the context of activism by pension funds, do not find a significant improvement in the performance of the target companies in terms of profitability for the three-year period after activism, compared to control companies. Karpoff, Malatesta and Walkling (1996) as well conclude, for activism by institutional investors, that shareholder proposals in the context of activist campaigns do not bring significant improvement in financial performance. They even find no notable achievements for proposals that achieve a majority among the shareholders. In a summarizing survey, Karpoff (2001) processes numerous empirical studies on shareholder activism, mainly by institutional investors, and concludes that activism achieves slight results in the area of addressed governance issues, but produces no success in the area of profitability. Smith (1996) also finds no improvement in the operational performance of target companies through institutional investors activism, but notes that observed targets respond with changes in line with the proposals of the activist in 72% of cases. Black (1998) comes to the conclusion that shareholder activism by institutional investors does not achieve success with target companies due to restrictions and inefficiencies and provides a description

of the engagement that seems to fit into the picture created so far: “They don't conduct proxy fights, and don't try to elect their own candidates to the board of directors. Legal rules, agency costs within the institutions, information costs, collective action problems, and limited institutional competence are all plausible partial explanations for this relative lack of activity.” (Black, 1998, p.1). Del Guercio and Hawkins (1999) find at least that the activism of institutional investors is driving an organizational change, as well as strategic restructuring measures in a time window of several years after the interventions. Yet, the findings lead again to the previously mentioned argument that institutional investors seem to be unsuitable as activists due to their legal positioning and organizational structure. It is therefore interesting to consider the campaign impact of more dynamic investment vehicles such as hedge funds. As was also pointed out in the opening section, the contemporary relevance of this type of activist seems to be higher anyway. Brav, Jiang, Partnoy and Thomas (2008) find in their analysis of activist campaigns by hedge funds a clear positive impact in terms of operating profitability, payout and CEO changes. Along with the previously mentioned reduction of agency problems in target companies, the scientists find an increase in leverage relative to the book value (with the intuition to use excess cash for interest redemption). Boyson and Mooradian (2011) present corresponding results, namely a long-term improvement in operational performance, especially if corporate governance and the reduction of excess cash are addressed by the activist hedge funds. A very exciting contribution is also made by Clifford (2008), who compares the performance of active investments and passive investments of identical hedge funds. He comes to the conclusion that the operative performance, measured by the Return on Assets (ROA) ratio, is greater for the active investments. As driver, Clifford identifies the divestment of unprofitable corporate assets. Brav, Jiang and Kim (2015) dive deeper into the operational effects of hedge fund activism. Using data from the U.S. Census Bureau, the researchers find that a typical target company realizes significant increases in production efficiency in the years following a hedge fund campaign. They also show that the productivity of production sites sold to new owners increases. Efficiency gains are also present when wages and working hours are kept constant, thus illustrating the increase in labour productivity. Gantchev,

Gredil and Jotikasthira (2018) and Zhu (2013) also come up with findings on performance improvements through hedge fund activism.

Nevertheless, there is also no consensus on the impact of hedge fund activism. Greenwood and Schor (2009) argue that the measured performance in connection with hedge fund activism is largely based on the activists' proficiency in driving target companies into a takeover, while performance is poor in times of low takeover interest. Corum and Levit (2019) also see a connection between campaign victories of hedge fund activists and M&A cases and argue that the basis for activists to win a proxy fight is much better than that of the opposite bidder who is involved in a conflict of interest with the shareholders of the targeted company. In summary, in response to the question of changes in target companies through activist campaigns, it can be stated that the heterogeneity of activist shareholders must definitely be taken into account. With regard to the degree of change of the target companies in operational and governance terms an unambiguous statement required a closer examination. However, as long as one abstains from asking what is the ultimate driver of change (with reference to the influencing potential of takeovers), hedge funds appear to be the more consequent and effective activists.

The analysis of the stock price performance, which is the ultimate measure of financially driven shareholder activism, follows subsequently.

2.4.2 Is There an Abnormal Short-Term Stock Price Performance Through Shareholder Activism?

The question of whether certain actions related to shareholder activism cause abnormal short-term returns has been investigated in numerous studies, mostly by means of an event study framework. Denes, Karpoff and McWilliams (2016) have evaluated 38 studies on the value contribution of shareholder activism, with publication dates between 1983 and 2016, of which many deal with the short-term effect on stock price performance. The scientists divide the studies into four categories: shareholder proposals, negotiated settlements or non-proposal pressure, hedge fund activism and contested proposals. In the following, I will reflect the majority trend of each category and then elaborate on the results of relevant studies.

- 1) Shareholder proposals: Different studies use various event points to investigate short-term returns through active shareholders' proposals. Occurring event points that are applied are the first press releases regarding the activism, the proxy mailings of the proposals, as well as the vote on the proposal by the shareholders. The majority of the studies considered come to the conclusion that the realized returns are negative, but insignificantly. Karpoff, Malatesta and Walkling (1996), who did not find improvements in the operational performance of target companies in the analysis of proxy proposals, do not find significant abnormal returns in this context either. This applies even to companies in which the activists were able to achieve majorities with their proposals. Wahal (1996), who documents a shift in the proxy proposals of activist institutional investors from takeover related topics, in the 1980s, to governance concerns, in the 1990s, also finds no evidence of short-term abnormal returns. However, Thomas and Cotter (2007), who conducted a comprehensive, later study on activism by institutional investors, find a significantly higher success rate of activist proposals in the early 2000s than in the 1990s, and thus a slightly positive abnormal return around shareholder meetings.
- 2) Negotiated settlements or non-proposal pressure: This category takes up activism in direct negotiations with management, and thus also the related, partially non-transparent processes. Again, a majority of the study results indicate negative but not significant abnormal returns in the short run. Carleton, Nelson and Weisbach (1998), who have specifically studied the effects of private negotiations between institutional activists and the management of the target companies without a democratic shareholder voting, conclude that short-term stock price development depends on the exact governance reference of the activist. They do not find significant excess returns from private negotiations across all sample cases. Caton, Goh, & Donaldson (2001), even find significantly negative short-term returns of almost -1% on average in this category. Wahal (1996), who could not find significant excess returns for proxy proposals, finds significant short-term excess returns for non-proposal pressure at 95% confidence level, which underlines that an absolute consensus is hardly to be found.

- 3) Hedge fund activism: For activism by hedge funds, there are consistently significant positive excess returns in the short term. Here Denes, Karpoff and McWilliams (2016) present consistent and robust findings, across the nine studies under consideration, that short-term excess returns arise in connection with activism. Brav, Jiang, Partnoy and Thomas (2008), who studied campaigns by hedge funds between 2001 and 2006, find approximately 7% abnormal returns at the time of the announcement of activism, without a reversal in the year after the event. Klein and Zur (2009), who have particularly examined campaigns with a confrontational character and have found high success rates of hedge funds with their claims, find short-term abnormal returns of over 5 % in an event window of 36 days around the filing dates. González and Calluzzo (2018), who have dealt extensively with clustered shareholder activism, i.e. the occurrence of several campaigns by different activists at a single target company, also find significantly positive abnormal returns in the short term for this specific sub-category of the phenomenon. For the first time a finding seems to be clear in the trend. Hedge fund activism appears to be generating short-term excess returns for target companies.
- 4) Contested proposals: The last category, which deals with activism expressed through proxy fights, shows a clearly positive trend in short-term returns as well. Classical content of these contests is the fight for board seats. Similar to hedge fund activism, the vast majority of the studies conducted by Denes, Karpoff and McWilliams (2016) come to the conclusion that proxy fights in target companies generate short-term excess returns, however, the range of average returns is larger. Dodd and Warner (1983), regardless of the success of activists proxy fights, who usually fail to achieve the majority but at least achieve board seats through methods such as cumulative voting in over half of the cases, find high short-term excess returns triggered by the contests of over 10% in the defined event window. Ikenberry and Lakonishok (1993), who often find the contests in the context of, at the time of their investigation, increased take-over defence activities by managers, report lower positive abnormal returns in the range of averagely about 5% within the event window.

The breakdown of the phenomenon shareholder activism in terms of actors and motives shows how different short-term achievements are (in the form of stock

price performance). The findings again underline that more dynamic investment vehicles such as hedge funds already seem to have an advantage over institutional investors in the short-term pricing of activist engagement. However, it is also conceivable that in the short-term context there is a premium for commitment of investors at governance level, which could explain the return performance of proxy fights, which is clearly different from general shareholder proposals and private negotiations. At least the studies about contested proposals present significantly positive returns achieved by institutional investors.

2.4.3 Does Shareholder Activism Enhance Value in the Long Run?

This is the key question in the search for the creation of shareholder value. It has already been derived from a wide range of studies that certain forms of shareholder activism, in the short term enhance the stock price performance of target companies. But does this positive effect last in the long run, or are players and approaches that seemed ineffective in the short run perhaps sustainably successful?

Since the clearest distinction regarding the character and influence of shareholder activism can be drawn against the background of different actors, I will distinguish in this section between study results relating to institutional investors on the one, and hedge funds on the other hand.

- 1) Institutional Activism: Smith (1996), who examined target companies of the California Public Employees' Retirement System (CalPERS), a partially activist pension fund, finds that sustainable value development depends on targets' cooperation with the activist. Therefore, a positive long-term performance can be found for companies that either make changes based on the activist's proposals or find a settlement, and a value destruction for companies that oppose the activist's demands. However, more than two thirds of the target companies surveyed were willing to cooperate with the activists, resulting in an overall positive value contribution for Smith's sample. Overall, his findings on positive long-term value creation through activist proposals are significant at 99% level. Opler and Sokobin (1997) investigate companies that have been included by the Council of Institutional Investors on a list of poorly performing companies. In the year following the inclusion, the scientists reported returns for the previously problem-driven companies that exceeded the performance of

the S&P 500 by more than 11%. The calculation of the long-run value impact of shareholder activism is more challenging and controversial compared to the calculation of short-term abnormal returns, which typically involves event study designs. For the search for long-term outperformances, often benchmark companies and peer groups are used, which are supposed to satisfy equivalence principles. The necessity of company comparability is a potential source of disputes about study results. Song and Szewczyk (2003) use the Council of Institutional Investors' focus list to examine the performance of activism targets as well and find no significant long-term returns, arguing that contrary findings are due to inadequacies in the selection and calculation of benchmarks.

The summarizing study by Denes, Karpoff and McWilliams (2016) comes to the conclusion that there are mixed and majorly insignificant value development findings for the categorized methods (proposals and private negotiations) with regard to the activism of institutional investors. A separate consideration should again apply to contested proposals, as these seemed successful in the short term in terms of stock price performance. The findings on this topic are also controversial, but the promising picture of the short term cannot be maintained. Ikenberry and Lakonishok (1993) argue that the long-term returns of companies after a proxy fight are related to its outcome. If incumbents keep their board seats, there are no significant abnormal returns. If, however, an activist involved in the proxy fight wins one or more board seats, the scientists find significantly negative abnormal returns. They see a connection with the disappointment of the capital market in the absence of operating success after the activist gains power. Mulherin and Poulsen (1998), on the other hand, criticize a focus on companies that are not taken over as a result of proxy contests. If considering the value development of an unfiltered basis of companies according to proxy contests, a positive sustainable value effect can be observed, whereby the effect is particularly positive for acquired companies. However, if companies are not taken over after proxy fights, the scientists identify board changes as a value driver, as restructuring measures are more likely to be carried out.

- 2) The survey by Denes, Karpoff and McWilliams (2016), which takes up five studies on the long-term value effect of activism by hedge funds, suggests that

the value of target companies increases not only in the short term but also in the long term as a result of hedge funds' entry. The excess returns found range between approximately 5% and 11% on average, with three of the studies presenting their results as significant at the 99% confidence level. The positive results of the other two studies are not significant. Becht, Franks, Grant and Wagner (2017) evaluate over 1700 activist campaigns by hedge funds in 23 countries and come to the conclusion that the value effect of activism is greater when several campaigns target a single target company. Bray, Jiang and Kim (2010) provide some more evidence that shareholder activism has a long-term value-generating effect. As main determinants of value enhancement they identify improvement in operational performance, the adjustment of firms' governance, and an optimization of the capital structure. The increase in value therefore depends implicitly on a more efficient course set by the activists. The connection between operating performance and market capitalization seems obvious. The share price can implicitly be seen as the capitalization of all expected future dividends that the company distributes to its shareholders. Bray, Jiang and Kim (2015) investigate in more detail how firm performance improves through hedge fund activism and thus drives the shareholder value. Through the efficiency increases in labour and capital employed described earlier (e.g. through targeted reallocation of plants), the scientists refute the often formulated thesis that the increase in the profitability of the target companies would only be achieved through financial optimisation and cost-saving measures. The researchers have also found that the efficiency gains of production units sold are greater when hedge funds are involved in the sale. On the basis of these findings, the scientists conclude that hedge funds as shareholders are conducive to the recombination of the corporate assets to be sold and the new owners. This leads to efficiency gains across company boundaries. In other words, hedge fund activism can be assumed to have positive externalities.

Taking into account the distinction between the players practicing activism described at the beginning of this section (institutional investors and hedge funds at high level), I conclude that the long-term outlook for shareholder value generation is already reflected in short-term returns. The long-term findings for activism by institutional investors are controversial and ambiguously in trend,

while for hedge fund activism predominantly positive value developments could be identified. This seems to be reflected in the pricing of expectations (with the exception of the subcategory contested proposals). Short-term abnormal returns of institutional campaigns are insignificant and ambiguous in trend, while short-term abnormal returns from hedge fund activism are mostly significantly positive.

3 Empirical Study

3.1 Introduction to the Subject of Investigation

The conclusion of the literature review is that shareholder activism has a value-enhancing effect on target companies under certain outlined circumstances, whereby hedge fund activism stands out from the activism of institutional investors in the majority of cases. The derived consequence of this is that the stock market shows a positive reaction in the moment an activist hedge fund campaign becomes known, in the form of an increase in the share price of the target, beyond the return required in the specific window. In other words, I am searching for short-term excess returns, or "alpha" in short. This will be the subject of the empirical part of my bachelor thesis.

3.2 Methodology and Procedure

To investigate, whether shareholder activism creates abnormal returns in the short run, I use an event study methodology as research design. The event study is a statistical method to observe security price reactions in form of returns to announcements or events (Binder, 1998). Applying two of the most widely used asset pricing models as benchmarks for requested stock returns, the CAPM and the Fama-French-Model (an augmentation of the first by two additional factors), I will search for systematic abnormal returns of selected stocks. While many practitioners of the event study methodology in a stock market context observe not only short-term returns during the event window, but are also interested in a post event drift of the stock to capture medium run reactions of an event, for example Womack (1996), with a study on the investment value of analyst recommendations, I only investigate returns in a defined three trading day event window. Denes, Karpoff and McWilliams (2016), who summarize the event study results of 38 studies on the topic of short-term abnormal returns through shareholder activism, find event windows from 2 to 31 days. The event window length used for this thesis accordingly is at the lower end of the spread. To receive the linearized return of each respective trading day I calculate the ln-returns, of the closing prices (CP), here exemplarily represented for stock (S^i) in period t (t), which therefore reflects one trading day (R expresses the growth factor $(1+r)$, with r standing for return):

Equation (1)

$$\ln\left(R(S^i)_t\right) = \ln\left(\frac{CP(S^i)_{t+1}}{CP(S^i)_t}\right) = \ln\left(CP(S^i)_{t+1}\right) - \ln\left(CP(S^i)_t\right)$$

The three trading day window includes the pre-event day, the event day itself and the post-event day in order to capture as many short-term reactions to the event as possible, including those driven by information leaps. The following day will be taken into account so that events that become known shortly before the close of trading will also be priced in accordingly. The goal of the event study is to capture the moment when the market prices the information of activism. This point in time can be characterised in two different ways, which is why I define two possible event points:

1. the date of the first public media article available about the entry of the shareholder, if markets can anticipate what might be the consequences of the entry for the target company because the investor was mostly acting actively in past events (a suitable example is the purchase of stakes by the hedge fund Elliott, which is notorious for rigorously following its strategic demands unconditionally); or
2. the campaign announcement date if a) the time of the purchase is unknown and the announcement takes place indefinitely later or b) if the shareholder is not always acting active, but intervenes for a specific reason (e. g. to prevent a takeover defence by the management (this is the use case for activism by institutional investors)).

The realized return for S^i in the three trading day event window (EW) with event on day t is:

Equation (2)

$$\ln\left(R\left(EW(S^i)\right)\right) = \ln(R(S^i)_{t-1}) + \ln(R(S^i)_t) + \ln(R(S^i)_{t+1})$$

I calculate the abnormal return for each sample company as a residuum between the average of the realized daily ln-return inside the event window, and the required daily return, estimated with the factor models mentioned above. As I linearized the returns using the natural logarithm, I can now apply the arithmetic mean to calculate the average realized daily return for the estimation of the

abnormal returns, by simply dividing equation (2) by three, instead of using the geometric mean that I would have had to use if I had not formed the natural logarithm. Therefore, the formula for the average ln-return during the Event Window is (for simplicity reasons, I show the ln-returns as small r in the following formulas):

Equation (3)

$$\bar{r}_t^i = \frac{1}{3} \ln \left(R \left(EW(S^i) \right) \right)$$

The formulas below illustrate the calculations of the abnormal returns:

Equation (4)

$$ER_t^{CAPM,i} = \bar{r}_t^i - r_t^f - \hat{\beta}_1^i (r_t^m - r_t^f)$$

Equation (5)

$$ER_t^{FF,i} = \bar{r}_t^i - r_t^f - \hat{\beta}_1^i (r_t^m - r_t^f) - \hat{\beta}_2^i (r_t^{SMB}) - \hat{\beta}_3^i (r_t^{HML})$$

Equation (4) represents the abnormal returns calculated with the CAPM, estimating the required return of a stock according to the contained systematic (market) risk (Sharpe, 1964). Equation (5) represents the abnormal return calculation applying the CAPM augmentation, developed by Eugene F. Fama and Kenneth R. French (1992), who include two additional factors adjusting for systematic risk differences of stocks, depending on companies' size and book-prize ratio. Since it is crucial for understanding abnormal returns and the overall research design, I will briefly explain the intuition of the factor models, which are capturing the required return subtracted from realized return, without going into the scientific derivation and explaining all implicit assumptions.

The CAPM, which is grounded on the portfolio theory of Markowitz (1952), is based on the assumption that all investors operating on the capital market hold a perfectly diversified portfolio. Accordingly, the opportunity cost of an investor to hold an asset consists only of the time value of the money and the systematic risk taken by the investment, while the unsystematic risk of an enterprise is perfectly diversified. The systematic risk of a company is represented by the market beta, which is calculated by dividing the covariance of the particular security with the market portfolio, divided by the market variance. In an efficient capital market, all securities must be priced according to their contained systematic risk, as otherwise

arbitrage possibilities arise (Sharpe, 1964). The CAPM is a one-factor model, which means that assets are priced solely on the basis of market risk and the risk-free interest rate. A simple linear regression model can therefore be used to estimate the market beta. Against this background, it becomes clear what an excess return is: a return which, given the systematic risk inherent in the company, exceeds the return to be generated. This is often referred to in the stock market as "alpha" (against the background of quantifying systematic risks through "betas").

Fama and French (1992) found in an empirical study of the US stock market that there are systematic differences in returns between companies with equivalent market beta, which can be explained by two essential factors.

The researchers found that:

- a) companies with a low market capitalisation systematically realize higher returns than larger comparable companies; and
- b) companies with a high book-to-market ratio (so called value stocks) realize higher returns than comparable companies with lower book-to-market ratios.

A plausible interpretation of the research results is that required returns calculated using CAPM do not fully reflect systematic risk contained in companies in terms of size and valuation. From their analysis of returns, Fama and French conclude that extending the CAPM model to consider the two factors SMB (Small minus Big) and HML (High minus Low) improves the estimate of the required return, as it better captures the entire systematic risk.

The two models are probably among the most popular and well established asset pricing models, which is why I use both to obtain a solid basis for investigating excess returns through activism.

3.3 Calculation of Required Returns

As the CAPM is a theoretical model, based on assumptions and preconditions which are not fully met in reality, its application requires conventions to estimate returns. In particular, the determination of the risk free rate and the market portfolio are handled differently, exactly as there is room for manoeuvre as regards the time horizons for the estimates. All time series taken for the empirical study were extracted from Bloomberg database, except the benchmark data for the

application of the Fama French model. The sample includes stocks from the prime stock indices of seven of the eight biggest European economies. As consequence, for the CAPM-return calculation I choose the STOXX® Europe 50 index as market portfolio , which consists of 50 European super sector leaders, including stocks from all countries observed in the study. For the required market portfolio return, I use the historic monthly ln-returns over a time horizon of 30 years prior to each company’s event window to control for the impact of the stock market booms prior to the stock market crisis of 2000/2001 and 2008/2009. The index had its all-time high in March 2000 and another peak in July 2007 which makes it difficult to validly estimate the required annual market return using periods of less than 20 years. The index was established in 1998 and calculated back to the beginning of 1987. So I use the maximum possible time horizon of the index for all sample companies that had their event period after 2017, which is however shorter than 30 years. As risk free rate I considered to choose the EONIA-rate first (Euro OverNight Index Average) which is the one-day interbank interest rate for the euro area, to respect the concept of maturity equivalence. As EONIA has been negative for the time frames of most event windows (with interest rates so negative that they would exceed the daily market risk premium and cause the required return on equity to become negative for some securities), I decided to use a different source for the daily risk free rates. *Kenneth R. French*, ,developer of the Fama French model, provides on his website benchmark portfolios for the application of multi factor asset pricing models, categorized by geo regions. In the section “developed market factors and returns” I select the “Fama/French European 3 Factors”-dataset (Kenneth R. French - Data Library, 2019). For the risk-free overnight interest rate, I obtained rates, this way, which are close to zero, but not in a deeply negative range, which would be problematic for modelling.

For the estimation of the market beta, I use the covariance of the monthly ln-returns for 23 months prior the campaign and respectively for the market variance. For the calculation of CAPM returns, I adjust the estimated “raw” market beta according to established practice:

Equation (6)

$$\beta_{Adj}^i = \frac{2}{3} \hat{\beta}_1^i + \frac{1}{3} \beta_m (= 1)$$

The adjustment of the market beta is based on the assumption that the systematic risk contained in a company converges with increasing maturity against that of the market portfolio, which by definition has a beta of 1. The method is proposed in the application of Bloomberg for the regression of betas and is commonly used in valuation practice (Western Libraries-Bloomberg Professional Service Overview, 2018). Another advantage is that the betas in the sample are smoothed and adjusted for outliers, such as slightly negative betas, which would also imply negative equity costs. In fact, the adjustment of the sample changes the average beta only marginally, while the sample is nevertheless adjusted for outliers.

I apply the time horizon of 23 months also for the estimation of the Fama-French coefficients. For regression of the market risk, size and the valuation impact for each stock, I use the provided benchmark data “Fama/French European 3 Factors” by Kenneth R. French. The time horizons provided for the factors and the risk free rate go back to July 1990. Since data are missing for a 30 year horizon, I go back to July 1990 for the calculations of the aggregated required returns for all securities. The portfolios used by French as a benchmark to calculate the factors include equities from all economies considered in my sample. The practice for the calculation of the SMB- and the HML-factor is as follows: The equities of a region are divided yearly into portfolios according to market capitalization for the calculation of the SMB-factor and book-value ratio for the calculation of the HML-factor. The size- and valuation-dependent return premiums are determined by subtracting the weighted portfolio returns from a) the small stocks minus the big stocks and b) the shares with a high book-to-price ratio minus the shares with a low book-to-price ratio. The calculation of the market risk premium (Mkt-RF) is logically based on the use of all equities under consideration in the specific geo region (Kenneth R. French - Description of Fama/French Factors, 2019). In order to embed the required returns, which were calculated using the Fama French factors, into the model, I use the natural logarithm of the factor returns to calculate the coefficients for each title of the sample on this basis. The same procedure is applied for the calculation of the yield of the risk free rate.

3.4 Sample

The descriptive part of my bachelor thesis deals with the search for short-term abnormal returns through the entry or campaign announcement of activist

shareholders. I interpret as activism what has been processed in the media or in studies by capital market players under the formulation "shareholder activism".

As already explained in the introduction, I investigate contemporary cases of activism on the European continent. As described in the literature section, activism is not a new phenomenon, but one that has changed over time. In my research I concentrate on share purchases and campaign announcements, which are less than 5 years in the past and thus became public after 01.01.2014. In order to ensure the general availability of data and the media presence of the campaigns, I concentrate on blue chips of the eight largest European economies measured by gross domestic product (GDP). These are Germany, Great Britain, France, Italy, Spain, the Netherlands, Switzerland and Sweden. For each of the eight countries, I look at the companies listed in the respective leading stock index (e.g. DAX 30 in Germany).

Using a keyword search, I find out which of the companies have received a publicly announced campaign during the specified period. Here I obtain my information mainly from media reports which either schedule the time of entry of the activist investor or, if this is unknown, the time of the first public communication of the investor on his campaign. The goal is to capture the time of the first information processing of activism by the capital market for the event window. So, if neither the entry point nor a direct public communication of the activist is known, but internal information about a campaign is made public and processed in the media for the first time, this moment is also adopted to define the event window.

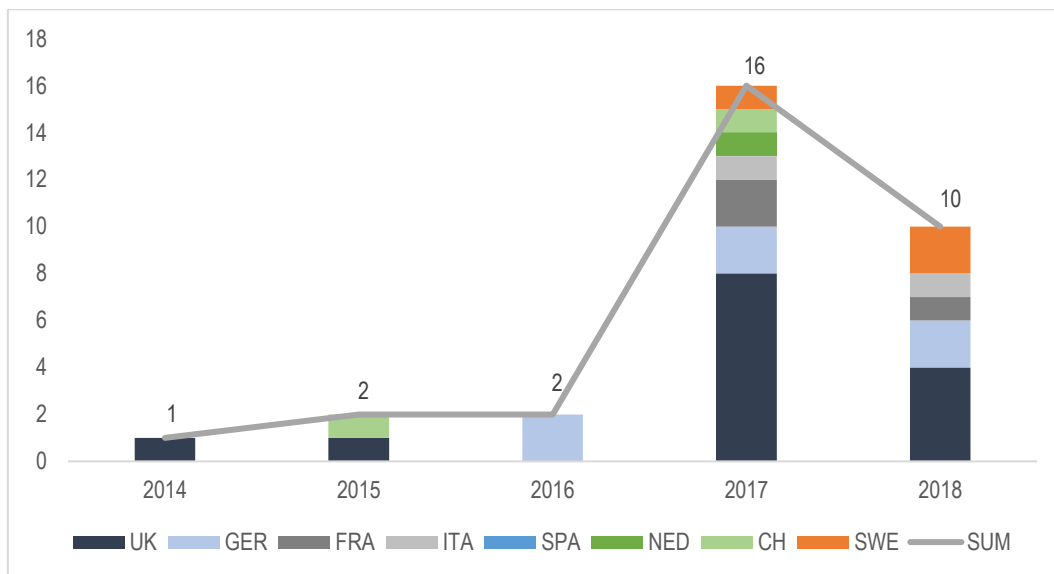
In addition to media reports from financial information service providers such as Bloomberg or Reuters and financial news such as Financial Times, I have used a regular report on activist campaigns "Review of shareholder activism" by the financial consulting firm and investment bank Lazard. This report has been published several times per year since 2017 and contains an appendix listing public campaigns during the respective report period (Murphy, 2017).

The search for publicly known entry times is complicated by the fact that many activist investors acquire shares below the reporting threshold for direct investments in the respective country (in Germany, the minimum threshold is 3% to BaFin (BaFin, 2011)) and have therefore less difficulties keeping their entry

secret. In order for campaigns to be included in the sample, I presume that the activists hold at least 0,5% of the total equity after their first entry. Companies that have received several campaigns from different activists, who do not diverge fundamentally in their known claims, are included in the sample only once using the first campaign in the five-year period. In this way distortion by company peculiarities is reduced.

Given the defined criteria and the indices examined, I find 31 relevant campaigns spread over seven of the eight countries considered in a period from November 2014 to December 2018. There is a particular accumulation of campaigns in Great Britain and Germany, accounting for 20 out of 31 campaigns. In addition, the number of campaigns in the prime indices of the considered economies has increased rapidly from 2 in 2016 to 16 in 2017. In 2018, the number of campaigns, identified within the prime indices, fell again, but nevertheless remained at a high level.

Figure 1: Campaign Distribution by Country and Year



The activists' targets operate in a wide range of different industries, including financial services, consumer goods, media, engineering, and machine building (detailed overview in the appendix in table 10). It is noticeable that numerous diversified conglomerates are among the targets, such as Thyssenkrupp, Bayer, ABB and Nestlé. This seems consistent with the findings of the literature review that activists are more likely to target larger companies, where they see potential

for divestitures, leaner business models and organizational optimization to maximize shareholder value.

It can be stated that the study is more an investigation of hedge fund activism, or at least entrepreneurial activism (Klein & Zur, 2009), than shareholder activism in general. Activist investors in my sample are almost always hedge funds or financial investors, which underlines the described evolution of players practicing activism. Among the investors, I find a strong concentration of a few players. Three hedge funds (Elliott Management, Cevian Capital and The Children’s Investment Fund (TCI)) account for 17 of the 31 campaigns.

I categorize all identified campaigns according to the purpose of the activists, as far as information is publicly available. The contents of the activist campaigns are classified into five categories: 1. Strategy/Management Change, 2. Board Change, 3. M&A, 4. Breakup/Divestiture 5. Others and Unknown. Since the level of detail of the available information is often low, I refrain from a deeper differentiation. A campaign can contain different purposes and therefore fall into several categories. The table below presents application examples of the defined categories of campaign content on the basis of campaigns included within the sample:

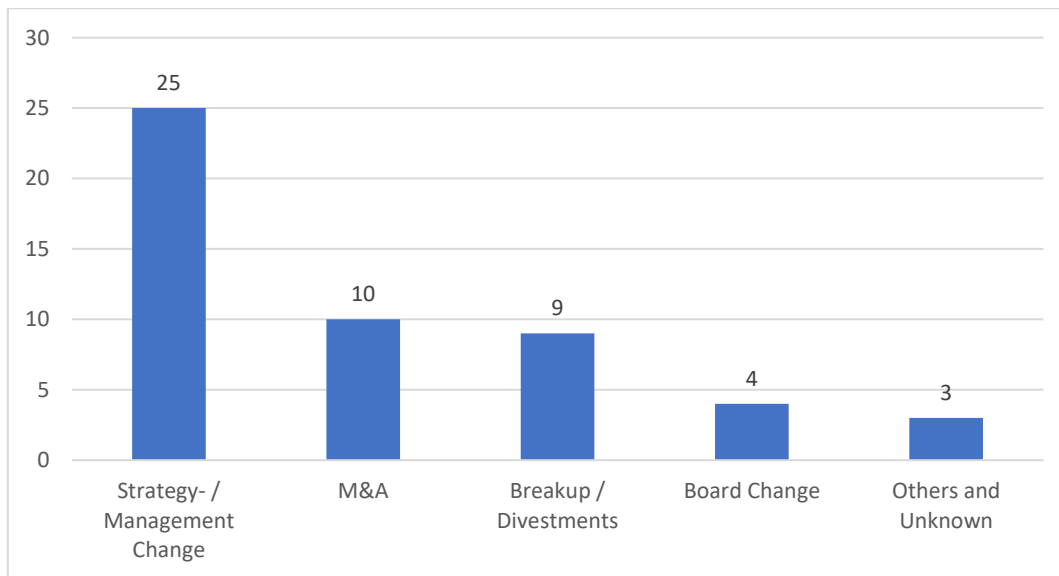
Table 1: Categories of Campaign Contents

Campaign Content	Target / Activist	Case
Strategy- / Management Change	Nestlé / Third Point Management	Third Point Management demands a comprehensive restructuring program from Nestlé. The aim is to reduce costs, also through job cuts, implement a stock repurchase program and invest in innovative markets. Simultaneously, unprofitable and non-core segments and activities are supposed to be divested.
Board Change	London Stock Exchange / TCI	TCI opposes the early dismissal of Xavier Rolet, the long-time chairman of the London Stock Exchange, and demands the resignation of his successor Donald Brydon.

Campaign Content	Target / Activist	Case
M&A	Akzo Nobel / Elliott Management	Elliott strongly supports the acquisition of Akzo Nobel by PPG Industries following a hostile takeover bid.
Breakup / Divestments	Whitbread / Sachem Head	Sachem Head considers the diversified structure of Whitbread to be inefficient and requires a breakup of the different divisions (split of the hotel and coffee shop businesses).
Others	Volkswagen / TCI	TCI intends to revise the incentive compensation at Volkswagen in order to link the compensation of the management board more directly to the interests of the shareholders.

On the basis of the defined categories of campaign contents, the sample is categorised as follows:

Figure 2: Sample by Campaign Content



3.5 Findings

3.5.1 Presentation of Findings

Following the methodology described above, the average logarithmic daily return for the entire sample in the individual event windows amounts to 1,1%, which appears to be high at first glance (the average logarithmic daily return of the STOXX® Europe 50 index of the last six years in comparison amounts to

0,005%). As described in the methodology part of the paper, I use two different factor models (CAPM and Fama French) to determine the required returns in order to validate the results.

In the diagram below, I illustrate the sample averages of the determinants I obtained from the data for CAPM, using the STOXX® Europe 50 index, and for Fama-French model, using the "Fama/French European 3 Factors"-dataset. Even if the final calculation of the excess returns is performed on the basis of daily returns, I calculate the data presented below, if they are returns, over the length of a year in order to make them easier to interpret.

Figure 3: Average Factor Returns (ln/Annually)

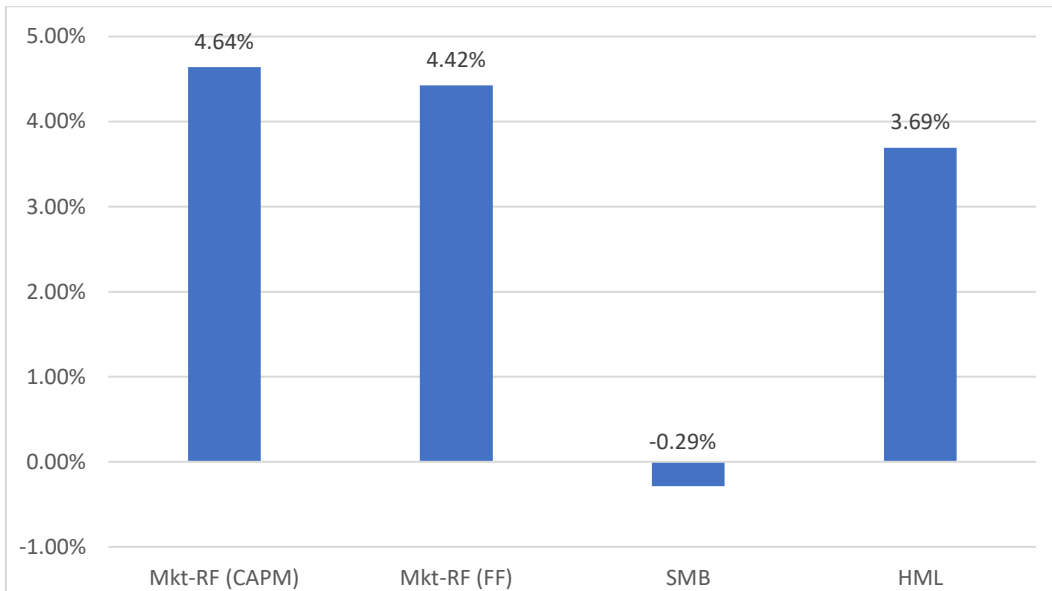
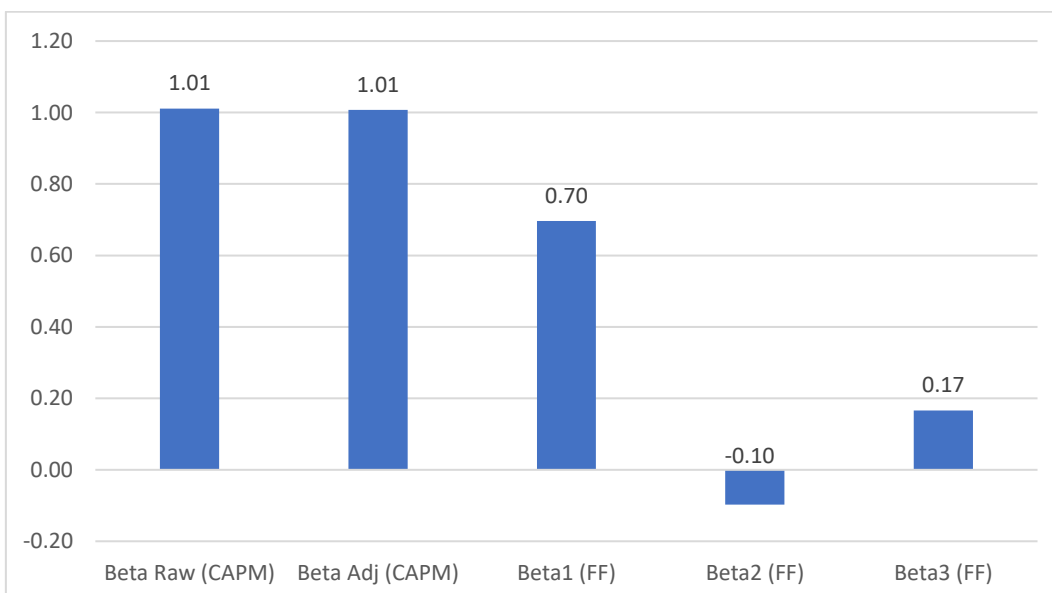


Figure 4: Average Betas (Factor Coefficients)



Against the background of the described conventions for the estimation of determinants, a required logarithmic daily return of 0,0127% is obtained using the Adjusted CAPM and 0,0132% using the Fama French model. Extrapolating the ln-returns to one year, they remain just under 5%, which in a valuation and corporate finance context are low values for levered equity costs (this is addressed in the section on the critical reflection of the empirical work).

The regression of the required returns calculated with the two factor models shows a medium-strong positive correlation of ~0,4 and a significant positive linear relationship of ~1,28 marginal return units for the Fama French model for each marginal unit of return for the CAPM return at the 95% confidence level.

Table 2: Regression of Required Returns

Regression Statistics						
<i>Excess Returns CAPM - Excess Returns Fama French</i>						
Multiple R	0,41323					
R Square	0,17076					
Adjusted R Square	0,14216					
Standard Error	0,00012					
Observations	31					

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-0,00003	0,00007	-0,44842	0,65718	-0,00017	0,00011
	1,28239	0,52477	2,44371	0,02086	0,20911	2,35567

Average daily excess returns in the event window of 1,0864% and 1,0859%, at total sample level, are obtained using the two models. The magnitude of the effect speaks for itself: the realized excess returns for both factor models are more than 80 times as high as the required returns. Thus, the realized returns very dominantly determine the trend direction of the excess returns, so that the calculated excess returns of both factor models are strongly positively correlated.

3.5.2 Significance of Findings

In order to test the significance of the calculated excess returns, I apply a one-sample T-test for the results of both factor models. A one-sided test is required because the results are supposed to be significantly greater than zero, not just unequal to zero.

Thus applies:

Equation (7)

$$H_0: \mu_1 \leq \mu_0$$

Equation (8)

$$H_1: \mu_1 > \mu_0$$

The test statistics is as follows, where μ_0 in this case is equal to zero:

Equation (9)

$$t = \frac{\bar{x} - \mu_0}{\frac{s}{\sqrt{n}}}$$

The zero hypothesis is to be rejected in a right-sided test at confidence level $1-\alpha$ if

$$t > t_{1-\alpha}$$

The application of a single sample test shows that the excess returns are significantly greater than zero, at a confidence level of 99%.

Table 3: Significance of Excess Returns (Full Sample)

t-Test: One-Sample			
	<i>Excess Return CAPM</i>		<i>Excess Return Fama French</i>
Mean	1,08635%	Mean	1,08590%
Variance	0,01976%	Variance	0,01978%
Observations	31	Observations	31
Hypothesized Mean Difference	0	Hypothesized Mean Difference	0
df	30	df	30
t Stat	4,303	t Stat	4,299
P(T<=t) one-tail	0,000083	P(T<=t) one-tail	0,000083
t Critical one-tail	2,457	t Critical one-tail	2,457

Therefore, the first general conclusion of the empirical study is that shareholder activism generates excess returns in the short term. These exceed the required returns many times over.

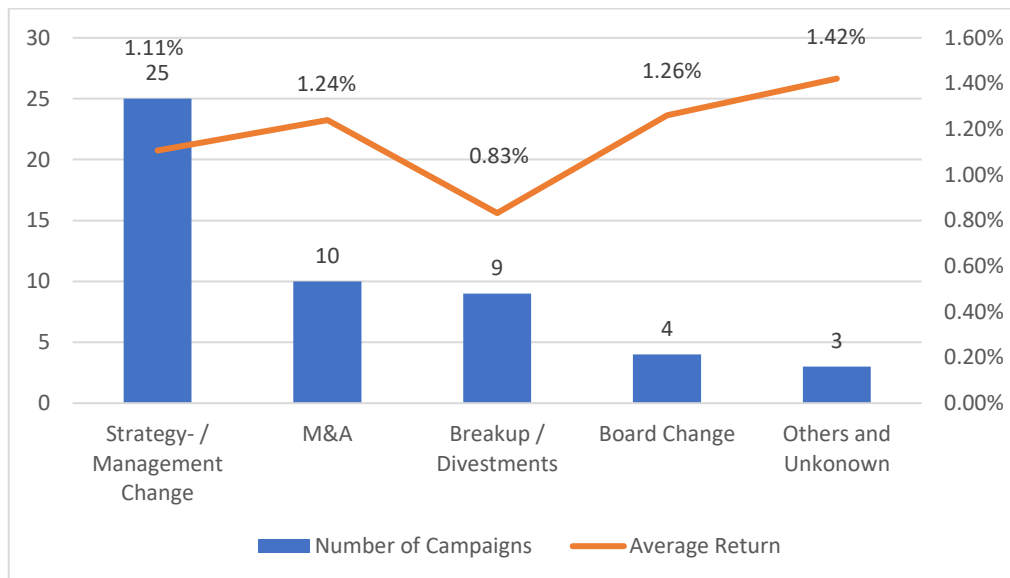
3.5.3 Dig Deeper Analysis of Findings

This section intends to provide in-depth analyses of the excess returns and return differences applying possible groupings of the sample companies, as well as other peculiarities, such as a conceivable correlation between the activists purchased shares in the targets and the realized excess returns. I analyse the amount of the realized excess returns 1. regarding the campaign contents (based on the defined 5 categories), 2. the geographical location of the companies and 3. the entry of an extraordinary “notorious” activist investor. 4. Additionally, I analyse whether a relevant positive correlation can be demonstrated between the relative share of the investment at first-time entry and the realized excess returns. In the following I

will only show the CAPM coefficient tables in the main part, while the Fama French tables can be found in the appendix.

- 1) For the different defined campaign categories I only compare the realized excess returns by means of juxtaposing. Many campaigns fall into several categories, which is why a statistical comparison of the returns does not seem to be very useful. The calculated averages are always identical between both factor models except for the second decimal place due to the over-proportionality of the realized returns to the required returns. Consequently, only the average returns, which are determined with the CAPM for reasons of simplicity, are visualised below:

Figure 5: Average Excess Returns by Campaign Category



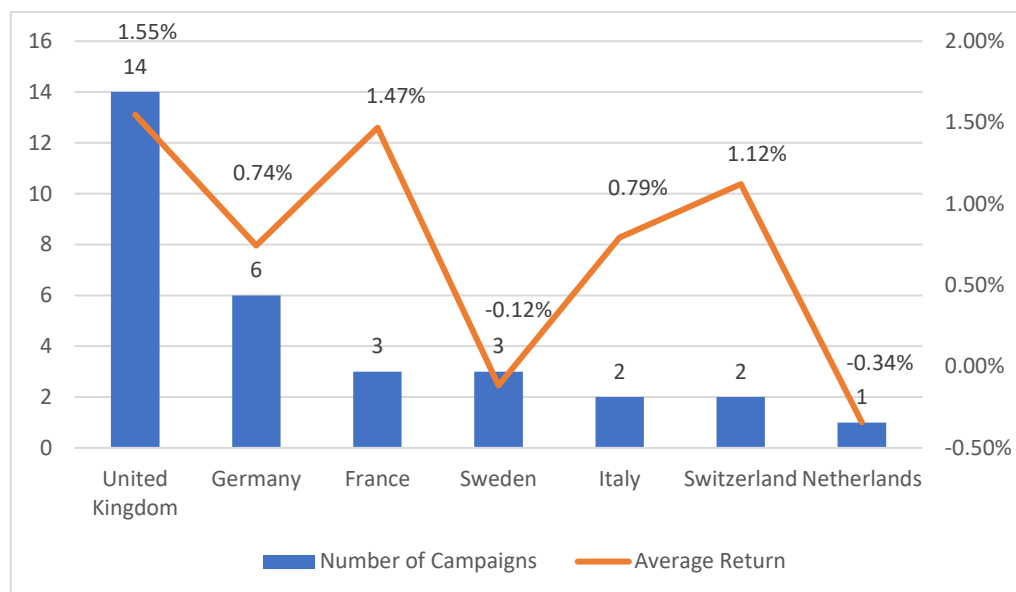
It turns out that there are definitely return differences between the categories. The average excess return of the first category is logically close to the overall average of the sample, as almost all campaigns are represented here. However, the average excess return of campaigns in the M&A context is almost 50% higher than in the context of breakups and divestments. Nevertheless, to be validly interpretable, the sample would have to be larger.

- 2) As mentioned in the literature section, the structure of the capital market and the embedding of the stock market in the national economy play a decisive role in the activity and success of activist shareholders. Structure of the capital market and the ownership structures of listed groups differ historically between European economies (Story & Walter, 2000). It therefore seems reasonable to

examine whether the sample reveals differences in the realized excess returns, which may indicate the attractiveness of a particular capital market environment for activist shareholders.

I use the same visualization for the return decomposition as for the campaign categories, whereby the same restrictions concerning the interpretability apply. Again I only show the CAPM excess returns, because of the almost equality between the results of both factor model applications:

Figure 6: Average Excess Return by Country



The highest excess returns achieved are observable for United Kingdom. They amount to 1,55 % (1,54%) per event day and are noticeably higher than the average realized excess returns of the remaining sample (0,71%). This could be consistent with the hypothesis that a more liberal financial market capitalism, as it exists in the USA and the United Kingdom (Windolf, 2005), in which companies are more clearly committed to the principle of shareholder value, is conducive to the success of activist shareholders.

The observed return difference is significant at the confidence level of 90% and slightly insignificant at the confidence level of 95%.

Table 4: Geographical Return Differences (CAPM)

t-Test: Two-Sample Assuming Unequal Variances			
	<i>CAPM</i>	<i>United Kingdom</i>	<i>Rest of Sample</i>
Mean		1,55%	0,71%
Variance		0,02%	0,02%
Observations		14	17
Hypothesized Mean Differen		0	
df		26	
t Stat		1,68415	
P(T<=t) one-tail		0,05206	
t Critical one-tail ($\alpha=5\%$)		1,70562	
t Critical one-tail ($\alpha=10\%$)		1,31497	

- 3) The hedge fund Elliott Management (Elliott) has made a name in the current wave of shareholder activism through a particularly aggressive course towards its targets. According to figures from Lazard’s activism report, Elliott was the activist investor with the highest activity in 2018 (Wood, 2018). I am therefore investigating whether the notorious reputation, which has been taken up in the media as well, generates significantly higher short-term excess returns than the other campaigns in the sample.

The average realized daily excess return when the activism by Elliott was priced in amounts 1,18%, while it amounts 1,04% for the remaining sample. The observable return difference is therefore at least a multiple of the required daily returns.

However, a two-sample T-test, assuming unequal variances, shows that the realized excess returns of the Elliott campaigns at the 95% confidence level are not significantly higher than the excess returns of the remaining campaigns. A short-term significant superiority of particularly aggressive campaigns or of a notorious reputation is therefore not indicated by the analytical results.

Table 5: Return Differences due to Notoriety (CAPM)

t-Test: Two-Sample Assuming Unequal Variances			
	<i>Excess return CAPM (Elliott)</i>		<i>Excess return CAPM (Others)</i>
Mean		1,18%	1,04%
Variance		0,03%	0,02%
Observations		10	21
Hypothesized Mean		0	
df		14	
t Stat		0,23359	
P(T<=t) one-tail		0,40934	
t Critical one-tail		1,76131	

- 4) A further very interesting question in the context of the study is whether the realized excess returns increase with the percentage share an activist purchases in the target company. This seems reasonable, as an activist holding a larger share is more likely to be heard by management for the demands made. In addition, the influence on the supervisory board rises with increasing shares and it can even become possible to place a member.

In order to examine this, I regress the level of activists' shares to the excess returns realized in the event window across the sample. The results are presented below. For both factor models I find only a weak positive correlation. Therefore, a significantly positive relation between share size and excess returns cannot be concluded on the basis of this study.

Table 6: Regression of Activists Relative Share and Excess Returns (CAPM)

Regression Statistics	
<i>Activist's Share - Excess Return (CAPM)</i>	
Multiple R	0,18135
R Square	0,03289
Adjusted R Square	-0,00165
Standard Error	0,01427
Observations	30

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,00600	0,00546	1,09885	0,28119	-0,00519	0,01719
X Variable 1	0,13232	0,13560	0,97581	0,33751	-0,14545	0,41010

4 Discussion

4.1 Conclusion of Empirical Study

In summary, it can be concluded that the objective of the empirical study was achieved. On the basis of 31 sample companies spread across seven of the eight most important European economies, I find significant short-term excess returns triggered by shareholder activism. The results can be interpreted in terms of the stock market anticipating an increase in the value of the target company through hedge fund dominated shareholder activism. As discussed in the literature section, the empirical study also reveals the picture that there are relevant success criteria for shareholder activism, such as the capital market environment, represented by the breakdown by country, in which the campaign takes place. For some further interesting questions regarding the (anticipated) value generation by shareholder activism, the format of a bachelor thesis remains too limited. Subjects such as the allocation of short-term excess returns by campaign content or the correlation between the activists' relative share in the targets and realized excess returns cannot be sufficiently statistically investigated on the basis of the small data set.

A larger study on shareholder activism in Europe, which has so far been scientifically underrepresented, seems logical and promising.

The classification of the findings with regard to existing scientific work on shareholder activism is discussed in more detail below. In addition, a critical review of my research design and findings is provided.

4.2 Classification of the Findings in Comparison to Existing Literature

As noted above, the majority of activist campaigns included in the sample are hedge fund and investor campaigns that can be categorised as entrepreneurial activism (Klein & Zur, 2009). Thus the classification of my study results is to be done in comparison to the findings of the literature on short-term returns through hedge fund activism. The quintessence of the literature review was that hedge funds appear to be the only activist players that, across a broad front of studies, can make a positive leap in short-run returns. The majority of the studies I have discussed on this topic are related to the American capital market environment. My contribution in this context has been to apply a similar research design to contemporary activist campaigns on the European continent that have, so far, experienced little scientific coverage due to their close temporal nearness to the present. Despite the chronological and geographical discrepancy, when compared

to the discussed literature, I find significant short-term excess returns for my hedge fund dominated sample and can thus confirm the positive trend of this dynamic and committing subcategory of activism. Further comparative studies of activist campaigns in different capital market environments can be considered as promising in order to better understand which external determinants contribute to the success of activists and to the creation of shareholder value.

4.3 Critical Review of the Research Design and Findings

4.3.1 Research Subject

In order to remain within a manageable scope for a bachelor's thesis, the empirical part of the thesis focuses on the aspect of short-term excess returns only. The relevance of the share price development for the first time pricing of shareholder activism is questionable for various reasons. First, the short-term processing of new information about an upcoming activist campaign by the stock market expresses forward-looking expectations. Information processing can of course be driven by empirical values from the past. However, the short-term return on an upcoming campaign has no informative value about its sustained success, but is rather driven by speculation. The empirical part of this paper therefore only indirectly provides a statement on the emergence of shareholder value through activism, namely in the form of anticipation by the capital market. It must also be emphasized that I have, in large parts, used media reports published shortly after the defined event windows for the collection of relevant information. Thus it can be assumed that the information situation at the time of the first information processing, used for the definition of the event window, was substantially thinner. This makes the short-term excess returns appear even more arbitrary.

4.3.2 Data Quality

I did not have access to a uniform database with collected information about shareholder activism (very helpful was at least the above-mentioned report by Lazard). For this reason I have conducted a keyword search for campaigns in the prime stock indices of the eight mentioned economies over the time horizon between January 2014 and December 2018. This search was very time-consuming and included research on about 300 companies in scope. Due to the large number of different media sources and the non-excludability of incorrect media reports, no systematic quality check could be undertaken in regard of the selection and the campaign information collected. Generally, as activist investors typically purchase

small shares in their targets, the availability of reportable information is low while the spread of rumours appears to be high on the days around their entry.

4.3.3 Sample

The sample is limited in size in accordance with the resources available for the bachelor thesis. Although significant excess returns can be observed at high level, because of the sample size of 31 campaigns the data quantity is insufficient and, above all, too unevenly distributed for in-depth analyses. One example is the inequality of geographical locations represented in the sample. Almost half of the identified campaigns (14 out of 31) are geographically located in the United Kingdom. This is made possible by the fact that the index used for United Kingdom (FTSE 100) includes 100 companies, which is more than twice the second largest sample index and five times the size of the smallest index considered for the analysis (SMI, Switzerland).

There have been numerous cases of shareholder activism in the five-year time horizon, which were not included in the sample due to the limited scope. A more comprehensive study would have made it possible to examine a much broader database, which would have been beneficial for the representativeness of the results. Furthermore, the limitation of the study to blue chip companies is a source of potential bias. As the prime stock indices primarily include companies with high market capitalisations compared to the overall number of listed companies, only smaller relative shares of the target companies can be acquired with limited financial resources. On the one hand, this could induce activist investors to favour smaller companies when selecting targets in order to gain more influence due to a higher share. On the other hand, this could force activists to purchase lower shares in large companies, which may also be correlated with lower excess returns due to the limited influence, already anticipated by the stock market at the entrance.

In any case, the representativeness of blue chips for the overall market in context of shareholder activism is questionable.

4.3.4 Practical Application of the Event Study Design

4.3.4.1 Determination of the Event Windows

The event windows were defined on the basis of the best information available to the public, mostly in the form of media reports. Often articles report on the entry of the activist investors (confirmed or unconfirmed). In many cases information is attached on how the share price reacted at a certain point in time after the

information became public. The event window then depends on this specified point in time. As already described above, the event time cannot always be determined so unambiguously. Especially if the activist investor has acquired shares without the public's knowledge and the campaign is announced at a later point in time, rumours or insider information may have already been processed before the event window opens, which may dilute considered excess returns.

It would have also been possible to apply a longer event window in order to process pre-event rumours and the subsequent concretisation of the campaign, i.e. not only the first reports about the entries or announcements. However, in this framework, the realized returns could also have been influenced by third effects. A conceivable compromise could have been the use of an extended factor model for estimating returns, which, for example, takes up an existing pre-event price momentum. But, this would also have led to a further increase in the complexity of the empirical research.

4.3.4.2 Excess Return Calculation

4.3.4.2.1 Simplification of the Calculation

For the calculation of the required returns, there is a lack of precision on closer examination. As the realized market excess returns are calculated on an annual (CAPM) and monthly basis (Fama French), returns must be transformed to a daily level, for matching with the realized average return during the event window. To facilitate the transformation, the natural logarithm is applied on the required returns. At this point, I used a simplification, in order to reduce the complexity of the model: Since the realized returns exceed the required returns many times over anyway (the required returns are in the low single-digit percentage range pro rata to the realized returns), the required returns were converted on the basis of the calendar year instead of the individual number of trading days. As a result, the required returns are shown slightly too low, which however can be neglected due to the very limited absolute influence, which consists of deviations two digits after the decimal point on a percentage level only.

4.3.4.2.2 Practical Assessment of Required Returns

With just under 5% (extrapolated to the calendar year) the calculated required return on equity is low, relative to the general valuation convention. According to the cost of capital study 2017 of the auditing company KPMG, the average levered cost of equity used in Germany in 2016/2017 amounted to 8.0%

(Castedello & Schöniger, 2018), which is almost twice as high as the sample average. The main determinants are the factors used (market risk premium for CAPM, augmented by SMB and HML for Fama French) and the regressed coefficients (betas). As already mentioned, the STOXX® Europe 50 index shows a difficult course development for valuation purposes, which is attributable to the outstanding peaks in 2000 and 2007. This is the driving factor behind the low required returns in the CAPM application. For the application of the Fama French model, another critique is that the scientific benchmark data provided by Fama and French remain non-transparent in their exact origin and constellation. But anyway, the application of the Fama French model leads to similarly low required returns as the application of the CAPM.

5 Conclusion

The empirical study of my bachelor thesis had the key objective to examine the short-term impact of shareholder activism on the stock performance of European target companies by means of an event study framework. The event study with a sample of 31 target companies from European prime stock indices shows significant excess returns at the time of activism processing, which are more than 80 times higher than the required returns. In in-depth analyses of the sample, I also find that excess returns in the UK are significantly higher at 90% confidence level than for campaigns in other European capital markets. Other analyses, such as the investigation of abnormal returns by campaign category, the influence of a notorious reputation of a certain hedge fund, and the relationship between the level of investment and the returns realized, do not lead to significant results, which might change with an expanded sample.

The composition of the sample supports the notion that hedge funds are today's dominant actors in launching activist campaigns. This seems consistent with the findings of the preceding literature review that was supposed to shed light on the phenomenon of shareholder activism and to clarify the question if activist investing creates shareholder value. Distinguishing between institutional investors and more dynamic investment vehicles, predominantly hedge funds, significant differences in short- and long-term value creation are identified, with hedge funds appearing to perform far better. This can be explained by their organizational advantage and lower regulation of capital investments, combined with high level of expertise. Hedge funds have minor incentive problems and operate with a high concentration of capital on selected assets. Under these circumstances, campaigns tend to be efficient, uncompromising and, consequently, generate value in the long term.

In contrast, the activism of institutional investors seems to suffer from a lack of commitment within the campaigns, driven among other things by stricter regulation, agency costs and missing competence to force management into value generating changes. Target companies are also heterogeneous and differ depending on the type of campaign and the activist's approach to create changes, which seems to be an essential factor for campaign success. Suitable hedge fund targets usually offer realisable optimisation potential with regard to free cash flow problems, the principal agent contract and the general efficiency of value

generation. The combination of regulatory room for manoeuvre and organizational efficiency on the investor side and optimization potentials, realizable at manageable costs, on the target side thus appear to be factors for value-generating campaigns.

The vast majority of the literature discussed relates to activism in the American stock market environment, while the empirical study focuses on contemporary campaigns in Europe. The American literature provides numerous studies that not only attest hedge fund activism a value-enhancing effect in the long term, but also find positive abnormal returns in the short term. This can be interpreted as the anticipation of long-term campaign success by the stock market. Despite the different capital market environment, this anticipation of success can also be seen for the examined European campaigns, in the form of the identified abnormal returns.

However, the long-term results of the, currently enormous, engagement of activists can only be fully evaluated in a few years, since many recently launched campaigns, are still ongoing. The high activist presence across different countries ensures good data availability and the question of whether the short-term positive response will continue to be a trend in the long run is of great relevance. Comparative studies with American campaigns are conceivable in order to explore the influence of management cultures and the capital market environment. In any case, Shareholder activism is currently highly topical and further research will certainly be beneficial to all actors involved: for investors to generate higher returns for their funds, for corporate managers to legitimize their dealings with activism or even not to become potential targets, but also for politicians in order to maximize the societal value of shareholder activism by means of tailor-made capital market (de)regulation.

6 Appendix

Table 7: Geographical Return Differences (Fama French)

t-Test: Two-Sample Assuming Unequal Variances

	<i>Fama French</i>	<i>United Kingdom</i>	<i>Rest of Sample</i>
Mean		1,54%	0,71%
Variance		0,02%	0,02%
Observations		14	17
Hypothesized Mean Differen		0	
df		26	
t Stat		1,67201	
P(T<=t) one-tail		0,05326	
t Critical one-tail ($\alpha=5\%$)		1,70562	
t Critical one-tail ($\alpha=10\%$)		1,31497	

Table 8: Return Differences due to Notoriety (Fama French)

t-Test: Two-Sample Assuming Unequal Variances

	<i>Excess return Fama French (Elliott)</i>	<i>Excess return Fama French (Others)</i>
Mean	1,18%	1,04%
Variance	0,03%	0,02%
Observations	10	21
Hypothesized Mean	0	
df	14	
t Stat	0,23433	
P(T<=t) one-tail	0,40906	
t Critical one-tail	1,76131	

Table 9: Regression of Activists Relative Share and Excess Returns (Fama French)

Regression Statistics

<i>Activist's Share - Excess Return (Fama French)</i>	
Multiple R	0,18144
R Square	0,03292
Adjusted R Square	-0,00162
Standard Error	0,01428
Observations	30

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0,00600	0,00546	1,09728	0,28187	-0,00520	0,01719
X Variable 1	0,13245	0,13567	0,97629	0,33728	-0,14545	0,41036

Table 10: Sample Overview - with Campaign Content

Target Company	Country	Industry	Activist Investor	Type of Investor	Year of Activism	~ Share (at first entry)	Strategy- / Mgt. Change	Board Change	M&A	Breakup / Divestments	Others and Unknown
Vodafone Group	United Kingdom	Telecommunication	Elliott Management	Hedge Fund	2018	"significant"	✓				
Barclays Bank	United Kingdom	Financial Industry	Sherborne Investors	Financial Investor	2018	5.2%					✓
Shire	United Kingdom	Pharmaceutical Industry	Sachem Head	Hedge Fund	2017	0.8%	✓			✓	
BHP Billiton	United Kingdom	Commodities	Elliott Management	Hedge Fund	2017	4.1%	✓		✓		
Tesco	United Kingdom	Retail	Artisan Partners / Schroders	Financial Investor	2017	9.0%	✓		✓		
Rolls-Royce Group	United Kingdom	Engineering	ValueAct Capital	Hedge Fund	2015	5.5%	✓				
Sky plc	United Kingdom	Media	Elliott Management	Hedge Fund	2018	1.1%	✓		✓		
London Stock Exchange	United Kingdom	Stock Exchange	TCI	Hedge Fund	2017	5.1%	✓	✓			
Smith & Nephew	United Kingdom	Medical Equipment	Elliott Management	Hedge Fund	2017	2.0%	✓		✓		
InterContinental Hotels Group	United Kingdom	Hospitality	Marcato Capital Management	Financial Investor	2014	4.0%	✓		✓		
Burberry	United Kingdom	Consumer Goods	Albert Fiere	HNWI	2017	3.0%					✓
Whitbread	United Kingdom	Hospitality	Sachem Head	Hedge Fund	2017	3.4%	✓			✓	
Micro Focus	United Kingdom	Information Technology	Elliott Management	Hedge Fund	2018	5.1%	✓		✓		
Ocado	United Kingdom	Digital Retail	Crystal Amber	Hedge Fund	2017	0.5%	✓				
Bayer AG	Germany	Chemical Industry	Elliott Management	Hedge Fund	2018	3.0%	✓			✓	
Deutsche Boerse AG	Germany	Stock Exchange	Artisan Partners	Financial Investor	2016	3.0%	✓				
Deutsche Bank AG	Germany	Financial Industry	Cerberus	Financial Investor	2017	3.0%	✓				
Thyssenkrupp AG	Germany	Steel Industry	Elliott Management	Hedge Fund	2018	3.0%	✓	✓	✓		
Volkswagen AG	Germany	Automotive Industry	TCI	Hedge Fund	2016	2.0%					✓
Commerzbank	Germany	Financial Industry	Cerberus	Financial Investor	2017	5.0%	✓				
Akzo Nobel	Netherlands	Chemical Industry	Elliott Management	Hedge Fund	2017	3.3%	✓		✓		
Mediaset	Italy	Media	Amber Capital	Hedge Fund	2017	2.5%	✓		✓		
Telecom Italia	Italy	Telecommunication	Elliott Management	Hedge Fund	2018	6.0%	✓	✓		✓	
Autoliv	Sweden	Automotive Industry	Cevian Capital	Hedge Fund	2018	6.9%	✓				
Ericsson (B)	Sweden	Telecommunication	Cevian Capital	Hedge Fund	2017	5.6%	✓				
Nordea	Sweden	Financial Industry	Cevian Capital	Hedge Fund	2018	2.3%	✓				
Danone	France	Consumer Goods	Corvex	Hedge Fund	2017	0.8%	✓				
Pernod Ricard	France	Consumer Goods	Elliott Management	Hedge Fund	2018	2.5%	✓				
Safran	France	Engineering	TCI	Hedge Fund	2017	4.0%	✓		✓		
ABB Ltd	Switzerland	Engineering	Cevian Capital	Hedge Fund	2015	3.1%	✓				
Nestlé	Switzerland	Consumer Goods	Third Point Management	Hedge Fund	2017	1.3%	✓			✓	

Table 11: Sample Overview - with Returns

Target Company	Country	Industry	Activist Investor	Type of Investor	Year of Activism	~ Share (at first entry)	Avg Realized Return (EW)	Required return (CAPM)	Required return (FF)	Excess Return CAPM	Excess Return Fama French
Vodafone Group	United Kingdom	Telecommunication	Elliott Management	Hedge Fund	2018	"significant"	1,63%	0,013%	0,023%	1,62%	1,61%
Barclays Bank	United Kingdom	Financial Industry	Sherborne Investors	Financial Investor	2018	5,2%	1,41%	0,012%	0,009%	1,40%	1,40%
Shire	United Kingdom	Pharmaceutical Industry	Sachem Head	Hedge Fund	2017	0,8%	0,72%	0,012%	0,018%	0,71%	0,70%
BHP Billiton	United Kingdom	Commodities	Elliott Management	Hedge Fund	2017	4,1%	1,04%	0,011%	0,025%	1,03%	1,02%
Tesco	United Kingdom	Retail	Artisan Partners / Schroders	Financial Investor	2017	9,0%	0,28%	0,009%	0,023%	0,27%	0,26%
Rolls-Royce Group	United Kingdom	Engineering	ValueAct Capital	Hedge Fund	2015	5,5%	4,70%	0,014%	0,010%	4,68%	4,69%
Sky plc	United Kingdom	Media	Elliott Management	Hedge Fund	2018	1,1%	0,85%	0,019%	0,026%	0,83%	0,83%
London Stock Exchange	United Kingdom	Stock Exchange	TCI	Hedge Fund	2017	5,1%	0,20%	0,009%	0,008%	0,19%	0,19%
Smith & Nephew	United Kingdom	Medical Equipment	Elliott Management	Hedge Fund	2017	2,0%	1,27%	0,007%	0,013%	1,26%	1,25%
InterContinental Hotels Group	United Kingdom	Hospitality	Marcato Capital Management	Financial Investor	2014	4,0%	2,02%	0,004%	0,000%	2,01%	2,02%
Burberry	United Kingdom	Consumer Goods	Albert Fièrè	HNWI	2017	3,0%	2,16%	0,010%	0,022%	2,15%	2,13%
Whitbread	United Kingdom	Hospitality	Sachem Head	Hedge Fund	2017	3,4%	2,80%	0,018%	-0,004%	2,79%	2,81%
Micro Focus	United Kingdom	Information Technology	Elliott Management	Hedge Fund	2018	5,1%	3,77%	0,015%	0,014%	3,76%	3,76%
Ocado	United Kingdom	Digital Retail	Crystal Amber	Hedge Fund	2017	0,5%	-1,01%	0,013%	0,021%	-1,02%	-1,03%
Bayer AG	Germany	Chemical Industry	Elliott Management	Hedge Fund	2018	3,0%	-2,54%	0,014%	-0,004%	-2,55%	-2,53%
Deutsche Boerse AG	Germany	Stock Exchange	Artisan Partners	Financial Investor	2016	3,0%	1,62%	0,011%	0,002%	1,61%	1,62%
Deutsche Bank AG	Germany	Financial Industry	Cerberus	Financial Investor	2017	3,0%	0,64%	0,026%	0,025%	0,61%	0,62%
Thyssenkrupp AG	Germany	Steel Industry	Elliott Management	Hedge Fund	2018	3,0%	2,32%	0,013%	0,022%	2,30%	2,30%
Volkswagen AG	Germany	Automotive Industry	TCI	Hedge Fund	2016	2,0%	0,73%	0,014%	0,007%	0,72%	0,73%
Commerzbank	Germany	Financial Industry	Cerberus	Financial Investor	2017	5,0%	1,78%	0,017%	0,045%	1,77%	1,74%
Akzo Nobel	Netherlands	Chemical Industry	Elliott Management	Hedge Fund	2017	3,3%	-0,33%	0,012%	0,014%	-0,34%	-0,35%
Mediaset	Italy	Media	Amber Capital	Hedge Fund	2017	2,5%	0,19%	0,019%	0,040%	0,17%	0,15%
Telecom Italia	Italy	Telecommunication	Elliott Management	Hedge Fund	2018	6,0%	1,43%	0,015%	-0,006%	1,41%	1,43%
Autoliv	Sweden	Automotive Industry	Cevian Capital	Hedge Fund	2018	6,9%	-0,63%	0,016%	0,023%	-0,64%	-0,65%
Ericsson (B)	Sweden	Telecommunication	Cevian Capital	Hedge Fund	2017	5,6%	1,15%	0,010%	-0,010%	1,14%	1,16%
Nordea	Sweden	Financial Industry	Cevian Capital	Hedge Fund	2018	2,3%	-0,83%	0,012%	0,005%	-0,85%	-0,84%
Danone	France	Consumer Goods	Corvex	Hedge Fund	2017	0,8%	0,81%	0,010%	0,014%	0,80%	0,80%
Pernod Ricard	France	Consumer Goods	Elliott Management	Hedge Fund	2018	2,5%	2,51%	0,011%	0,003%	2,50%	2,51%
Safran	France	Engineering	TCI	Hedge Fund	2017	4,0%	1,11%	0,012%	0,012%	1,10%	1,10%
ABB Ltd	Switzerland	Engineering	Cevian Capital	Hedge Fund	2015	3,1%	1,44%	0,007%	0,000%	1,43%	1,44%
Nestlé	Switzerland	Consumer Goods	Third Point Management	Hedge Fund	2017	1,3%	0,82%	0,008%	0,004%	0,81%	0,82%

7 Bibliography

- Becht, M., Franks, J., Grant, J., & Wagner, H. F. (2017). Returns to Hedge Fund Activism: An International Study. *The Review of Financial Studies*, 30(9), 2933–2971.
- Binder, J. (1998). The Event Study Methodology Since 1969. *Review of Quantitative Finance and Accounting*, 11(2), 111–137.
- Black, B. S. (1998) Shareholder Activism and Corporate Governance in the United States. *The New Palgrave Dictionary of Economics and the Law*, vol. 3, 459-465.
- Boyson, N. M., & Mooradian, R. M. (2011). Corporate governance and hedge fund activism. *Review of Derivatives Research*, 14(2), 169–204.
- Brav, A., Jiang, W., & Kim, H. (2010). Hedge Fund Activism: A Review. *Foundations and Trends® in Finance*, 4(3), 185–246.
- Brav, A., Jiang, W., & Kim, H. (2015). The Real Effects of Hedge Fund Activism: Productivity, Asset Allocation, and Labor Outcomes. *The Review of Financial Studies*, 28(10), 2723–2769.
- Brav, A., Jiang, W., Partnoy, F., & Thomas, R. (2008). Hedge Fund Activism, Corporate Governance, and Firm Performance. *The Journal of Finance*, 63(4), 1729–1775.
- Carleton, W. T., Nelson, J. M., & Weisbach, M. S. (1998). The Influence of Institutions on Corporate Governance through Private Negotiations: Evidence from TIAA-CREF. *The Journal of Finance*, 53(4), 1335–1362.
- Castedello, D. M., & Schöniger, S. (2018). *Cost of Capital Study 2017 - KPMG*
- Caton, G. L., Goh, J., & Donaldson, J. (2001). The Effectiveness of Institutional Activism. *Financial Analysts Journal*, 57(4), 21–26.
- Christoffersen, S. E. K., Geczy, C. C., Musto, D. K., & Reed, A. V. (2007). Vote Trading and Information Aggregation. *The Journal of Finance*, 62(6), 2897–2929.

- Clifford, C. P. (2008). Value creation or destruction? Hedge funds as shareholder activists. *Journal of Corporate Finance*, 14(4), 323–336.
- Corum, A. A., & Levit, D. (2019). Corporate control activism. Unpublished working paper. Samuel Curtis Johnson Graduate School of Management, Cornell University and Wharton School, University of Pennsylvania.
- Cziraki, P., Renneboog, L., & Szilagyi, P. G. (2010). Shareholder Activism through Proxy Proposals: The European Perspective. *European Financial Management*, 16(5), 738–777.
- David, P., Bloom, M., & Hillman, A. J. (2007). Investor activism, managerial responsiveness, and corporate social performance. *Strategic Management Journal*, 28(1), 91–100.
- Denes, M., Karpoff, J. M., & McWilliams, V. (2016). Thirty Years of Shareholder Activism: A Survey of Empirical Research. *Journal of Corporate Finance*, 44(3), 405–424.
- Dodd, P., & Warner, J. B. (1983). On corporate governance: A study of proxy contests. *Journal of Financial Economics*, 11(1), 401–438.
- Fama, E. F., & French, K. R. (1992). The Cross-Section of Expected Stock Returns. *The Journal of Finance*, 47(2), 427–465.
- Gantchev, N., Gredil, O., & Jotikasthira, C. (2018). Governance under the Gun: Spillover Effects of Hedge Fund Activism. European Corporate Governance Institute (ECGI) - Finance Working Paper No. 562/2018.
- Gillan, S. L., & Starks, L. T. (2000). Corporate governance proposals and shareholder activism: the role of institutional investors. *Journal of Financial Economics*, 57(2), 275–305.
- Gillan, S. L., & Starks, L. T. (2007). The Evolution of Shareholder Activism in the United States*. *Journal of Applied Corporate Finance*, 19(1), 55–73.
- González, T. A., & Calluzzo, P. (2018). Unpublished working paper. VU University Amsterdam and Queen's University - Smith School of Business

- Goranova, M., & Ryan, L. V. (2014). Shareholder Activism: A Multidisciplinary Review. *Journal of Management*, 40(5), 1230–1268.
- Greenwood, R., & Schor, M. (2009). Investor activism and takeovers. *Journal of Financial Economics*, 92(3), 362–375.
- Grossman, S. J., & Hart, O. D. (1980). Takeover Bids, The Free-Rider Problem, and the Theory of the Corporation. *The Bell Journal of Economics*, 11(1), 42–64.
- Guercio, D. D., & Hawkins, J. (1999). The motivation and impact of pension fund activism. *Journal of Financial Economics*, 52(3), 293–340.
- Hu, H. T. C., & Black, B. S. (2007). Hedge Funds, Insiders, and the Decoupling of Economic and Voting Ownership: Empty Voting and Hidden (Morphable) Ownership. *Journal of Corporate Finance*, 13(2), 343–367.
- Ikenberry, D., & Lakonishok, J. (1993). Corporate Governance Through the Proxy Contest: Evidence and Implications. *The Journal of Business*, 66(3), 405–435.
- Karpoff, J. M. (2001). The Impact of Shareholder Activism on Target Companies: A Survey of Empirical Findings. Unpublished working paper. University of Washington - Michael G. Foster School of Business.
- Karpoff, J. M., Malatesta, P. H., & Walkling, R. A. (1996). Corporate governance and shareholder initiatives: Empirical evidence. *Journal of Financial Economics*, 42(3), 365–395.
- Klein, A., & Zur, E. (2009). Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors. *The Journal of Finance*, 64(1), 187–229.
- Lin, T. C. W. (2015). Reasonable Investor(s). *Boston University Law Review*. 95(2), 461–518.
- Markowitz, H. (1952). Portfolio Selection. *The Journal of Finance*, 7(1), 77–91.

- Mietzner, M., & Schweizer, D. (2014). Hedge funds versus private equity funds as shareholder activists in Germany — differences in value creation. *Journal of Economics and Finance*, 38(2), 181–208.
- Mulherin, J. H., & Poulsen, A. B. (1998). Proxy contests and corporate change: implications for shareholder wealth. *Journal of Financial Economics*, 47(3), 279–313.
- Norli, Ø., Ostergaard, C., & Schindele, I. (2015). Liquidity and Shareholder Activism. *The Review of Financial Studies*, 28(2), 486–520.
- Opler, T. C., & Sokobin, J. (1997). Does Coordinated Institutional Activism Work? An Analysis of the Activities of the Council of Institutional Investors. Unpublished Working Paper. Ohio State University.
- Prevost, A. K., Rao, R. P., & Williams, M. A. (2012). Labor Unions as Shareholder Activists: Champions or Detractors? *Financial Review*, 47(2), 327–349.
- Scharfstein, D. (1988). The Disciplinary Role of Takeovers. *Review of Economic Studies*, 55(2), 185-199.
- Schwab, S. J., & Thomas, R. S. (1997). Realigning Corporate Governance: Shareholder Activism by Labor Unions. *Michigan Law Review*, 96, 1018-1055.
- Sharpe, W. F. (1964). Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk*. *The Journal of Finance*, 19(3), 425–442.
- Smith, M. P. (1996). Shareholder Activism by Institutional Investors: Evidence from CalPERS. *The Journal of Finance*, 51(1), 227–252.
- Song, W.-L., & Szewczyk, S. H. (2003). Does Coordinated Institutional Investor Activism Reverse the Fortunes of Underperforming Firms? *The Journal of Financial and Quantitative Analysis*, 38(2), 317–336.
- Stadler, M., Knyhausen–Aufseß, D. zu, & Schweizer, L. (2014). Shareholder activism by hedge funds in a concentrated ownership environment: an empirical study for Germany. *International Journal of Financial Services Management*, 8(1), 58–82.

- Story, J., & Walter, I. (2000). The Political Economy of European Union Financial Integration: The Battle of the Systems in *After the Euro, Shaping Institutions for Governance in the Wake of European Monetary Union* by Colin Crouch, Oxford, UK. Oxford University Press, 89-108.
- Thomas, R. S., & Cotter, J. F. (2007). Shareholder proposals in the new millennium: Shareholder support, board response, and market reaction. *Journal of Corporate Finance*, 13(2), 368–391.
- Wahal, S. (1996). Pension Fund Activism and Firm Performance. *The Journal of Financial and Quantitative Analysis*, 31(1), 1–23.
- Windolf, P. (2005). Was ist Finanzmarktkapitalismus?, in *Finanzmarkt-Kapitalismus: Analysen zum Wandel von Produktionsregiment*, by Windolf, P, Cologne, Germany. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 20-57.
- Womack, K. L. (1996). Do Brokerage Analysts' Recommendations Have Investment Value? *The Journal of Finance*, 51(1), 137–167.
- Zhu, C. (2013). The Preventive Effect of Hedge Fund Activism. Unpublished Working Paper. University of Oklahoma.

8 Bibliography of Online Sources

- Agnew, H. (15.08.2017) “Activist Corvex looks to squeeze value from Danone”, from <https://www.ft.com/content/191721c0-81b5-11e7-a4ce-15b2513cb3ff>, last access: 23.03.2019
- Armstrong, A. (11.11.2014): “Activist investor Marcato pushes InterContinental Hotels to consider a merger with a rival”, from <https://www.telegraph.co.uk/finance/newsbysector/epic/ihg/11223644/Activist-investor-Marcato-pushes-InterContinental-Hotels-to-consider-a-merger-with-a-rival.html>, last access: 19.03.2019
- BaFin (19.12.2011): “Major holdings of voting rights” from https://www.bafin.de/EN/Aufsicht/BoersenMaerkte/Transparenzpflichten/BedeutendeStimmrechtsanteile/bedeutendestimmrechtsanteile_node_en.html, last access: 10.03.2019
- Curry, R. (15.04.2018): “Hedge fund Elliott adds to calls for Whitbread to spin off Costa”, from <https://www.telegraph.co.uk/business/2018/04/15/hedge-fund-elliott-adds-calls-whitbread-spin-costa/>, last access: 25.03.2019
- Felsted, A. (01.03.2017): “Burberry's New Activist Needs That Creative Spark”, from <https://www.bloomberg.com/opinion/articles/2017-03-01/burberry>, last access: 19.03.2019
- French, K. R. (2019): “Description of Fama/French Factors”, from http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/f_f_3developed.html, last access: 18.03.2019
- French, K. R. (2019): “Developed Market Factors and Returns”, from http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html#International, last access: 18.03.2019
- Henning, E. and Wilkes, W. (22.05.2018): “Elliott Purchases Stake in Germany's Thyssenkrupp”, from <https://www.bloomberg.com/news/articles/2018-05-22/elliott-is-said-to-purchase-stake-in-germany-s-thyssenkrupp>, last access: 19.03.2019

- Herbst-Bayliss, S. (02.07.2018): “Loeb's Third Point takes new approach in battle with Nestle. Retrieved”, from <https://www.reuters.com/article/us-nestle-thirdpoint-loeb-analysis/loeb-third-point-takes-new-approach-in-battle-with-nestle-idUSKBN1JS2P8>, last access: 25.03.2019
- Jahn, T. and Köhler, P. (06.09.2018): “Angriffe aktivistischer Investoren – Deutschland droht ein beispielloser Kampf der Managementkulturen”, from <https://www.handelsblatt.com/finanzen/banken-versicherungen/thyssen-krupp-stada-bilfinger-angriffe-aktivistischer-investoren-deutschland-droht-ein-beispielloser-kampf-der-managementkulturen/22998208.html>, last access: 19.03.2019
- Jahn, T. and Köhler, P. and Landgraf R. and Rickens, C. (10.09.2018): “Activist investors shake up German complacency”, from <https://www.handelsblatt.com/today/companies/capitalist-invaders-activist-investors-shake-up-german-complacency/23583280.html?ticket=ST-1602100-JWsYaShNbAlrNcTzprSn-ap3>, last access: 19.03.2019
- Jones, H. (19.12.2017): “TCI fails in bid to oust London Stock Exchange chairman”, from <https://www.reuters.com/article/us-lse-chairman-vote/tci-fails-in-bid-to-oust-london-stock-exchange-chairman-idUSKBN1ED1I6>, last access: 25.03.2019
- Kleinman, M. (14.10.2017): “Activist fund seeks break-up of £35bn pharma group Shire”, from <https://news.sky.com/story/activist-fund-seeks-break-up-of-35bn-pharma-group-shire-11079901>, last access: 19.03.2019
- Larsen, P. T. (22.01.2019). “Breakingviews - Busy activists navigate tricky currents”, from <https://www.reuters.com/article/us-shareholders-breakingviews/breakingviews-busy-activists-navigate-tricky-currents-idUSKCN1PG220>, last access: 23.03.2019
- Martin, B. (05.06.2017): “Activist investor Crystal Amber snaps up Ocado stake”, from <https://www.telegraph.co.uk/business/2017/06/05/activist-investor-crystal-amber-snaps-ocado-stake/>, last access: 19.03.2019

- McLaughlin, K. (30.07.2018):“ Vodafone Surges on Report Activist Elliott Took Stake in Carrier”, from <https://www.bloomberg.com/news/articles/2018-07-30/vodafone-surges-on-report-activist-elliott-took-stake-in-carrier>, last access: 19.03.2019
- Milne, R. (21.12.2018) “Activist investor Cevian takes stake in Nordea”, from <https://www.ft.com/content/f17b89b8-04f2-11e9-9d01-cd4d49afbbe3>, last access: 23.03.2019
- Milne, R. (30.05.2017) “Activist investor Cevian Capital amasses \$1bn stake in Ericsson”, from <https://www.ft.com/content/1328c896-4573-11e7-8d27-59b4dd6296b8>, last access: 23.03.2019
- Murphy, M. (2017): “2017 Activism Year in Review”, from <https://www.lazard.com/perspective/lazard-s-2017-activism-year-in-review/>, last access: 19.03.2019
- Pooler, M. (16.08.2017): “Akzo Nobel agrees peace deal with activist hedge fund Elliott”, from <https://www.ft.com/content/7564a146-8255-11e7-a4ce-15b2513cb3ff>, last access: 25.03.2019
- Reuters (22.06.2016): “Activist investor Artisan takes stake in Deutsche Boerse”, from <https://de.reuters.com/article/deutsche-boerse-artisan-idUKFWN19E0CC>, last access: 19.03.2019
- Ruddick, G. (27.03.2017): “Two Tesco shareholders oppose £3.7bn takeover of wholesaler Booker”, from <https://www.theguardian.com/business/2017/mar/27/two-tesco-shareholders-oppose-takeover-of-wholesaler-booker>, last access: 19.03.2019
- Ruddick, G. (31.07.2015): “Rolls-Royce may face break-up after activist hedge fund reveals stake”, from <https://www.theguardian.com/business/2015/jul/31/rolls-royce-break-up-valueact-capital-stake>, last access: 19.03.2019

- Saigol, L. (13.12.2018): “European family firms fall to activist investors”, from <https://www.fnlonon.com/articles/europes-family-fortresses-fall-to-activist-investors-charge-20181213>, last access: 19.03.2019
- Schmocker, A. (05.06.2015): “Cevian sieht in ABB «langfristiges Wertpotenzial»”, from <https://www.fuw.ch/article/cevia-sieht-in-abb-langfristiges-wertpotenzial>, last access: 19.03.2019
- Schnell, C. & Kreijger, G. (29.11.2018): “Hedge Fund: Activist Shareholder Targets VW Bonuses”, from <https://www.handelsblatt.com/today/finance/hedge-fund-activist-shareholder-targets-vw-bonuses/23537784.html>, last access: 25.03.2019
- Schuetze, A. and Roumeliotis, G. (07.12.2018): “Exclusive: Activist investor Elliott has stake in Germany's Bayer”, from <https://www.reuters.com/article/us-bayer-elliott/activist-investor-elliott-has-taken-position-in-germanys-bayer-sources-idUSKBN1O61ZR>, last access: 19.03.2019
- Schuetze, A. and Sims, T. (15.11.2017): “U.S. investor Cerberus takes 3 percent stake in Deutsche Bank”, from <https://www.reuters.com/article/us-deutsche-bank-shareholders/u-s-investor-cerberus-takes-3-percent-stake-in-deutsche-bank-idUSKBN1DF1U0>, last access: 19.03.2019
- Sims, T. and Huebner, A. and Heller, G. (26.07.2017): “Cerberus builds stake controlling 5 percent of Commerzbank voting rights”, from <https://www.reuters.com/article/us-commerzbank-cerberus-idUSKBN1AB231>, last access: 19.03.2019
- Stoxx (n.d.) “STOXX® Europe 50” from <https://www.stoxx.com/web/stoxxcom/index-details?symbol=SX5P>, last access 8.03.2019
- The Irish Times (06.05.2016): “Hedge fund launches activist campaign against Volkswagen”, from <https://www.irishtimes.com/business/manufacturing/hedge-fund-launches-activist-campaign-against-volkswagen-1.2638394>, last access: 19.03.2019

Western Libraries (06.03.2018): “Bloomberg Definition of Beta”, from
<https://guides.lib.uwo.ca/bloomberg/equities>, last access 18.03.19

Wood, A. (2018): “2018 Review of Shareholder Activism”, from
<https://www.lazard.com/media/450805/lazards-2018-review-of-shareholder-activism.pdf>, last access: 19.03.2019

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