

ASSESSING THE IMPACT OF ACTIVIST
INVESTORS & CORPORATE RAIDING ON
COMPANIES

by

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TABLE OF CONTENTS

LIST OF FIGURES	iii
LIST OF TABLES.....	iv
LIST OF ABBREVIATIONS	v
Chapter 1. Introduction.....	1
Chapter 2. Industry Overview and Related Studies	4
Chapter 3. Methodology	12
Chapter 4. Data.....	16
Chapter 5. Results.....	23
Chapter 6. Conclusions and Recommendations.....	27
REFERENCES.....	30
APPENDIX A.....	32
APPENDIX B.....	33

LIST OF FIGURES

<i>Number</i>	<i>Page</i>
Figure 1. CAAR around activist intervention	23
Figure 2. Distribution of activist campaigns on target companies by year	33

LIST OF TABLES

<i>Number</i>	<i>Page</i>
Table 1. Key players	7
Table 2. Descriptive statistics of operating margin data	18
Table 3. Descriptive statistics of ROE	20
Table 4. Descriptive statistics of EV to EBITDA	22
Table 5. Estimation results for DiD regression model for operating margin	24
Table 6. Estimation results for DiD regression model for ROE	25
Table 7. Estimation results for DiD regression model for EV to EBITDA	26
Table 8. Distribution of target companies by industry	32

LIST OF ABBREVIATIONS

SEC Securities and Exchange Commission

EDGAR Electronic Data Gathering, Analysis, and Retrieval

ROA Return on Assets

ROE Return on Equity

EV Enterprise Value

EBITDA Earnings before Interest, Taxes, Depreciation and Amortization

ESG Environmental, Social, and Governance

CHAPTER 1. INTRODUCTION

The overall objective of doing this research is to analyze the performance of companies whose control has been transferred to activist investors or which have been taken over by corporate raiders and to understand how such corporate transactions affect the target company.

Usually, activist investors target companies that they consider to be potentially more successful but those companies can't realize their potential due to poor management, ineffective operational structure, or other weaknesses in governance. These activists promise the shareholders of the target company that by gaining control over the company's management, they will be able to achieve more efficient use of the company's resources and bring much better results.

Such investors usually do not own 50% or more of the target company. They buy up to 10%, which allows them to exert significant influence over the company's management and strategic direction.

Activist investors mainly focus on changing the management, optimizing the financial structure, and changing the strategy of the target company. When assessing the overall profitability of activist investors, it can be concluded that they generally receive excessive returns on their activities.

However, the financial performance and results of the target companies of such investors cannot be called unambiguous. They can show positive and negative financial results, but over the years, a trend has emerged that indicates a more negative impact on the financial performance of activist investors.

Today it is quite difficult to distinguish an activist investor from a corporate raider because the market and society often unify these two concepts. This is understandable since the same actions can be attributed to the typical behavior of an activist investor and a corporate raider, depending on the reputation of the actors and the context of the transaction.

Moreover, over the years, raiders have modernized their techniques and are no longer just taking over targets, but are implementing more active approaches to transforming and managing companies. On the contrary, activist investors can be presented by the media and the public as corporate raiders in cases where their actions lead to a deterioration in the company's condition in the short term.

That is why the analysis of the results of such corporate transactions on the target company is important and helps to better understand the true motives of acquiring control by activist investors.

In this research, one hypothesis is tested. This hypothesis is that activist investors do not improve target companies' performance as a result of their activities.

The research utilizes data from SEC's EDGAR database and Yahoo Finance.

The thesis is organized into six chapters. Chapter 2 provides an overview of the US activist investing industry, its development and transformation over the past decades, and current trends. In particular, the historical context is given, the main players of this market are presented, and the change in their approaches and investment methods is described. It also observes relevant studies that have been conducted in this field.

Chapter 3 explains the methodological approach and reasonability behind the selection of the statistical model. Financial indicators and the methodology of their calculation are described in more detail, as well as the reasonability of analyzing these indicators.

Chapter 4 provides a description of the collected data and its descriptive statistics. In addition, the sources of this data and the criteria for selecting target companies are indicated.

Chapter 5 presents the findings of the analysis, interpreting the data and highlighting the impact of activist investors on target companies.

Finally, Chapter 6 concludes the study by summarizing the results and providing recommendations for stakeholders. Additionally, this chapter suggests areas for future research, encouraging further exploration of the evolving role of activism in corporate governance and its impact on long-term financial performance.

CHAPTER 2. INDUSTRY OVERVIEW AND RELATED STUDIES

Evolution over time

Activist investors today is a well-known term in finance and they became a separate niche in the financial field over the last several decades.

According to the last report from Lazard (2024), activist investors launched 147 campaigns in the first half of 2024, breaking the old record of 143 campaigns in the first half of 2018. It is a 29% increase compared to the historical five-year average, making it the busiest half-year on record. This data includes only target companies with a market capitalization greater than 500 million dollars at the time of campaign announcement. The above figures indicate that activist investor activities continue to gain momentum.

Activism investing is considered to have appeared back in the 1980s, when investors started to buy significant stakes in companies and leveraged their power to agitate for changes and transformations in those targets. During this period, the image of corporate raiders was created. According to general opinion back then, activist investors were aimed at personal gain, and not at long-term changes in the companies that were acquired.

This characteristic did not arise for anything, as the 1980s were remembered for two large transactions by the then pioneers of activist investing. It was the acquisition of RJR Nabisco and TWA.

RJR Nabisco was a tobacco and food products selling company that was acquired by KKR in 1988. It became the largest LBO transaction at that time. Shortly after the transaction, RJR Nabisco was forced to sell off its assets in whole divisions to competitors, and the company's debt increased significantly. In 1999 it stopped operating as a single entity.

A similar story happened to TWA. It was an airline company that was targeted by famous activist investor Carl Icahn in 1985. Although Icahn profited from this deal, TWA increased

its debt and in 2001 filed for a third and final bankruptcy after which was sold to American Airlines.

Since then activist investors rebranded themselves. They started to promote strategic changes in targets and used a lot of approaches to do that. The most popular was to force companies to undertake corporate governance reforms and change their management.

Activist investors also focused on new business strategies, changes in executive compensation policies, returning more cash to stockholders through share buybacks and modifying targets` approaches to social, political, and environmental issues.

One of the vivid examples is the criticism of Shutterfly by the activist Marathon Partners Equity Management regarding the management's incentive policy. As a result, Shutterfly changed the methods of evaluating management results and made this information more public in subsequent periods.

Another example was the concern from Icahn Enterprises about Apple`s buyback policy. For a long period, Apple kept a record amount of cash reserves that it did not use. After Carl Icahn's proposal, Apple significantly increased the size of its buyback program and reached the highest value of its shares in the company's history.

Such positive examples emerged more and more over time. It helped activist investors to get rid of the reputation of corporate raiders and gave the industry some positive cases about activists that benefit the companies in which they invest.

Recent trends

Today, several trends in the industry are being followed at once. First of all, although there are more and more activist campaigns, they have a lower success rate. In the US alone, activists won just 11% of desired board seats in the first half of 2024, down significantly

from 65% in the first half of 2023. This suggests that companies have significantly improved their ability to resist activist investors recently (Barclays, 2024).

It is also worth noting that the pool of companies that are becoming interesting for investment by activists is increasing. If earlier it was mainly companies that had poor financial performance and management, today such successful companies as Salesforce, Disney, and Alphabet are the targets. All because activist investors see the potential for improvement in these companies through new strategic changes and partnerships.

Recently, the number of so-called "accidental activists" has increased. These are mainly institutional investors or insiders who have not been involved in activism before, but use their influence for changes in the company. For example, in the first half of 2024, about 19% of all campaigns were initiated by new activists (Morrison Foerster, 2024).

The ESG trend has become well-known in the financial environment. He could not help but touch the sphere of activist investors. Although at first activists promoted changes in accordance with ESG principles without counting on the impact of new changes on the company's performance, today there is a trend that now it has become clear that asking the company's management to make changes that do not bring additional value to shareholders is meaningless and ESG activists mainly focus on "G" to ensure the board and management are doing their duty of care and loyalty to enforce the alignment with value creation.

Key Players

The activities of activist investors and their campaigns have gained popularity relatively recently, if compared to other investment strategies and approaches, but there are already a large number of people who are well-known precisely because of this type of investment and their transactions, which have entered the history of the development of corporate governance.

Among the most influential and active investor activists today are those listed in Table 1.

Table 1. Key players

Fund Name	Founder(s)	Notable Campaigns
Icahn Enterprises	Carl Icahn	Apple, Dell, Occidental Petroleum
Elliot Management	Paul Singer	Hess, Samsung Electronics, Citrix
Third Point	Daniel Loeb	Yahoo, Sotheby's, Nestle
Greenlight Capital	David Einhorn	GM, Apple, Micron
ValueAct Capital	Jeffrey Ubben	21st Century Fox, Microsoft, Citigroup
JANA Partners	Barry Rosenstein	Whole Foods, EQT, Tiffany & Co.
Pershing Square	Bill Ackman	Canadian Pacific, Chipotle, ADP
Triun Fund Management	Nelson Peltz, Peter May, Ed Garden	DuPont, P&G, Mondelez
Starboard Value	Jeffrey Smith	Darden Restaurants, Yahoo, Box
Engine No. 1	Chris James	ExxonMobil

First of all, it is worth mentioning Carl Icahn. This man started the wide development of activist investing, and his activity continues today.

In the 1980s, Carl Icahn was feared as a notorious corporate raider and he was often accused of greenmailing. Greenmailing is essentially a threat of corporate takeover if the management does not buy back the previously purchased shares of the greenmailer at an increased price.

His famous deal with TWA in 1988 was mentioned earlier. In the 21st century, Carl Icahn was primarily involved in entertainment-related businesses such as Blockbuster and Hollywood Entertainment video chains, Time Warner, and Netflix.

Nowadays, Icahn has moved away from the methods he used in the last century and does not seek to gain control over companies. Instead, he buys up some shares, campaigns for representation on the board of directors, and tries to implement changes that he believes will bring the most benefit to shareholders, including himself.

A man of the same greatness as Icahn is his colleague Nelson Peltz. Nelson Peltz also started in the 1980s and has adjusted over time to the current rules of the industry.

After a large number of successful deals as an individual investor, Nelson Peltz established his fund in 2005. Peltz's main strategy is targeting undervalued companies and further lobbying for changes within the company in aspects such as dividend policies, buybacks and cost reductions. In some cases, Peltz even lobbied for the dissolution of the company.

It is also worth mentioning investors who appeared in the field after Icahn and Peltz but have already become important figures in the world of activist campaigns.

One such investor is Bill Ackman. Bill began to combine the strategy of value investing with activist investing. He also often uses public pressure to put pressure on company management and get shareholders on his side. Ackman is known for holding his positions for years even when he has short-term losses. He is primarily focused on internal changes in the company and characterizes his fund as a private equity firm that deals only with public companies.

Another activist investor who successfully uses the media to strengthen his own position is Dan Loeb. He is widely known for frequently publicly criticizing companies in his open letters. These letters stand out for their harsh language and contain comparisons of the company's management to Hitler and phrases such as the "most dangerous and incompetent executives in America."

Unlike previous investors, David Einhoff has a slightly different approach. While he sometimes buys companies just to improve, he also uses a long/short equity strategy, which combines long positions in undervalued companies with short positions in companies he believes are overvalued. This approach allows him to protect himself from unfavorable developments and helps hedge against market volatility. A well-known example is his short position in Lehman Brothers in 2007, where he profited from analyzing the bank's weaknesses before the financial crisis unfolded.

In general, if you analyze the majority of successful activist investors today, they all did not start their careers in this niche. They moved here from other fields of finance, law, or management. This can be explained by the fact that for activist investors, expertise in many fields is important at once, and for successful campaigns, it is also necessary to create an image of a competent person who can bring something to the company.

Related Studies

With the development of the concept of activist investing, a large base of research on this topic has accumulated. They examine a large number of aspects related to this type of investment, ranging from the success of this strategy for activist investors themselves to analyzing the short-term and long-term results of activism and even touching on moral and ethical standards.

Dirk Schiereck, Joachim Vogt, and Nikolas Lethaus (2023) examine recent findings on activist investors. For this purpose, 98 articles on the topic of activist investors were selected, of which only 25 were selected for further analysis because they contained the strategies, activities, and results of global activist investors. The research draws conclusions regarding both the results of activist investors and their targets. The authors argue that activist investors generally achieve positive abnormal results, while the results of targets are not so obvious. In the short term, their performance shows strong and poor financial results alike. In the long run, this changes to a more negative impact on financial performance resulting from activist investors.

A completely opposite conclusion was reached by Lucian A. Bebchuk, Alon Brav, and Wei Jiang (2015). This study analyzes a 5-year period after the intervention of an activist in a US company through empirical studies of its operational indicators for the relevant period. According to the results, the activist's intervention in the company does not lead to a short-term improvement of the performance at the expense of long-term indicators. Nor has it

been proven that the initial positive spike in stock prices that accompanies activist interventions tends to lead to negative abnormal returns in the long run.

Alon Brav, Wei Jiang, Frank Partnoy, and Randall Thomas (2008) analyzed a dataset of target companies from 2001 to 2006 in their research and found that activists in the US propose strategic, operational, and financial initiatives and achieve success or partial success two-thirds of the time. Also, the results of the analysis showed an abnormal return after the announcement of the intervention of the activist in the amount of about 7%, and during the following year, it did not change. In addition, after activist intervention, target companies increase payouts, improve operational performance, and increase executive turnover.

Victor Barros, Maria Joao Guedes, Joana Santos, and Joaquim Miranda Sarmiento (2023) used a dataset from activist campaigns targeting firms in the US from 2002 to 2017 in their research and their results showed a decline in the target company's profitability almost immediately after the campaign, although the effect in subsequent years is not so bright and one-sided. The results show that the campaigns focused on changing the strategic development of the target are the most negative for profitability.

Another work by Goshen and Steel (2023) focuses on proving that the image of the activist investor as the savior of the company is not credible. According to their research, activist investors are more likely to choose the wrong target company that only appears to be underperforming and mistakenly create a lot of stress for that company through their activities. Thus, there is a greater chance of irreparable damage and destruction of the company instead of change for the better.

In turn, raiders buy entire companies, and activists take minority stakes. This means that raiders are less likely to make mistakes with firms that operate only marginally apart from their competitors, and they are less able to pass on the costs of their mistakes to other shareholders because they have full control of the company, allowing them to look under

the hood to determine, whether a change in the target company's business strategy is really justified.

To summarize, there is no clear consensus on the impact of investor activists. While some studies argue that activists improve only the short-term performance of targets, others disagree and find positive long-term changes. It is clear from these studies that while activism offers a powerful mechanism for driving corporate change, it carries risks when interventions are poorly executed or motivated by short-term gains.

CHAPTER 3. METHODOLOGY

CAAR (Cumulative Average Abnormal Return) analysis was used to assess the short-term impact of the appearance of an activist investor on the target company's share price. CAAR is used to measure the overall average impact of an event on the returns of selected securities in the sample during a certain time interval of the event. This analysis aggregates abnormal returns over the period and demonstrates how the event affects stock performance. The main idea of choosing such an approach was borrowed from Lucian A. Bebchuk, Alon Brav, and Wei Jiang (2015) research.

The analysis uses the closing price of the target companies starting 10 days before the submission of the 13D Schedule by the activist investor and up to 19 days after. The respective closing prices of the S&P 500 index for the relevant dates as a benchmark for expected returns.

According to this methodology, to begin with, the expected return is determined as follows:

$$E(R_{i,t}) = a_i + \beta_i R_{m,t} \quad (1)$$

$E(R_{i,t})$: Expected return of stock i on day t .

$R_{m,t}$: Return of the market index (S&P 500) on day t .

a_i : Intercept.

β_i : Slope coefficient.

Then, the abnormal return is calculated as the difference between the actual return and the expected return for stock i on day t .

$$AR_{i,t} = R_{i,t} - E(R_{i,t}) \quad (2)$$

$AR_{i,t}$: Abnormal return for stock i on day t .

$R_{i,t}$: Actual return for stock i on day t .

$E(R_{i,t})$: Expected return based on the market model.

After obtaining abnormal return for all companies in the sample, the average abnormal return (AAR) is calculated for each day in the event period. The CAAR is then calculated by summing the AARs over the event period.

This methodology was chosen as one of the most effective and easiest to implement for evaluating the short-term effect of an activist investor's influence on a target company.

For a more detailed and long-term analysis, it was decided to use DiD regression. Differences-in-Differences regression (DiD) is used to assess the causal effect of an event by comparing the set of units where the event happened (treatment group) in relation to units where the event did not happen (control group).

In this case, an analysis of the influence of the intervention of an activist investor on three financial indicators of the target companies was performed. These financial indicators are as follows: operating margin, ROE, and EV to EBITDA.

Operating margin was chosen as an indicator that will be able to show the dynamics of changes in the direct business component of the company since this indicator measures the percentage of profit from the total revenue that was earned by the company's operational activities. Since most activist investors focus on changes in the business aspects of targets, this indicator is appropriate for reflecting the results of these changes. The formula for calculating this indicator is as follows:

$$\text{Operating margin} = \frac{\text{Operating income}}{\text{Revenue}} \quad (3)$$

Operating income is a company's profit after deducting operating expenses such as wages, depreciation, and cost of goods sold. Revenue is the total amount of income generated by the sale of goods and services related to the primary operations of the business.

ROE also serves as a good indicator of the performance of an activist investor, as it shows the efficiency of using the company's equity capital. Activist investors often advocate for changes in capital structure, and ROE can show how these changes affect profitability. It is calculated according to the following formula:

$$ROE = \frac{Net\ income}{Equity} \quad (4)$$

Net income is the amount of accounting profit a company has left over after paying off all its expenses. Equity is the residual interest in the assets of an entity after deducting liabilities.

And finally, EV to EBITDA is a benchmark for measuring how a company's valuation has changed since the arrival of an activist investor. Using EBITDA, this multiple shows just the operating component of a company's income, ignoring components such as interest, taxes, depreciation, and amortization. Changes in this indicator show not only the dynamics of the operational component of the business but also a change in the market's perception of the company. EV to EBITDA is calculated using the following formula:

$$EV\ to\ EBITDA = \frac{EV}{EBITDA} \quad (5)$$

EV stands for enterprise value and is calculated as the sum of the company's capitalization and debt excluding cash and cash equivalents. EBITDA is earnings before interest, taxes, depreciation, and amortization.

The model representation and description of variables are discussed below:

$$Y_i = \beta_0 + \beta_1 * X_i + \varepsilon_i \quad (6)$$

Y_i : Dependent variable representing financial indicator (operating margin, ROE, or EV to EBITDA).

β_0 : Intercept.

β_1 : Coefficient for the independent variable.

X_i : Dummy variable (1 if activist investor invested and 0 if activist investor did not invest)

ε_i : Error term, capturing the effect of unobserved factors on the dependent variable.

CHAPTER 4. DATA

The main dataset for the analysis includes 126 companies that were targeted by activist investors from 2012 to 2022. Information on these transactions was collected through 13D Schedules.

A Schedule 13D is a form that must be filed with the U.S. Securities and Exchange Commission (SEC) if a person or group acquires more than 5% of a company's voting stock. The Schedule 13D must be filed within 10 days after the applicant reaches the 5% share. Once filed, Schedule 13D forms are accessible to the public through the SEC's EDGAR database.

When filing this Schedule, the basic information about the transaction is indicated, including the purpose of the transaction. This is why it is possible to recognize that the transaction is an activist campaign by using this Schedule, as it is directly stated in the document.

To analyze the transactions of activist investors, the targets of some of the most famous and largest representatives of this industry in the US were taken, namely: Carl Icahn, Paul Singer, Daniel Loeb, David Einhorn, Baruch Rosenstein, Bill Ackman, Nelson Peltz, and Chris James.

APPENDICES A and B disclose the number of target companies analyzed in the study, by their industries, and by the years in which the transactions took place, respectively.

In addition, the financial indicators of the target companies were selected for analysis, namely: operating margin, ROE, and EV to EBITDA. For each company, indicators were taken in the year of the transaction, the year before the transaction, and the year and two years after the transaction.

All financial indicators were taken from the electronic resource discountingcashflows.com, which in turn takes information from the SEC's EDGAR database. The analysis also used the share prices of the target companies during the relevant time periods, as well as the prices of the S&P 500 index. This information was imported from Yahoo Finance.

A descriptive statistics of the operating margin dataset for the corresponding periods of the target companies is given in the Table 2. The mean value indicates that the average operating margin of the companies is negative and has been deteriorating over time. This indicator cannot be considered representative, since among the selected data there are very large negative values that distort the mean of the dataset. This can be seen from the largest and smallest values in the dataset and from the standard error value, which is also pretty high.

Kurtosis indicates that the distribution of values gravitates more toward negative values, which also indicates the presence of extreme values on the lower end. In addition, skewness shows that the distribution is skewed to the left and indicates large negative margin values in certain companies.

And finally, the range increases over time after the intervention of an activist investor. This means that after this event, the results diverge more and the spread between the lowest and highest operating margins widens.

In summary, it is worth noting that the target companies' operating margin data shows increased variability in results after activist investor intervention, while the median remains relatively stable, showing that most companies have near-zero or slightly negative margins, although the extremes values and lower the mean value and indicate that a subset of companies is facing severe financial pressure.

Table 2. Descriptive statistics of operating margin data

Operating Margin (- 1)		Operating Margin		Operating Margin (+ 1)		Operating Margin (+ 2)	
Mean	-0.581	Mean	-1.263	Mean	-2.465	Mean	-4.929
Standard Error	0.593	Standard Error	0.939	Standard Error	1.756	Standard Error	3.929
Median	0.085	Median	0.059	Median	0.070	Median	0.073
Mode	0.162	Mode	0.129	Mode	0.036	Mode	0.054
Standard Deviation	6.655	Standard Deviation	10.540	Standard Deviation	19.706	Standard Deviation	44.098
Sample Variance	44.284	Sample Variance	111.098	Sample Variance	388.324	Sample Variance	1944.647
Kurtosis	122.403	Kurtosis	106.512	Kurtosis	60.380	Kurtosis	100.580
Skewness	-10.984	Skewness	-10.084	Skewness	-7.831	Skewness	-9.805
Range	79.933	Range	117.145	Range	164.247	Range	473.500
Minimum	-74.163	Minimum	-113.784	Minimum	-159.638	Minimum	-468.199
Maximum	5.770	Maximum	3.361	Maximum	4.609	Maximum	5.301
Sum	-73.177	Sum	-159.121	Sum	-310.574	Sum	-621.113
Count	126.000	Count	126.000	Count	126.000	Count	126.000
Largest (1)	5.770	Largest (1)	3.361	Largest (1)	4.609	Largest (1)	5.301
Smallest (1)	-74.163	Smallest (1)	-113.784	Smallest (1)	-159.638	Smallest (1)	-468.199
Confidence Level (95.0%)	1.173	Confidence Level (95%)	1.858	Confidence Level (95%)	3.474	Confidence Level (95%)	7.775

Table 3 shows the results of descriptive statistics of the ROE dataset of target companies. According to the indicator of the mean value of ROE, the dynamics of companies improves over time, although this indicator is significantly distorted by outliers, especially in the 2-year period after the intervention of the activist investor. This is also indicated by the standard error, which is relatively low in the periods of the year before and in the year of the intervention of the activist investor, and already in the following periods this indicator increases significantly, which indicates a greater variability of ROE in this dataset in the corresponding periods.

The median and mode in all periods are close to each other, indicating a central tendency that the values in the dataset are concentrated around this range. It is also worth noting the increase in standard deviation and sample variance in the periods of 1 and 2 years after the intervention of the activist investor in the target company. This indicates a widening spread in ROE values post-intervention, reflecting greater variability among companies' performance.

In all periods, the dataset has a large kurtosis, which indicates the presence of extreme values and such positive values shows a leptokurtic distribution with a higher-than-normal peak and fat tails, especially in the post-intervention periods. Skewness also indicates a shift to the right in all periods, implying a significant number of companies with high ROE values, especially in the periods after the intervention of the activist investor.

In general, similar conclusions can be drawn with the operating margin dataset here, as high kurtosis and positive skewness indicate significant outliers in the dataset, and increased variability and range after an activist investor intervention implies different outcomes in different companies where some achieve very high ROE and others have low or negative ROE.

Table 3. Descriptive statistics of ROE

ROE (- 1)		ROE		ROE (+ 1)		ROE (+ 2)	
Mean	0.267	Mean	0.036	Mean	0.911	Mean	1.984
Standard Error	0.173	Standard Error	0.105	Standard Error	0.520	Standard Error	3.168
Median	0.081	Median	0.053	Median	0.080	Median	0.067
Mode	0.026	Mode	n/a	Mode	n/a	Mode	0.067
Standard Deviation	1.941	Standard Deviation	1.174	Standard Deviation	5.838	Standard Deviation	35.564
Sample Variance	3.767	Sample Variance	1.379	Sample Variance	34.077	Sample Variance	1264.820
Kurtosis	104.999	Kurtosis	15.235	Kurtosis	89.099	Kurtosis	114.417
Skewness	9.841	Skewness	1.769	Skewness	9.049	Skewness	10.366
Range	23.042	Range	11.706	Range	62.504	Range	451.700
Minimum	-2.106	Minimum	-4.885	Minimum	-2.086	Minimum	-63.000
Maximum	20.936	Maximum	6.821	Maximum	60.418	Maximum	388.700
Sum	33.656	Sum	4.587	Sum	114.840	Sum	249.932
Count	126.000	Count	126.000	Count	126.000	Count	126.000
Largest (1)	20.936	Largest (1)	6.821	Largest (1)	60.418	Largest (1)	388.700
Smallest (1)	-2.106	Smallest (1)	-4.885	Smallest (1)	-2.086	Smallest (1)	-63.000
Confidence Level (95.0%)	0.342	Confidence Level (95%)	0.207	Confidence Level (95%)	1.029	Confidence Level (95%)	6.270

Descriptive statistics of the EV to EBITDA are shown in Table 4. This dataset resembles the datasets of the two previous indicators. Although the mean value does not differ much during all periods, the standard error significantly increases in the periods after the intervention of the activist investor, which indicates greater uncertainty in the EV to EBITDA ratio estimates in the post-intervention periods. The median is even more stable than the mean and suggests that, while there is volatility in the mean due to outliers, the central tendency remains more consistent.

As for kurtosis and skewness, all periods have high kurtosis suggesting a leptokurtic distribution with heavy tails throughout the dataset. And skewness, in turn, changes from positive values in the periods before the arrival of the activist investor to negative values in the following periods. This shift suggests a distribution with higher EV/EBITDA values pre-intervention and lower values post-intervention.

The range widens significantly post-intervention, indicating an increased spread between the lowest and highest EV to EBITDA values. This increased range is due to both an increase in maximum values and a drop in minimum values.

All in all, the EV/EBITDA dataset shows increased variability, range, and extremes in the post-intervention periods, with a pronounced right-skewed distribution pre-intervention that shifts to left-skewed post-intervention. The high kurtosis and range suggest the presence of substantial outliers.

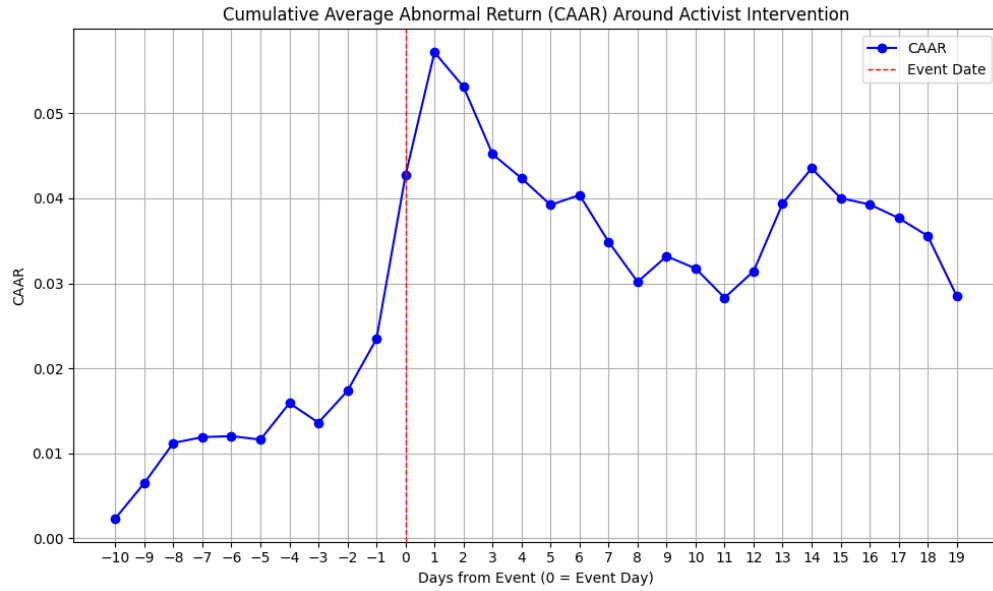
Table 4. Descriptive statistics of EV to EBITDA

EV to EBITDA (- 1)		EV to EBITDA		EV to EBITDA (+ 1)		EV to EBITDA (+ 2)	
Mean	12.811	Mean	13.951	Mean	7.164	Mean	11.602
Standard Error	5.102	Standard Error	4.163	Standard Error	9.446	Standard Error	8.858
Median	8.696	Median	10.019	Median	11.130	Median	11.800
Mode	n/a	Mode	n/a	Mode	n/a	Mode	n/a
Standard Deviation	57.275	Standard Deviation	46.734	Standard Deviation	106.036	Standard Deviation	99.427
Sample Variance	3280.397	Sample Variance	2184.026	Sample Variance	11243.544	Sample Variance	9885.661
Kurtosis	69.985	Kurtosis	25.619	Kurtosis	51.449	Kurtosis	43.032
Skewness	7.036	Skewness	3.803	Skewness	-4.190	Skewness	-4.888
Range	728.800	Range	455.600	Range	1479.700	Range	1181.700
Minimum	-165.700	Minimum	-147.000	Minimum	-909.800	Minimum	-809.500
Maximum	563.100	Maximum	308.600	Maximum	569.900	Maximum	372.200
Sum	1614.143	Sum	1757.869	Sum	902.618	Sum	1461.818
Count	126.000	Count	126.000	Count	126.000	Count	126.000
Largest (1)	563.100	Largest (1)	308.600	Largest (1)	569.900	Largest (1)	372.200
Smallest (1)	-165.700	Smallest (1)	-147.000	Smallest (1)	-909.800	Smallest (1)	-809.500
Confidence Level (95.0%)	10.098	Confidence Level (95%)	8.240	Confidence Level (95%)	18.696	Confidence Level (95%)	17.530

CHAPTER 5. RESULTS

In order to assess the short-term impact of activist investor intervention in the target company, a case study was conducted. This analysis focuses on CAAR (Cumulative Average Abnormal Return) directly in the event period (the activist investor's 13D filing date).

Figure 1. CAAR around activist intervention



According to the results (Figure 1) of the analysis, a few days before the event and during the day after the event, we can observe an increased CAAR in the target companies. This price reaction a few days before the official filing is explained by the fact that such information is usually leaked in the financial media even before the official disclosure, which provokes a market reaction.

In the short-term period following the event, CAAR declines slightly but remains high. These figures indicate that the market's initial reaction to the arrival of an activist investor

is positive and contributes to a short-term increase in the company's value. The continued stabilization of CAAR at high levels also indicates that the market maintains a favorable outlook on the potential impact of the activist.

To assess the longer-term impact, the financial indicators of the target companies were selected and a DiD regression was conducted to assess how the appearance of an activist investor affects changes in the company's activities.

Table 5. Estimation results for DiD regression model for operating margin

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Operating Margin	6.02334	4.4617	1.349801	0.1866
R-squared	0.882131	Mean dependent var		0.750000
Adjusted R-squared	0.778155	S.D. dependent var		0.437595
S.E. of regression	4.38E-17	Akaike info criterion		-72.23578
Sum squared resid	6.13E-32	Schwarz criterion		-71.61205
Log likelihood	1749.659	Hannan-Quinn criter.		-72.00007
F-statistic	3.13E+32	Durbin-Watson stat		0.325937
Prob(F-statistic)	0.000000			

According to the results in Table 5, the intervention of an activist investor in a company has a positive effect on the operating margin of this company, though it is not statistically significant according to p-value. The R-squared indicates that 88.21% of the changes in the operating margin of the target company are explained by the intervention of an activist investor. It indicates a strong model fit.

According to the results of the F-statistic, it can also be concluded that the model as a whole is statistically significant, meaning that the predictors included collectively explain a meaningful amount of variation in operating margin.

The next indicator that was analyzed was ROE. Table 6 shows the main results of the analysis of the impact of the arrival of an activist investor on this indicator of target companies.

Table 6. Estimation results for DiD regression model for ROE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROE	0.001135	0.016918	0.067110	0.9469
R-squared	0.585130	Mean dependent var		0.100564
Adjusted R-squared	0.390660	S.D. dependent var		0.184924
S.E. of regression	0.144352	Akaike info criterion		-0.771916
Sum squared resid	0.666804	Schwarz criterion		-0.148182
Log likelihood	34.52599	Hannan-Quinn criter.		-0.536206
F-statistic	3.008842	Durbin-Watson stat		1.989240
Prob(F-statistic)	0.004342			

As can be seen from the result, the influence of activist investor on ROE is insignificant and low, as evidenced by the coefficient and p-value. The R-squared indicates that 58.51% of the variability in ROE is explained by the independent variable in the model. While the model explains a reasonable amount of variation, the low coefficient and lack of significance suggest that other factors are likely more influential in determining ROE.

F-statistics shows that the model as a whole is statistically significant. This means that, while the individual coefficient for activist involvement is not significant, the predictors together explain a meaningful portion of the variation in ROE.

Table 7. Estimation results for DiD regression model for EV to EBITDA

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EV to EBITDA	0.026264	0.007351	3.572713	0.0011
R-squared	0.726172	Mean dependent var		11.79182
Adjusted R-squared	0.597815	S.D. dependent var		4.436460
S.E. of regression	2.813516	Akaike info criterion		5.167949
Sum squared resid	253.3079	Schwarz criterion		5.791682
Log likelihood	-108.0308	Hannan-Quinn criter.		5.403658
F-statistic	5.657445	Durbin-Watson stat		2.255754
Prob(F-statistic)	0.000020			

And the last indicator that was analyzed was EV to EBITDA. The results are shown in Table 7. According to the coefficient, companies after the intervention of an activist investor have a slightly higher EV to EBITDA multiple and it is statistically significant. This indicates that such companies are valued more positively by the market and are slightly more expensive.

According to the R-squared, 72.62% of changes in this multiplier are associated with the independent variable, which indicates a good model fit and that the variables used in the model are meaningful predictors of the EV to EBITDA ratio.

F-statistics also shows that the model as a whole is statistically significant. This confirms that the model is useful in explaining the relationship between the variables.

CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

In this study, the hypothesis that activist investors do not improve the performance of target companies as a result of their activities can be partially rejected.

Indeed, after analyzing the operating indicators of target companies, such as operating margin and ROE, we can come to the conclusion that the appearance of an activist investor in a company is not usually characterized by an improvement in these indicators.

The reason for this can be many factors since the arrival of an activist investor and the start of his campaign does not always mean the beginning of changes in the company because the management of the target company may start a proxy fight or the activist will not be able to lobby for his changes.

Another factor is the fact that in recent years companies with a poor financial situation have become targets. Thus, activist investors often have to raise additional debt financing, reduce costs, or change business strategy. This can have a significant impact on the target's operating performance in the years following the start of the activist campaign.

It is also important not to forget that sometimes an activist investor only declares his intentions and can pursue a policy that is focused solely on his benefit and does not bring anything to the target, which does not directly improve the company's performance.

Despite these challenges, the analysis found that the arrival of an activist investor is accompanied by improvements in the market's valuation of the target company. First of all, this is evidenced by the CAAR analysis. From its results, it can be seen that the price of the target company's shares after the activist investor declares his plans by submitting a 13D Schedule shows very good dynamics and the market believes in the further positive influence of the activist on the company's results.

The analysis of the EV to EBITDA multiple also indicates the positive impact of the appearance of an activist on this indicator in the longer term. This shows that the market often views the involvement of activists as a positive development, even if operational and profitability indicators do not improve immediately. Activists may succeed in unlocking hidden value, increasing transparency, or improving corporate governance, which enhances the company's market attractiveness.

Policy implications

Based on the preliminary results, we can say that the main policy implication should address active shareholder engagement, particularly from institutional investors, to ensure that activist interventions are aligned with the long-term interests of all shareholders.

Also quite important is the possible creation of a mechanism by the regulator to monitor the long-term influence of activist investors on target companies. Regulators could intervene if it becomes evident that activist strategies are harming the company's long-term viability or the broader economic interests.

Limitations and further research

The main difficulty of this study is the nature of the company data. Transactions by activist investors quite often imply complex corporate structures where it is impossible to distinguish the performance of an individual company.

It is also very common for companies to be delisted from the stock exchange after an activist investor has taken control of the company, which makes obtaining financial information much more difficult.

Another obstacle to assessing longer-term performance is that the length of time activist investors are attracted is unclear, as they may take a long time to dispose of their stake and stop participating in the company's management before they lose control.

Regarding the direction for further research, it is worth investigating the direct activities of activist investors and company shareholders using examples of successful and unsuccessful transactions, in order to at least partially shed light on the processes that affect the further performance of target companies.

REFERENCES

- Barclays. (2024). H1 2024 Review of Shareholder Activism.
- Bebchuk, Lucian A. and Brav, Alon and Jiang, Wei.(2015). The Long-Term Effects of Hedge Fund Activism. Harvard Law School John M. Olin Center Discussion Paper No. 802, Columbia Law Review, Vol. 115, 2015, pp. 1085-1156, Columbia Business School Research Paper No. 13-66.
<https://ssrn.com/abstract=2291577>.
- Brav, Alon and Jiang, Wei and Thomas, Randall S. and Thomas, Randall S. and Partnoy, Frank. (2008). Hedge Fund Activism, Corporate Governance, and Firm Performance. Journal of Finance, Vol. 63, p. 1729, 2008, European Corporate Governance Institute (ECGI) - Finance Working Paper No. 139/2006, Vanderbilt Law and Economics Research Paper No. 07-28, FDIC Center for Financial Research Working Paper No. 2008-06.
<https://ssrn.com/abstract=948907>.
- Cohn, Jonathan B. and Rajan, Uday. (2010). Optimal Corporate Governance in the Presence of an Activist Investor.
<https://ssrn.com/abstract=1364763>
- Goshen, Zohar and Steel, Reilly. (2021). Barbarians Inside the Gates: Raiders, Activists, and the Risk of Mistargeting. Yale Law Journal, Vol. 132, No. 411, 2022, European Corporate Governance Institute - Law Working Paper No. 613/2021, Columbia Law and Economics Working Paper No. 664.
<https://ssrn.com/abstract=3945764>.
- Lazard. (2024). Review of Shareholder Activism - H1 2024.
- Levit, Doron. (2018). Soft Shareholder Activism. Review of Financial Studies, Forthcoming, Jacobs Levy Equity Management Center for Quantitative Financial Research Paper,
<https://ssrn.com/abstract=1969475>.
- Morrison Foerster. (2024). Occasional Activists: Shaping Corporate Governance in 2024.
- Schiereck, D., VogtJ., & Lethaus, N. (2023). Activist investors: A literature review on recent evidence. Corporate Ownership & Control, 20(4), 129–146.
<https://doi.org/10.22495/cocv20i4art9>.

U.S. Securities and Exchange Commission. EDGAR database.

Victor Barros, Maria Joao Guedes, Joana Santos, and Joaquim Miranda Sarmento. (2023). Shareholder activism and firms' performance. *Research in International Business and Finance*, Elsevier, vol. 64(C).
<https://doi.org/10.1016/j.ribaf.2022.101860>.

Yahoo Finance. Historical Data.

APPENDIX A

Table 8. Distribution of target companies by industry

Industry	Nº of companies	Industry	Nº of companies
Aerospace/Defense	2	Homebuilding	1
Air Transport	1	Household Products	2
Auto Parts	2	Information Services	10
Bank (Money Center)	1	Insurance (General)	1
Brokerage & Investment Banking	5	Insurance (Prop/Cas.)	3
Building Materials	3	Machinery	3
Business & Consumer Services	1	Metals & Mining	1
Chemical (Specialty)	5	Office Equipment & Services	3
Coal & Related Energy	2	Oil/Gas (Production and Exploration)	6
Computer Services	1	Oil/Gas Distribution	3
Drugs (Biotechnology)	2	Precious Metals	1
Electrical Equipment	1	R.E.I.T.	2
Electronics (General)	1	Real Estate (Development)	2
Engineering/Construction	3	Real Estate (Operations & Services)	1
Entertainment	4	Restaurant/Dining	9
Financial Svcs. (Non-bank & Insurance)	4	Retail (Automotive)	1
Food Processing	4	Retail (General)	3
Food Wholesalers	4	Semiconductor	1
Furn/Home Furnishings	1	Software (Entertainment)	1
Green & Renewable Energy	1	Software (Internet)	1
Healthcare Products	8	Software (System & Application)	7
Healthcare Support Services	3	Transportation	2
Healthcare Information and Technology	2	Transportation (Railroads)	1
Total	61	Total	65

APPENDIX B

Figure 2. Distribution of activist campaigns on target companies by year

