Shareholder Activism in Continental Europe

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von Philipp Schüler, Dipl.-Kfm.

geboren am 28. Oktober 1981 in Hildesheim, Deutschland

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Erstgutachter: Prof. Dr. Dirk Schiereck

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Table of Contents

List of Figures

List of Tables

List of Abbreviations

AG	Aktiengesellschaft
AGM	annual general meeting
AR	abnormal return
BaFin	Bundesanstalt fuer Finanzdienstleistungsaufsicht
BEHG	Bundesgesetz über die Boersen und den Effektenhandel
BHAR	buy hold abnormal return
BHAAR	mean buy hold abnormal return
BHR raw	raw buy hold return
Capex	capital expenditure
CAR	cumulative abnormal return
CAAR	mean cumulative abnormal return
CalPERS	California Public Employees' Retirement System
CEO	Chief Executive Officer
CFO	Chief Financial Officer
Co.	Corporation
COO	Chief Operating Officer
DAX	Deutscher Aktienindex
EBIT	earnings before interest and taxes
EBITDA	earnings before interest, taxes, depreciation and amortisation
EPS	earnings per share
Et al.	Et alii
EU	European Union
GDP	gross domestic product
GmbH	Gesellschaft mit beschraenkter Haftung
HUKFF	Hermes UK Focus Fund
i.e.	id est
IFRS	International Financial Reporting Standards
Inc.	Incorporated
KGaA	Kommanditgesellschaft auf Aktien
KKR	Kohlberg Kravis Roberts & Co.
M&A	mergers and acquisitions
MDAX	Mid-Cap Deutscher Aktienindex
n.a.	not applicable
NEMAX50	Neuer-Markt-Index
NYSE	New York Stock Exchange
Obs.	Observations
ROA	return on assets
ROE	return on equity
SA	societe annonym
SDAX	Small-Cap Deutscher Aktienindex
SEC	U.S. Securities and Exchange Commission
SIC	Standard Industrial Classification
SIX	Swiss Exchange
U.K.	United Kingdom

U.S.	United States of America
USD	US-Dollar
vs.	versus
WpHG	Wertpapierhandelsgesetz

I. Introduction

I.1. Preface

Due to prominent activist campaigns especially in the U.S. against Dell, Apple and Ebay and its equally prominent protagonists like Carl Icahn or Paul Singer, shareholder activism became a regular topic in national and international business outlets in recent years and therefore known to a broader public. A recent analysis of Bain & Company (2015) underpins this observation and emphasises that the worldwide number of activist approaches rose by an average of 34% per year since 2000. The relevance of shareholder activism is also shown in the study as 8% of the total capital invested in hedge funds worldwide, i.e. 3 trillion USD, is controlled already by shareholder activist funds.

Since its origins in the 1980s, the academic world has always been fascinated by shareholder activism as research subject and its impact on corporates, its management and supervisory bodies, share prices as well as operating and financial performance of the activists' target companies. Most research focuses on the U.S. corporate environment whereas the topic is still rarely researched in Continental Europe. Therefore, the main purpose of this dissertation is to fill this research gap and to provide an in-depth analysis of shareholder activism in Continental Europe in general and Germany in specific, its key players and the main characteristics of the Continental European and German corporate governance system and corporate environment compared to Anglo-Saxon jurisdictions.

The first study analyses the investment activities and returns of shareholder activist and hedge fund manager Guy Wyser-Pratte as well as his success and failure rate to enforce his demands against the management and supervisory bodies of the approached companies in Continental Europe between 2001 and 2011. The second study is an in-depth clinical study of a specific single activist investment of Guy Wyser-Pratte in Germany which shows in detail the confrontation between an activist shareholder, a typical German medium sized company and a German family business investor which is – compared to Anglo-Saxon jurisdictions – a common element of the investor universe in Continental Europe and especially in Germany. The third study compares the investment activities of Continental European family business investors with private equity funds to identify any similarities and differences in their investment approach in more detail for the first time and to clarify if family business investors should be taken into consideration as another key player in future research on shareholder activism in Continental Europe.

The introductory part of this doctoral thesis proceeds as follows. The next subchapter gives an overview of shareholder activism, its origins and key players in the context of this dissertation. The subsequent section identifies the specifics of the Continental European and German corporate governance environment compared to the predominant system in Anglo-Saxon jurisdictions like the U.S. and the U.K. The section continues with an overview of the existing literature on shareholder activism and its related topics, especially with focus on research from the U.S., Continental Europe and Germany. The three

subsequent sections include the theoretical framework, development of hypothesis and some explanatory remarks on the process of data collection and the corresponding test statistics. The introductory chapter ends with a brief presentation of the three research papers and their contribution to literature.

I.2. Definition of Shareholder Activism, its Origins and Key Players

Shareholder activism is today perceived as the effort of different investors, for example hedge funds, private equity firms, pension funds, mutual funds, or individual investors, to increase their return via actively influencing the target company's management and supervisory board as well as its corporate governance structure (see for example Schwartzman and Snyder, 2007). Despite the comprehensive research on shareholder activism especially from the U.S., a single valid definition of shareholder activism is still missing. This is probably because of the broad spectrum of investors who execute an equally wide range of active investment strategies worldwide. Like for the missing definition the same holds for an encompassing global database which for example lists relevant information like activism events and information about the investor and target. Due to the lack of valid data and definition, the data in this dissertation is hand-collected for each specific analysis and the definition of shareholder activism used in this dissertation follows the understanding of shareholder activism mentioned above: shareholder activists are investors who are actively influencing the management and supervisory bodies of a listed company to increase their returns.

This understanding of shareholder activism is mainly rooted in the social rights movements in the U.S. during the 1940s to 1960s ((Thompson and Davis, 1997), (Vogel, 1983)) where more and more shareholders, especially individual investors, became interested in the monitoring of social, economic and governance issues focusing on the companies they invested in. In the 1980s, other investor groups entered the stage as active investors like corporate raiders, pension funds, insurance companies, labour unions or strategic investors (Brav et al., 2008). These shareholder groups became active when they were for example dissatisfied with the performance of the company or its board of directors or when the company's governance structure limited a sufficient control of the management. The landscape of shareholder activism advanced in the 1990s due to changed regulations by the SEC in the U.S. Shareholders were now allowed to communicate more flexible, get access to corporate shareholder lists and vote more easily for individual board members (Akhigbe et al., 1997). Due to additional regulative changes in the following years, like new diversification requirements, insider trading regulations and conflict of interest guidelines, institutional investors engaged themselves in fewer activist cases (Brav et al., 2008).

After the changed regulations for mutual and investment funds, fund managers started to look for profitable alternative investment vehicles. This development in combination with overall decreased financial transaction, research, communication and leverage costs was beneficial for the whole alternative investment sector, especially the hedge fund and private equity industry (Cheffins and Armour, 2011). As Gillan and Starks (2007) mention, these fund types have become increasingly important players in financial

markets, particularly in their capacity as monitors of corporate performance and agents of change. The investment philosophy of active hedge funds and private equity funds is in most instances determined to influence the target company, its management and corporate governance in the shareholders' interest (Mietzner et al., 2011). The corresponding compensation of the fund managers is in both cases mainly based on the funds' performance (Achleitner et al., 2010). In most instances, hedge funds invest their own capital to acquire minority stakes (normally 5% at the most) in the targeted publicly listed company ((Boyson and Mooradian, 2012), (Mietzner and Schweizer, 2014), (Achleitner et al., 2010)). In contrast, private equity funds typically acquire major stakes or become principal shareholders in strong companies. Due to their large amount of invested capital, a profitable exit strategy is very important for private equity funds ((Schwartzman and Snyder, 2007), (Thomas and Young, 2006)).

Both, hedge funds and private equity funds, are perfectly suited as research subjects for this dissertation on shareholder activism, due to their importance as major alternative investors and their business model to pursue active investment strategies. The research focus on Continental Europe in general and on Germany with its – compared to Anglo-Saxon jurisdictions – different corporate environment and corporate governance system in particular made it necessary to consider an additional relevant investor group, the group of family business investors, as third research subject. For the first time, a study compares the investment behaviour of family business investors with hedge funds and private equity funds and puts them into the context of shareholder activism. To simplify matters, the term shareholder activists will incorporate hedge funds, private equity funds and family business investors in the remainder of this dissertation. The differences between the corporate environments and governance systems will be discussed in the next section.

I.3. Specifics of Continental European Corporate Governance and Corporate Environment

Compared to the U.S., shareholder activism is still less researched in Continental Europe. Some reasons for that are the specifics of the corporate governance system and corporate environment in major Continental European countries like Germany, France and Italy. To demonstrate the importance of in-depth clinical studies as considerable contribution to the research on shareholder activism in Continental Europe, the key differences between these jurisdictions will be briefly presented in the following.

Compared to the one-tier system in the U.S., countries like Germany, Austria and Switzerland have a two-tier governance system where the executive board (Vorstand) is responsible for managing the day-to-day operations monitored by the independent supervisory board (Aufsichtsrat). The members of a typical supervisory board like for example in Germany are elected for up to 5 years (Thamm, 2013). Despite a lower protection of private property of outside investors in Continental European civil law countries

compared to Anglo-Saxon common law countries (La Porta et al., 2000), the shareholder structures in Continental Europe are characterized by a high amount of large single investors like founders and families. Especially the German corporate environment with its many small- and medium sized private companies is characterized by a concentrated ownership structure and reciprocal shareholdings as well as its domination by founders, their families and other family business entrepreneurs ((Bassen and Zöllner, 2009) and (Bessler and Holler, 2008)). In contrast to the U.K., a study from Franks et al. (2008) shows that family controlled blocks are the most important category of ownership in Italy, France and Germany. Of combined more than 550 of the largest listed companies in the four countries, 61.3% companies in Italy are family owned, 48.1% in France and 32.3% in Germany compared to 5.3% in the U.K. The study summarises that family ownership in Continental Europe is internationally at the high end and is in the U.S., Japan and U.K. among the lowest worldwide.

I.4. Research on Shareholder Activism

Due to its U.S. origins, the research on U.S. shareholder activism is much more comprehensive than the research on shareholder activism in the U.K. and Continental Europe. Another reason for the unequal distribution of studies is the availability of extensive data on activist cases in the U.S. as the SEC requires detailed information from each investor on his activist engagement (see for example its 13D filing). The information can be accessed centrally and digital and therefore are easy to use for research purpose. In contrast to the disclosure requirements of the SEC, the authorities of Continental European jurisdictions, especially in Germany and France, do not require a specific official filing which covers a shareholder activist case and underlying purpose of the engagement (for example the German legislator BaFin demands a public notification only if a share purchase exceeds or falls below a specific threshold level like 3%[1]). Due to the different disclosure obligations in Continental Europe, relevant data must be hand-collected from various sources.

Independent from the origin of the research, i.e. Anglo-Saxon or Continental European, and its source of data, i.e. database inquiry or hand-collected, the study results on shareholder activism do not provide consistent results. Large sample studies on shareholder activism primarily examine this three different topics:

1. The value enhancing effect of shareholder activism measured by abnormal stock market returns of the target companies via short- and/or long-term event studies,
2. The operational and financial performance of the target companies prior to the activist engagement, and

[1] See §21 and §26 Securities Trading Act (Wertpapierhandelsgesetz; WpHG).

3. The medium- and long-term development of the target companies following the activists' investment.

Table I.1. summarizes the most relevant quantitative large sample studies on shareholder activism structured by the three topics mentioned above and geographies. To present a comprehensive overview of the existing research on shareholder activism in general, I did not deliberately focus on specific activist shareholder groups, like pension funds, hedge funds, private equity or family business investors, but took all studies into consideration which cover potential activist engagements as such. The geographic classification of the studies enables the comparison and identification of potential regional specifics of shareholder activism, especially between Anglo-Saxon and Continental European countries.

Table I.1. Results of most relevant quantitative Sample Studies on Shareholder Activism ordered according to the Geographic Focus

	Observation period /regional focus / sample size	Short- and long-term stock price effects (CAR)	Target firm characteristics	Medium- and long-term development
Focus on the U.S.				
Akhigbe et al. (1997)	1985-1992 / U.S. / 144	Significant CAR of 9.27% at the end of the first year following the activist event and 23.06% at the end of the third year	No analysis	No analysis
Bethel et al., (1998)	1980-1989 / U.S. / 244	Significant CAR of 14.2% for a 61-day event window of a activist block purchase	Focus on poor performing (i.e. ROA), smaller and more diversified firms	Increase in operating profitability (ROA) in the years two and three following the activist investment
Boyson and Mooradian (2007)	1994-2005 / U.S. / 418	Significant CAR of 8.13% for a 51-day event window	Activist hedge funds target small firms with poor stock performance but high ROA	Improved short- and long-term performance with regard to lower cash level and higher ROA
Brav et al. (2008)	2001-2006 / U.S. / 1.059	Significant CAR of 8.4% for a 41-day event window	Hedge funds target profitable firms with low market value relative to book value and	Overall improved performance (i.e. with regard to ROA and operating profit

			sound operating cash flow	margins) of target firms at the end of the first year following the activist event
Brav et al. (2009)	2001-2007 / U.S. / 1.172	Positive CAR for a 41-day event window	Focus on small low growth companies that are profitable and have high leverage	Higher ROA at the end of the second year following the activist event
Clifford (2008)	1998-2005 / U.S. / 197	Significant CAR of 3.39% for a 5-day event window for activist hedge fund targets and 22.32% excess return for activist targets during the year following the event	Firms targeted by activist hedge funds have a higher ROA and ROE as well as a low level of cash	ROA increases by 1.22% in the year following the activist event
Greenwood and Schor (2009)	1993-2006 / U.S. / 980	Significant CAR of 3.53% for a 15-day event window and 9.67% for an event window of 19 months	Focus on small, underperforming firms	No significant change in ROA, operating ROA, payout ratio, asset growth and share growth but increase of leverage and decrease of capex
Klein and Zur (2006)	2003-2005 / U.S. / 319	Significant CAR of 10.3% for a 61-day event window and significant one-year BHAR of 16.5%	Hedge funds target profitable and healthy firms with above-average cash holdings	EPS, ROA and ROE decline in the year following the activist event
Klein and Zur (2009)	2003-2005 / U.S. / 305	Significant CAR of 10.2% for a 61-day event window for activist hedge fund targets and 11.35% at the end of the first year following the activist event	Compared to other activists, hedge funds target more profitable and financially healthy firms with higher cash levels	In the year following the activist event, hedge fund targets have higher dividends and long-term debts as well as lower cash levels and short-term investments
Focus on Europe and/or European countries				
Achleitner et al. (2010)	1998-2007 / Germany / 249	No analysis	Hedge funds target firms with free cash flow problems and a lack of controlling	No analysis

			shareholders whereas private equity funds are focusing on firms with the potential to increase leverage	
Becht et al. (2010a)	2000-2008 / Europe / 362	Significant CAR of 6.90% for a 41-day period around initial disclosure	No analysis	No analysis
Bessler and Holler (2008)	2000-2006 / Germany / 324	Significant CAR of 3.49% for a 31-day event window and BHAR of 19.93% at the end of the first year following the activist event	Focus on less profitable companies, i.e. with regard to ROE, ROA and EPS	No analysis
Croci (2007)	1990-2001 / Europe / 136	Significant CAR of 9.12% for a 36-day window and significant long-run abnormal returns if raiders sell their shares	Focus on large firms with stable stock price performance	No evidence found that raiders improve target firm performance
Cziraki et al. (2010)	1998-2008 / Europe / 290	No analysis	Focus on underperforming firms with low leverage	No analysis
Drerup (2011)	1999-2010 / Germany / 278	Significant CAR of 3.47% for a 41-day event window and insignificant BHAR -6.1% at the end of the first year following the activist event	Target companies of activist hedge funds are neither extraordinarily profitable nor unprofitable	No significant changes or improvements following the activist investment
Mietzner et al. (2011)	2001-2009 / Germany / 249	Significant CAR of 5.41% (hedge fund targets) and 7.61% (private equity targets) for a 41-day event window	Compared to its peers, the target companies of hedge funds and private equity funds have lower cash holdings but hedge funds tend to extract liquidity from their targets following the investment	No analysis
Mietzner and Schweizer (2014)	1993-2007 / Germany / 226	Significant CAR of 6.24% (hedge	Compared to private equity	No analysis

		fund targets) and 3.55% (private equity targets) for a 41 -day event window; BHAR of -21.46% (hedge fund targets) and -2.47% (private equity targets) over a 250-day period	funds, hedge funds tend to acquire smaller stakes of smaller companies	
Stadler (2010)	2000-2008 / Germany / 136	Significant CAR of 1.23% for a 5-day event window; non-significant BHAR of -0.94% for a 7-months event window	No analysis	No analysis
Thamm (2013) / Thamm and Schiereck (2014)	1999-2011 / Germany / 140	Significant CAR of 4.36% for a 41-day event window if an activist investor approaches a target in a true active / hostile manner	Focus on firms with positive ROE but underperforming share price	No analysis
Other relevant research on shareholder activism				
Karpoff (2001)	Review of 25 empirical studies on shareholder activism	Analysis of value effects of shareholder proposals: little evidence of short-term value creation and contradictory results regarding increased share values of target companies in the long run	Shareholder activists target large firms with poor stock returns and profitability prior to the activist investment	Shareholder activism does not lead to operational improvements of the target companies
Judge et al. (2010)	2003-2007 / U.S., U.K., Australia, Japan, Germany and South Korea / 234	No analysis	(Financially-driven) shareholder activists target less profitable firms	No analysis

As shown by Table I.1.and independent from its regional focus, the majority of quantitative large sample studies observes positive abnormal share price returns following the public filing of a share purchase by an activist shareholder. Only a few studies do not detect a value enhancing effect of an activist engagement. Drerup (2011) and Mietzner and Schweizer (2014) find negative buy and hold abnormal returns at the end of the first year following the activist event, Stadler (2010) at the end of the first six months. The meta study of Karpoff (2001) who reviews 25 empirical studies on shareholder activism finds contradictory results with regards to the long-term value creation.

An analysis of the target firm characteristics presents contradictory results as well. Some studies identify poor performance as key criterion of an engagement by activists where this assessment is based on the company's financial performance indicators like a low ROA and ROE. For example Bethel et al. (1998) and Bessler and Holler (2008) show a negative correlation between the profitability level of a company and its possibility to become an activist target. Other studies complement that target companies generally have a lower market valuation, growth rates and leverage. But some studies contradict these findings. According to for example Klein and Zur (2006 and 2009), activists are targeting profitable and financially healthy companies with liquidity above average. Brav et al. (2009), Thamm (2013) and Thamm and Schiereck (2014) also identified profitability as key criterion of an activist engagement. The target company of the study of Boyson and Mooradian (2007) is a cash cow with poor growth prospects but a high ROA.

The analyses of the medium- and long-term impact of shareholder activism on target companies do not give definite results as well. Some studies determine an improved financial performance, expressed by the key performance indicators ROA and ROE ((Clifford, 2008), (Bethel et al., 1998), (Boyson and Mooradian, 2007) and (Brav et al., 2009)), which is mainly driven by the divesture of under-performing assets following the activist engagement. Boyson and Mooradian (2007) and Klein and Zur (2009) additionally find an increased extraction of cash subsequent to the activist event. On the other hand, Greenwood and Schor (2009), Croci (2007) and Drerup (2011) do not find significant improvements or changes of the target firms' earnings or operating performance. Additionally, the regional classification of Table I.1. shows that most of the studies with focus on Continental Europe or Continental European countries lack to examine the medium- and long-term development of the target companies following the activist investment. This dissertation therefore complements the sparse existing research on the medium- and long-term impact of shareholder activism on firms in Continental Europe.

Summarising the review of the existing research, it can be stated that independent from the regional focus of the studies no definite results have been obtained with regards to target firm characteristics, value enhancing effects of shareholder activism and its medium and long-term impact on the target firms. There are a variety of reasons for the mixed results: the use of different quality of data, i.e. database inquiry vs. hand-collected, or the use of different points of time of share purchases by the activists, or the availability of relevant data in general based on the different national publication requirements. For example, Brav et

al. (2009) as well as Klein and Zur (2009) use publicly available data whereas Becht et al. (2010a) incorporate transaction data of private, i.e. non-public, approaches.

Furthermore, the review shows the relatively small amount of studies on shareholder activism in Continental Europe in general and Germany in specific. Despite some prominent public cases in the past, the research on shareholder activism in Continental Europe is still at an early stage. These findings are important for the structure and design of this dissertation as well as for the development of the hypotheses (see section I.6.). To fil the existing research gap and to provide valuable results, the dissertation focuses on major Continental European countries like Germany, France, Austria and Switzerland (German speaking but non-EU) and the specifics of the corporate governance systems and corporate environments in Continental Europe via in-depth clinical studies (see for example Bessiere et al. (2010) and their motivation to conduct a clinical study).

I.5. Theoretical Framework

This dissertation and most of its incorporated analyses like short- and long-term event studies are based on the principal-agent-theory. This theory combines different academic disciplines and is often applied to the separation of ownership and control and the occurring conflicts. The issue has been described by academics for some time (see for example Berle and Means, 1932) but it became known for a wider audience following the work of Jensen and Meckling (1976) who formulated the concept of agency costs for the first time.

With regards to the corporate world, the agency theory addresses governance issues which could arise when the agent, e.g. company executives, makes decisions on behalf of his principal, e.g. company shareholders, but acts in his own best interest rather than in the best interest of his principal. The costs which are associated with this potential conflict of interest are known as agency costs. The agency theory states that the agency costs could negatively affect the value of a firm as they can arise from an enhanced monitoring of the executives or a comprehensive provision of information (Bassen and Zöllner, 2009). Professional investors like shareholder activists who acquire a significant stake in a company could be able to enforce a stricter monitoring of the management and therefore help to restrict the management's possibilities to act in their own bDie est interest ((Gillan and Starks, 1998) and (Nordén and Strand, 2011)).

In order to assess the impact of an activist investment on the firm value, short- and long-term event studies have been conducted in this dissertation. An increase of the share price – respectively a positive abnormal return at the time of the public announcement of an activist investment – indicates that the capital market assumes a more effective monitoring of the company's management and thus a simultaneous reduction of the company's agency costs.

I.6. Development of Hypotheses

Due to the different corporate environment in Continental European compared to Anglo-Saxonian jurisdictions, I examine whether a shareholder activist could execute his investment strategy in an equally successful manner here as an activist in the U.S. or the U.K. as well as I analyse a broader definition of activist investors which seems to be more suitable for Continental Europe.

In the last years, a new player entered the stage of active investing in Continental Europe – family business investors. This investment group is a typical element of the Continental European corporate environment, especially in Germany, France and Italy. Family business investors invest increasing amounts of money to acquire major stakes in target companies striving for example for adequate board representations to exert their dominating influence. Therefore, I test whether the investment approach and strategy of family business investors in Continental Europe differ significantly from classical representatives of the shareholder activism guild, i.e. activist hedge funds and private equity funds.

The theoretical framework of this dissertation is based on the principal-agent-theory (see section I.5.) and the correlated assumption of the existence of agency costs. A positive share price reaction at the time of notification of a stake purchase by a shareholder activist is the direct anticipation of the capital market that the activist is able to reduce the agency costs of the target firm via its superior qualifications to efficiently integrate, manage and control the target firm. Due to the positive image as long-term oriented, stable and conservative investor, I assume that the capital market values the stake purchased by a family business investor higher than by an activist hedge fund or private equity fund.

I.7. Remarks on the Collection of Data and Test Statistics

In comparison to the disclosure requirements of the SEC (for example see its 13D filing), the authorities of Continental European jurisdictions, especially in Germany and France, do not require a specific official filing which covers a shareholder activist case and underlying purpose of the engagement. For example, the German legislator demands a public notification if a share purchase exceeds or falls below a specific threshold level like 3%.[2] The legal requirements in other Continental European countries like France[3] and Switzerland[4] are quite similar.

For that reason and due to the lack of a cross-national European data base for shareholder activist cases, all data used in this dissertation have been hand-collected for each specific study and underlying research question in a work-intensive approach. Despite the different research focus of the three studies, the identification process of relevant activist cases and involved parties, i.e. activist hedge funds, private equity funds and family business investors, is quite similar. Factiva, a database focused on media news, and

[2] See §21 and §26 Securities Trading Act (Wertpapierhandelsgesetz; WpHG).
[3] See § L233-7 Trading Act (Code de commerce).
[4] See §20 Securities Exchange Act (Bundesgesetz über die Börsen und den Effektenhandel; BEHG).

Bloomberg, a financial information database, helped to identify relevant activist cases, the level of share purchases as well as the underlying purpose of the activists' engagement.[5]

I filtered the results for publicly listed companies only and – due to the different accounting rules of financial service companies – excluded banks, insurance and real estate companies from the list as well. The pre-selection was completed by checking the corresponding voting rights announcements – if existing – via the websites of the target companies as well as ad-hoc disclosures. To conduct the analyses of target firm characteristics as well as their medium- and long-term operative and financial development following the activist engagement, all relevant financial information have been compiled via Bloomberg and partially via hand-collection by means of the companies' annual reports. If needed for a specific study, the same approach has been used to compile a group of peer companies. To analyse the share price reactions in the course of the public announcements of an approach by an activist shareholder, the event study methodology has been applied. If the specific entry date was missing due to the lack of filing data, I defined the day of the first public announcement, e.g. via press statements, of the investment as event day (t=0). The time periods of the three studies differ little from each other. Overall the analysed time period comprises the years 1999 to 2012 which covers several phases of extreme stock market developments, i.e. two periods of rising stock prices (2003 to 2008 and 2009 to 2012) and the global financial crisis between the years 2008 and 2009.

To examine the various hypotheses (see section I.6.) on shareholder activism and its protagonists, different statistic tests have been applied to primarily detect differences in the analysed investor groups and their approaches, stock market reactions, changes of the operating and financial performance of the target companies prior, during and following the activist engagement as well as to predict the possibility that a specific active investor group approaches a company with specific parameters. This section briefly summarizes the most relevant statistical tests which have been applied in the three studies.

To find any statistically relevant differences and changes between the compiled target companies and control samples like peer companies or benchmark stock indices, the parametric *t*-Test[6], the non-parametric *Mann-Whitney U*-Test[7] and *Wilcoxon Signed Rank*-Test[8] have been applied in most of the analyses used in this dissertation and are briefly presented below. The *t*-Test is a difference-in-means test with the standard test statistic

[5] Selected sources are amongst others the leading news agencies Reuters and Dow Jones as well as Germany's leading daily newspapers Bild Zeitung, Die Welt, Frankfurter Allgemeine Zeitung, Handelsblatt and Süddeutsche Zeitung.
[6] See Brown and Warner (1980).
[7] See Mann and Whitney (1947).
[8] See Wilcoxon (1945).

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sigma_{\overline{X}_1 - \overline{X}_2}}$$

where $\overline{X}_1$ and $\overline{X}_2$ are the means of the two samples and $\sigma_{\overline{X}_1 - \overline{X}_2}$ measures the variability of the differences between the sample means. The *Mann-Whitney U*-Test is a difference-in-medians test with a standard test statistic

$$U = N_1 N_2 + \frac{N_1(N_1 + 1)}{2} - R_1$$

where N_1 and N_2 are the number of cases in sample 1 and sample 2, and R_1 is the sum of the ranks for the first sample. The *Wilcoxon Signed Rank*-Test is another non-parametric difference-in-medians test with a standard test statistic

$$z = \frac{R - \mu_R}{\sigma_R}$$

where $\mu_R is\ \frac{n_1(n_1+n_2+1)}{2}$, $\sigma_R is\ \sqrt{\frac{n_1 n_2(n_1+n_2+1)}{12}}$, R is the sum of ranks for smaller sample size (n_1), n_1 is the smaller of sample sizes, n_2 is the larger of sample sizes, $n_1 \geq 10$ and $n_2 \geq 10$. Comparing the target firms with its peers, these tests have been applied to analyse the characteristics of the target firms, their changes in operating performance as well as short- and long-term stock performance via event studies.

Additionally, the statistical significance of the cumulative abnormal returns (CARs) calculated in the short- and long-term event studies has been tested by the *Boehmer* Test and the non-parametric *Corrado Rank* Test as robustness checks. The test statistic of the *Boehmer* Test is

$$t_B = \frac{\overline{A}\sqrt{n}}{s}$$

where $\overline{A}$ is the average of standardized abnormal returns over the sample of n firms of the event day, and s the cross-sectional standard deviation of standardized abnormal returns. For conducting the *Corrado Rank* Test each firm's abnormal returns have to be transformed into their respective rank first. The test statistic of the *Corrado Rank* Test at day 0 is

$$R = \frac{\frac{1}{N}\sum_{I=1}^{N}(K_{i0} - \overline{K})}{S(K)}$$

where K_{it} denotes the rank of the abnormal return ε_{it} in security i's time series of T excess returns where $\varepsilon_{it} \geq \varepsilon_{ij}$ means $K_{it} \geq K_{ij}$ and $T \geq K_{it} \geq 1$, the average rank $\overline{K} = \frac{T+1}{2}$ and the standard deviation $S(K)$ which is computed as

$$S(K) = \sqrt{\frac{1}{T}\sum_{t=1}^{T}\left[\sum_{i=1}^{N}(K_{it} - \overline{K})/N\right]^2}$$

Short- and long-term event studies provide information about the positive or negative stock price reactions of target firms which are approached publicly by an activist shareholder. These event studies are based on the calculation of abnormal return (AR) and cumulative abnormal return (CAR) of the stock market listed target firms using a standard market model.[9] The abnormal return ε_{it} is the difference between the target company's actual return R_{it} on the event day *t* with $t = 0$ and the expected return on day *t* where R_{mt} is the return of the market portfolio on day *t*:

$$\varepsilon_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{mt})$$

$\hat{\alpha}_i$ and $\hat{\beta}_i$ are the coefficients calculated from an ordinary least squares-regression of the daily stock returns of target company *i* on the market return over an estimation period. The CAR is the sum of all daily abnormal returns and CAAR is the mean cumulative abnormal return.

To predict the probability that a firm could become an investment target of either a single activist shareholder or a group of activists, selected key performance indicators of the target companies have been used to conduct a logistic regression. To model the conditional probability Pr(Y=1|X=x) as a function of x with a binary output variable y, the logistic regression model is

$$\log\frac{p(x)}{1 - p(x)} = \beta_0 + x * \beta$$

where solving for p is $p(x; b, w) = \frac{e^{\beta_0 + x*\beta}}{1+e^{\beta_0 + x*\beta}} = \frac{1}{1+e^{-(\beta_0 + x*\beta)}}$.

A multiple regression model is needed to predict whether selected financial performance indicators of the target firms affect the intensity of the stock market reaction when an activist approach becomes public. The model allows k different independent variables to affect y as dependent variable. The formula is:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \ldots + \beta_k x_k + u$$

where β_0 is the intercept, β_k is the regression coefficient, x_k is the respective control variable, u is the error term and y the dependent variable, i.e. in this case CARs of two different event windows (CAR3 = $[t - 1; t + 1]$ and CAR21 = $[t - 10; t + 10]$).

[9] See Brown and Warner (1985). The standard market model used in this dissertation is based on an estimation window of 252 trading days ending 10 days prior to the event day, i.e. $[t - 262; t - 10]$. Due to the focus of this dissertation on Continental Europe, I used the Stoxx Europe 600 as benchmarking index. The index represents 600 large, medium and small public listed European companies. With the parameters calculated via the estimation window, I computed the expected, abnormal and cumulative abnormal returns for the different event windows.

To analyse the impact of an activist approach on the target company, I choose the DuPont model which was first applied by the U.S. DuPont Corporation in the 1920s as operating and financial control instrument. This model is used to evaluate a company's financial condition by comparing various key financials from the income statement and balance sheet (see for example Milbourn and Haight, 2005) expressed by the company's return on equity (ROE):

$$ROE = \frac{Net\ income}{Equity} = \frac{Net\ income}{Pre\ Tax\ Income} * \frac{Pre\ Tax\ Income}{Earnings\ before\ interest\ and\ taxes\ (EBIT)} * \frac{EBIT}{Sales} * \frac{Sales}{Assets} * \frac{Assets}{Equity}$$

The formula incorporates three major parts: the company's profit margin, asset turnover and equity multiplier. Due to its model kit like approach, these operating figures could be broke down into more specific and interpretable financial figures and ratios (Soliman, 2008).

I.8. Presentation of Studies and Contribution to Literature

I.8.1. First Study: A Clinical Study of the Investments of Wyser-Pratte in Continental Europe

"A Clinical Study of the Investments of Wyser-Pratte in Continental Europe" is the first study which analyses the investments of one single shareholder activist who operates in relatively similar Continental European jurisdictions. The format as an in-depth clinical study enables to gather detailed information about the whole investment and engagement process in – compared to Anglo-Saxon jurisdictions – a different corporate environment.

The study perfectly complements the sparse existing literature on single shareholder activists like the studies from Smith (1996) and Crutchley et al. (1998) on the California Public Employees' Retirement System (CalPERS), Carleton et al. (1998) on Teachers Insurance and Annuity Association College Retirement Equities Fund (TIAA-CREF) and Becht et al. (2010b) on Hermes UK Focus Fund (HUKFF). The study from Venkiteshwaran et al. (2010) on U.S. shareholder activist Carl Icahn acts as a role model for my clinical study. Therefore, the contribution to literature of the first study is (i) providing the first examination of the investment behaviour of a single activist investor with focus on Continental Europe, (ii) complementing the limited amount of studies on single shareholder activists, (iii) complementing the sparse research on shareholder activism in Continental Europe, (iv) providing a comprehensive insight into the whole investment approach, the demands and success of one single activist investor, (v) an analysis of the operating performance of the target companies following the activist approach in more detail which has not definitely been clarified by studies so far (see for example Bessiere et al., 2010, and their motivation to conduct a clinical study), and (vi) comparing the findings of the study with the results of large sample studies.

I.8.2. Second Study: Shareholder Activism by Family Business Investors: The Clinical Study of German KUKA AG

"Shareholder Activism by Family Business Investors: The Clinical Study of German KUKA AG" complements my first study on the investments of U.S. shareholder activist Wyser-Pratte in Continental Europe. Against the background of an increased deal activity of family business investors in Continental Europe and Germany in recent years[10], the confrontation between a classical shareholder activist and a typical German famdeily business investor on the German mid-cap machine manufacturer KUKA is one of the most prominent activist cases of the past years in Germany.

For the first time, this in-depth clinical case study places family business investors in the context of shareholder activists. The contribution to literature of this study is (i) providing detailed insights into the whole investment approach of a shareholder activist in Germany, (ii) examining the specific role of a family business investor as activist shareholder, (iii) analysing the operating and financial performance of the target company prior, during and following the activism process, (iv) bringing this specific German case and its underlying corporate environment into the context of shareholder activism, and (v) comparing the findings of the study with the results of large sample studies.

I.8.3. Third Study: Family Business Investors versus Private Equity Investors – The Case of Continental Europe

„Family Business Investors versus Private Equity Investors – The Case of Continental Europe" enhances the research focus of the second study and complements its findings with a comparison of the investment activities of Continental European family business investors and private equity firms.

With its comprehensive focus on Continental European family business investors, the study perfectly concludes this dissertation and the findings of my previous two studies as well as helps to clarify if research on shareholder activism in Continental Europe should be complemented by family business investors in future as additional study group. Private equity firms are well suited as peer group for the family business investors as these firms also often acquire larger stakes in the target companies – compared to activist hedge funds – and could therefore exert their influence on the companies and its management and supervisory bodies.

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[10] Recent examples of these investment activities of German family investors are the hostile takeovers of Continental by Schaeffler and Volkswagen by Porsche as well as the share purchases of Klöckner & Co. by Knauf, of Douglas Holding by Müller or of Vossloh by family investor Heinz Hermann Thiele ((Lehmann-Tolkmitt and Wattendrup, 2011) and (Becker, 2013)).

The contribution to literature of this study is (i) providing an overview of family business investors as typical element of the Continental European corporate environment, (ii) a review of the existing research on the investment and acquisition activities of family business investors in Continental Europe, (iii) a comparison of the investment activities of family business investors and private equity investors in the context of shareholder activism for the first time, (iv) a comprehensive analysis of the differences and similarities of these investor groups throughout the entire investment process, and (v) a comparison of the findings of this study with relevant large sample studies.

II. A Clinical Study of the Investments of Wyser-Pratte in Continental Europe

Summary[11]

This paper analyses the investments of U.S. activist investor Guy Wyser-Pratte in listed companies in Germany, France, Austria and Switzerland between the years 2001 and 2011. Wyser-Pratte is the best known single activist investor in Continental Europe whose investments have typically been followed intensively by the press. For the first time, this study examines the investment activities of a single activist investor with key focus on Continental Europe and complements the few existing studies on single activist investors and their focus on Anglo-Saxon jurisdictions. The results show that he approaches poor performing companies, i.e. unprofitable and undervalued, and that his investment activities increase the short- and long-term shareholder value. Key differentiator to existing research is the focus of Wyser-Pratte on improving the profitability of his target companies. This new insight can be interpreted as an indicator that value generation by shareholder activism works different in the institutional setting of Continental Europe and it differentiates my study from recent mainly Anglo-Saxon based research.

[11] The chapter II. of this dissertation is largely based on the joint working paper of Bassen/Schiereck/Schüler with the title *A Clinical Study of the Investments of Wyser-Pratte in Continental Europe*

II.1. Introduction

Following the first wave of Anglo-Saxon shareholder activism spreading over to Continental Europe at the beginning of the new millennium, recent data again showed an increase of actions against companies by activist shareholders of 88% between the years 2010 and 2013 with focus on Europe and the U.S. ((Gillan and Starks, 2007), (Linklaters, 2013)). It is expected that alternative investors will continue with actions against European companies searching for cash and low market valuations ((Hirt and Hübner 9/25/2013), (Rozwadowski and Young, 2005)).

The shareholder activism movement has its seeds in the emergence of agency conflicts between shareholders (principals) and the responsible corporate managers (agents) and debuted in the U.S. around the 1970s and 1980s (Jensen, 1986). Favored by changed regulation rules and as successors of the aggressive corporate raiders, hedge funds successively became the key players of global shareholder activism ((Cheffins and Armour, 2011), (Boyson and Mooradian, 2012)). Hedge fund managers swiftly realized that they could actively influence and change managerial decisions as minority shareholders to unlock potential value and maximize their own profits (Marler and Faugère, 2010). Following the dry spell phase during the financial crisis, activism seems to be a lucrative approach more relevant than ever (Hilldrup, 2012).

Due to its U.S. origins, most research focuses on U.S. based shareholder activism and investors; only a few studies analyze this corporate governance issue in the U.K. or even less in Continental European countries. Some studies illustrate the value increasing effects of shareholder activism through positive short- and long-term abnormal stock market returns ((Akhigbe et al., 1997), (Becht et al., 2010a), (Boyson and Mooradian, 2007), (Brav et al., 2008), (Clifford, 2008)).[12] Other studies doubt these positive effects, especially with regard to long-term benefits like an improved operating performance ((Drerup, 2011), (Gillan and Starks, 2007), (Karpoff, 2001)).

The main objective of this study is to tackle primarily two topics which have barely been covered by empirical research so far. First, with Guy Wyser-Pratte I focus my efforts on one single active investor only. There are just a few studies that enable a comprehensive insight into the specific approach, demands and success of one activist investor executing his investment strategy ((Smith, 1996), (Crutchley et al., 1998), (Smythe et al., 2015), (Becht et al., 2010b), (Venkiteshwaran et al., 2010)).[13] All these active investors are focused on Anglo-Saxon markets. In contrast to large-sample studies, an in-depth clinical study helps to examine aspects like the whole investment approach, i.e. from targeting to exiting, and sustainable operating performance in more detail which have not definitely been clarified by studies so far (see for example Bessiere et al. (2010) and their motivation to conduct a clinical study). And second, my analysis

[12] See for example Akhigbe et al. (1997): positive CAR of 9.27% to 23.06% between the first and third year following an activist event; Becht et al. (2010a): positive abnormal returns of 11.4%; Boyson and Mooradian (2007): 9%-11%; Brav et al. (2008): 7%-8%; and a good summary of Clifford (2008).

[13] See Smith (1996), Crutchley et al. (1998), Smythe et al. (2015) concerning the institutional U.S. investor CalPERS, Becht et al. (2010b) on Hermes UK Focus Fund and Venkiteshwaran et al. (2010) on U.S. activist investor Carl Icahn.

focuses on Continental European jurisdictions, especially on Germany, France, Austria and Switzerland. The corporate environments as well as the shareholder rights in these countries considerably differ from Anglo-Saxon jurisdictions like U.K. or the U.S. These differences do influence the effectiveness of the respective activism ((Bessler and Holler, 2008), (La Porta et al., 2000), (Nili, 2014), (Schaefer and Hertrich, 2013)).

Additionally, the amount of research on shareholder activism in Europe, especially with focus on Germany as Europe's largest economy, is still very low and partially differs regarding short- and long-term effects of activism ((Bessler and Holler, 2008), (Drerup, 2011), (Kühne, 2011), (Mietzner et al., 2011), (Schaefer and Hertrich, 2013), (Mietzner and Schweizer, 2014), (Stadler, 2010), (Thamm, 2013), (Weber and Zimmermann, 2013)). The format of this study is based upon the clinical study of Venkiteshwaran et al. (2010) who investigate the ability of famous U.S. activist investor Carl Icahn to generate long term shareholder value.

My results show that Wyser-Pratte approaches poor performing companies, i.e. unprofitable and undervalued, and that his investment activities increase the short- and long-term shareholder value. I determine abnormal returns of 9.4% for a three-day and 6.2% for a 19-months event window. My study results differ from other research with regard to the operating development of the target companies of up to two years following the investment. Compared to the last financial year prior to the approach by Wyser-Pratte, the companies show an increased profitability, higher cash holdings accompanied by a slightly higher dividend payout ratio and decreased leverage. The analysis suggests that Wyser-Pratte focuses his efforts more on improving the profitability of his target companies than on quick cash outs and capital structure adjustments like other activists often do. This new insight can be interpreted as an indicator that value generation by shareholder activism works different in the institutional setting of Continental Europe and it differentiates my study from recent mainly Anglo-Saxon based research. Finally, Wyser-Pratte is less successful in achieving his demands towards the target companies' management and supervisory boards compared to other activist investors.

The analysis proceeds as follows. The next paragraph reviews the literature on shareholder activism followed by some background information about Guy Wyser-Pratte. The following paragraph describes the data collection process and the methodology. The empirical results of the analysis will be presented in the next section followed by a comparison of the findings with other relevant studies. The last paragraph concludes the analysis.

II.2. Literature Overview on Shareholder Activism

Agency conflicts, i.e. opposed interests between managers and shareholders, and the resolution of these conflicts have been the key rationale of shareholder activism ((Gillan and Starks, 1998), (Jensen and Meckling, 1976)). Starting in the 1980s, investor groups like corporate raiders and pension funds increasingly expressed their dissatisfaction with company performances or governance issues through active involvement ((Brav et al., 2008), (Gillan and Starks, 1998)). Changed capital market regulations in the 1990s, especially in the U.S. and triggered by the SEC, made it easier for shareholders to tackle companies and managers. In combination with lower costs for transactions, leverage and communication, shareholders were now allowed to communicate more flexible, get access to corporate shareholder lists and vote more easily for individual board members ((Cheffins and Armour, 2011), (Akhigbe et al., 1997)).

Based on this development, new players entered the stage. Hedge funds and private equity firms stepwise became the most important representatives of activist shareholders and increasingly acted as monitors of corporate performance and agents of change (Gillan and Starks, 2007).

Hedge funds and private equity firms are characterized by some commonalities. Both investors are privately organised limited investment firms, invest large amounts of own capital and have a compensation system which is closely linked to the respective fund performance. Major customers are for example professional mutual, investment and pension funds as well as wealthy individual investors ((Mietzner et al., 2011), (Achleitner et al., 2010)). Hedge funds differ from private equity funds in some points. They could for example use additional financial instruments like derivatives or short selling positions to execute alternative investment strategies and to generate excess returns ((Kühne, 2011), (Rozwadowski and Young, 2005)). Contrary to the acquisition of majority stakes by private equity firms, hedge funds normally acquire minority stakes which rarely exceed 5% of their target companies' equity ((Mietzner et al., 2011), (Schwartzman and Snyder, 2007)).

Focusing on the target firm characteristics, numerous studies identify poor performance, i.e. ROA and ROE, as key criterion of an approach by activists (see for example (Drerup, 2011), (Gillan and Starks, 1998), (Bethel et al., 1998)). Judge et al. (2010) additionally show a negative correlation between profitability and the possibility to become an activist target. Additionally, target firms have a low market valuation, lower growth rates and low leverage ((Cziraki et al., 2010), (Brav et al., 2009), (Ellison et al., 2008)). Contrary to the studies already mentioned, some research finds inconsistent results especially with regard to the profitability criterion. According to these studies, shareholder activists target profitable and financially healthy companies with above average liquidity ((Klein and Zur, 2009), (Klein and Zur, 2006), (Boyson and Mooradian, 2007)).

Focusing on the value enhancing effects of shareholder activism, research is non-ambiguous as well. Large U.S. and European sample studies find these effects especially for the target shareholders and triggered by positive abnormal share price reactions in the course of the activist approach (see for example

(Akhigbe et al., 1997), (Boyson and Mooradian, 2007), (Clifford, 2008), (Mietzner and Schweizer, 2014), (Bessler and Holler, 2008), (Klein and Zur, 2009), (Brav et al., 2009), (Becht et al., 2010a)). Beside short-term effects, some of these studies also mention positive long-term value effects which partially exceed the announcement returns. Compared to that Karpoff (2001) does not confirm these positive long-term effects, Drerup (2011) just describes market neutral returns and Mietzner and Schweizer (2014) even find negative long term buy-and-hold abnormal returns.

The partially ambiguous results of relevant research perfectly express the complexity of the topic shareholder activism and the difficulty to make a clear statement concerning the impact of activism on target companies and their shareholders. The different results are mainly attributed to the varying jurisdictions, i.e. Anglo-Saxon jurisdictions vs. Continental European jurisdictions, and their different corporate governance and environment as well as on the use and quality of adequate data ((La Porta et al., 2000), (Karpoff, 2001)). I therefore decided to focus my analysis on one single shareholder activist only who operates in relatively similar Continental European jurisdictions. Additionally, my study adds relevant information to the sparse research on single shareholder activists. There are only very few studies like Smith (1996) and Crutchley et al. (1998) on the California Public Employees' Retirement System (CalPERS), Carleton et al. (1998) on Teachers Insurance and Annuity Association College Retirement Equities Fund (TIAA-CREF) and Becht et al. (2010b) on Hermes UK Focus Fund (HUKFF) and Venkiteshwaran et al. (2010) on Carl Icahn which acts as the role model of this study. But contrary to my study, they are focusing on investment activities in the Anglo-Saxon region.

II.3. Background on Guy Wyser-Pratte

Guy Patrick Wyser-Pratte, born in June 1940 in Vichy, France, is founder, CEO, President and COO of the employee owned investment company Wyser-Pratte Management Co., Inc. based in New York, United States. The firm is an investment vehicle for individuals or institutions like pension funds or trusts, managing various active investing funds which are focusing on undervalued especially European public listed companies. His major objective is always to achieve an increase in shareholder value following his investment. Generally, he focuses on conglomerates in the metal and defence industry with a high free float and acquires not more than 5% of a company’s outstanding shares. His company specific investment horizon varies from some months to several years. In 1991, Wyser-Pratte resurrected the former family firm, became an independent investment manager and acts as influential activist investor since then.

With his engagement during the Vodafone Mannesmann takeover battle in 1999, he was one of the first foreign investors who brought the investment strategy of shareholder activism to corporate Germany. Answering the question of why he mainly focuses the investments of his EuroValue fund on German corporations, he said in an interview: ”In the United States, poor companies have poor prices. It's a different

situation in Germany. A company's stock can be floundering while real wealth is hidden somewhere in its books, sometimes even for decades. We're interested in that wealth."[14]

II.4. Data Collection and Methodology

According to the main objective of this study, I concentrated the data collection on companies which have actively been targeted by Wyser-Pratte in Continental Europe. To guarantee proper documentation and data availability, I limited the analysis to the period from the year 2001 to 2011. This period has also been chosen due to the fact that it perfectly covers the peak of Wyser-Pratte's activities in Europe.

Compared to U.S. law, Continental European jurisdictions, especially Germany and France, do not require a specific official filing which covers the case and purpose of shareholder engagement (like the U.S. 13D SEC filing). The German legislator only demands the public announcement of a shareholding in a listed company if it exceeds or falls below various thresholds beginning with 3%.[15] The legal requirements in France[16] as well as in Switzerland[17] are quite similar.

The identification of the companies targeted by Wyser-Pratte was hand collected and based on the following approach: first, I run a Factiva search[18] looking for all press articles which incorporated information or statements with regard to Wyser-Pratte; second, I filtered the results for publicly listed companies which had actively been approached by Wyser-Pratte and third, I double checked the pre-selection with the corresponding voting rights announcements – if existing – via the companies' websites. Finally, I found 14 companies which were investment targets during the years 2001 and 2011. The selection primarily included German companies but also companies located in France, Switzerland and Austria.

To conduct a proper analysis of the target companies' operating performance and development prior, during and following the approach by Wyser-Pratte, I composed a control group. My objective was to find one comparable control firm for each target firm in the Continental European corporate environment with equal sector focus and business portfolio as well as unaffected by shareholder activism. But due to the conglomerate like structure of some target companies, I had to assign two control firms per target firm in three cases to properly match their corporate structure. The target firms' analyst reports and its peer group section supported this selection process. Finally, I selected 17 control firms for my group of 14 target firms. As Bloomberg did not provide all necessary financial data, I decided to use hand collected data only to

[14] See Hornig (2005).
[15] See §21 and §26 Securities Trading Act (Wertpapierhandelsgesetz; WpHG).
[16] See § L233-7 Trading Act (Code de commerce).
[17] See §20 Securities Exchange Act (Bundesgesetz über die Börsen und den Effektenhandel; BEHG).
[18] Selected sources are amongst others the leading news agencies Reuters and Dow Jones as well as Germany's leading daily newspapers Bild Zeitung, Die Welt, Frankfurter Allgemeine Zeitung, Handelsblatt and Süddeutsche Zeitung.

calculate the financial ratios of the target and control companies via working through their corresponding annual reports.

II.5. Analyses

II.5.1. Characteristics of the Target Companies

Table II.2. gives an overview of the different characteristics of Wyser-Pratte's target companies, like the time of engagement by year, their security exchange or index and industry affiliation as well as Wyser-Pratte's shareholdings and his particular purpose of engagement.

Table II.2. Characteristics of Wyser-Pratte's Target Companies between 2001–2011

Due to the lack of an equivalent 13D U.S. SEC filing in Continental European jurisdictions, the data has been hand collected in a multi-source approach, i.e. via corresponding voting rights announcements, press coverage, Thomson Reuters, corporate websites. Panel A shows Wyser-Pratte's engagement by year and the industry distribution based on the 4 digit SIC codes. Panel B tabulates the stock exchange or index affiliation and names of the target companies. Panel C presents average key financials of the group of target firms prior to Wyser-Pratte's engagement, Panel D shows the purposes of each engagement stated by Wyser-Pratte. Panel E tabulates the combined size of Wyser-Pratte's shareholdings and Panel F gives an overview of the way of approaching the target companies.

Panel A: Distribution of entry/engagement by year and 4 digit SIC1 industries		
Year	**SIC1 industries**	**Number**
2001	Carburetors, pistons, rings, valve; Radiotelephone Communications	2
2002	Air Transportation, Scheduled; Turbines, turbine Generator Sets	2
2003	Machine Tools, metal Cutting Types	1
2005	Textile Machinery	1
2006	Railroad Equipment	1
2007	Motor Vehicle Parts, accessories; Plastics Products, Nec; Photographic Equipment Supplies; Tour Operators; Skilled Nursing Care Facilities	5
2010	Book Publishing	1
2011	Motor Vehicle Parts, accessories	1
Total		**14**

Panel B: Stock exchange or index listing and name of target firms	
MDAX (Germany): *Rheinmetall, Babcock Borsig, IWKA, Vossloh, Tognum*	5
SDAX (Germany): *Balda, Cewe Color, Curanum*	3
DAX (Germany): *TUI*	1
NEMAX50 (Germany): *Mobilcom*	1
NYSE Euronext Paris (France): *Lagardère, Valeo*	2

SMI Mid Cap Index (Switzerland): *Unaxis*	1
Vienna Stock Exchange (Austria): *Austrian Airlines*	1
Total	**14**

Panel C: Key financials of target firms prior to Wyser-Pratte's Engagement (n=14)		
	Mean	Median
Ø Net income (€m)	-56.6	18.3
Ø EBIT (€m)	3.4	24.6
Ø EBITDA (€m)	252.9	125.4
Ø Assets (€m)	4,350.6	3,050.4
Ø Market Cap at year end (€m)	1,363.6	474

Panel D: Purpose of engagement according to quotes by Wyser-Pratte	
Valuation	10
Business Strategy	7
Corporate Governance	6
Restructuring	3
Asset Sale	6
Block Merger/Higher Offer	2

Panel E: Size of block holding in target firms according to filings and/or quotes	
Mean	4.38%
Median	5.01%
Minimum	0.53%
Maximum	8.8%

Panel F: Individual or partner engagement	
Individual approach	7
With partners	1
Follower	6

Panel A of Table II.2. shows a peak of his activities in the year 2007 and a differentiated industry focus. Based on the 4-digit SIC industry code, the 14 target companies are distributed across 13 different industries. The only industry which appears twice is the "Motor Vehicle Parts" sector. This suggests that Wyser-Pratte like other shareholder activists does not necessarily focus on specific industries but on other parameters. I will identify Wyser-Pratte's rationales in the course of this study.

Wyser-Pratte's interest in mainly German mid-cap companies is indicated in Panel B and Panel C. More than half of the targets are part of Deutsche Börse's most important mid and small cap stock indices, MDAX and SDAX. Other companies are part of equivalent indices of other major European stock

exchanges, like the French NYSE Euronext, the Austrian Vienna Stock Exchange and the SIX Swiss Exchange.

Based on the lack of an 13D equivalent filing in Continental Europe, the purposes of the engagements as shown in Panel D are hand collected based on press statements by Wyser-Pratte or his affiliates. I used the categorization of Venkiteshwaran et al. (2010) and Greenwood and Schor (2009) as role models and adapted the 12 respectively 9 categories as follows:

1. *Valuation* (identification of undervaluation; demanding increase of shareholder value towards boards)
2. *Business strategy* (propose change of existing business strategy through focus on profitable businesses)
3. *Corporate Governance* (criticize the track record, behavior and/or qualification of members of the Executive and/or Supervisory Board; trying to replace members)
4. *Restructuring* (criticize the slow efforts in restructuring specific business parts)
5. *Asset Sale* (demand the sale of specific business parts)
6. *Block Merger/Higher Offer* (demand an increased offer price/valuation during offer periods)

The distribution of the different categories perfectly shows the strategic approach of Wyser-Pratte when a company appeared on his radar screen. In most cases he criticised the undervaluation of the target accompanied by demanding a changed business strategy, i.e. focus on profitable business segments, and the sale of unprofitable segments. Compared to the approach of the legendary shareholder activist Carl Icahn who started most of his investments as passive investor (Venkiteshwaran et al. 2010), Wyser-Pratte followed a more aggressive approach. Some examples show that he publicly informed the target company's management about his shareholding via press statements before the company received the official voting rights announcements.[19] This approach is in line with the legal requirements but demonstrates the hostility of his investment style.

Panel E reports the average size of his shareholdings in the target companies. Due to the lack of some voting rights announcements[20], I also relied on the shareholding data mentioned by Wyser-Pratte or his affiliates via press statements. According to the data, the average shareholding in the target companies amounts to 4.38%, with a median of 5.01%. The highest shareholding he had during the analysis period was in the German KUKA AG (former IWKA AG) with 8.8%. With his shareholdings Wyser-Pratte is in line

[19] See for example the press coverage with regard to the purchase of shares in Balda AG on 11 January 2007 or in CEWE Stiftung & Co. KGaA (former CEWE COLOR Holding AG) on 15 March 2007.

[20] For example, there is no need to declare a shareholding below the threshold of 3% in Germany; see §21 and §26 Securities Trading Act (Wertpapierhandelsgesetz; WpHG).

with evidence presented by Katelouzou (2013) who finds average shareholdings of activist hedge funds in German companies of between 3.53% and 6.44%.[21]

Finally, in Panel F I examine if Wyser-Pratte approached his target companies as first mover, follower or as part of a so called "wolf-pack" with other activist hedge funds. 50% of his engagements are based on an individual approach and in 43% of his investments he followed other activist investors. I identify just one case where Wyser-Pratte was part of an investment group who approached the French Valeo company.

II.5.2. Key Performance Indicators of Target Companies prior to Engagement

To analyse the operating and financial performance of the target companies prior the engagement by Wyser-Pratte, I calculated some key performance indicators focusing on market valuation, profitability, leverage, cash and capital expenditures (see also definitions in Table II.3.).

Table II.3. Definitions of selected Key Performance Indicators

All data have been hand collected from the corresponding financial section of the annual reports of the target and control companies. I used the reports of each financial year prior to the engagement by Wyser-Pratte as well as both reports of the two years following the activist event. Beside the ordinary financial ratios, I conducted the remaining ratios as follows:

Key Performance Indicators	Definition
Capex / Assets	= Sum of investments in tangible and intangible assets / Assets
Cash / Assets	= Cash at year end / Assets
Dividend Payout Ratio	= Dividends paid / Net income
Market to Book Value	= Market capitalization at year end / Equity
ROA	= Net income / Assets
ROE	= Net income / Equity
Total Asset Turnover	= Sales / Assets

Table II.4. shows these indicators of the respective financial year prior to the year of engagement and compares the figures to those of my control group.

[21] 3.53% average minimum and 6.44% average maximum shareholdings.

Table II.4. Definitions of selected Key Performance Indicators

*This table shows various financial performance indicators to characterize Wyser-Pratte's target companies compared to the control group. The indicators are based on the companies' annual reports of the financial year prior to the engagement. For the definition of the data, please see Table II.3. The different columns show the number of observations, the means and medians of each variable as well as the corresponding test statistics. I conducted the t-Test for the difference in mean and the non-parametric Mann-Whitney U-Test for the difference in median between the target companies and the control group. ***, **, * and # indicate significance at the 0.1%, 1%, 5% and 10% levels.*

		Wyser-Pratte Sample		**Control Sample**		***t*-Test (*Z*-Test) for difference in means (medians)**
Key figures		**Obs.**		**Obs.**		
Pre 1 year BHAR	mean	14	-0.213	17	-0.015	-1.911#
	median		-0.295		-0.034	2.342*
ROA	mean	14	-0.009	17	0.037	-2.297*
	median		0.015		0.028	1.469
ROE	mean	14	-0.016	17	0.088	-1.800#
	median		0.056		0.097	1.429
Pretax Income / Assets	mean	14	0.000	17	0.060	-2.279*
	median		0.026		0.040	1.548
EBIT / Sales	mean	14	0.001	17	0.066	-2.265*
	median		0.029		0.029	1.270
EBITDA / Assets	mean	14	0.077	17	0.109	-1.364
	median		0.084		0.094	1.350
Total Asset Turnover	mean	14	1.026	17	1.156	-0.653
	median		0.956		0.994	0.079
Dividend payout ratio	mean	14	0.345	17	-0.427	0.709
	median		0.308		0.330	0.161
Capex / Assets	mean	14	-0.112	17	-0.042	-1.285
	median		-0.046		-0.024	1.310
Cash / Assets	mean	14	0.079	17	0.121	-1.376
	median		0.064		0.080	0.754
Interest-bearing Debt / Equity	mean	14	1.191	17	1.021	0.406
	median		0.942		0.492	-0.714
Interest-bearing Debt / Assets	mean	14	0.265	17	0.191	1.280
	median		0.246		0.147	-1.389
Market to Book Value	mean	14	1.607	17	2.911	-1.613
	median		1.330		2.017	2.143*

The shares of the target companies underperform the control group with a mean (median) return of -21% (-30%) compared to -1% (-3%). The differences between both the medians and means are statistically significant. I also identify a statistically significant underperformance with regard to the means of most of the profitability indicators, like return on assets, return on equity, pre-tax income to assets and the operating margin (EBIT to sales). The differences of the market to book value medians are also statistically significant. Overall it can be stated that the target companies of Wyser-Pratte are less profitable, have less cash (cash to assets ratio), higher leverage (debt to equity and debt to assets ratios) and lower valued (market to book value) than the companies of the control group.

In addition to the analysis above and to predict if a company could probably fit into Wyser-Pratte's target scheme based on specific performance indicators, I conducted a binomial logistic regression with selected indicators.[22] The results are reported in Table II.5.

Table II.5. Definitions of selected Key Performance Indicators

*This table reports the results of the binomial logistic regression to predict the probability that a company could become a target of Wyser-Pratte. The column shows a set of selected key performance indicators (see also Table II.3.) which consists of the target companies and the control group. ***, **, * and # indicate significance at the 0.1%, 1%, 5% and 10% levels.*

Constant	-0.293
Pre 1 year BHAR	-1.817
ROE	-3.007
Dividend payout ratio	0.160
Cash / Assets	-3.509
Interest-bearing Debt / Assets	1.517
Obs.	31
Likelihood Ratio	35.43
Hosmer Lemeshow-Test	0.168
Pseudo R2 (Nagelkerkes Rsq)	0.279

[22] Logistic regression tests with all or a large selection of the presented performance indicators in Table II.4. suggested a very high correlation between the figures. So, I decided to limit the indicators to the most relevant.

As independent variables I test the one-financial-year pre-investment buy and hold abnormal return, return on equity, dividend payout ratio, cash holdings (cash to assets) and leverage (debt to assets). Despite an adequate quality of the model (see *p*-value of *Hosmer Lemeshow*-Test of above 0.05), the results of the regression are not statistically significant.

A careful interpretation of the results comes to the conclusion that there is an increased likelihood of becoming a Wyser-Pratte target if the specific company shows an unsatisfying stock price performance and operates less profitable as well as has low cash holdings and a high leverage. This analysis is in line with the findings concerning the target firm characteristics mentioned above (and as reported in Table II.4.). But one unexpected finding is the relation between the cash holding and the leverage which is contrary to most research. Numerous recent studies assign activist shareholders a strict focus on corporate capital structures which are not beneficial for shareholders, i.e. low payout ratio, high cash holdings and low leverage (see for example the statements on target firm characteristics of (Boyson and Mooradian, 2012), (Brav et al., 2009), (Cziraki et al., 2010)). According to my analysis, Wyser-Pratte seems to pay more attention to undermanaged and undervalued companies.

II.5.3. Market Reactions in the Course of Wyser-Pratte's Target Company Entries

To analyse the corresponding market reactions in the course of the public announcements of the engagements of Wyser-Pratte, I conducted short-term event studies focusing on three different event windows. If the specific entry date was missing due to the lack of filing data, I defined the day of the first public announcement, e.g. via press statements, of the investment as event day (t=0). I used a standard market model to calculate the cumulative abnormal returns (*CAR*) as well as the mean cumulative abnormal returns (*CAAR*).[23]

Table II.6. Short Run Event Studies surrounding the Specific Engagement Date

*This table shows the results of the short-term event studies across different time windows. I used the standard market model with the Stoxx Europe 600 as benchmark index. Panel A includes all target companies, Panel B one delisted company, Panel C acquired companies and Panel D survived companies. Each panel contains the mean cumulative abnormal return (CAAR), the statistic values of the t-Test and the Wilcoxon Signed Rank-Test and the number of positive versus negative returns. ***, **, * and # indicate significance at the 0.1%, 1%, 5% and 10% levels.*

[23] My standard market model is based on an estimation window of more than 250 trading days ending 10 days prior to the event day (t=0). My benchmark index was the Stoxx Europe 600 representing 600 large, medium and small public listed European companies. With the parameters calculated via the estimation window, I was able to compute the expected, abnormal and cumulative abnormal returns for the different event windows. The abnormal return is the difference between the target company's return and the expected return.

Panel A: All Wyser-Pratte Targets N=14	**Event windows in days**		
	[-1,+1]	**[-10,+10]**	**[-10,+30]**
CAAR	9.37%	11.48%	13.30%
t-value	4.41***	2.45*	2.60*
Z-score	3.045**	1.977*	2.166*
P/N	12/2	11/3	10/4
Panel B: Delisted Targets N=1			
CAAR	23.08%	34.70%	25.58%
t-value	-	-	-
Z-score	-	-	-
P/N	1/0	1/0	1/0
Panel C: Acquired Targets (N=3)			
CAAR	3.01%	1.69%	3.60%
t-value	0.916	0.140	0.295
Z-score	0.535	0.000	0.000
P/N	2/1	1/2	½
Panel D: Survived Targets (N=10)			
CAAR	9.88%	12.10%	14.98%
t-value	4.447**	2.403*	2.434*
Z-score	2.701**	2.090*	2.191*
P/N	9/1	9/1	8/2

As presented in Panel A of Table II.6., I find significant abnormal returns for all target companies and across all three event windows: 9.4% (for the three-day event window), 11.5% (21-day event window) and 13.3% (for the 41-day event window). According to the analysis of Venkiteshwaran et al. (2010), I divided the group of target companies into three subgroups and calculated the abnormal returns again, i.e. in companies which were delisted within 18 months following Wyser-Pratte's investment, acquired companies and companies which survived more than 18 months.

My findings show the highest positive abnormal returns for the only one delisted company[24] (34.7% for the 21-day event window), the lowest abnormal returns for the three acquired companies (1.7% for the 21-day event window) and – compared with the results of Panel A – higher abnormal returns for the ten surviving companies of between 9.9% to 15%. The results are therefore in line with the results of Venkiteshwaran et al. (2010) concerning the announcement market returns for Carl Icahn as well as with

[24] The company was the German industrial conglomerate Babcock Borsig AG. The company announced on 7 January 2002 that Wyser-Pratte purchased around 5.01% of the company's shares. Babcock Borsig filed for insolvency on 4 July 2002.

the positive results of other studies on shareholder activism in Germany.[25] But my results should be handled with care due to the limited size of the sample group and the fact that only the results of Panel A (all companies) and Panel D (surviving companies) are significant.[26]

II.5.4. Changes in Medium Term Financial and Operating Performance

As there are still different opinions regarding the medium- and respectively long-term effects of shareholder activism on target companies, I also conducted an analysis to determine either positive or negative long term changes of the companies' financial and operating performance. Therefore, I focused my analysis on those target companies that survived (i.e. remained independent) the investment entry of Wyser-Pratte for at least 18 months.

The analysis is based on the same key financial indicators as described in Table II.4. and comprises two different time windows. The first time window shows the changes from the last financial year prior to the investment of Wyser-Pratte [t=-1] to the first financial year following his investment [t=+1]. The second time window contains the changes from the first financial year [t=+1] to the second financial year [t=+2] following the investment.

Table II.7. Changes in Target Firm's Financial and Operating Performance

*This table presents changes of various financial performance indicators (see also Table II.3.) of the target companies and the control samples. It contains companies that are not delisted or acquired within 18 months following the engagement by Wyser-Pratte. The first time window ([t-1] – [t+1]) shows changes from the financial year prior to the engagement to the first financial year following the engagement. The second time window ([t+1] – [t+2]) reports the changes from the first year to the second year following Wyser-Pratte's engagement. The columns ΔX and ΔY show the mean difference of each variable for both sample groups across the two time windows. The last column presents the difference in means, i.e. between the row ΔX and ΔY. ***, **, * and # indicate significance at the 0.1%, 1%, 5% and 10% levels.*

		Wyser-Pratte Sample		**Control Sample**		**Difference in Mean**
Key figures	**Period**	**N**	**ΔX**	**N**	**ΔY**	**H0:Δ = 0**
Δ*ROA*	[t-1] – [t+1]	12	-0.0225	15	-0.0070	-0.0155
	[t+1] – [t+2]	12	0.0777	15	-0.0030	0.0807
Δ*ROE*	[t-1] – [t+1]	12	-0.8423	15	-0.0328	-0.8095
	[t+1] – [t+2]	12	0.9183	15	-0.0222	0.9405

[25] See for example Bessler and Holler (2008) with *CARs* of 1% [-1,+1] to 3.5% [-15,+15], Drerup (2011) with *CARs* of 1.22% [-1,+1] to 3.47% [-20,+20] and Stadler (2010) with *CARs* of 3.27% [-2,+2] to 8.75% [-20,+20].

[26] As expected, the significance of the used statistic tests highly depends on the respective sample size which is demonstrated by my results as well.

Δ*Pretax Income / Assets*	[t-1] – [t+1]	12	-0.0204	15	-0.0106	-0.0098
	[t+1] – [t+2]	12	0.0786	15	-0.0056	0.0842
Δ*EBIT / Sales*	[t-1] – [t+1]	12	-0.0948	15	-0.0125	-0.0822
	[t+1] – [t+2]	12	0.1465	15	-0.0033	0.1498
Δ*EBITDA / Assets*	[t-1] – [t+1]	12	0.0816	15	-0.0020	0.0836
	[t+1] – [t+2]	12	-0.0480	15	-0.0046	-0.0434
Δ*Total Asset Turnover*	[t-1] – [t+1]	12	-0.0547	15	0.1006	-0.1553
	[t+1] – [t+2]	12	0.1187	15	-0.0574	0.1761
Δ*Dividend payout ratio*	[t-1] – [t+1]	12	-0.1876	15	0.7504	-0.9381
	[t+1] – [t+2]	12	0.1619	15	4.2190	-4.0570
Δ*Capex / Assets*	[t-1] – [t+1]	12	0.0645	15	0.0137	0.0508
	[t+1] – [t+2]	12	0.0134	15	0.0043	0.0091
Δ*Cash / Assets*	[t-1] – [t+1]	12	-0.0034	15	0.0095	-0.0129
	[t+1] – [t+2]	12	0.0423	15	0.0023	0.0400
Δ*Interest-bearing Debt / Equity*	[t-1] – [t+1]	12	1.6238	15	-0.1763	1.8001
	[t+1] – [t+2]	12	-1.9067	15	-0.0286	-1.8781
Δ*Interest-bearing Debt / Assets*	[t-1] – [t+1]	12	0.0305	15	-0.0003	0.0308
	[t+1] – [t+2]	12	-0.0919	15	-0.0117	-0.0803
Δ*Market to Book Value*	[t-1] – [t+1]	12	-0.1610	15	-1.2600	1.0990
	[t+1] – [t+2]	12	0.1967	15	0.0621	0.1347

As reported in Table II.7., I do not find any statistical significant difference between the target companies and the control group over the two time windows; the limited sample size can be one reason.[27] Apart from that the analysis shows some important insights. It can be stated that nearly all profitability indicators of the target companies worsen in the first time window and improve in the second time window compared to the control group. With focus on the target companies only, the dividend payout ratio shows the same development, i.e. decrease in the first time window and increase in the second. But compared to the control companies, the ratio still lags behind. After decreasing in the first time window, the detected cash holdings improve during the second time period and reach a higher level than the control companies. The leverage shows an opposite development with relative lower debt holdings at the end of the second financial year [t=+2].

[27] I also adapted the control group with regard to surviving companies and therefore excluded two companies.

Summarising the qualitative results carefully, Wyser-Pratte's targets become better performing companies at the end of the second year following the activist approach. The higher profitability goes in line with an increased cash flow which is reflected in a higher dividend payout ratio as well as higher cash holdings. Additionally, the target companies take actions to lower their leverage.

In addition to the analysis of the medium-term financial and operating performance, I looked into the share price performance of the target companies starting one month prior Wyser-Pratte's investment [t=-1] until 18 months after the initial filing [t=+18].[28]

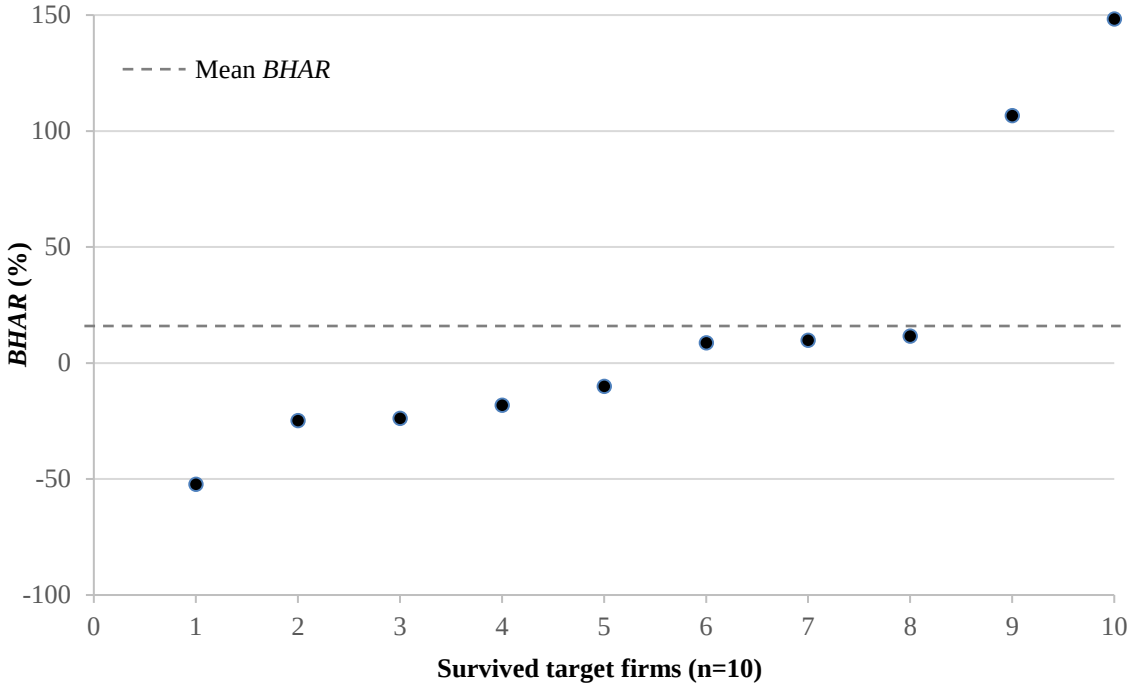
Table II.8. Long-Term Post Performance

*This table reports the long-term post performance of the target companies' shares. I used the Stoxx Europe 600 as benchmark index. The time window consists of one month prior to the engagement date to 18 months following the engagement [-1,+18]. The columns contain all target companies as well as the acquired and survived companies. For each group, I present the number of companies, the mean abnormal buy hold return, the statistic values of the t-Test and the Wilcoxon Signed Rank-Test and the number of positive versus negative returns. ***, **, * and # indicate significance at the 0.1%, 1%, 5% and 10% levels.*

Market Model mean Buy Hold Abnormal Returns (BHAR) for all Targets over 19 Months [-1,+18]			
	All Targets	**Acquired Targets**	**Survived Targets**
N	14	3	10
BHAR	6.24%	0.07%	15.51%
t-value	0.402	0.004	0.780
Z-score	-0.408	0.000	-0.153
P/N	7/7	2/1	5/5

[28] Like my short term event studies, I divided the analysis into three different subgroups and calculated the Buy Hold Abnormal Returns (*BHAR*) and mean Buy Hold Abnormal Returns (*BHAAR*) for all target companies, the three acquired companies and the ten surviving companies. To calculate the returns, I used the Stoxx Europe 600 index as benchmark again.

Figure II.1. Buy Hold Abnormal Returns (BHAR) for survived Targets (n=10) over 19 Months [-1,+18]



As Table II.8. shows, the returns are not statistically significant for all groups but in line with the results of my short term event studies. All target companies show mean *BHAR* of 6.2%, the acquired companies have the worst mean *BHAR* (0.07%) and the surviving companies perform best with 15.5% mean *BHAR*. Figure II.1. shows the distribution of the *BHAR* of the survived target firms with a range from -52,3% to 148,2%. Additionally, the figures illustrates that half of the survived target companies have negative BHAR only and that the positive mean BHAR mainly depends on two surviving firms with very high BHAR.

II.5.5. Success Rate of Wyser-Pratte's Activism

Beside financial and operating improvements as well as outperforming share prices, a closer look on the more qualitative outcome of Wyser-Pratte's active engagements offers additional insights. I compared his demands which he publicly made in the course of each company engagement with the actual outcome of each case up to two years following his investment. Based on the categories I presented in Panel D of Table II.2., I run a Factiva search for each target company and focused on articles which gave evidence concerning the fulfilment of the stated demands.

Table II.9. Success Rate of Wyser-Pratte's Activism by Outcome

This table presents the success rate with regard to the stated purposes by Wyser-Pratte in the course of each company engagement. The success rate consists of the achieved, failed and indefinite outcome in relation to all stated purposes. Panel A shows the success rate for all target companies and Panel B reports the success rate for the target companies that survived the engagement by at least 18 months.

Panel A: Success Rate of Wyser-Pratte's Activism with All Firms

Publicly stated purpose tabulation across all activist engagements	**# Total**	**# Achieved**	**# Failed**	**# Indeterminate**
Valuation	10	2	5	3
Business Strategy	7	2	4	1
Corporate Governance	6	1	4	1
Remind restructuring	3	0	2	1
Asset Sale	6	2	3	1
Block merger/higher offer	2	1	1	0
Total	**34**	**8**	**19**	**7**
% of Objectives Met/Failed/Indeterminate		**23.53%**	**55.88%**	**20.59%**

Panel B: Success Rate of Wyser-Pratte's Activism with Survived Firms

Publicly stated purpose tabulation across all activist engagements	**# Total**	**# Achieved**	**# Failed**	**# Indeterminate**
Valuation	6	1	3	2
Business Strategy	5	2	2	1
Corporate Governance	5	1	3	1
Remind restructuring	3	0	2	1
Asset Sale	6	2	3	1
Block merger/higher offer	0	0	0	0
Total	**25**	**6**	**13**	**6**
% of Objectives Met/Failed/Indeterminate		**24.00%**	**52.00%**	**24.00%**

As reported in Table II.9., the frequency analysis shows an overall success rate of 23.5% and a failure rate of 55.9%. Wyser-Pratte was especially successful with regard to increase the target companies' valuation, to change their business strategy and to force asset sales. On the other side, he failed with most of these objectives, especially with the several times stated objective to remove members of the supervisory and/or executive board. The findings do not change much if I focus the analysis on target companies which remain independent for more than 18 months following the engagement. The success rate stays nearly the same (24%) and the failure rate only slightly decreases (52%). The high amount of failed attempts to force personnel changes (see category "Corporate Governance") in the managing and/or supervisory boards of the targets firms can be an indication for the distinctive characteristic of the Continental European corporate environment and its difficulty for minority investors to exert influence as well as for the activist's strategy

to use this angle to put pressure on the target firms as a whole in the knowledge that this specific approach will fail in most instances.

II.6. Comparison of my Results with relevant Research

This study examines the investment activities of a single activist investor with key focus on Continental Europe for the first time. Key differentiator of my results to existing, mainly Anglo-Saxon based, research is the focus of Wyser-Pratte on improving the profitability of his target companies instead of changing their capital structure. This assumption is based on my findings concerning cash holding, dividend payout ratio and leverage which are contrary to other major studies like for example from Boyson and Mooradian (2007), Brav et al. (2009), Clifford (2008) or Klein and Zur (2006). These studies report effects like cash reductions through higher dividend payments and an increased leverage which proof the positive effect of shareholder activism on agency conflicts and shareholder value.[29] But the analysis of Wyser-Pratte's target companies shows increased cash holdings accompanied by a slightly higher dividend payout ratio[30] and decreased leverage. This approach can be interpreted as an indicator that value generation by shareholder activism works different in the institutional setting of Continental Europe which can probably take more time but will lead to better performing companies with stable cash flows and capital structures to increase both the cash holdings for further investments and the dividend payout. This approach is in line with the detected target firm characteristics[31] (see Table II.4.) as well as with the study of Mietzner and Schweizer (2014) who state that "hedge funds (…) are not able to enhance shareholder value by reducing agency costs" in Germany.

Other results of my study do not differ much from existing research. Equivalent to activist investors in Anglo-Saxon jurisdictions, Wyser-Pratte focuses his investment activities on poor performing companies (compare for example with (Bebchuk et al., 2015), (Bethel et al., 1998), (Drerup, 2011), (Gillan and Starks, 1998), (Karpoff, 2001)). The short- and long-term share price reactions do also not differ from other studies. I determine for example abnormal returns of 9.4% for a three-day and 6.2% for an 19-months event window[32] which provide clear evidence for the shareholder value enhancing effect of Wyser-Pratte's activism.

Looking at Wyser-Pratte's success respectively failure rate of 23.5% and 55.9% in enforcing his demands towards the target companies' boards, my findings indicate that he demands the same topics as

[29] See Jensen (1986) who mentioned that cash payouts to shareholders could reduce potential agency conflicts.
[30] But the ratio still underperforms the control companies.
[31] Higher likelihood to become a target company with a low cash level and high leverage.
[32] For comparison see for example Becht et al. (2010a) with 11.4% long term abnormal returns, Boyson and Mooradian (2007) with mean *CAR* of 8.13% in a 51-days event window, Akhigbe et al. (1997) with *CAR* of 9.27% at the end of the first year following an activist event.

other activists[33] but is less successful compared to the results of the mainly Anglo-Saxon focused studies.[34] One comprehensible reason for the low success rate could be the distinctive characteristic of the German – or in the broadest sense Continental European – corporate environment especially compared to Anglo-Saxon jurisdictions.[35] The German corporate environment consists of a vast amount of small and medium sized public listed companies often owned and/or controlled by their founding families as well as headed by frequently co-determined supervisory boards. Despite the renunciation of the so-called "Deutschland AG" during the past decade, this special model of ownership and control still limits the influence or activities of minority shareholders like activist hedge funds in Germany ((Bessler and Holler, 2008), (La Porta et al., 2000), (Schaefer and Hertrich, 2013), (Thamm, 2013)).[36]

Finally, I separately compare my major findings with the few existing research on single activist investors. Smith (1996) investigates the investment approach of CalPERS, the California Public Employees' Retirement System, and identifies firm size, i.e. market value of equity, and the level of institutional shareholders as key criteria of becoming an CalPERS target. Becht et al. (2010b) who analyse the activities of the Hermes UK Focus Fund find poor share price performance as being the decisive target characteristic which is generally in line with my study outcome. U.S. activist investor Carl Icahn, analysed by Venkiteshwaran et al. (2010), focuses his engagements on companies with higher leverage and lower dividend payout ratios which partially applies to my results as well.

With positive short- and long-term share price reactions I demonstrate the value enhancing effects of the shareholder activism by Wyser-Pratte. Smith (1996) mentions that the value effects depend on the outcome of the engagement by CalPERS. Successful activism especially with regard to changes of the governance structures leads to an increase in shareholder wealth.[37] Smythe et al. (2015) examine the basis for the value enhancing activism of CalPERS and find significant positive value effects based on the targets'

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[33] See for example Bratton (2007): asset sale or spin-off, change of corporate strategy and increase cash payout or Pearson and Altman (2006): asset sale, increase dividend, share buyback, board representation and changes of corporate governance structures.

[34] See for example Boyson and Mooradian (2007): 70% success rate to get a board representation; Brav et al. (2008): overall success rate of around 66%; Girard (2009): overall success rate of 45%; Klein and Zur (2006): overall success rate of 60%; Kühne (2011): rate of at least partial success of 53%.

[35] See Katelouzou (2013) who mentions that "there is some evidence that the legal environment has an impact on the incidence and magnitude of global hedge fund activism".

[36] The influence of the different corporate environment in Germany (and in Continental Europe) is supported by the fact that Wyser-Pratte holds only below average shareholdings in his target companies which limits his power to enforce his demands towards the management (Shleifer and Vishny, 1986). His average shareholding of 4.38% is absolutely in line with the findings of Katelouzou (2013) who determines a range of average minimum and maximum shareholdings of activist hedge funds in Germany of between 3.53% and 6.44% but it is significantly below the range of all analyzed countries (of between 6.10% and 11.54%).

[37] Two-day event window with mean *CAR* of +1.06% for sample firms that adopt CalPERS's shareholder resolutions or execute CalPERS initiated governance changes.

poor prior stock performance and the smaller firm size.[38] Restructuring activities and top executive changes initiated by Hermes also generate large excess returns.[39] And Venkiteshwaran et al. (2010) find value enhancing market reactions based on Icahn's activities as well.[40]

II.7. Conclusion

The first study examining the investment activities of a single activist investor in Continental Europe shows that a shareholder activist could also successfully execute his investment strategy in a corporate environment which is quite different from Anglo-Saxon jurisdictions. My study provides a new insight according to which Wyser-Pratte focuses his investment activities on improving the profitability of his target companies. This can be interpreted as an indicator that value generation by shareholder activism works different in the institutional setting of Continental Europe which will probably take more time but could lead to better performing companies and higher returns for the shareholder activists in the long run. This approach is in stark contrast to the common focus of shareholder activists on short-term capital structure adjustments and therefore differentiates my study from recent mainly Anglo-Saxon based research.

[38] The results of the OLS regression of Smythe et al. (2015) show a significant negative correlation between the dependent variable *CAR* – which is the abnormal estimated return of firms targeted by CalPERS and computed over a 3 day event window [-1,+1] – and the targets prior stock performance (the industry adjusted buy and hold return for the 5 years prior to targeting) and the firm size (the inflation adjusted log of the target's book value of assets).

[39] 11-day event window with mean *CAR* of +6.66% as largest excess return triggered by restructuring activities, including sales of assets and divisions; 7-day event window with mean *CAR* of +6.09% triggered by changes of CEO and chairmen; events with confounding information are excluded.

[40] Range from three-day event window with mean *CAR* of +6.93% to 41-day event window with mean *CAR* of +16.6%.

III. Shareholder Activism by Family Business Investors: The Clinical Study of German KUKA AG

Summary

This study should close the research gap concerning the potential different proceedings of family business investors and Anglo-Saxon style investors. Therefore, I analyse the confrontation between the German machine manufacturer KUKA, U.S. shareholder activist Wyser-Pratte and the German family company Grenzebach between 2003 and 2011. The analysis shows that both investors are successful in getting the boards to acquiesce to their demands which lead to massive divestures, an improved profitability, the three times replacement of KUKA's CEO and different changes of the supervisory board composition. However, the analysis of the stock returns shows deterioration for both investors.

III.1. Introduction

Compared to the United States, shareholder activism is a relatively new phenomenon in corporate Germany which first appeared at the beginning of the new millennium in the course of the Mannesmann/Vodafone takeover battle. Due to a different corporate governance system, a high level of cross-shareholdings within the corporate environment and the frequent appearance of family business investors as active investors, German shareholder activism cases partially differ from typical cases in other jurisdictions, like the United States or the United Kingdom.

Maybe the most prominent case which perfectly suits for the analysis of a confrontation with a classical shareholder activist and the active engagement of a typical German family business investor is KUKA AG ("KUKA"). The German mid-cap machine manufacturer KUKA - which was renamed in 2007 from IWKA AG[41] - became the investment target of the well-known U.S. hedge fund activist Wyser-Pratte in 2003 and the family owned plant engineering company Grenzebach Maschinenbau GmbH ("Grenzebach") in 2008. Following his share purchase, Wyser-Pratte primarily forced the KUKA management to break-up the company's conglomerate structure. Grenzebach on the other side acquired step-by-step a blocking minority stake in KUKA and demanded for an adequate board representation and business expansion. In December 2014, it became public that Grenzebach sold all shares in KUKA to the Voith Group, another German family owned engineering company. Wyser-Pratte left the supervisory board of KUKA in June 2015. It is not clear if he still holds shares in KUKA as his last holdings were below the notifiable threshold level of 3%.

The detailed analysis of KUKA prior, during and following the activism process and a comparison of these results with peers and large sample studies give evidence about the success and the impact of shareholder activism on the target company. Furthermore, the clinical study highlights the specific role of family business investors in Germany as activist shareholders and helps to subsume this specific German case into the broader context of shareholder activism.

This study is structured as follows. Paragraph 2 informs about the origins and key players of shareholder activism. Paragraph 3 reviews the current research. Paragraph 4 gives additional background information about KUKA, Wyser-Pratte and Grenzebach as well as highlights the major events of the whole confrontation between the years 2003 and 2011. Paragraph 5 reviews the study's methodology and data collection. Paragraph 6 presents the results of the analysis and paragraph 7 concludes the study.

[41] For the sake of convenience and due to the renaming in 2007, I name the company KUKA.

III.2. The Origins of Shareholder Activism and its Current Major Representatives

Shareholder activism is today perceived as the effort of different investors, for example hedge funds, private equity firms, pension funds, mutual funds, or individual investors, to increase their return via actively influencing the target company's management and supervisory board as well as its corporate governance structure (see for example Schwartzman and Snyder, 2007).

This understanding of shareholder activism is mainly rooted in the social rights movements in the U.S. during the 1940s to 1960s ((Thompson and Davis, 1997), (Vogel, 1983)) where more and more shareholders, especially individual investors, became interested in the monitoring of social, economic and governance issues focusing on the companies they invested in. In the 1980s, other investor groups entered the stage as active investors, like corporate raiders, pension funds, insurance companies, labour unions or strategic investors (Brav et al., 2008). These shareholder groups became active when they were for example dissatisfied with the performance of the company or its board of directors or when the company's governance structure limited a sufficient control of the management.

The elimination or at least limitation of these agency conflicts have been the main rationale for shareholder activism within the last decades. The tool of active involvement helps to restrict the management's possibilities to act in their own interest but is unequally executed by different shareholders ((Jensen and Meckling, 1976), (Gillan and Starks, 1998), (Nordén and Strand, 2011)). The landscape of shareholder activism advanced in the 1990s due to changed regulations by the U.S. Securities and Exchange Commission (SEC). Shareholders were now allowed to communicate more flexible, get access to corporate shareholder lists and vote more easily for individual board members (Akhigbe et al., 1997). Due to additional regulative changes, as new diversification requirements, insider trading regulations and conflict of interest guidelines, institutional investors engaged themselves in fewer activist cases (Brav et al., 2008).

According to the changed regulations for mutual and investment funds, fund managers started to look for profitable alternative investment vehicles. These developments in combination with overall decreased financial transaction, research, communication and leverage costs, benefited the whole alternative investment sector, especially the hedge fund and private equity industry (Cheffins and Armour, 2011). As Gillan and Starks (2007) mentioned, these fund types have become increasingly important players in financial markets, particularly in their capacity as monitors of corporate performance and agents of change. The investment philosophy of active hedge funds and private equity funds is in most instances determined to influence the target company, its management and corporate governance in the shareholders' interest (Mietzner et al., 2011). The corresponding compensation of the fund managers is in both cases mainly based on the funds' performance (Achleitner et al., 2010).

Hedge funds differ from private equity funds in some points. They employ various investment strategies (see for example Rozwadowski and Young, 2005), have their own capital at stake and are using

additional financial instruments to improve their returns or limit their losses, like derivatives and short selling positions. Generally, the funds invest only limited amount of money to acquire minority stakes (normally 5% at the most) in the targeted publicly listed company. In contrast, the main investment activities of private equity funds are the provision of early stage venture capital and equity capital for buyouts (Wright et al., 2009). Therefore, private equity funds typically target private companies or they invest into publicly listed firms to take them private afterwards (Subiotto, 2006). According to their business model, private equity funds acquire major stakes or become principal shareholder in basically strong companies to achieve an adequate supervisory board representation and influence the corporate strategy in their sense, for example via restructuring measures. Due to their large invested amount of money, a profitable exit strategy is very important for private equity funds ((Schwartzman and Snyder, 2007), (Thomas and Young, 2006)).

According to the specifics presented above, it is comprehensible that most activist cases as well as the corresponding large sample studies are associated with hedge funds initiated activism. Activist hedge funds benefit from a shorter investment horizon, the use of various financial instruments and less invested capital. But as this clinical study shows shareholder activism could also be initiated by other investor groups like for example family business investors. Compared to activist hedge funds, these investors who became more active in Germany over the last couple of years invest higher amounts of money to acquire major stakes in the target companies and strive for adequate board representations to exert their dominating influence. With their specific cultural backgrounds, it is still an open question whether traditional German family business investors and Anglo-Saxon style financial sponsors behave differently.

I address this research gap and examine the potential different proceedings of both investor types (activist hedge fund vs. family business investor) as well as the impact of their actions on the target company in the course of a shareholder activism process. The situation of KUKA perfectly suits for this kind of analysis.

III.3. Review of Literature and Key Findings on Shareholder Activism

Numerous mainly U.S. studies analyse the key characteristics of companies which have been targeted by activist shareholders. Gillan and Starks (1998) identify poor operational performance as key criterion. Bethel et al. (1998) and Drerup (2011) find a significant lower return on assets (ROA) and return on equity (ROE) prior to an activist event compared to firms that do not experience such an approach. Judge et al. (2010) show that the lower the firm's prior profitability the higher is the possibility to become a target of financial activism. Target firms are much more diversified and have lower expected sales growth rates (Brav et al., 2009). Beside operational factors, the financial structure also gives some evidence if a company will be targeted by activist shareholders. Target companies may have a low level of debt ((Cziraki et al., 2010), (Ellison et al., 2008)) or do not hold large amounts of cash (Drerup, 2011). However, the last finding

conflicts with the results of Ellison et al. (2008) who mentioned that target companies possess high amounts of cash. Further studies also contradict some of the deliverables just mentioned. Klein and Zur (2006, 2009) find that activist hedge funds are focusing on profitable and financially healthy companies with liquidity above average. According to Boyson and Mooradian (2007), a typical target of activist shareholders is a cash cow with poor growth prospects but a high ROA. And Nordén and Strand (2011) state that activist shareholders are focusing less on poor performing companies but on large firms with high media exposure to use the Annual General Meeting (AGM) as proper platform for the involved fund managers or investment company.

Similar to the assertions regarding the target firm characteristics, there are also contrary results concerning the effectiveness of shareholder activism and the impact on the target firms. Oded and Wang (2010) doubt the general value enhancing effects of activism. Nevertheless various large U.S. and European sample studies show a value enhancing effect of shareholder activism, especially as positive abnormal share price reactions following the public filing of a share purchase by an activist shareholder (see for example (Akhigbe et al., 1997), (Becht et al., 2010a), (Klein and Zur, 2009), (Clifford, 2008), (Boyson and Mooradian, 2007), (Brav et al., 2009), (Mietzner and Schweizer, 2014), (Bessler and Holler, 2008)). The value effects are higher if the activism is initiated by an individual shareholder or a group of shareholders (Akhigbe et al., 1997), or an activist fund which is well-known (Bessler and Holler, 2008), or has a track record of successful engagements (Brav et al., 2008), and if it concerns a public rather than private activism (Becht et al., 2010a).

Some studies also show long-term positive value effects which appear several months or even years following the activism event. These positive abnormal stock market returns could be similar or even higher than the short-term value effects (see for example (Akhigbe et al., 1997), (Brav et al., 2009), (Klein and Zur, 2009), (Bessler and Holler, 2008)). But Weber and Zimmermann (2013) relativize these observations as they noted that the positive abnormal stock market effects are only part of price reactions surrounding the activist announcement event. Major parts of the value increases are based on transactional effects like insider trading by the activists in the forerun of the transactions.

Other large sample studies give evidence that shareholder activism does not lead to positive long-term share price effects too. Drerup (2011) just finds returns that are market neutral but without value destructive effects on the firm value. Mietzner and Schweizer (2014) show negative long-term buy-and-hold abnormal returns which could be based on the assumption that market participants do not believe in the value enhancing abilities of activist hedge funds compared to private equity firms. Additionally, Karpoff (2001) does not find significant positive long-term abnormal returns as well.

The assessment of the impact of shareholder activism on target companies does not give definite results as well. Beside positive abnormal stock market returns following an activist event, an improvement of the target firms' operating performance through ROA is discovered by Clifford (2008), Bethel et al.

(1998) and Boyson and Mooradian (2007). This performance improvement is mainly driven by the divesture of under-performing assets. This observation is in line with additional findings of Bethel et al. (1998) who show on the one hand an increase of asset divestures and share repurchases and on the other hand a decrease of the target companies' mergers and acquisitions activities. Brav et al. (2009) also find an increase of the ROE and leverage as well as like Boyson and Mooradian (2007), Klein and Zur (2009) or Mietzner et al. (2011) an increased extraction of cash. In contrast, Karpoff (2001) and Drerup (2011) do not find significant improvements of the target firms' earnings or operating performance. Only slight changes of the companies' governance structures could be forced by shareholder activists. Klein and Zur (2009) speak about a deterioration of profitability because of the lacking impact of shareholder activism on the targets' accounting profitability. Shareholder activists do not initiate cost focused restructuring measures or extract cash. Compared to the behaviour of corporate raiders in the 1980s, today's activists also do not force companies to load their capital structure with massive leverage (Bratton, 2007).

After reviewing the various large sample study results, it is not clear if shareholder activism leads on average to an improvement or deterioration of shareholder value and successfully impacts the target firms' operational and financial performance. One reason for the mixed results could be the incorporation of different data into large sample studies. Especially with regard to the analysis of short-term or long-term positive abnormal share price reactions, the use of different points of time of share purchases by activist investors could affect the results. The data availability based on the different national publication requirements could also massively influence the corresponding analysis and results. Large sample studies of Brav et al. (2009) and Klein and Zur (2009) for example are using publicly available date whereas Becht et al. (2010a) incorporate transaction data of private, i.e. non-public, engagements. These analytical approaches lead to the use of different target entry dates and statements about the improvement or deterioration of shareholder value by activist shareholders. Moreover, Gillan and Starks (2007) note that some short-term positive abnormal share price effects could be explained with the profiles and track-records of successful activist funds.

According to the critical comparison and review of recent large sample study findings, the mixed statements regarding the success and impact of shareholder activism in general and the specifics of the German corporate governance system and corporate environment in particular, I therefore decided to use a case focused design for this study based on the following reasons:

- The setting and methodology of large sample studies fail to analyse specific questions of an activist event as these studies focus on potential past changes of share prices or key financials only rather than to look at the entire activism process in more detail. Questions regarding the target's performance prior to the event, the activist's objectives and demands, the impact of the activist's

actions on the target and its performance as well as the final success rate of the activist could only insufficiently be answered.

- The already mentioned differences between the U.S. and German corporate environment and capital market requirements hamper the direct transfer of U.S. study results to Germany. Especially, the appearance of a family business investor as active investor in addition to the typical activist hedge fund shows the distinctive feature of this case.
- Large sample studies are basically focusing their analyses on relatively small time periods whereas a clinical study enables to examine the specific event or topic over a much longer time period.

I decided on KUKA as objective of investigation on shareholder activism as the confrontation between the company, Guy Wyser-Pratte and Grenzebach perfectly combines the specific characteristics of the corporate environment in Germany with attributes of a typical shareholder activism case. The appearance of Grenzebach as active family business investor following the engagement of a traditional activist hedge fund enables to complement the existing research on the topic with this typical component of the German corporate environment. Moreover, the eight years long sample period (from Wyser-Pratte's share purchase end of October 2003 until the end of KUKA's financial year 2011) allows to get coherent information about the potential success of both investors as well as the long-term impact of the shareholder activism on the company's key financials. With a free float of 100% and a highly diversified but only partial profitable business structure prior to the first activist event, KUKA perfectly fits into the target firm characteristics as mentioned by various studies on shareholder activism (see for example (Gillan and Starks, 1998), (Bethel et al., 1998), (Drerup, 2011), (Boyson and Mooradian, 2007), (Judge et al., 2010)).

III.4. Background Information about the Key Players and the Activist Case

III.4.1. Background Information about KUKA prior to the First Activist Event in 2003

KUKA Group, which is the new name of the company following the renaming from IWKA in 2007, is one of the largest suppliers of robots and automated production systems worldwide. In 2011, the company generated sales revenues of Euro 1.4 billion (please refer to Table III.10.) and employed more than 6,500 people worldwide. The robotics segment achieved around 40% and the systems segment around 60% of the group's revenues.[42] The company's key customers are top tier automotive companies as well as other industrial manufacturing companies. KUKA is ranked at least amongst the top 3 companies in its respective segments worldwide. The shareholder structure of the exchange listed firm consists of some large shareholders like Grenzebach (19.8%), Swoctem (5.1%), AXA (5.0%), Bank of America (3.1%) and other

[42] Based on KUKA's annual report 2011.

institutional and private investors with 64.0%.[43] The corporate governance structure of the company is based on the two-tier standard with an executive management board and a supervisory board.

Table III.10. Key Financials of KUKA

(in € million)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Sales	2.220,0	2.290,0	2.312,0	2.287,0	2.169,0	1.613,0	1.566,0	1.286,0	1.266,0	902,0	1.079,0	1.436,0
EBIT	50,8	68,9	73,4	81,1	101,8	-30,7	33,7	70,5	52,0	-52,9	24,8	72,6
Pre tax income	42,2	36,5	45,9	56,2	84,4	-48,7	15,7	62,5	47,0	-64,4	-4,5	46,0
Tax	-11,2	-5,3	-23,4	-32,8	-33,8	0,1	-4,9	-13,6	-16,5	-11,4	-4,1	-16,1
Net income	31,0	31,2	22,5	23,4	48,8	-147,5	-69,4	117,9	30,6	-75,8	-8,6	29,9
Assets	1.589,0	1.577,0	1.515,0	1.502,0	1.660,0	1.553,0	1.071,0	888,0	866,0	726,0	985,0	1.078,0
Equity	353,8	367,1	386,6	387,8	358,0	189,1	126,7	233,5	213,5	160,8	198,1	252,4

Source: Non-adjusted financials from KUKA's annual report of each corresponding financial year.

In 1970, the German entrepreneurial family Quandt decided to merge its two portfolio companies, KUKA GmbH and Industrie-Werke Karlsruhe AG, to become Industrie-Werke Karlsruhe Augsburg Aktiengesellschaft, or IWKA AG, headquartered in Karlsruhe. In 1980, the Quandt family exited its investment and IWKA became a publicly listed firm with 100% free float. Due to the run out of KUKA's voting right restrictions based on corporate law changes in the first half of the year 2000, the management feared to become a takeover target. The capital market considered this scenario as quite possible. In view of this threat and due to limited internal growth potential in general, CEO Hans Fahr and his management team decided to start streamlining its business activities and to focus the company more on future growth areas like the automotive and consumer goods industry. Therefore, the company started in 1999 an intensive M&A process which resulted in the acquisition of the subsidiaries of Jagenberg, a part of Rheinmetall group, and of the U.K. based BWI Group. These acquisitions massively strengthened the existing packaging business and tripled its sales. Additionally, KUKA decided to exit its defense engineering business after 127 years by a sale to Rheinmetall. To broaden its U.S. presence, KUKA also acquired the U.S. welding plant manufacturer Key-Welder and B&K Group.

At the beginning of the new millennium, KUKA was a highly diversified conglomerate with its business segments production technology, manufacturing technology, process technology, and packaging technology and more than 90 subsidiaries worldwide. Despite the strategic reorientation and M&A efforts, capital market participants had doubts about the sustainability of KUKA's business focus. The analysts of SalomonSmithBarney (2000) for example missed a radical strategic move and criticised the ongoing underperformance of the process technology division which was mainly due to the limited critical mass of

[43] Shareholder structure as of July 2014.

this division and the increased price competition within this sector. Therefore, analysts asked for additional divestments or restructuring measures in the future. The management knew that something had to change and that their efforts should focus on a consequent strategic realignment and measures to increase the company value in the forthcoming months. This was the initial situation when U.S. financial investor Guy Wyser-Pratte informed the German financial authorities and KUKA about its share purchase which exceeded the 5% threshold of the voting rights on 27 October 2003.

III.4.2. Background Information about Guy Wyser-Pratte

Guy Patrick Wyser-Pratte, born in June 1940 in Vichy, France, is founder, CEO, President and COO of the employee owned investment company Wyser-Pratte Management Co., Inc. based in New York, United States. The firm is an investment vehicle for individuals or institutions like pension funds or trusts, managing various active investing funds which are focusing on undervalued especially European public listed companies. His major objective is always to achieve an increase in shareholder value following his entry. Normally, he focuses on conglomerates in the metal and defence industry with a high free float and acquires not more than 5% of a company's outstanding shares. His company specific investment horizon varies from some months to several years. In 1991, Wyser-Pratte resurrected the former family firm, became an independent investment manager and acted as influential activist investor since then.

Until his attempt to change KUKA's strategic focus starting end of October 2003, he already tried to influence the boards of different German companies like Mannesmann (1999), Rheinmetall (2001), Babcock Borsig (2002) and Mobilcom (2002). He succeeded with his Rheinmetall engagement by forcing the management to focus on two business divisions in future only but failed with his activism strategy in the other cases. Especially with the insolvency of Babcock Borsig shortly after his entry, he lost approximately Euro 15 million, a newspaper speculated (Smolka and Sosalla, 2005). Answering the question of why he mainly focuses the investments of his EuroValue fund on German corporations, he said in an interview: "In the United States, poor companies have poor prices. It's a different situation in Germany. A company's stock can be floundering while real wealth is hidden somewhere in its books, sometimes even for decades. We're interested in that wealth." (Hornig, 2005)

III.4.3. Background Information about Grenzebach

As medium-sized family owned and privately held company, Grenzebach is a typical representative of the traditional German "Mittelstand" based in the Bavarian small town Hamlar, north of Augsburg, Germany. With around 1,400 employees the company produces manufacturing equipment and systems mainly focusing on material flow and process technology. Customers are companies in various industries like furniture, creamery, glass, building materials, transport and solar. The roots of today's company lie in a

repair shop for agricultural machines founded 1920. In 1960, Rudolf Grenzebach founded the Grenzebach, the core company of today's company group, and is President of its Board. In 1988, Grenzebach has started the global expansion of its service centres and production facilities with the foundation of a subsidiary in Newnan, Georgia, United States. Today, Grenzebach is also present in Brazil, China, India, Indonesia, Italy, Russia and Taiwan. According to the group's consolidated statement for the financial year 2010, the group generated total revenue of Euro 362 million which is an increase of more than 30% compared to 2009. The glass technology division was responsible for 51% of the total sales, construction materials and furniture technology for 40% and general industry for 8%. The operating result was Euro 38 million in 2010 and Euro 35 million in 2009.[44]

III.4.4. The Activist Case

The following description of the activist case focuses on the corresponding highlights and comprises the period starting with the entry of Wyser-Pratte end of October 2003 until the end of KUKA's financial year 2011. The information are divided into two parts, first, the confrontation of KUKA with Wyser-Pratte and second, the confrontation of KUKA with Grenzebach.

III.4.4.1. The Confrontation of KUKA with Guy Wyser-Pratte

On 28 October 2003, Guy Wyser-Pratte informed the management as well as the German financial authorities that his interest in KUKA exceeded the threshold of 5% of the voting rights the day before. A spokesperson of Wyser-Pratte mentioned that a further stake increase could be possible (Reuters, 2003a) and that Wyser-Pratte would welcome talks with the management about measures to increase the firm value (Reuters, 2003b). Knowing about Wyser-Pratte's investment style, company representatives and insiders made clear that despite Wyser-Pratte's entry the executive board will not mess up its current corporate strategy. On the occasion of the presentation of the interim full year financial figures for 2003, mid of February 2004, KUKA's CEO Hans Fahr stated the future strategic focus on profitable growth areas like automation and manufacturing, the intention for portfolio adjustments but refused, with focus on Wyser-Pratte, the divestment of a total business division. Wyser-Pratte welcomed these considerations.

Few days before the official presentation of the annual financial results 2003, mid of April 2004, Wyser-Pratte started his first attack towards the management via a Reuters interview (Reuters, 2004a). He criticised that the strategy did not change so far and demanded personal consequences. "The time for talks will gradually come to an end", he said (Reuters, 2004a). During the press conference, CEO Fahr announced the sale of unprofitable parts of the process technology division with approximately 15% of KUKA's total

[44] Source: German Federal Gazette; https://www.bundesanzeiger.de/ebanzwww/wexsservlet.

sales within the coming two to three years and expressed his surprise about the interview approach of Wyser-Pratte. At the beginning of June 2004, Wyser-Pratte repeated his criticism on the strategic considerations and demanded the focus on the profitable automation business and on appropriate parts of the manufacturing business.

To meet his requirements, he issued an ultimatum until KUKA's AGM on 9 July 2004 and threatened the executive board with non-discharge from liability in support of other shareholders. Prior to the AGM, CEO Fahr presented in an interview the management's decision to divest the complete process division instead of parts as intended earlier (Reuters, 2004c). Despite a combined stake of more than 18% in KUKA, the shareholder coalition of Wyser-Pratte (6.5%), U.K. pension fund Hermes (7%) and Threadneedle Asset Management (4.9%) failed with their countermotion to non-discharge the executive board in the course of the AGM. Following the AGM, CEO Fahr decided to accelerate the planned divestment process. But Wyser-Pratte signalised to increase his stake in KUKA and the potential convening of an extraordinary shareholder meeting on the one hand to indirectly achieve the dismissal of CEO Fahr prior to the regular AGM in 2005 and on the other hand to force the board to divest the packaging division.

In preparation of KUKA's regular annual general meeting on 3 June 2005, Wyser-Pratte published his comprehensive list of claims via the German Federal Gazette. First, he intended to file a motion to non-discharge the whole executive board. Second, he argued for the deselection of two supervisory board members, Jürgen Hubbert, former member of the executive board of DaimlerChrysler, and Reinhard Engel, former CEO of Buderus, due to the reasons of conflicts of interest and insufficient control of KUKA's executive board. Third, he nominated two own candidates Reiner Beutel, former CEO of Bosch's U.S. subsidiary Robert Bosch Tool Group, and Anton Dulski, CEO of Minerals Technologies. Wyser-Pratte also mandated the proxy service firm MacKenzie Partners to campaign for his plan. Additionally, he publicly speculated about a potential manipulation of the financials of KUKA's robotics division to counter his arguments of a necessary strategic business concentration.

Confronted with Wyser-Pratte's demands and incriminations, CEO Fahr decided to resign just hours before the beginning of the AGM. The supervisory board accepted Fahr's decision and the shareholder representatives decided, in case of a deselection of Hubbert and/or Engel during the AGM, to resign en bloc as well. At the end, the deselection of Hubbert and Engel failed also due to the fact that Wyser-Pratte abandoned his motion shortly before. But the attending shareholders voted against the formal approval of the actions of KUKA's executive and supervisory board.

Following the AGM, Wyser-Pratte issued again an ultimatum towards the supervisory board to reorganise itself and to focus the company on the robotics business until the end of August 2005. As mentioned in a Reuters interview (Reuters, 2005b), he already personally approached interested buyers for the whole packaging division. End of July 2005, the supervisory board appointed Wolfgang-Dietrich Hein as new CEO which was not agreed with other shareholders like for example Wyser-Pratte. Until his

appointment Hein was CEO of the plastic machine manufacturer Coperion Holding. CEO Hein contacted Wyser-Pratte and agreed to focus the company on its core competencies and review all business activities with regard to their future profit contribution. To reorganise KUKA's supervisory board, an extraordinary shareholder meeting was held on 9 November 2005 and elected amongst others Wyser-Pratte's candidate Reiner Beutel, CFO of Schefenacker. Rolf Bartke became the new chairman of the supervisory board.

In the meantime, the management successfully divested several businesses and started restructuring measures which became necessary due to the economic downturn and in this context decreasing orders from customers in the automotive industry. The corporate reorganisation to become an automation company proceeded but in August 2006, KUKA had to announce a profit warning. Wyser-Pratte increased his stake in KUKA to 9%. In autumn 2006, the supervisory board decided to review the potential sale of KUKA's packing division which started some weeks after with the sale of the first subsidiary. But despite the ongoing corporate readjustments, members of the supervisory board increasingly expressed their disaffection with CEO Hein especially due to his hesitant corporate reorganisation. An internal power struggle with CFO Koch about the future strategy and positioning of KUKA additionally weakened Hein's position. Wyser-Pratte would welcome the resignation of Hein, he said to a newspaper (Elger, 2006). End of 2006, Hein decided to resign from his CEO position and the supervisory board appointed Gerhard Wiedemann as new CEO.

Wiedemann was chairman of the board of the subsidiary KUKA Schweissanlagen and a member of KUKA's executive board since 2006, responsible for the systems technology division. As his precursor, CEO Wiedemann intended to consequently expand the company's core business and focus on the business areas automation and robotics. With the sale of the remaining packaging business in 2007, KUKA's corporate structure finally consisted of two business divisions only. To emphasise the new corporate orientation, the annual shareholder meeting on 16 May 2007 agreed to the renaming of IWKA Aktiengesellschaft to KUKA Aktiengesellschaft. Against the background of sound financial results, the management of KUKA also intended to expand its growth efforts towards business areas like aviation, solar, medicine, food production and logistics. In June 2008, CEO Wiedemann decided to not extend his contract and the supervisory board appointed Dr Horst J. Kayser as new CEO of KUKA. Kayser was former CEO of Siemens U.K.

III.4.4.2. The Confrontation of KUKA with Grenzebach

Entitled as the expansion of the "Swabian alliance"[45], the family owned firm Grenzebach Maschinenbau GmbH acquired a stake of 5.43% in one of its key business partners KUKA on 28 November 2008. Until

[45] See joint press release from 4 December 2008: „ Swabian Alliance - Grenzebach Maschinenbau GmbH and KUKA expand global alliance".

this share purchase both companies have already been working together: in the plat and solar glass industries, in the material and baggage handling sector as well as through a joint subsidiary in the U.S. On 9 March 2009, Grenzebach informed KUKA as well as the public about its further stake purchase in KUKA. Grenzebach held more than 10% and intended to acquire additional 9% if agreed by cartel authorities. The company mentioned that it strives for a stake in KUKA of between 25.1% and 30%. Bernd Minning, Chairman of the board of Grenzebach, stressed that Grenzebach will act as an active and stabilising shareholder who is interested in a constructive cooperation and will admit to KUKA's existing divisional structure (Grenzebach, 2009).

Within the three weeks following the recent stake increase of Grenzebach in KUKA, the proposed cooperation was burdened with speculations and more or less public incriminations about financial irregularities and fictitious transactions between KUKA and Grenzebach in 2007. Additionally, KUKA's CEO Kayser questioned in a newspaper if the senior managers of Grenzebach really share the same strategic concept for KUKA (Busse et al., 2009). But at the end of March 2009, both parties agreed that Grenzebach will obtain two seats in KUKA's supervisory board. Furthermore, Grenzebach mentioned its support for KUKA's corporate strategy with its focus on automation and robotics.

But the dispute between KUKA and Grenzebach flared up again as Grenzebach made an application for an extraordinary shareholder meeting on 12 August 2009. The meeting should take place in autumn 2009 to call for a vote of non-confidence against CEO Kayser and CFO Rapp, to dismiss supervisory board chairman Bartke as well as to elect new supervisory board members. Grenzebach justified this application with KUKA's unsatisfying development into growth markets beyond the automotive industry like medical and solar technology as well as airport logistics and the lack of measures to compensate the recent declines in orders and secure the company's financing. KUKA's executive and supervisory boards criticised the approach of Grenzebach as strange and not justified especially as shareholder with a stake below the important 30% threshold level. But both boards declared to strive for an ongoing constructive cooperation with Grenzebach. Nevertheless, in the course of the extraordinary supervisory board meeting on 3 September 2009 both boards agreed to end the appointments of CEO Kayser and CFO Rapp. The former lawyer and investment banker Till Reuter was appointed as chairman of KUKA's supervisory board, according to his role as Grenzebach confidant and representative of investment firm RINVEST AG, and Wyser-Pratte, beside three others, became supervisory board member. End of September 2009, Reuter was appointed as temporary CEO of KUKA and Grenzebach's chairman of the board Minning followed Reuter as chairman of KUKA's supervisory board. End of April 2010, Reuter was named permanent CEO of KUKA.

III.5. Data Collection and Methodology

To answer the study's key questions regarding the potential success and impact of shareholder activism on KUKA, the methodology of the analysis is divided into two parts. The first part focuses on the activist investors' potential success concerning the assertion of their demands towards KUKA's management and supervisory board in the course of the whole activist campaign. The second part comprises the impact of the shareholder activism on KUKA's performance.

According to Karpoff (2001), one reason for the inconsistent results of large sample studies is the diverse definition of the activists' success. Boyson and Mooradian (2007) defined "success" as enforcement of the activists' exact motive (like stated in the 13D SEC filing) and "partial success" as assertion of some demands, for example obtaining one supervisory board seat instead of the demanded two seats. Brav et al. (2008) classified a demand as successful when the activist gets the management to acquiesce to its main stated goal. If the activist asserts parts of the main goal for example through negotiations, a partial success is noted.

With regard to the different methodologies of defining the success of shareholder activism and the missing requirements in Germany to officially state the goals of a share purchase, I decided on a combined definition and approach. I evaluate the assertion of a demand as "success" when, first, the activist got the management to fully acquiesce this demand and, second, the demand has been clearly identified as the activist's main stated or most frequently repeated goal. As "partial success" counts the full assertion of other demands, i.e. non-main stated or non-most frequently repeated goals, or the partial assertion of all goals requested by the activists.

The various demands and their frequency of Wyser-Pratte and senior representatives of Grenzebach towards KUKA have been hand-collected and identified from different online databases over the period from the first threshold exceeding by Wyser-Pratte end of October 2003 to KUKA's fiscal year end 2011 (31 December 2011). This period has been chosen due to the fact that Wyser-Pratte reduced its stake below 5% in September 2010 and that both investors became less active than the years before. The data sources included Factiva and different corporate websites, like KUKA and Grenzebach. The analysis of the successful assertion of these demands followed the same methodology. Finally, the results of the analysis have been compared with findings of the large sample studies to identify any consistency or ambiguity.

To analyse the impact of the activist engagement of both investors on KUKA, I used three different methods: DuPont model, analysis of KUKA's investment and divestment history and buy-and-hold return (BHR) analysis. According to for example Milbourn and Haight (2005), DuPont is used to evaluate a firm's financial condition by comparing relationships within the income statement and balance sheet, or between the two statements. It is an adequate tool to calculate the return on equity (ROE) of a company expressed through three major parts: the company's profit margin, asset turnover and equity multiplier. Due to its model kit like approach, these operating figures could be broke down into more specific and interpretable

financial figures and ratios (Soliman, 2008). This method has been invented by the U.S. DuPont Corporation in the 1920s as operating and financial control instrument.

The formula I used for the analysis is the following:

$$ROE = \frac{Net\ income}{Equity} = \frac{Net\ income}{Pre\ Tax\ Income} * \frac{Pre\ Tax\ Income}{Earnings\ before\ interest\ and\ taxes\ (EBIT)} * \frac{EBIT}{Sales} * \frac{Sales}{Assets} * \frac{Assets}{Equity}$$

The ratio $\frac{Net\ income}{Pre\ Tax\ Income}$ gives information about the company's tax burden, $\frac{Pre\ Tax\ Income}{EBIT}$ about its interest burden, $\frac{EBIT}{Sales}$ valuates the company's operating margin, i.e. its profitability, $\frac{Sales}{Assets}$ informs about its capital turnover, i.e. the operating efficiency, and the ratio $\frac{Assets}{Equity}$ gives information about the company's financial leverage. The detailed breakdown of these financial figures allows tracing the development of the company over a long period of time as well as the impact of strategic and operational decisions. For the calculation of the various financial ratios, the financial data was hand-collected out of the corresponding annual reports of KUKA over the time period from 2000 to 2011. Following the analysis, the results of the DuPont model have been compared to the results of a peer group. As there are no complete comparable companies according to KUKA's various businesses, the peer group is based on companies mentioned by either KUKA or capital market analysts as appropriate. The peers mainly consist of mid to large cap German machine and equipment manufacturers (Gildemeister, Krones, Dürr and Siemens) and one of KUKA's major competitor in the robotics business (the Japanese Fanuc). The financial data of this peer group were collected via Bloomberg.

To specify if the management of KUKA already started the divestment process of under-performing business parts before the engagement of Wyser-Pratte in October 2003 as stated by CEO Fahr several times (for example Reuters, 2004c), the company's investment and divestment history was analysed from the years 1999 to 2011. The necessary data was hand-collected from the annual reports and the corresponding changes of the company's scope of consolidation. Business parts or companies intended for disposal were for example classified as discontinued operations.

A BHR model was used to analyse a potential increase or decrease in shareholder value in the course of the activist process. According to Becht et al. (2010a), I calculated the raw returns (BHR raw) of the KUKA share over different holding periods, especially with changing starting times like the beginning of the year 2000 or the respective dates of Wyser-Pratte's and Grenzebach's entry. For the same periods, I additionally calculated the raw abnormal returns (BHR AR) over the German mid-cap benchmark index MDAX. I decided for the MDAX index as benchmark as it contains 50 stocks which are representing the German medium sized company sector and therefore perfectly fit to KUKA.

III.6. Results

III.6.1. Assertion of Demands

Guy Wyser-Pratte was fully successful (100%) in getting the boards to acquiesce to his main stated goal, the full structural reorganisation of KUKA. From the very first beginning following his share purchase in October 2003, he forcefully demanded and most frequently repeated a changed business focus on the profitable automation and appropriate parts of the manufacturing business in combination with the consequent divestment of the process and packaging divisions.[46] With the management decision to divest its packaging business and focus on the businesses robots and automated production systems in the future only, Wyser-Pratte achieved his major objective in autumn 2006 nearly three years after his entry. In the course of the activist confrontation between Wyser-Pratte and KUKA, he also fully succeeded in achieving changes in KUKA's management and supervisory boards, like for example the withdrawals of CEO Fahr (in June 2005) and CEO Hein (in December 2006).[47] As these demands were less frequently repeated by Wyser-Pratte compared to his main goal of full business reorganisation, the successful assertion will be charged as 100% partial success. Additionally, he also succeeded with his later demand (i.e. 100% partial success) of supervisory board representation which was mentioned by Wyser-Pratte for the first time during the confrontation between Grenzebach and KUKA in August 2009. Overall, the analysis of the assertion of Wyser-Pratte's demands and objectives during the whole activist process shows a success rate of 100%.

In comparison to Wyser-Pratte, Grenzebach confronted the management and supervisory board of KUKA with fewer demands and objectives in a shorter period of time. Furthermore, Grenzebach did not directly express its demands through for example interviews like Wyser-Pratte the years before, but used insiders or unnamed confidants to express the demands to the media.[48] Following the exceeding of the 5% threshold in November 2008 and the following share increase to more than 19% in March 2009, Grenzebach stated its two main goals, adequate board representation and the joint business expansion into for example aviation and solar technology.[49] Additional demands have been publicly mentioned through a corporate release on 12 August 2009 focusing mainly on the dismissal of CEO Kayser and CFO Rapp as well as the replacement of most of the supervisory board members. With the agreement to receive two supervisory board seats end of March 2009, the withdrawals of CEO Kayser and CFO Rapp and the resignation of four supervisory board members, including Chairman Bartke, at the beginning of September 2009, Grenzebach fully succeeded with its major and other objectives within nine months. Through KUKA's successive expansion into business areas like aviation and solar in recent years, Grenzebach accomplished its second

[46] See for example following articles: Reuters (2004b) and Reuters (2004e).
[47] See for example following articles: Reuters (2004d), Reuters (2005a) and Reuters (2005b).
[48] See for example following articles: Reuters (2009b) and Reuters (2009c).
[49] See for example following articles: Reuters (2009a).

main goal as well. Overall, the active approach of KUKA by Grenzebach showed a success rate of 100%, i.e. in both categories full and partial success.

The major demands of both investors do not differ from other studies (see for example: sale or spin-off of significant company parts and improvement of long-term strategy (Bratton, 2007), changes on the corporate strategy (Brav et al., 2008), seeking board seats and forcing the buyout or sale of a division ((Gillan and Starks, 2007), (Klein and Zur, 2006)), corporate governance changes (Pearson and Altman, 2006) and pushing the CEO (Klein and Zur, 2006)). Overall, the demands and objectives of Wyser-Pratte and Grenzebach are mainly focusing on governance and strategy issues. The comparison of the various success rates does not show any major differences as well. Wyser-Pratte and Grenzebach show a success rate of 100% (i.e. full and partial success). The overall success rate of Brav et al. (2008) is more than 66%, of Klein and Zur (2006) is 60% and of Kühne (2011) is 53%. Klein and Zur (2006) report a success rate of 100% concerning the replacement of the CEO and of 72% referring to board representation. Boyson and Mooradian (2007) also found that hedge funds are achieving board representation in over 70% of the time.

III.6.2. Impact on KUKA

The fragmentation into four different phases allows a more detailed analysis of the impact of the whole shareholder activism process on KUKA's financial performance. The first phase comprises to financial years from 2000 to 2003, i.e. a time period prior to the full engagement of the activists. The second phase focusses on KUKA's development from 2004 until the time when Grenzebach entered the firm end of November 2008. The third phase analyses the years 2009 until the end of the recent financial year 2011. To finally give evidence about the overall impact of the activism on the company, the analysis closes with phase four and an overall look at the company development between 2003 and 2011.

Table III.11. Overview of ROE Components: KUKA vs. Peer Group

(in %)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Net income/Pre tax income												
KUKA	73,5%	85,5%	49,0%	41,6%	57,8%	302,9%	-442,0%	188,6%	65,1%	117,7%	191,1%	65,0%
Arithmetic mean of peers	*85,8%*	*5,6%*	*110,1%*	*733,0%*	*75,3%*	*46,8%*	*65,4%*	*64,8%*	*96,6%*	*99,5%*	*63,8%*	*69,9%*
Pre tax income/EBIT												
KUKA	83,1%	53,0%	62,5%	69,3%	82,9%	158,6%	46,6%	88,7%	90,4%	0,0%	-18,1%	63,4%
Arithmetic mean of peers	*159,6%*	*83,4%*	*66,3%*	*77,8%*	*74,1%*	*155,4%*	*77,9%*	*90,4%*	*74,9%*	*65,2%*	*62,7%*	*89,0%*
EBIT/Sales												
KUKA	2,3%	3,0%	3,2%	3,5%	4,7%	-1,9%	2,2%	5,5%	4,1%	-5,9%	2,3%	5,1%
Arithmetic mean of peers	*9,5%*	*9,8%*	*7,6%*	*8,7%*	*10,1%*	*10,1%*	*11,8%*	*12,8%*	*14,1%*	*10,0%*	*8,7%*	*13,8%*
Sales/Assets												
KUKA	139,7%	145,2%	152,6%	152,3%	130,7%	103,9%	146,2%	144,8%	146,2%	124,2%	109,5%	133,2%
Arithmetic mean of peers	*109,4%*	*111,8%*	*106,3%*	*105,5%*	*95,1%*	*99,4%*	*103,9%*	*105,3%*	*108,1%*	*87,2%*	*83,0%*	*95,3%*
Assets/Equity												
KUKA	449,1%	429,6%	391,9%	387,3%	463,7%	821,3%	845,3%	380,3%	405,6%	451,5%	497,2%	427,1%
Arithmetic mean of peers	*280,6%*	*320,1%*	*350,5%*	*367,2%*	*332,9%*	*298,1%*	*288,0%*	*286,0%*	*275,2%*	*267,6%*	*284,3%*	*272,5%*
ROE												
KUKA	**8,8%**	**8,5%**	**5,8%**	**6,0%**	**13,6%**	**-78,0%**	**-54,8%**	**50,5%**	**14,3%**	**-47,1%**	**-4,3%**	**11,8%**
Arithmetic mean of peers	*14,3%*	*11,1%*	*4,9%*	*2,9%*	*7,4%*	*7,4%*	*9,7%*	*12,9%*	*16,4%*	*1,2%*	*5,5%*	*12,6%*

Sources: Annual reports of KUKA, Bloomberg, own calculations.

III.6.2.1. Phase 1: 2000 – 2003

Examining the first phase from 2000 to 2003 and referring to Table III.11., KUKA showed a strong increase in profitability (operating margin rose from 2.3% in 2000 to 3.5% in 2003) despite a more or less stable development in sales. But compared with the peer group, this performance was only below average (range from 2.6% to 28%). Despite the increase in profitability and efficiency, ROE decreased from 8.8% in 2000 to 6.0% in 2003 mainly due to a lower leverage and higher tax costs. The analysis of the profitability of the four different business segments of KUKA (automation technology, manufacturing technology, process technology, and packaging technology) made clear that the company's automation business generated significant positive operating margins only. Despite the performance improvements the share price development was unsatisfying. From the beginning of the year 2000 until the end of 2003, the share of KUKA showed a raw BHR of -25% and a raw BHAR over the MDAX benchmark index of -34%.

Overall, the analysis of the financial and stock market performance of KUKA prior to the approach of Wyser-Pratte is also consistent with most of the typical target firm characteristics found in various sample studies on shareholder activism, like a low but positive operating performance ((Judge et al., 2010), (Klein and Zur, 2006 and 2009)), a low stock market valuation but with an attractive break-up value of the different business parts (Ellison et al., 2008). Other factors like the highly diversified conglomerate corporate structure and the differences in operating performance between the four business parts increased the possibility to become an activist target.

III.6.2.2. Phase 2: 2004 – 2008

The second phase from 2004 to 2008 was a very intense period of transition for KUKA. Confronted with the demands of Wyser-Pratte to consequently focus the company on its profitable businesses like robotics and partially manufacturing as well as to divest the process and packaging divisions, the management executed a massive strategic and structural reorganisation. Additionally, the CEO position was replaced twice at that time. According to various accounting based adjustments triggered by the introduction of the IFRS accounting standard in 2004 and the necessary classification into continuing and discontinuing operations due to the proposed divestments, the comparability of the respective financial years is difficult. In addition, the beginning of the global subprime and financial crisis as well as a sharp decrease of the worldwide demand for industrial goods and services affected this time period too.

With regard to Table III.11. it could be determined that the divestment of the process and packaging businesses with disposals of more than 60 consolidated companies led to a strong decrease in sales and EBIT as well as reductions on the balance sheet. Especially, the company divestitures in 2005 and 2006 negatively affected the net income and therefore the ROE. Following these two years and compared with 2004, the profitability of the whole phase until 2008 only slightly decreased (EBIT margin in 2004 of 4.7% to 4.1% in 2008). In contrast, the ROE improved from 13.6% to 14.3% which was mainly based on an improved efficiency. Comparing KUKA's financial results of 2008 with the peer group still shows a below average profitability (KUKA's EBIT margin of 4.1% vs. 14.1% arithmetic mean EBIT margin of the peer group with a range of between 6.5% and 40.5%). The ROE is slightly below average (range of 12.4% to 21.3%) and efficiency as well as leverage is above average. The share price development is similar to the first phase. KUKA's raw BHR from the beginning of financial year 2004 until the end of financial year 2008 is -23%, the raw BHAR over the MDAX benchmark index -46%.

III.6.2.3. Phase 3: 2009 – 2011

This phase is affected by KUKA's economic rebound following the period of strategic and structural reorganisation as well as the approach by Grenzebach and its demands for business expansion and replacement of senior managers and supervisory board members. KUKA massively improved its sales and turned the operating and net income from negative to positive (please see Table III.11.). The EBIT margin improved from -5.9% in 2009 to 5.1% in 2011 which is still below average compared to the peer group (range from 2.7% to 42.5%). The company's efficiency increased and its leverage decreased both ratios lay above average. The ROE rose from -47.1% to slightly below average 11.8% in 2011 (range from 5.6% to 19.1%). The share price development of KUKA reflects the positive financial development as well as the only below average profitability. The raw BHR between the beginning of 2009 until the end of 2011 is +14% but the raw BHAR over the MDAX benchmark index is -41%.

III.6.2.4. Phase 4: The Whole Company Development between 2003 and 2011

The comparison of KUKA's financial situation covering the whole activist engagement period gives evidence if the activism based demands increased the company's overall profitability (please refer to Table III.11.). While the sales level decreased by 37% mainly due to the massive divestures, the company's EBIT level declined only by -10%. This development resulted in a strong increase of EBIT margin (from 3.5% in 2003 to 5.1% in 2011). The increased profitability and leverage led to a nearly ROE doubling from 6.0% in 2003 to 11.8% in 2011. The clear concentration on the profitable business areas robotics and systems is the crucial factor of the improved group wide profitability.

As outlined in Table III.12., the analysis of KUKA's investment and divestment history between the years 1999 and 2011 showed that the massive corporate reorganisation especially in the years 2004 to 2007 was executed due to the initiative and corresponding demands of Wyser-Pratte only. Contrary to the statements of CEO Fahr, KUKA did not realise major divestments prior to the beginning of the activist engagement.

Table III.12. Overview of KUKA's Divestments between 1999–2011

Year	Sold companies (in total)	Notes
1999	2	Complete sale of defence business
2000	1	Sale of long-distance heating control business unit
2001	-	
2002	-	
2003	-	
2004	15	Partial sale of process technology business
2005	15	Sale of process technology completed; partial sale of manufacturing technology business
2006	9	Partial sale of manufacturing technology business
2007	22	Complete sale of packaging business
2008	-	
2009	-	
2010	-	
2011	-	

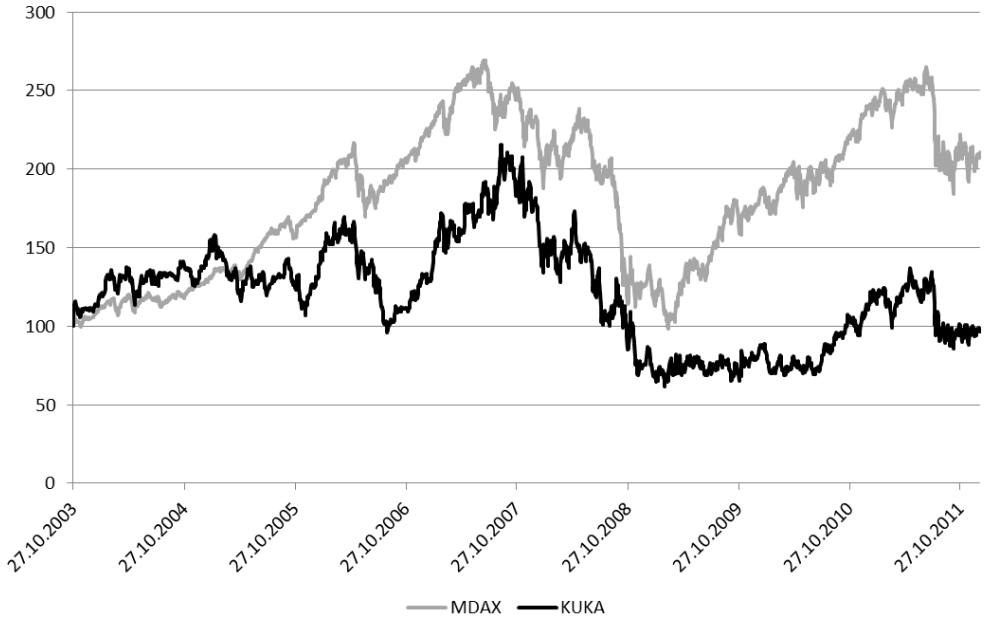
With regard on the divisional profitability development, the robotics segment had an EBIT margin of 6.9% in 2003 and the other business segments generated operating margins of 0.7% at most. In 2011, robotics earned an EBIT margin of 8.3%, the systems business of 4.0%. But despite this positive development, the profitability of KUKA is still below the average profitability of its peer group (KUKA EBIT margin of 5.1% in 2011 vs. 13.8% arithmetic mean EBIT margin of peer group). The ROE on the other side is only slightly

below the peer group's average (11.8% vs. 12.6%), especially according to the peer group's lower efficiency and leverage.

The share price development from the day as Wyser-Pratte exceeded the 5% threshold level (27 October 2003) until the end of financial year 2011 (31 December 2011) shows the value destroying effect of the engagement. According to Figure III.1., the raw BHR for the KUKA stock price in these more than eight years is -3%. The raw BHAR over the MDAX benchmark index in the same investment period is -114%.

The results regarding the impact of shareholder activism on KUKA are in line with most of the findings of large sample studies. Bethel et al. (1998) discover an increasing level of asset divestures following the purchase of a large company stake and a slight increase of the target companies operating performance. Brav et al. (2009) and Clifford (2008) both show improved ROA and ROE, mainly driven by the divesture of under-performing assets. Clifford (2008) and Klein and Zur (2009) determine an increase of the target company's leverage. And Clifford (2008) additionally notices an increased rate of CEO replacements. The unsatisfying raw BHR and raw BHAR of the KUKA share price over an investment period of more than eight years are in line with the conclusion of Kühne (2011) that most activist studies do not show clear evidence regarding the realisation of long-term shareholder value following an activist approach.

Figure III.2. KUKA Share Price vs. MDAX Benchmark Index from 27 October 2003 until 31 December 2011



100 = 27 October 2003, threshold exceeding of Wyser-Pratte; Source: Bloomberg.

III.7. Conclusion and Discussion

My analysis shows that due to KUKA's financial and stock market performance in the years prior to Wyser-Pratte's approach end of October 2003 as well as its highly diversified conglomerate and ownership structure, the firm possesses the typical characteristics of an activist target company. In the course of the activist process, both investors are 100% successful in getting the boards to acquiesce to their stated goals, like full strategic reorganisation, management and supervisory board changes and adequate supervisory board representation. The performance and purposefulness of both investors do not show major differences. Wyser-Pratte mainly demands the reorganisation of KUKA's business whereas Grenzebach primarily strives for adequate board representation. This is comprehensible as Wyser-Pratte as a typical activist hedge fund manager intends to most efficiently benefit from his minority stake in KUKA via publicly demanding the company's reorganisation and thus increasing the pressure on the KUKA management. And Grenzebach tries to benefit from its majority stake and therefore immediately demands an adequate board representation to exert influence in their sense.

It could be determined that all demands and goals of both investors are focusing on structural and operational topics only rather than demanding financial changes like a higher leverage, a decrease of the cash level or the payout of an extra or higher dividend as large sample studies noted. These demands lead to massive divestures especially during the years of Wyser-Pratte's most active phase 2004 to 2007, an improved profitability (EBIT margin and ROE) on group and business level, the three times replacement of KUKA's CEO as well as various changes of the supervisory board composition. But despite the positive operational effects of the activist engagement, the analysis of the long-term raw BHR and raw BHAR over the MDAX benchmark index shows a different development. Wyser-Pratte faces the deterioration of shareholder value with raw BHR of -3% and raw BHAR of -114% (both time periods: 27 October 2003 until 31 December 2011) whereas Grenzebach generates a positive raw BHR of +40% but negative raw BHAR of -26% (both time periods: 28 November 2008 until 31 December 2011). The negative long-term abnormal returns could be explained with KUKA's positive but compared to a peer group only below average profitability.

Overall, the typical German family owned company Grenzebach acted like a classical activist hedge fund and was slightly more successful than Wyser-Pratte. This analysis impressively shows that studies on shareholder activism, especially with focus on Germany, should also incorporate family business investors in future as they are seriously be able to act as shareholder activists beside typical activist hedge funds and active private equity funds. It could even be questioned if a family business investor is – compared to an activist hedge fund or active private equity fund – at the end the smarter investor who successfully targets companies following the engagement of another activist shareholder and benefits from the already implemented demands and actions.

IV. Family Business Investors versus Private Equity Investors – The Case of Continental Europe

Summary[50]

This study tests the hypothesis that family business investors and private equity investors in Continental Europe do not significantly differ from their investment approach and strategy. Therefore, I analyse 126 announced acquisitions of listed Continental European firms by family business investors and private equity firms from the years 2002 to 2012. The results confirm my hypothesis as most of the differences between both investor groups are not statistically significant. Minor differences are mainly associated with their specific business model. The results partly fit with the existing research on shareholder activism. Due to their private equity like investment approach, I argue for the increased consideration of family business investors into the research on shareholder activism in Continental Europe.

[50] The chapter IV. of this dissertation is largely based on the joint working paper of Schiereck/Schüler with the title *Are Family Business Acquirers the New Private Equity Investors in Continental Europe?*

IV.1. Introduction

Dealing with the under-researched topic of shareholder activism in Continental Europe, it is absolutely necessary to have a closer look at the acting parties likes hedge funds and private equity investors as well as family business investors which became serious competitors in the area of direct corporate investments and mergers and acquisitions in recent years (Lehmann-Tolkmitt and Wattendrup, 2011). A study of Rödl et al. (2014) comes to the conclusion that family owned businesses will realise more strategic acquisitions in the future than in the past. Disposable assets, so-called family equity, will therefore be more and more invested into alternative investments in general and in other companies in particular ((Landgraf and Nagl, 2009), (Wulf et al., 2011). Recent examples of these investment activities of German family investors are the hostile takeovers of Continental by Schaeffler and Volkswagen by Porsche as well as the share purchases of Klöckner & Co. by Knauf, of Douglas Holding by Müller or of Vossloh by family investor Heinz Hermann Thiele ((Lehmann-Tolkmitt and Wattendrup, 2011), (Becker, 2013)).

The specifics of the Continental European (activist) investor landscape are primarily based on the unique characteristics of the Continental European corporate environments. The corporate environments of Continental European countries like for example Germany, France and Italy differ from Anglo-Saxon countries like the U.S. and the U.K. especially with regard to their legal systems and shareholder structures. The protection of private property respectively of outside investors is higher in Anglo-Saxon common law countries than in Continental European civil law countries (La Porta et al., 2000). The shareholder structures of Continental European countries are characterized by a high amount of large single investors like founders and families. In contrast to the U.K., a study from Franks et al. (2008) shows that family controlled blocks are the most important category of ownership in Italy, France and Germany. Of combined more than 550 of the largest listed companies in the four countries, 61.3% companies in Italy are family owned, 48.1% in France and 32.3% in Germany compared to 5.3% in the U.K. The study summarises that family ownership in Continental Europe is internationally at the high end and is in the U.S., Japan and U.K. among the lowest worldwide.

As the research of family investors in Continental Europe is still limited and due to their growing importance as financial investor, I decided to focus the analysis of this study on the comparison of Continental European family business investors and private equity firms as representative of the traditional financial investor guild. My main objective of this study is to test the hypothesis that both investor groups do not significantly differ from their investment approach and strategy. This is to my knowledge the first study which compares the investment activities of Continental European family business investors with private equity investments and puts this topic thematically into the context of shareholder activism. This study will help to clarify if family business investors are able to successfully imitate the investment strategies of private equity firms and therefore to act like a traditional shareholder activist.

Overall, the results of this study confirm my hypothesis as most of the differences between both investor groups are not statistically significant. Minor differences are mainly associated with their specific business model. It could be summarised that family business investors in Continental Europe behave in a similar way like private equity investors and should therefore be involved as additional investor group in future studies on shareholder activism in Continental Europe.

This study proceeds as follows: Paragraph 2 gives an overview of both analysed investor groups, i.e. family business investors in Continental Europe and private equity investors. In paragraph 3 I describe the data collection process and the methodology. Paragraph 4 presents the empirical results of my analysis. Paragraph 5 discusses the results and concludes the paper.

IV.2. Description of Investor Groups

IV.2.1. European Family Business Characteristics

My definition of family business is based on Miller et al. (2007) who define a family firm as a company with multiple family members as insiders (officers or directors) or large owners (5% or more of the firm's equity) at the same time or over the life of the company as family descendants. As mentioned by Barontini and Caprio (2005), the ownership structure of the European corporate environment is amongst the most concentrated worldwide. They show that half of the sample companies have a shareholder with more than 37% of the ultimate voting rights. The high concentration of corporate ownership in Europe highly differs from U.S., U.K. or Asian samples. Caprio et al. (2011) emphasise the results mentioning that the largest shareholder owns at least 20% of the equity capital in nearly two-third of the analyzed European firms. The majority of these companies are family controlled firms. According to Faccio and Lang (2002), 44.3% of the European corporate environment are family controlled. The average founding family ownership in family firms in Germany is 33.2% (Schmid et al., 2008).

Some studies observe that family firms are smaller and younger than non-family firms, have higher cash levels and leverage ((Caprio et al., 2011), (Schmid et al., 2008)). With regard to the age of family firms, Franks et al. (2012) distinguish between family firms in the U.K. and Continental Europe. In the U.K., they observe a negative correlation of firm age with the probability of family ownership. For countries like Germany, France and Italy, it is more likely that older firms are family controlled. Franks et al. (2012) add that the existence of family control is more persistent in countries with weak investor protection and corporate control which links this topic to the already mentioned differences in legal and governance systems in Anglo-Saxon countries and Continental Europe. Nevertheless, agency issues can affect family firms in different jurisdictions as well.

Morck and Yeung (2003) describe that the key difference between widely-held firms and family firms is that agency issues in the latter involve managers acting solely for one shareholder, i.e. the family, and in the former involve managers not acting for shareholders. This management focus on one major family shareholder can also explain the higher sensitivity and risk aversion concerning investment decisions of family firms (Bianco et al., 2009). Caprio et al. (2011) confirm this conclusion mentioning the negative correlation between the size of voting rights held by the largest shareholder and the propensity to make acquisitions whereas family firms are less likely to become acquirers. The aversion to acquisitions is linked to the size of the family stake and the requirement to not significantly dilute this stake following an acquisition. Large shareholders and especially controlling families frequently support cash deals for this reason (Caprio et al., 2011). Contrary to the U.K., Continental European family firms tend to acquire more frequently other family firms and pursue less diversifying transactions (Franks et al., 2012). According to Franks et al. (2008) family firms show a significant industry concentration. Nearly half of the analyzed family firms in U.K., Germany, Italy and France are concentrated in five of 48 Fama-French industries: wholesale, business services, retail, financials and household products.[51] Overall, it can be stated that family firms are primarily active in non-financial industries compared to widely-held firms.

IV.2.2. Private Equity Investors

Private Equity has its origins in the U.S. The world's first private equity firm was Kohlberg Kravis Roberts & Co. L.P. (KKR) founded in 1976 by Jerome Kohlberg, Henry Kravis, and George Roberts. The first private equity fund of KKR was raised two years later in 1978. Triggered by a buyout boom during the 1980s, private equity gained attention by the public and gradually emerged in Europe, first in U.K. and later in Continental European countries ((Seretakis, 2013), (Achleitner et al., 2013)).

Market deregulation in European jurisdictions in the course of the millennium change resulted in increased business activities and helped the private equity industry to finally disassociate itself from its predecessors, the corporate raiders ((Cheffins and Armour, 2011), (Seretakis, 2013)). With regard to transaction value and volume, the U.K. is still the most important market for private equity firms in Europe. In Continental Europe, Germany and France are the countries with the highest investment activities of private equity firms. The high amount of family businesses, especially in Germany, their investment needs and divestment strategies contributed to the positive development of private equity in the last two decades (Seretakis, 2013).

[51] Franks et al. (2008) additionally describe differences across countries, for example, in Italy only 32% are in the top five industries compared with 65% in France, 56% in Germany and 44% in the U.K.

Compared to the other major representative of shareholder activism, the hedge funds, private equity funds act more like "value creators" who have a long-term focus and try to increase shareholder value through financial engineering and other improvements ((Judd, 2006), (Gillan and Starks, 2007)). The motives of private equity investments differ from case-to-case and are related to the funds' investment strategy and the targeted share of ownership and control (Achleitner et al., 2013). These funds become active investors if they are confronted with poor performing companies and/or management and ownership structures violating good corporate governance. Under those circumstances, the private equity investors consider to actively take actions to influence and alter the decision process and corporate governance of their targets ((Cheffins and Armour, 2011), (Rauch and Umber, 2012)). More than half of the private equity firms are pursuing such active investment strategies and are successful in addressing agency problems in their target firms ((Rauch and Umber, 2012), (Schweizer and Mietzner, 2014)). Due to the success of such an active investment approach primarily initiated by private equity firms and hedge funds, more investors like for example family business investors increasingly adopt these strategies and engage with target firms in a comparable way (Shadab, 2009).

IV.3. Data Collection and Methodology

IV.3.1. Sample

In order to analyse the key objectives of this study, I compiled a list of acquisitions of public listed companies based in Continental Europe by family business investors and private equity firms. My sample data consists of 126 announced acquisitions. 56 of these companies were acquired by family business investors; the remaining 70 by private equity investors. The analysed time period comprises the years 2002 to 2012 which covers two periods of rising stock prices (2003 to 2008 and 2009 to 2012) and the global financial crisis between the years 2007 and 2009.

IV.3.2. Data Collection

The main source of the data collection process was Bloomberg. In a first step, I compiled a comprehensive list of approximately 1,500 announced deals of private investors targeting public listed companies between 2002 and 2012. Key selection criteria were: target headquarters in Continental Europe[52], a sufficient deal size of at least Euro 100 million (see for example the selection criteria of Hege et al., 2013), a deal identified as mergers and acquisitions (M&A) or investment transaction as well as the corresponding purchase of a stake of more than 30% in the target company. Due to the different accounting rules of financial service

[52] I focused the search on the following major Western Continental European countries: Austria, Belgium, Denmark, Finland, France, Germany, Italy, Norway, Sweden, Spain and The Netherlands. Due to their importance as legal place of business, I added Cyprus and Luxemburg to the list.

companies, I also limited the sector and industry focus on non-financial companies and excluded banks, insurance and real estate companies. In a second step, I adjusted the deal list and removed transactions and companies with wrong industry group or sector classification, missing public listing status and/or stock price data. In a third step of sample adjustment, I concentrated my efforts on both investor groups, i.e. family and private equity investors, and went through all remaining transactions. For the verification of each transaction I used publicly available information like news coverage via Factiva or corresponding press releases as well as the official transaction documentation (like tender offer documents) which were available via the websites of the different Continental European financial supervisory agencies (like for example the German federal financial supervisory agency BAFin).

With regard to the announced deals of family business investors, I deleted all cases with involvement of private equity investors as my focus is solely on family investors. I analysed each single family business in accordance to the definition of Miller et al. (2007) who additionally differentiate between the categories of first and second generation family firms as well as lone founder family firms which I combined in one category "Family firm" only. I therefore followed the definition of Anderson and Reeb (2003) and Villalonga and Amit (2006) who also combine family and lone founder firms to one category.

Like with the family business transactions, I went through all remaining private equity investments and adjusted them to my key selection criteria. Following the approach of Achleitner et al. (2013), I checked publicly available information on each specific transaction and corresponding private equity investors. I excluded for example transactions which were conducted by investment banks and not by their private equity divisions, buy-outs of the companies' management and transactions led by private investment groups or consortia. In a final step, I checked both remaining family business and private equity transactions for double appearance in my list. For example, on 23 May 2011 it was publicly announced[53] that the private equity company CVC Capital Partners acquired a majority stake of around 64% of the capital of the French railroad-equipment maker Delachaux SA. The stake has been sold from the Delachaux family and its holding companies Sogrepar and Sodelho. The transaction appeared in my deal list for the second time when CVC Capital Partners launched a public tender offer for the remaining public-owned shares on 8 September 2011 to take the company private. Here and in similar cases, I excluded the respective second transaction announcement to avoid the use of deal affected share price movements into my event studies as capital market participants were expecting a taking private and/or squeeze-out offer to the remaining public shareholders sooner or later.

Following the final set up of my deal list, I collected the additional data for my comprehensive analysis. As I focus the study primarily on the target firm characteristics, I aggregated various financial and share performance data via Bloomberg. To calculate different key performance indicators (see for example

[53] See for example Reuters article of Rouillon (2011).

Table IV.13. and Table IV.14.) covering for example profitability, leverage and cash level of each target company, I listed the corresponding financials over a 14-years period (from the year 1999 to 2012). As the sample period comprises some extreme market cycles between 2002 and 2012, I then calculated three-year averages for each annual data and performance indicator to smooth this impact. Additionally, I obtained the daily share price data via Bloomberg to conduct the event studies for each deal announcement.

Table IV.13. Definitions of selected Key Performance Indicators

The main source of all data is Bloomberg. The indicators are based on a three-year average of the corresponding financial years prior to the engagement by the investors. Beside the ordinary financial ratios, I conducted the remaining ratios as follows:

Key Performance Indicators	Definition
Cash / Assets	= Cash at year end / Assets
Dividend Payout Ratio	= Dividends paid / Net income
Market to Book Value	= Market capitalization at year end / Equity
ROA	= Net income / Assets

IV.4. Analyses

IV.4.1. Empirical Results

The limited disclosure of public information and complicated company structures made it difficult to gather numerous and proper information about the specific acquirer companies, especially with regard to the family-owned companies. The data availability concerning the acquiring private equity companies is partially better as some companies are publicly listed and other publish comprehensive financial information like annual reports in their online investor relations section. Therefore, I limited the descriptive statistics of the acquirer companies to a few indicators only.

Table IV.14. General Characteristics of Family Business and Private Equity Investors

The data is based on various sources, e.g. Bloomberg, press coverage and corporate websites. Panel A shows the countries of origin of each analysed family business and private equity investor. Panel B tabulates descriptive data concerning the founding years of the family and private equity sample.

Panel A: Geographic classification				
	Family Business Investors		Private Equity Investors	
	# of Firms	in %	# of Firms	in %
Austria	2	4	1	1

Australia			1	1
Belgium	2	4		
Cyprus	3	5		
Denmark	1	2		
Finland	2	4		
France	7	13	8	11
Germany	12	21	1	1
Italy	9	16	1	1
Luxembourg	2	4	1	1
Netherlands	5	9	5	7
Norway	3	5		
Spain	5	9		
Sweden	3	5	14	19
United Kingdom			24	34
United States of America			13	19
n.a.			1	1
Total amount	**56**	**100**	**70**	**100**
Thereof listed firms			**7**	**10**

Panel B: Founding year

	Family Business Investors	Private Equity Investors
Mean	1946	1987
Median	1957	1987
Youngest	2011	2003
Oldest	1819	1969

Table IV.14. gives a brief overview of two different characteristics of the analysed Continental European family business investors as well as of the private equity investors. Panel A shows that most of the family investors are situated in Germany (21%), followed by Italy (16%) and France (13%). Therefore, these largest Continental European countries[54] consolidate half of all family acquirers. The geographic classification of the private equity investors indicates that these are primarily situated in the United Kingdom (35%), followed by Sweden (19%) and the United States (19%). 10% of my private equity sample are listed firms. The large amount of Anglo-Saxon private equity companies is no surprise and could be explained with the origin of private equity first in the United States and later in the United Kingdom.

Panel B shows some descriptive statistics concerning the corresponding founding years of the family and private equity companies. The average founding age of all analysed family companies is 1946 which argues for a signal to establish family companies following the end of the Second World War in Europe. But the range of my family companies is quite large as the oldest firm has been founded in 1819 and the youngest in 2011. The average founding year of the private equity companies in this study is 1987, the year following the comprehensive deregulation of the stock market in the U.K. The founding year of the oldest firm is 1969 and of the youngest firm 2003.

Table IV.15. Overall Transaction Characteristics between 2002–2012

The data incorporates all samples in the analysed period and is based on Bloomberg. A double check occurred via public sources like press coverage and corporate websites. Panel A shows the respective industry classification of each sample subdivided into both investor groups, i.e. family business investors and private equity investors. Panel B tabulates the corresponding years of the respective transaction announcement again subdivided into both investor groups.

Panel A: Industry Group Classification of Investment Targets		
Industry Group	**Family Investors**	**Private Equity Investors**
Advertising	1	1
Apparel	1	4
Auto Parts / Equipment	1	2
Beverages	2	
Building Materials	4	4
Chemicals	2	4
Commercial Services	3	2
Computers	1	
Cosmetics / Personal Care	1	3

[54] GDP Rank of Continental European countries in 2012: 1. Germany, 2. France and 3. Italy; excluding Russia; Source: International Monetary Fund Database.

Distribution / Wholesale	2	1
Electrical Components / Equipment		2
Electronics		3
Energy-Alternate Sources	1	1
Engineering / Construction	2	1
Environmental Control	1	
Food	9	
Healthcare-Products / Services	2	9
Holding Companies	1	
Home Builders	1	2
Home Furnishings	1	3
Housewares	2	1
Internet	2	1
Leisure Time	3	2
Machinery-Diversified	3	2
Media	2	1
Metal Fabricate / Hardware		3
Miscellaneous Manufacturing		1
Oil / Gas and Services	1	5
Packaging / Containers		1
Pharmaceuticals	1	2
Retail	2	5
Software	1	1
Telecommunications		3
Transportation	2	
Trucking / Leasing	1	
Total amount	**56**	**70**

Panel B: Transaction Announcements by Year

Year of Announcement	Family Investors	Private Equity Investors
2012	8	4
2011	7	3
2010	2	6
2009	2	4
2008	9	9
2007	9	11
2006	4	8
2005	5	7
2004	1	10
2003	3	6
2002	6	2

Total amount	**56**	**70**

Table IV.15. lists the key characteristics of the target companies in the sample period from the year 2002 to 2012. Panel A is the classification of the target companies into the various industry groups. The industry groups which most frequently appear as family investor targets are: Food, Building Materials, Commercial Services, Leisure Time and Machinery-Diversified. The most frequently represented industry groups of the private equity investors are: Healthcare, Retail and Oil & Gas. According to an unpublished comparison of the targets' industry groups with the industry affiliation of the acquiring family investors, it can be stated that most of the family investors are looking for acquisition targets in their specific industry. The top three industry groups of the acquiring family investors are: Food, Building Materials and Commercial Services.[55] This is in line with the study of Franks et al. (2008) who mention the significant industry concentration of family firms in the Continental European countries Germany, Italy and France. Panel B shows the different years of the transaction announcements. With a peak of the family investor activities in the years 2007 and 2008 and a strong recovery following the financial crisis in 2011 and 2012, the transaction activities of the private equity investors show a nearly similar development which slowed down a bit since 2010.

Table IV.16. Key Performance Indicators of Target Companies prior to Engagement (2002 to 2012)

*This table shows various financial performance indicators to characterise the target companies of the family and private equity investors. The indicators are based on a three-year average of the corresponding financial years prior to the engagement by the investors. For the definition of the data, please see Table IV.13. The different columns show the number of observations, the means and medians of each variable as well as the corresponding test statistics. I conducted the t-Test for the difference in mean and the non-parametric Mann-Whitney U-Test for the difference in median between the target companies of both investor groups. ***, **, * and # indicate significance at the 0.1%, 1%, 5% and 10% levels.*

Variables		**Family Firm Targets**		**Private Equity Targets**		**t-Test (Z-Test) for difference in means (medians)**
		Obs.		**Obs.**		
Transaction Volume in €m	Mean	56	687	68	732	-0.233
	Median		225		464	1.328**
Sales in €m	Mean	55	2,250	67	2,553	-0.335
	Median		991		894	1.887
ROA	Mean	56	0.0432	70	0.0457	-0.221
	Median		0.04		0.05	1.862

[55] To focus on classical industry groups only, I excluded the most frequent family investor classification groups "Holding Companies" and "Investment Companies" from the analysis.

Cash / Assets	Mean	56	0.0963	70	0.096	0.014
	Median		0.06		0.065	1.804
Dividend Payout Ratio	Mean	46	0.4804	57	0.3184	-1.281
	Median		0.335		0.25	1.108
Debt / Assets	Mean	56	0.6118	70	0.5873	0.842
	Median		0.625		0.600	2.142
Short-&Long-term Borrowings / Assets	Mean	53	0.1602	70	0.1283	2.316*
	Median		0.150		0.135	2.223
Market to Book Value	Mean	53	2.266	67	3.384	-0.906
	Median		1.570		1.710	1.598
EBIT Margin	Mean	53	0.0755	68	0.081	-0.420
	Median		0.070		0.080	1.561
EBITDA Margin	Mean	54	0.160	68	0.1385	0.927
	Median		0.120		0.120	1.772
Freefloat	Mean	44	33.96	54	50.21	-2.231*
	Median		19.92		48.25	0.933
Number of Employees	Mean	55	7,922	69	10,306	-0.505
	Median		2,689		3,407	1.702

Table IV.16. shows key operating and financial indicators to analyse the performance of the target companies prior to the engagements by family business and private equity investors. I calculate indicators with focus on profitability, cash, leverage and market valuation. The comparison between the targets of both investor groups shows some differences but only a few are statistically significant like the differences of the transaction volume medians as well as the differences of the leverage indicator (Short- and Long-term Borrowings to Assets) and freefloat means. A careful summary of the mostly not statistically significant results indicates that family business investors make smaller transactions (Transaction Volume), focus on smaller companies (Number of Employees) with a higher dividend payout ratio, a slightly higher leverage (Short- and Long-term Borrowings to Assets), a cheaper market valuation (Market to Book Value) and a lower freefloat level.

To predict if a public listed company could fit into the target scheme of rather a family business investor than a private equity investor, I used the financial data of the target companies for a two-step analysis. In the first step, I shortened the sample period to eight years (2002 to 2009) and calculated the operating and financial key performance indicators again (see Table IV.17.).

Table IV.17. Key Performance Indicators of Target Companies prior to Engagement (2002 to 2009)

*This table shows various financial performance indicators to characterise the target companies of the family and private equity investors. The indicators are based on a three-year average of the corresponding financial years prior to the engagement by the investors. For the definition of the data, please see Table IV.13. The table includes only samples with transaction announcements from the year 2002 to 2009. The different columns show the number of observations, the means and medians of each variable as well as the corresponding test statistics. I conducted the t-Test for the difference in mean and the non-parametric Mann-Whitney U-Test for the difference in median between the target companies of both investor groups. ***, **, * and # indicate significance at the 0.1%, 1%, 5% and 10% levels.*

Variables		**Family Firm Targets**		**Private Equity Targets**		**t-Test (Z-Test) for difference in means (medians)**
		Obs.		**Obs.**		
Transaction Volume in €m	Mean	39	718	55	807	-0.371
	Median		259		519	0.752*
Sales in €m	Mean	38	2,416	53	2,019	0.566
	Median		1,152		950	1.089
ROA	Mean	39	0.0436	57	0.0454	-0.130
	Median		0.040		0.050	1.069
Cash / Assets	Mean	39	0.0908	57	0.0851	0.284
	Median		0.050		0.060	1.020
Dividend Payout Ratio	Mean	33	0.4430	48	0.3131	-0.784
	Median		0.270		0.270	0.772
Debt / Assets	Mean	39	0.6364	57	0.5905	1.341
	Median		0.640		0.600	1.319
Short-&Long-term Borrowings / Assets	Mean	37	0.1649	57	0.1307	2.174*
	Median		0.150		0.140	1.302
Market to Book Value	Mean	39	2.579	55	3.717	-0.720
	Median		1.670		1.760	1.043
EBIT Margin	Mean	39	0.0705	55	0.0836	-0.876
	Median		0.080		0.080	0.904
EBITDA Margin	Mean	38	0.1382	55	0.1444	-0.320
	Median		0.130		0.120	0.975
Freefloat	Mean	32	43.888	46	55.275	-1.371
	Median		38.04		67.01	0.634
Number of Employees	Mean	39	9,521	56	11,439	-0.310
	Median		2,731		3,101	1.025

With only a few statistically significant results (differences in means and medians of Transaction Volume and Short- & Long-term Borrowings to Assets), most of the outcome is similar to the results of Table IV.16. In the second step of my analysis, I used the data of the eight years sample and conducted a binominal logistic regression with carefully selected performance indicators.[56]

Table IV.18. Logit Model to predict targeting by Family Business or Private Equity Investors

*This table reports the results of the binominal logistic regression to predict the probability that a company could become an investment target of either family business investors or private equity investors. The column shows a set of selected key performance indicators (see also Table IV.13.) which consists of the target companies of both investor groups. ***, **, * and # indicate significance at the 0.1%, 1%, 5% and 10% levels.*

Constant	-2.351
ROA	-14.353
EBITDA Margin	-4.440
Dividend Payout Ratio	-0.342
Cash / Assets	6.850
Short-&Long-term Borrowings / Assets	12.773*
Market to Book Ratio	0.399
Freefloat	-0.008
Obs.	63
Likelihood Ratio	70.317
Hosmer Lemeshow Test (p value)	0.930
Pseudo R2 (Nagelkerkes Rsq)	0.275

Table IV.18. shows the results of the logistic regression. As independent variables I test the efficiency and profitability (Return on Assets and EBITDA margin), dividend payout ratio, cash holdings (Cash to Assets), leverage (Short- & Long-term Borrowings to Assets), market valuation (Market to Book Ratio) and the freefloat. My regression model shows a good quality (low Nagelkerkes R2 and p value of Hosmer Lemeshow Test of above 0.05) but the result of only one indicator is statistically significant.

The outcome of the leverage indicator reveals that companies with a higher leverage fit more into the target scheme of family business investors. Therefore this result is in line with the outcome of Table IV.16. and Table IV.17. and militates in favor for the business model of private equity investors to generate

[56] Logistic regression tests with all or a large selection of the presented key performance indicators in Table IV.18. suggested high correlations between the figures, especially between the profitability and leverage indicators. I therefore decided to limit the indicators used in the regression and to focus on the most relevant.

excess returns via for example financial engineering with focus on increasing the leverage (see for example (Judd, 2006), (Achleitner et al., 2010), (Rauch and Umber, 2012)).

A careful interpretation of the other not statistically significant results comes to the conclusion that the likelihood of companies of becoming a family business investor target is higher if these companies are less profitable, have higher cash holdings and leverage. Indicators like Dividend Payout Ratio, Market to Book Ratio and Freefloat are playing a minor role only.

Following the binominal regression, I used the data of the target companies to test the quality and predictability of the regression model. To conduct t- and Z-Tests for differences in means and medians, I used the shortened three-year sample period from 2010 to 2012 and included the same key performance indicators as in the binominal regression. Table IV.19. shows the results of this analysis.

Table IV.19. Key Performance Indicators of Target Companies Prior to Engagement (2010 to 2012)

*This table shows selected financial performance indicators which have been used in the binominal logistic regression (see Table IV.18.). The indicators are based on a three-year average of the corresponding financial years prior to the engagement by the investors. For the definition of the data, please see Table IV.13. The table includes only samples with transaction announcements from the year 2010 to 2012. The different columns show the number of observations, the means and medians of each variable as well as the corresponding test statistics. I conducted the t-Test for the difference in mean and the non-parametric Mann-Whitney U-Test for the difference in median between the target companies of both investor groups. ***, **, * and # indicate significance at the 0.1%, 1%, 5% and 10% levels.*

Variables		**Family Firm Targets**		**Private Equity Targets**		**t-Test (Z-Test) for difference in means (medians)**
		Obs.		**Obs.**		
ROA	Mean	17	0.0424	13	0.0469	-0.287
	Median		0.050		0.060	0.102
EBITDA Margin	Mean	16	0.2119	13	0.1138	1.627
	Median		0.1100		0.1200	0.109
Dividend Payout Ratio	Mean	13	0.5754	9	0.3467	-1.243
	Median		0.5000		0.2000	0.030
Cash / Assets	Mean	17	0.1088	13	0.1438	-0.926
	Median		0.0600		0.1100	0.084
Short-&Long-term Borrowings / Assets	Mean	16	0.1494	13	0.1177	1.044
	Median		0.1250		0.1200	0.114
Market to Book Value	Mean	14	1.3957	12	1.8550	-1.379
	Median		1.2650		1.4600	0.060

Freefloat	Mean	12	7.4850	8	21.1188	-1.829
	Median		5.2950		13.1300	0.028

As mentioned above (see Table IV.18.), family business investors focus on less profitable companies with high cash holdings and leverage. Other indicators like Dividend Payout Ratio, Market to Book Ratio and Freefloat are less relevant. The results of Table IV.19. do not verify the tendency of the regression. The differences in means and medians are not statistically significant and most of the outcome contradicts the results presented earlier. The targets of the family business investors show nearly the same efficiency (ROA) and are more profitable (EBITDA Margin) as the target companies of the private equity investors, have less cash (Cash to Assets) and a considerably lower freefloat level. In addition, the market valuation (Market to Book Ratio) is lower and the Dividend Payout Ratio is higher as predicted by the binominal regression. The leverage (Short- & Long-term Borrowings to Assets) is the only key performance indicator that proves the results of the regression but without being statistically significant. Explanations for the contradictions between the results of the binomial regression and the test of its predictability can be the limited sample size of the years 2010 to 2012 as well as the accumulation of specific target industries in the three-year period which influence the results.

For the analysis of the different market reactions in the course of the public announcements of the respective acquisitions by family business and private equity investors, I examined two different short-term event windows. I defined the event day (t=0) as the day of the first public announcement of the corresponding acquisition. The data was based on Bloomberg which I double checked via for example company press statements or official public tender offer prospectuses. I used the standard market model to calculate the cumulative abnormal returns (CAR) and the mean cumulative abnormal returns (CAAR).[57] Due to missing share price data of the target companies, the sample group decreased by six family investor and eight private equity investor targets. The results of the event studies are shown in Table IV.20.

Table IV.20. Market Reactions in the Course of Transaction Announcements

*This table shows the results of the short-term event studies across two different time windows. I used the standard market model with the Stoxx Europe 600 as benchmark index. The table covers the whole sample period from the year 2002 to 2012. The different columns show the number of observations, the number of positive versus negative returns, the means of the cumulative abnormal returns (CAR) and the results of the test statistics. I conducted the parametric t-Test and Boehmer Test and the non-parametric Corrado Rank Test. ***, **, * and # indicate significance at the 0.1%, 1%, 5% and 10% levels.*

[57] The standard market model is based on an estimation window of more than 250 trading days ending 10 days prior to the event day (t=0). My benchmark index was the Stoxx Europe 600 representing the major 600 public listed European companies. With the parameters calculated via the estimation window, I was able to compute the expected, abnormal and cumulative abnormal returns for the two different event windows. The abnormal return is the difference between the target company's return and the expected return.

Event windows in days	Obs.	P / N	CAR	t-Test	Boehmer Test	Corrado Rank Test
[-1,+1]			mean	t-value	z-score	z-score
Family Firm Targets	50	30 / 20	4.19%	7.14***	2.44*	2.64**
Private Equity Targets	62	31 / 31	2.11%	4.16***	2.12**	1.82#
[-10,+10]			mean	t-value	z-score	z-score
Family Firm Targets	50	29 / 21	10.14%	6.53***	4.03***	1.81#
Private Equity Targets	62	32 / 30	6.46%	4.81***	1.98*	0.64

The results of the event studies show a high statistically significance, expressed by almost every statistical test. It can be concluded that the capital market participants evaluate the engagement of a family investor higher than the engagement of a private equity investor. The mean cumulative abnormal returns of both event windows (three-day and 21-day event window) of the family business investor targets exceed the returns of the private equity targets. Explanations for the different valuation could be that market participants believe in the ability of family firms to better integrate, manage and control the acquired companies or that family business investors just pay higher acquisition premiums to succeed against competing bidders like private equity or other strategic investors.

To predict whether certain financial performance indicators influence the intensity of the market reactions in the course of the public announcements, I run a multiple regression for both investor groups. The results are shown in Table IV.21.

Table IV.21. Summary of Multiple Regression

*These tables show the results of the multiple regression for each investor group, i.e. family business investors and private equity investors. To increase the quality of the regression, I limited the amount of key performing indicators. The different columns show the four independent variables, i.e. the selected key performance indicators (see also Table IV.13.), the unstandardized regression coefficient (B), the Standard Error of the coefficient (SEB) and the standardized coefficient (b). All columns are separated by the two different event windows (CAR3 = three-day and CAR21 = 21-day event window). ***, **, * and # indicate significance at the 0.1%, 1%, 5% and 10% levels.*

IV.21.1. Multiple Regression for Family Business Investors

Variable	*B*		SE_B		*b*	
	CAR3	CAR21	CAR3	CAR21	CAR3	CAR21
Intercept	0.234	0.281	0.076	0.099		
ROA	-0.605	-0.645	0.699	0.911	-0.157	-0.129
EBITDA Margin	0.054	0.091	0.220	0.287	0.047	0.061
Cash / Assets	-0.031	-0.097	0.302	0.394	-0.019	-0.045
Short-&Long-term Borrowings / Assets	-0.446	-0.613	0.417	0.544	-0.223	-0.235

IV.21.2. Multiple Regression for Private Equity Investors

Variable	*B*		SE_B		*b*	
	CAR3	CAR21	CAR3	CAR21	CAR3	CAR21
Intercept	0.212	0.192	0.055	0.066		
ROA	0.236	0.509	0.470	0.559	0.071	0.131
EBITDA Margin	-0.629	-0.684	0.325	0.387	-0.290#	-0.268#
Cash / Assets	-0.179	-0.221	0.237	0.282	-0.103	-0.109
Short-&Long-term Borrowings / Assets	-0.096	0.117	0.304	0.362	-0.047	0.049

The unstandardized coefficients (*B*) of the tables above indicate how much the dependent variables CAR3 and CAR21 vary with an independent variable when all other independent variables are held constant. Despite a good quality of the model, only one independent variable coefficient (EBITDA Margin in the multiple regression table for private equity investors) is statistically significantly different from zero. The results show a large negative correlation between the announcement returns and the two performance indicators ROA and Short-&Long-term Borrowings / Assets, i.e. the announcement returns are higher for target companies which have a smaller ROA and leverage before the announcement.

A careful interpretation of the results indicates that capital market participants assume that family business investors are able to generate value following the acquisition of a company through efficiency gains (expressed by ROA) and an increased leverage (Short-&Long-term Borrowings / Assets). According to the other regression results, profitability and cash holding of a target company do not particularly influence the capital market reaction. In comparison to the family investors, the profitability (expressed by

the EBITDA Margin) of the private equity targets has a greater impact on the announcement returns, i.e. the announcement returns are higher for target companies which are less profitable before the announcement. Capital market participants believe in the ability of private equity investors to generate value via focusing on profitability issues of their targets. The cash holding also influences the announcement returns but should always be considered in combination with the leverage of the targets.

IV.4.2. Comparison with Related Research

A comparison of my findings with especially U.S. based research should give more information about the classification of family investors within the universe of shareholder activism. Numerous research on shareholder activism focuses on the key characteristics of the target firms, the main element of this study. Especially the condition of the operating performance as key criterion of activist targets is kind of ambiguous. For example the studies of Bebchuk et al. (2015), Bethel et al. (1998), Cziraki et al. (2010), Ellison et al. (2008), Drerup (2011) and Gillan and Starks (1998) mention poor performance i.e. low profitability as key characteristic of activism targets. According to Bethel et al. (1998), target companies that are not experiencing a block purchase by activists have a pre-engagement median ROA (return to assets) of 15.5% compared to companies that encounter activist block purchases with a median ROA of 12.6%. In contrast, other also important studies come up with a different assessment. For Boyson and Mooradian (2007) and Klein and Zur (2006) strong operating performance i.e. high ROA is a distinctive characteristic of activism targets. Other target characteristics are large cash positions ((Boyson and Mooradian, 2007), (Brav et al., 2009), (Ellison et al., 2008), (Klein and Zur, 2006)) and low leverage ((Brav et al., 2009), (Cziraki et al., 2010), (Ellison et al., 2008)).

The outcome of my analysis partly fit into the target scheme mentioned in the studies on shareholder activism. With regard to the undetermined aspect of profitability, my target results do not add definite results to the existing research. Based on the data, the logistic regression (see Table IV.18.) shows that family business investors target companies with poorer performance, i.e. lower efficiency and profitability (ROA and EBITDA margin). The predictions are not statistically significant and cannot be confirmed by the results of Table IV.19. The leverage of my sample firms targeted by family business investors is statistically significant higher than that of its private equity peers (see Table IV.16. and Table IV.17.). The cash positions are nearly similar (Table IV.16. and Table IV.17.) or below the private equity targets (see Table IV.19.).

With regard to the announcement returns, my findings are in line with other studies. Gogineni (2011) mentions mean abnormal returns of 21.4%[58] if a company is acquired by a private firm. In the study of Becht et al. (2014) with focus on the global regions North America, Europe and Asia, they find abnormal returns

[58] Three-day event window [-1,+1].

of between 4.0% and 6.9%[59] in the course of the announcement of block purchases by activists. Other studies confirm the value creating effect of the engagement of activist investors (see for example Clifford (2008), Klein and Zur (2009), Stadler (2010), Mietzner et al. (2011) or Drerup (2011)).[60] My findings concerning the market reactions and the comparison with other studies confirm the statements made by Caprio et al. (2011) that acquisitions by large shareholders result in positive announcement effects. And the U.S. focused study of Basu et al. (2009) concretises the positive correlation between the dominance of family ownership and positive abnormal acquisitions returns.

IV.5. Conclusion

This is to my knowledge the first study which compares the investment activities of Continental European family business investors with private equity investments and puts this topic thematically into the context of shareholder activism. My main objective of this study is to test the hypothesis that both investor groups do not significantly differ from their investment approach and strategy. Overall, the results of this study confirm this hypothesis as most of the differences between both investor groups are not statistically significant. Minor differences are mainly associated with their specific business model.

The results of Table IV.16. indicate that family firms are more likely to target smaller companies with a higher dividend payout ratio, a slightly higher leverage (Short- and Long-term Borrowings to Assets), a cheaper valuation by the market (Market to Book Value) and a lower freefloat level. The analysis of the shortened sample period (Table IV.17.) is similar to this outcome. With focus on the business approach of both investors, it makes sense that family investors target companies with higher dividend payout ratios as their investment return highly depends on the dividend distribution of their investments. Furthermore, the business model of private equity firms is mainly based on financial engineering triggered especially by medium-term levered and unlevered measures (Achleitner et al., 2010). The focus of family investors on firms with low market to book values argues for a more conservative acquisition approach as these targets are favorably valued by the capital market and potentially less profitable compared to private equity targets. Beside the differences of the leverage between family business and private equity targets, the predictions of the logistic regression (see Table IV.18.) could not be verified by the outcome of Table IV.19. Reasons can be the limited sample size of the years 2010 to 2012 as well as the accumulation of specific target industries in the three-year period.

The analysis of the market reactions in the course of the respective transaction announcements shows higher abnormal returns for family based acquisitions than for acquisitions with participation of private equity firms. Supported by the interpretation of the multiple regression (see Table IV.21.), these

[59] Across two event windows [-10,+10] and [-20;+20].

[60] Overview of stated abnormal returns: Clifford (2008) 3.39% surrounding the filing date [-2,+2], Klein and Zur (2009) 10.2% in a 61-day event window, Stadler (2010) 3.27% [-2,+2], Mietzner et al. (2011) 8% if activist is a private equity firms compared to 5.41% if the acquirer is a hedge fund [-20,+20], and Drerup (2011) 1.27% [t=0].

statistically significant results argue for the market participants' confidence that family business investors are probably better qualified to efficiently integrate, manage and control the acquired companies. It could be summarised that family business investors in Continental Europe behave in a similar way like private equity investors and should therefore be involved as additional investor group in future studies on shareholder activism in Continental Europe.

V. Summary of Key Research Findings

1. Independent from the prevailing corporate environment and corporate governance system, shareholder activism could be successfully executed in Continental Europe just like in Anglo-Saxon jurisdictions. The corresponding value enhancing effect of shareholder activism confirms the findings of most of the studies.
2. In comparison with existing research, one key differentiating element and new insight of this study is the focus of the activist engagement on improving the profitability of the target companies. Due to the limited sample size, further research should verify this observation and its potential distinguishing feature of Continental European shareholder activism.
3. Family business investors in Continental Europe should become part of the future research on shareholder activism which is another important finding of this dissertation. Beside some minor business model specific differences between family business investors and activist hedge funds and private equity funds, like for example their focus on smaller companies with higher dividend payout ratio, no major differences between the activist investor groups could be found.
4. Measured by short- and long-term event studies, activist engagements by family business investors show higher abnormal returns compared to activist hedge funds and private equity funds. These findings suggest that family business investors are considered more suited by capital market participants to successfully impact the target companies than other activist investors.
5. To further verify the findings of this dissertation a larger sample study incorporating all three mentioned activist investor groups, i.e. family business investors, hedge funds and private equity funds, could be conducted.

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Declaration of Honor

I declare upon my word of honor that the doctoral thesis submitted herewith is my own work. All sources and aids used have been listed. All references or quotations in any form and their use have been clearly identified. The dissertation has not been submitted for examination purposes to any institution before.

Ich erkläre hiermit ehrenwörtlich, dass ich die vorliegende Arbeit selbstständig angefertigt habe. Sämtliche aus fremden Quellen direkt und indirekt übernommene Gedanken sind als solche kenntlich gemacht. Die Dissertation wurde bisher keiner anderen Prüfungsbehörde vorgelegt und noch nicht veröffentlicht.

Frankfurt am Main, den 20. Juni 2016 _____

Philipp Schüler

Scientific Career

2012-2016: Doctoral study (Dr. rer. pol.) at Technische Universität Darmstadt, Darmstadt/Germany

2004-2006: Main study in business administration (Dipl.-Kfm.) at HHL Leipzig Graduate School of Management, Leipzig/Germany

2002-2004: Basic study in business administration at Friedrich-Schiller-Universität, Jena/Germany

2001: Abitur at Gymnasium am Rittersberg, Kaiserslautern/Germany