



LUND UNIVERSITY

Institutional Portfolios and M&A Returns

- A study about institutional investors' portfolio exposure on the
Swedish market

Master Thesis (15 ECTS)

MSc. Corporate Financial Management
Lund University
School of Economics & Management
Lund, May 2017

Authors

Karl Ardby (19930628-3418)
Teodor Opasiak (19930113-1232)

Supervisor

Håkan Jankensgård

Abstract

- Title:** Institutional Portfolios & M&A Returns
- Date:** 2017-05-30
- Course:** BUSN 89 – Degree Project in Corporate and Financial Management
Master Level, 15 ECTS
- Authors:** Karl Ardby & Teodor Opasiak
- Supervisor:** Håkan Jankensgård
- Key words:** Portfolio exposure, institutional investors, short-term abnormal return, agency theory, M&A wealth effects, incitements
- Purpose:** To examine how investors' portfolio exposure in a concentrated ownership-structure affects abnormal returns for the bidding company in a merger and acquisition on the Swedish market
- Methodology:** Quantitative research approach with an event study to explore cumulative abnormal return, multivariate regression analysis
- Theoretical perspective:** Agency theory, M&A wealth effects, empire building, managerial hubris, block-ownership, institutional ownership
- Empirical foundation:** A sample of 338 acquisitions completed on the Swedish market between January 2001 and January 2015
- Conclusion:** This study can not with today's limited foreign portfolio data confirm that high portfolio exposure of an institutional investor does create higher CAR in the event of a M&A.

Acknowledgements

The authors would like to thank our supervisor, Håkan Jankensgård, for his involvement, support and reflections in order to improve this thesis. Furthermore, we would like to thank Modular Finance for both professional and fast correspondence with the data material. Finally, we would like to send our greatest appreciations to our families and friends for giving us lots of encouragement during this intense period.

Thank you!

Karl Ardby

Teodor Opasiak

Table of Content

ABSTRACT	2
ACKNOWLEDGEMENTS	3
1. INTRODUCTION	7
1.1 BACKGROUND.....	7
1.2 PROBLEM DISCUSSION.....	8
1.3 PURPOSE AND RESEARCH QUESTION.....	11
1.4 DISPOSITION.....	12
2. LITERATURE REVIEW	13
2.1 DEFINITION OF MERGERS AND ACQUISITIONS	13
2.2 REASONS FOR MERGERS AND ACQUISITIONS.....	13
2.3 AGENCY THEORY	14
2.3.1 <i>Agency Costs</i>	14
2.3.2 <i>Explanation Behind the Occurrence of Agency Costs in M&As</i>	15
2.3.3 <i>Empire Building</i>	15
2.3.4 <i>Managerial Hubris-hypothesis</i>	16
2.3.5 <i>Agency Costs in M&A's</i>	17
3. M&A EMPIRICS	18
3.1 WEALTH EFFECTS IN MERGERS AND ACQUISITIONS.....	18
3.2 WEALTH EFFECTS CHARACTERISTICS	19
3.3 OWNERSHIP CONCENTRATION, BLOCK-HOLDING AND MONITORING	21
3.4 INSTITUTIONAL OWNERSHIP AND MONITORING	22
3.5 INSTITUTIONAL OWNER'S PORTFOLIO EXPOSURE AND WEALTH EFFECTS	23
3.6 DEVELOPMENT OF HYPOTHESES	25
4. METHOD	26
4.1 RESEARCH APPROACH.....	26
4.2 DATA COLLECTION AND SAMPLE.....	27
4.3 EVENT STUDY	29
4.3.1 <i>Event Window</i>	30
4.3.2 <i>Estimation Window - Normal and Abnormal Returns</i>	30
4.4 INDEPENDENT VARIABLES.....	32
4.4.1 <i>Ownership Concentration</i>	32
4.4.2 <i>Institutional Ownership</i>	33
4.4.3 <i>Portfolio Exposure</i>	34

4.5.1 <i>Size</i>	35
4.5.2 <i>Payment Method</i>	35
4.5.3 <i>Cross-border Deal</i>	35
4.5.4 <i>Diversification</i>	36
4.6 REGRESSION ANALYSIS	37
4.7 METHOD DISCUSSION	38
4.7.1 <i>Reliability</i>	39
4.7.2 <i>Validity</i>	39
4.7.3 <i>Literature Study</i>	40
5. EMPIRICAL RESULTS.....	42
5.1 SAMPLE DESCRIPTIVE STATISTICS	42
5.1.2 <i>Violations of Regression-Assumptions</i>	46
5.1.3 <i>Results of Regressions – 1 and 2</i>	47
5.2 RESULTS OF HYPOTHESES	49
5.2.1 <i>Results of Hypothesis 1 - Regression 3</i>	49
5.2.2 <i>Results of Hypothesis 2 – Regression 5 and 6</i>	50
5.2.3 <i>Results of Hypothesis 3 – Regression 6 and 7</i>	51
6. ANALYSIS AND DISCUSSION	55
6.1 ANALYSIS OF HYPOTHESIS 1	55
6.2 ANALYSIS OF HYPOTHESIS 2	56
6.3 ANALYSIS OF HYPOTHESIS 3	58
7. CONCLUSION	60
7.1 CONCLUSION.....	60
7.2 PROPOSAL FOR FUTURE RESEARCH.....	61
7.3 REFLECTIONS AND CRITICISM	61
REFERENCES.....	63
<i>Academic Journals</i>	63
<i>Books</i>	73
APPENDIX.....	74
<i>Appendix 1 – Kolmogorov Smirnov</i>	74
<i>Appendix 2 – Normal Distribution</i>	75
<i>Appendix 3 - T-test of institutional and non-institutional</i>	76
<i>Appendix 4 – Tests for OLS-violations</i>	77
<i>Appendix 5 – Descriptive Statistics without outliers</i>	78
<i>Appendix 6 – Correlation Matrix Excluding Owners >90%</i>	79

List of Tables

Table 4.1: Sample Criteria for Observations.....	29
Table 4.2: Summary of Control-Hypotheses and the Expected Impacts on CAR....	37
Table 5.1: Descriptive Statistics.....	43
Table 5.2: Pearson's Correlation Matrix.....	45
Table 5.3: Summary of Regressions.....	48

1. Introduction

In this first chapter, an introduction to the study's problem will be presented. The reader will take part of several well-acknowledged academic journals – with a spread of modern and early researches – that motivates the background of the core problem. Furthermore, a clarity of why the authors of this study believes that the problem has to be treated will be provided. Conclusively, the purpose and the research question will be concretised and a matrix of disposition will ultimately be displayed to get an overview of following chapters.

1.1 Background

The separation of ownership and control has been a problematic topic discussed by researchers around the world ever since "The Wealth of Nation" by Adam Smith in 1776. Berle & Means (1932) further concretized the separation of ownership and control by describing the term ownership dispersion. The authors argued that the average investor did not have any deep interest in the daily operations of company where one owned shares. Since the majority of corporate ownership are held by these investors together - hence being dispersed - the control over the decision making of the daily operations is rather in the hands of the company's board of directors (Berle & Means 1932).

In "Theory of the firm: Managerial behaviour, agency costs and ownership structure", Jensen & Meckling (1976) developed a theory of ownership structure based on agency theory where the agent - in a corporate context: the board of directors - have incentives different from the incentives of the principal (the shareholders). The deviation of incentives in the decision making process of the firm's operations creates certain transaction costs called agency costs which affects the company value negative (Jensen Meckling 1976). Today, 40 years later, the topic of separation of ownership and control and the affection on shareholder value still occurs in various contexts within the research of finance and corporate finance (Fama & Jensen 2009).

Another well-discussed topic within finance is mergers and acquisitions (M&A) which often is considered to be one of the most important events in corporate finance.

The rationality behind that statement is mainly since these events tend to be extensive processes combined with involvement from different parties dealing with large transactions (Gaughan, 2007). M&A can even be considered to be the most important driver of corporate performance (Yen & André, 2007). The frequency of M&As is experiencing an accelerated growth since the last decades and were hitting a record-breaking year in 2015 in total number of deals with a slight decrease in 2016 resulting in a transaction volume of \$3,9 trillion (Fortune, 2017). The outlook for 2017 is that the M&A market will anticipate a consistent deal volume since companies face difficulties to create organic growth (JP Morgan, 2017).

The literature regarding if M&As actually create value for shareholders is heavily debated. According to Allen, Jagtiani, Peristiani and Saunders (2004) and Bhaumik and Selarka (2012) the target company's shareholders receive positive return, but acquiring company receive no or negative return. This result is consistent both with Faccio, McConnell and Stolin (2006) and Akben-Sechuk (2015) that acquires of public companies earn an insignificant average abnormal return since acquires seem to pay a premium to control the rights of the target. On the contrary, both Jensen and Ruback (1983) and Jeffrey (1988) provides evidence for acquiring company's shareholders receive positive abnormal returns after a merger or an acquisition.

Meanwhile, as a result of a more globalized market, foreign- and institutional have increased their influence in the Swedish listed companies. The consequences will be further investigated in the thesis.

1.2 Problem Discussion

Considering that the question if M&As do create shareholder value or not has been one of the most important topic within the research of corporate finance. Hence, it is of interest to study in what extent the classical problem of separation of ownership and control might impact the value creation in a M&A. The separation of ownership and control with higher agency cost as consequence can in this context be derived from theories like managerial hubris, impact of corporate governance and managerial entrenchment and hence explain possible value destruction in a M&A context (Yen & André 2007).

Further the agency explanation posits that if firms with a dispersed ownership structure - where the monitoring from shareholders are less effective - managers tend to undertake acquisitions that enhance their own empires even if the shareholders are worse off (Lewellen, Loderer and Rosenfeld (1985). In the opposite manner, in firms with a concentrated ownership structure the degree of monitoring should be stronger which consequently may reduce the agency cost - derived from the deviation of incentives caused in the manager owner conflict - and ultimately create higher value for the acquiring firm's shareholders in acquisitions (Yen & André 2007; Bhaumik & Selarka 2012).

As a result, earlier studies have shown that acquisition deals where acquiring firms with concentrated ownership-structures on average have a higher cumulative abnormal return (CAR) than firms with dispersed ownership (Yen & André 2007; Bhaumik and Selarka 2012). As mentioned above, concentrated ownership-structures influence wealth effects since in these structures there are stronger incentives to monitor and discipline managers to be acting in a way that maximizes shareholder value (Shleifer & Vishny 1998; Thomsen & Pedersen 2000; Faccio & Lang 2002; LaPorta et al 1999). Furthermore, these concentrated ownership-structures can be of different characteristics depending of the type of investor, for example institutional investors - such as banks, insurance firms or pension funds - but also family investors controlling companies with their holdings of voting shares. Additionally, different shareholder groups might also have different incentives to monitor the management: institutional owners need to monitor their investment to be in their investors best interest while family-owned firms monitor management in order to protect their own wealth invested in the company (Craninckx & Huyghebaert 2015).

A previous study by Craninckx & Huyghebaert (2015) have shown that family-owned firms on average generate a capital gain of 4.23% after the M&A process which can be compared to M&A gains realized by widely held companies of 2.34%. However, firms with concentrated ownership where the biggest ownership share is held by an institutional investor show negative return of -1.78%. Hence, the authors provided no evidence that firms with concentrated institutional ownership mitigate the agency

costs through monitoring and thereby create higher shareholder wealth in context of M&A.

So why does this puzzle in the literature occur? Firch, Harford and Tran (2014) motivates that an investor increases their monitoring when the importance of the investment increases. The largest institutional investor can have a broad or a narrow portfolio, where the exposure reflects her incentives to monitor managers in the firm. According to Faccio et al (2011) large shareholder groups with diversified portfolios have - in a more significant way – a tendency to take on greater corporate risk in the firms they invest in. Consequently, why concentrated ownership with institutional investors does not create positive wealth effect, as it theoretically should do, might be because the investors' exposure to the specific company is relatively low to the rest of their portfolio (LaPorta et al, 1999). Thereby, the monitoring is reduced and – as a consequence – a reduced wealth effect if the presence of institutional owners.

Moreover, this puzzle concerns since theoretically the concentrated ownership-structure should have higher CAR than dispersed ownership. Meanwhile, empirical findings suggest that it might be the characteristic of the investor that influence if the M&A can create value or not. Hence, the largest investor might be a “pillar of society” or do not want to maximize the firm-value (Cronqvist & Nilsson 2003). Meanwhile, there might be investors having different incentives, for instance investors that have almost their whole portfolio exposed to one single company and therefore have different incentive than investors that have a more diversified portfolio, and consequently do not suffer from a drawback in the firm (Cronqvist & Nilsson 2003).

These questions have earlier been speculations, mainly because of the lack of an appropriate way to measure different incentives of institutional investors. For instance, earlier studies have tried to measure incentives using ownership shares of investors, but fail to measuring the incentives well enough and hence causing an academic problem. In this study, we are aiming to solve this problem with offering a superior way to measure investors' incentives through their portfolio exposure.

To sum up, the previous research is debating if mergers and acquisitions can create value for shareholders. Earlier generic studies have also investigated if there is a difference between block-ownership or institutional-ownership, although the literature of the impact of ownership in a M&A is very limited and the limitation of research has been suffering from the problems of receiving the accurate data material (Bhaumik and Selarka, 2012).


The contribution of this thesis is to decisively fill the gap in the M&A research, since we have the possibility to study the shareholder's portfolio exposure in a given company. Earlier, the speculations about portfolio exposure and its impacts on shareholder wealth in M&As have not been able to study in a broader extent. Though, Sweden and Modular Finance AB (former SIS Ägarservice) has developed a database in which a thoroughly registration of owners and their portfolios has made it possible to explore the impacts of how concentrated ownership will affect the shareholder wealth in a M&A.

1.3 Purpose and Research Question

The purpose of this thesis is to examine how investors' portfolio exposure in a concentrated ownership-structure affects abnormal returns for the bidding company in a merger and acquisition on the Swedish market. This purpose leads to following research question:

- *Does high portfolio exposure mitigate agency costs and thereby explain the wealth effects in M&As with concentrated institutional ownership*

1.4 Disposition



• **Introduction** - In this first chapter, an introduction to the study's problem will be presented. The reader will take part of several well-acknowledged academic journals – with a spread of modern and early researches – that motivates the background of the core problem. Furthermore, a clarity of why the authors of this study believes that the problem has to be treated will be provided. Conclusively, the purpose and the research question will be concretised.

• **Litterature Review** - In this second chapter, the theoretical fundament will be provided to the reader, to create an understanding of both the topic and the core problem. The chapter will firstly explain the definitions of a M&A before describing theories of why M&A exists. Ultimately, the agency-theory and its negative affection of wealth-creation will be elucidated with the ambition to give an understanding to the reader why shareholder wealth in M&A differs.

• **M&A Empirics** - The ambition of this third chapter is to further provide the reader with understanding of the given subject by elucidating previous empirical findings. The chapter will provide scientific evidence of wealth effects in M&As, portfolio exposure and the impacts of institutional ownership of a targeting firm. Ultimately, three hypotheses will be presented deriving from the empirical findings and the theoretical framework from the previous chapter

• **Method** - This fourth chapter will motivate practical details of how the study is aiming to answer its purpose and research question. The reader will be informed how and why the authors selectively made certain decisions in – for instance – the data collection and the choice of measurement methods. The method-chapter will also consist of arguments for the preferred research approach and why this theoretical approach was considered to be superior.

• **Empirical Results** - This fifth chapter will display the empirical results of the research and the potential violations of the underlying assumptions. The results will be presented with tables and matrixes – attached either in this chapter or in appendix. Furthermore, the results will also be verified through a robustness-test where the authors describe how outliers and other adjustments in the data material affects the result. Ultimately, the three main hypotheses will be answered.

• **Analysis and Discussion** - In this sixth chapter, the authors will elaborate and analyse the results, with the ambition to give theoretical explanations on the outcomes of the hypotheses. These explanations will be supported of theories and earlier empirics from chapter two and three. Ultimately, the authors will give their opinions about the exposure-variable and discuss its validity.

• **Conclusions** - In this seventh chapter, the authors will elaborate and analyse the results, with the ambition to give theoretical explanations on the outcomes of the hypotheses. These explanations will be supported of theories and earlier empirics from chapter two and three. Ultimately, the authors will give their opinions about the exposure-variable and discuss its validity.

2. Literature Review

In the second chapter, the theoretical fundament will be provided to the reader, to create an understanding of both the topic and the core problem. The chapter will firstly explain the definitions of a M&A before describing theories of why M&A exists. Ultimately, the agency-theory and its negative affection of wealth-creation will be elucidated with the ambition to give an understanding to the reader why shareholder wealth in M&A differs. Theoretical arguments deriving from this chapter will later on be referred to in following chapters.

2.1 Definition of Mergers and Acquisitions

A merger and acquisition (M&A) is generally defined as a consolidation between two separate companies and their assets to become one entity. The single established company that has emerged from the merger or the acquisition contains the former separate companies' assets and liabilities (Gaughan, 2007). An acquisition is different from a merger in a way that an acquisition aims to overtake and incorporate the target completely hence implement the bidder's vision and culture in to the acquired company (Arnold, 2008).

Furthermore, a merger is different from a consolidation where the latter is a creation of an entirely new company. The differences between a merger and a consolidation can be explained that a merge means that company B is merged into company A. A consolidation is that company A and B merge into company C. Generally, when the two merging companies differs in size it is defined as a merge, but when the two companies are relatively equally sized it is defined as a consolidation (Gaughan, 2007).

2.2 Reasons for Mergers and Acquisitions

One of the most common reason to why a company proceeds with a M&A is to expand its business, since the expansion through a M&A-process is much quicker than expand through organic growth. From the bidder's point of view, an acquisition can be motivated through certain synergistic benefits, that will make the business efficient. Some takeovers are motivated by the idea that the acquiring organization's management can better manage the target's resources, commonly known as *best-*

owner principle. Tax gains can also be important motives for certain takeovers (Gaughan, 2007).

Moreover, managers tend to motivate a merger or an acquisition by the potential synergies. According to Koller, Goedhart & Wessels (2015) there are four different synergies that can be realized through such event 1) cost synergies, where cost is separated in fixed- and variable cost reductions 2) revenue synergies, by widening the products and services of the firm to provide a more complete offering, 3) market power synergies where the synergy results from the elimination of competitive firms on the market and ultimately 4) intangibles.

2.3 Agency theory

In order to understand the problem about institutional investors' different incentives of maximizing shareholder value, this sub-chapter will explain the agency theory and elaborate its importance in the context of M&As.

2.3.1 Agency Costs

In *Theory of the firm: Managerial behavior, agency costs and ownership structure*, Jensen & Meckling (1976) developed a theory of ownership structure based on an agency theory where the agent - in a corporate context: the board of directors - have incentives different from the incentives of the principal (the shareholders). The deviation of incentives in the decision making process of the firms' operations creates certain transaction costs, with the term agency costs, which affects the company value negative (Jensen Meckling, 1976).

Because of the existence of divergence of incentives, the principle has to make sure that the agent act in the principles best interest. Hence, the principle need to monitor the agent by establishing incentives which creates monitoring cost i.e. cost of monitoring to prevent a divergence of incentives between the agent and the principle. In addition, the principle might pay the agent to not perform certain actions (referred as bonding costs) which also means that the agent has to pay a certain amount if the agent takes action that would harm the principle (Jensen Meckling 1976). Further, it is not possible to prevent all divergence, that is there will always be some deviation of

incentives and hence reduction of welfare maximizing in the principle-agent relationship. The amount equivalent to this reduction can be referred to as the residual loss. Finally, Jensen & Meckling (1976) define agency costs as the summary of the monitoring expenditures, the bonding expenditures and the residual loss.

2.3.2 Explanation Behind the Occurrence of Agency Costs in M&As

The reason why M&As still are taken place despite high control-premiums is often motivated with the “Best owner-principle”, where the best owner is the one that has the ability to utilize and maximize the volume of the targeted enterprise. Though, this principle is often charged by several competing hypotheses, such as managerial hubris, empire building and managerial ego. These hypotheses are sceptical to an M&A-event, for instance because of the difficulties to motivate an acquisition premium - which will take time to financially recover from – or also the manager’s willingness to “pay” for annual growth-ratios in their annual reports. Hence, one of the crucial challenges for a manager is to ensure that an acquisition actually will create shareholder value (Gaughan, 2007; Koller et al, 2015)

In the following sub-chapters, the challenging propositions will be further theoretically investigated and elaborated.

2.3.3 Empire Building

Large shareholders or boards have the capability of monitor a firm’s management and CEO, so they in order with their job-description maximizes shareholder wealth (Schweiger and Very, 2003). Although, in some scenarios, it occurs that the CEO or management of the firm gets more freedom in their role, and therefore tend to pursue their own goals rather than the company’s. For instance, a CEO may have a personal vision to be head of a large company or making headlines for a sizeable transaction, hence forcing the company into an acquiring position only to create a large empire and without thoroughly investigating the potential downsides of the acquisition (Gaughan, 2007). Hence, this empire building is present when the managers of the firm gain personal benefits from expanding the size of the assets under control, without taking value creation into consideration (Koller et al, 2015).

This behaviour of the manager's tendencies to let the firm grow beyond its optimal size is a well-documented agency problem, to which increases the potential agency costs of a firm since managers derive financial or non-financial benefits from managing larger and more complex organisations (Chen, Lu and Sougiannis, 2012).

2.3.4 Managerial Hubris-hypothesis

The hubris-hypothesis posits that manager's in an acquiring firm does not solely care for the economic gains and predicted wealth when acquiring another firm (Gaughan, 2012). According to Roll (1986), bidding firms have a tendency to be biased in their decision-making and simply pay an overprice for the target.

Some firms engage in many acquisitions, but the average individual manager has only a few takeover-opportunities during his career. Rational bidders will realize that valuations of a target may not reflect the empirical truth, and many of the valuations contain different errors and deviations from the actual value. A bidding manager, who is biased with managerial hubris, may in his way of grasping the rare takeover-opportunity convince himself that his valuation is right and the market's price does not reflect the full economic value of the targeted firm, hence forcing and motivating the acquiring firm to pay a high price than theoretically rational premium relative the market's requested price (Gaughan, 2012; Roll, 1986).

Furthermore, once the market becomes aware of the irrational bid the acquiring stock price should decline – mainly since the firm has failed to allocate their wealth and consequently failed to maximize the bidding company's shareholder (Roll, 1986). The hubris-hypothesis does not have the intention to be applicable or valid in all takeovers, only to propose that the “human element” plays an important part in M&A transactions, where individuals - such as a CEO – can by solely affect the shareholder's return by fulfilling his own personal motives instead of the company's (Gaughan, 2012). Hence, the hubris-hypothesis is - apart and in contrast with characteristics of the “best owner-principle” – a reason to why M&A occurs on the market (Koller et al, 2015).

2.3.5 Agency Costs in M&A's

In a M&A context, the agency problem occurs when managers rather take on acquisitions that help building their empire or making their own position stronger than acquisitions that truly increase shareholder wealth (Lewellen, Loderer and Rosenfeld (1985). The underlying explanation is that when management finds acquisition opportunities that maximize their own personal but not necessary the shareholder wealth, they are willing to sacrifice company value through overpayments of control premium (Morck, Shleifer & Vishny, 1990).

The literature covering the agency problem and how it influences wealth effects in M&A's can be explored by studying the ownership structure in the acquiring firm. In line with Berle & Means (1932) early discussions how ownership dispersion transfers the corporate control from owners to management, the agency explanation posits that firms with concentrated ownership structures where there is a major shareholder with controlling ownership stakes of voting rights, managers do not have the same space for action as in firms with dispersed ownership structures (Lewellen et al, 1985). Hence, in these firms the agency costs are on average lower because of the presence of monitoring the management preventing management from utilizing their own personal wealth (Pound, 1988)

Regarding agency costs in the context of institutional ownership, institutional owners are considered to have deep financial knowledge and be influential, thus reducing the conflicts between different owners or between owner and management (Demsetz, 1983; Shleifer and Vishny, 1986). Although, a problem with institutional owners is that they might have relatively low ownership in a single company in relation with their other holdings – hence have low incentives to actually utilize their control to pursue it in the best interest of a firm (Celik and Isaksson, 2013).

3. M&A Empirics

The ambition of this third chapter is to further provide the reader with understanding of the given subject by elucidating previous empirical findings. The chapter will provide scientific evidence of wealth effects in M&As, portfolio exposure and the impacts of institutional ownership of a targeting firm. Ultimately, three hypotheses will be presented deriving from the empirical findings and the theoretical framework from the previous chapter

3.1 Wealth Effects in Mergers and Acquisitions

This study defines shareholder wealth effects as the gain received by shareholders after a M&A announcement. This gain is frequently measured and referred to as the cumulative abnormal return (CAR) (Datta & Puia 1995; Harris and Ravenscraft 1991; Kang 1993; Markides and Ittner, 1994; Morck and Yeung 1992). Previous literature has shown that M&A do create value because of synergies, but foremost it is the target company's shareholders who receive positive returns while the acquiring company's shareholders receive no or negative return (Allen et al, 2004; Bhaumik and Selarka, 2012).

Additionally, in a study of 4 256 M&A's between year 1973 - 1998 done by Andrade et al (2001) it is shown that the average abnormal return of both the acquiring and the target companies is about 1.8%. Hence, this study indicate that M&A overall create value but it is mainly the target company that increase its shareholder value. Furthermore, Bruners (2002) has evaluated 100 academic studies between year 1971 - 2001 and also finds that M&A on average do create value. Although, the evidence of whether the M&A process create value to the acquiring company's shareholders is highly divided since only 24 out of 44 studies presented positive CAR i.e. gains to the acquiring company's shareholders. The rest of the studies showed negative CAR i.e. negative gain to shareholders.

The overall empiric evidence is consistent both with Faccio et al (2006) and Akben-Sechuk (2015), two studies which conclude that shareholders of public bidding companies earn an insignificant average abnormal return since the acquiring firm pay a premium to control the rights of the target company.

3.2 Wealth Effects Characteristics

In the research whether M&As do create value, different explanations have been evaluated to discover in what extent they impact on the value creation. By collecting the most common explanations of wealth effects in the academic field this section thoroughly discuss how previous literature have addressed the subject “wealth effects in mergers and acquisitions”.

Theories are stating that a bidding company’s size has a negative effect on shareholder wealth to the company. That is, larger companies suffer from their size and thereby generate a lower return in relation with bidder’s of a smaller scale (Moeller, Schlingemann and Stulz, 2004). The rationality behind those statements is based on corporate governance-theories, such as overconfidence and empire building (see 2.4.1 and 2.4.2), where the manager of the large bidding firm is driven by other incentives than maximizing shareholder value (Rau and Vermaelen, 1998). Furthermore, smaller firms have a tendency to acquirer companies in markets they have full knowledge of, hence increasing shareholder wealth for the relatively smaller firm’s shareholders. This quality is something that larger firms do not in a frequent manner utilizes (DePamphilis, 2010).

According to Fuller, Netter and Stegemoller (2002) the relative size between the target and the bidder affects the shareholder wealth to the bidding company’s shareholders where the relative size of the acquirer enhances the abnormal returns (Arik & Mutan, 2015). The rationality behind this relationship can be explained by the fact that larger acquiring entities have a higher bargaining power and higher economies of scale relative small targets. Also, there is a negative relationship between relative size and integration costs in which the higher the relative size, the lower cost of integration (Arik & Mutan, 2015; Fuller et al (2002). Also, Jansen, Sanning and Stuart (2013) concludes that the empirical findings are diverse, but the majority of studies implies that the greater the relative size the greater the cumulative abnormal return.

Maloney, McCormick and Mitchell (1993) and Moeller et al (2004) postulates that firms with high leverage can expect positive abnormal returns after acquiring a firm.

Higher debt-firms have more focused managers, who is not biased of overconfidence in their decision making processes hence these firms only participate in value-creating acquisitions (Jensen, 1986; Seth, 1990).

The choice of payment method is another factor that have been widely studied within the M&A research area (Asquith et al 1988; Yook 2003). The underlying theoretical explanation is described by Myers & Majluf (1984) suggest that the issuance of stock is creating a negative reaction on the capital market. A stock issuance signals out that the firm is overvalued and hence the capital market reacts negatively (Martynova & Renneboog 2009) Furthermore, an offer consisting of all stocks tends to generate a wealth transfer from shareholders to bondholders which consequently makes the stock prices to fall (Travlos, 1987). Ultimately, the theories regarding payment method and its influence on wealth effects suggest that shareholders of both the acquirer and the target firm are better off in cash deals (Datta et al, 1992).

A number of studies have analysed whether cross-border deals are creating value or not (Datta & Puia 1995; Harris and Ravenscraft 1991; Kang 1993; Markides and Ittner, 1994; Morck and Yeung 1992). The underlying argument for a firm to create value through cross border M&A is the opportunity to enter foreign markets hence make usage of firm specific resources, which creates an advantage of imperfection in the markets (Morck and Yeung 1992; Datta et al 1992). Further, Morck & Yeung (1992) argue that cross-border deals open up to 1) international benefits, 2) higher synergies and 3) diversification in terms of risk for both the acquiring firm's shareholders and the target firm's shareholders.

Moreover, the market reaction of cross-border deals is different from domestic deals, which in most cases show that the shareholder wealth of the acquiring firm is reduced while the target firm's shareholders benefit from it in terms of abnormal return (Kaplan and Weisbach 1992). Besides, previous studies performed on the US market regarding cross-border deals show that if the M&A is a cross-border deal this is a characteristic that increase the M&A wealth effect (Morck and Yeung 1992; Markides and Ittner 1994).

Finally, a matter of interest in previous studies regarding M&A wealth effects the linkage to the literature about diversification. In these studies, the question whether M&A where the target and the bidding firm is related (i.e. within the same industry) creates higher value towards shareholders than firms that is unrelated to one another (conglomerate). Salter and Weinhold (1979) argued that in M&As between related firms, a transfer of core skills arises between acquiring firm and target firm which consequently creates greater wealth to shareholders than M&As between firms that are not related (conglomerate M&As).

Hence, it can be argued that in M&As where firms are unrelated the acquiring firm - through diversification - move away from its core operation consequently leading to value destruction (Gaughan 2007). On the other hand, Flanagan 1996 finds no evidence of the theoretical explanation that shareholders on average earn higher return in purely related acquisitions than in unrelated acquisitions. Additionally, Graham Lemmon & Wolf (2002) finds no evidence that excess value decline after firms increase number of business segments and hence that diversification destroy value.

3.3 Ownership Concentration, Block-holding and Monitoring

Previous literature has shown that acquisition deals where the acquiring firm with concentrated ownership-structures on average have a higher CAR than acquiring firms with dispersed ownership (Yen & André 2007; Bhaumik and Selarka 2012).

In the ownership literature, ownership concentration is a term which refers to that a single or a group of shareholders posits control over the firm's management and thereby the daily operations of the firm (Short, 1994). Consequently, the term control in this study, defined by Short (1994), as *the ability of a particular individual or group to effectively determine the decision making process within a firm*. Furthermore, the ownership of shares in a corporation does not per se give direct control over the operational decision making but rather make it possible for owners to monitor the management and exercise power through buying and selling securities (Dye, 1985; Mintzberg 1983).

The control that large owners possit is captured by the “effective monitoring hypothesis” which postulate that larger investors have better information hence are able to monitor the firm’s management at lower costs than shareholders that possit smaller blocks of shares. Thereby it exists a positive relationship between performance and large ownership stakes (Pound, 1988).

In firms with a concentrated ownership structure the degree of monitoring should be stronger, which consequently may reduce the agency cost - derived from the deviation of incentives caused in the manager owner conflict - and ultimately create higher value for the acquiring firm’s shareholders in acquisitions (Yen & André 2007; Bhaumik & Selarka 2012). In concentrated ownerships structures the largest shareholders through block-holding have higher incentives to monitoring thus increase shareholder value (Schleifer & Vishny, 1986). If this shareholder for example is a family holding a controlling block but lack of operational control this creates incentives to monitor the incumbent management which consequently will add shareholder value to all existing shareholders (Schleifer & Vishny, 1986).

The opposite case to concentrated ownership can be referred to as dispersed ownership (Cubin & Leech 1983). This categorisation of ownership was originally brought up by Berle & Means (1932) as ownership structures of corporates in which the shares are dispersed to the amount that the control of the daily operations is transferred to the management rather than the owners. Hence, ownership structures can be defined as owner controlled and management controlled firms, where firms with concentrated ownership structures refers to owner controlled firms and firms with dispersed ownership structures refers to management controlled firms (McEachern 1975).

3.4 Institutional Ownership and Monitoring

Institutional investors can be defined as nonbank person which is large enough in terms of equity ownership that it has different treatment and lower commissions, for example pension fund, life insurance companies which with their ownership of equity consisting of voting rights control corporations (Craninckx & Huyghebaert 2015).

In institutional organizations, like a pension fund, management holds no ownership in the controlled firm which mitigate the agency costs since the management lose their job if they do not maximize the shareholder value. That is, there exist higher incentives to monitor incumbent management of the controlled firm if the large shareholder is an institutional owner (Cronqvist & Nilsson 2003).

Furthermore, the institutional owners are often relying on internal regulations, which often tend to be focusing on minimizing costs. For instance, to minimize costs of actively manage the company - such as participate on annual meetings - many institutional investors are depending on consultants which in exchange of a fee actively participate in the voting on the annual meetings and hence reducing the institutional investor's engagement and active participation in important decisions (Demsetz, 1983). Thus, because of the internal regulations of the institutional owners it might lead to a passive management of a company instead of an active participation, mainly because of reducing costs. As a consequence, the shareholder wealth might be reduced since the institutional owners of the firm neglect to manage the firm in the best interest of the shareholders, because there are no incentives of taking on the costs of an active management (Celik and Isaksson, 2013).

Apart from institutional ownership, other shareholder groups have different incentives to monitor the management: institutional owners need to monitor their investment to be in their investors best interest while family-owned firms monitor management in order to protect their own wealth invested in the company (Craninckx & Huyghebaert 2015).

3.5 Institutional Owner's Portfolio Exposure and Wealth Effects

According to Deng, Moshirian, Kien, Pham and Zein (2013) there is a clear difference between large shareholders – such as individuals and institutional owners - in terms of individualities that will affect the firm's performance in terms of shareholder wealth. Likewise, Faccio et al (2011) suggests that an institutional investor with a more diversified exposure to a given company is significantly involved in firms with greater corporate risk. Even though the institutional investor has the possibility to monitor the firm for a lesser risk-taking, the investor is inactive because of lack of

personal interest and incitement in the given company. On the other hand, institutional owners are showed to be natural monitors in firms where they have stimulations in their investment and in their portfolio exposure, for instance if the institute have a long-term horizon in the investment (Gaspar et al, 2005)

Furthermore, in the same way as independent managers exercise more effort in projects that they perceive to be more important, institutional owners acts in the same way when they focus their efforts on their largest holdings, hence monitoring some investments in their portfolios rather than other (Masulis and Mobbs, 2014). Although, many studies enlighten the relationship between firms and institutional owners from the opposite point of view, where the logic treats that the more equity the institution holds in a certain company, the greater is the willingness for the firm to pay attention to the investor. Though, this logic disregards the fact that even if the firm “obey” its largest equity-holder, for instance the institutional investor with certain negotiating power, the institution might not be interested in monitoring the management of a specific firm if the holding is relative small in relation to the rest of the portfolio (Fich et al, 2015; Hartzell, Ofek and Yermack, 2004).

The discrepancy between the level of monitoring in the institutional owner’s portfolio-investments does theoretically affect the wealth effects of the bidding firm in an acquisition-process, since the incentives of monitoring for maximum value-creation are not equally aligned between the investors and the managers – which is clearly distinguished in a context of M&As. Hence, firms in which an institute have a relative low holding in relation to the portfolio is suffering from lesser monitoring due to lower incentives from the institute (Fich et al, 2015).

Ultimately, according to Celik and Isaksson (2013) institutional investors do not tend to be as risk avert in one specific firm as a private investor, since the institutional investor have the possibility to diversify his risk in a larger extent than a private investor. Thereby, an institutional owner may have a more optimistic view of a risky investment, for instance an acquisition of a firm.

3.6 Development of Hypotheses

In this section, the hypotheses of this study will be developed, referring to previously presented theoretical- and empirical evidence. Again, our motivation of testing the hypotheses in a context of acquisition is since acquisitions are considered to be notable investments where the incentives of owners can be clearly distinguished (Craninckx & Huyghebaert 2015). The first hypothesis is primarily based on the empirical evidences of Yen and André (2007) and Bhaumik and Selarka (2012), and hence is presented as following:

Hypothesis 1:

A concentrated ownership structure has a positive affection of shareholder wealth

The rationality behind the second hypothesis also derives from the empirics about investors' best interest from Craninckx & Huyghebaert (2015, thus generating following hypothesis:

Hypothesis 2:

Institutional ownership has a negative affection of shareholder wealth

Furthermore, a third hypothesis will be derived from the empirical evidence of the previous studies of Cronqvist and Nilsson (2003) who states that there exist higher incentives to monitor incumbent management of the controlled firm if the large shareholder is an institutional owner. Low incentives are therefore believed to, in proportion to Masulis and Mobbs (2014) and Fich et al (2015), have a negative effect on shareholder wealth and hence lead to the third hypothesis:

Hypothesis 3:

Low portfolio exposure has a negative effect of shareholder wealth in institutional ownership

4. Method

This fourth chapter will motivate practical details of how the study is aiming to answer its purpose and research question. The reader will be informed how and why the authors selectively made certain decisions in – for instance – the data collection and the choice of measurement methods. The method-chapter will also consist of arguments for the preferred research approach and why this theoretical approach was considered to be superior. All information given in this chapter will consequently be presented with an appurtenant argument of its superiority over alternative methods.

4.1 Research Approach

This study will be executed with an approach towards science, which has the purpose of explaining *how* investor's portfolio exposure in a concentrated ownership-structure affects abnormal returns for the bidding company in a M&A-process. This approach is consistent with the given research philosophy, that is focusing on building hypotheses and to verify results hence estimate generalizability (Hansson, 2011). Furthermore, our empirical material consists of quantitative estimations and numerical methods, where the material can be obtained for other researches since this study is intending to give objective and independent interpretations. The philosophy of this study have a focus on determine *what is*, consequently minimizing for free interpretations (Denscombe, 1998). Therefore, this paper will focus on objective results to provide valid results to future research.

This study has chosen a deductive approach, resulting in that the hypotheses are constructed based on the dependency of recognised economic theories, such as wealth effects and agency costs (Fich et al, 2015), that will be tested for in an empirical context (Alvehus, 2013). The superiority of this approach among other research approaches – such as abdicative or inductive – is that a deductive approach and theory-based hypotheses are useful in quantitative studies to preserve validity and objectivity in the interpretation of the results (Alvehus, 2013; Bryman and Bell, 2011).

Furthermore, this thesis is, as previously stated, aiming to explain cumulative abnormal return in the context of a M&A event. Therefore, an explanatory design has been chosen since it is considered to be the best applicable design to use in our context of quantitative data collection, specifically for find relationship between variables (such as abnormal returns) from theory based expectancies (Denscombe, 1998; Lewis, Thornhill & Saunders, 2009; Malhotra & Grover, 1998).

The rationality behind the choice of quantitative research method is motivated since the evidence of the thesis derives from statistical significance-tests. According to Denscombe (1998) a quantitative research method is superior to a qualitative research method since *'the opportunity to analyse numbers from statistical methods motivates a quantitative approach to provide a correct and dependable analysis (...)'* (p.193). Hence, since this study consist of an event study, we relied on previous arguments to support our choice of quantitative method. The study includes numerous regressions where it is crucial to provide dependable analyses due to our mathematically based methods (Aliaga and Gunderson, 2002). Ultimately, a quantitative research method corresponds to our ambition of following a systematically implementation which is replicable and therefore preserves the objectivity (Bryman & Bell, 2003).

4.2 Data Collection and Sample

To be able to evaluate institutional portfolio exposure in M&A wealth effects a large amount of data is required to be able to receive trusted results. Therefore, the data in this study is collected from secondary data provided by research databases. The wealth creation characteristics and hence the control variables have been retrieved using the database Zephyr which is a platform providing information and deal characteristics of Mergers and acquisition from all around the world (Bauer & Matzler, 2014). Zephyr is frequently used in the M&A research field and because of its easy navigation and access to M&A deal characteristics it was a natural choice of database (Le Nadant & Perdreau 2006; Ma et al 2009; Bauer & Matzler 2014).

In addition to Zephyr, DataStream have been used to collect data about stock and index returns which is the underlying data used in this study to calculate cumulative abnormal return which is then used as approximation of wealth effects. DataStream

(DS) is widely used in economic research as it both have a high coverage in terms of markets and time horizons but also since DS contains a rating system which inform the user about the quality of different data sources provided in the database. (Beitel et al 2004; Chakrabarti et al, 2009; Ma et al 2009)

To be able to measure ownership characteristic and portfolio exposure the database Holdings by Modular Finance was used. The Swedish company Modular Finance AB (MFHD) provides unique ownership, board and auditor data of Swedish listed firms in which a thoroughly registration of owners' characteristics and their portfolio is available. The Swedish law tolerates automatic registrations of all shareholders on the Stockholm Stock Exchange – registrations that MFHD has access to via its linkages to the Swedish Securities Register Center, Värdepapperscentralen (Cronqvist and Nilsson, 2003). Examples of ownership characteristics that can be retrieved from Modular Finance Holding Database are nationality, amount of cash flow rights and voting rights, whether the owner is a sphere, family or is an institutional owner etc.

The rationality behind using MFHD is further motivated since the database enables us to better define the largest shareholder by grouping closely related owners into one single group hence taking into consideration that the largest owner might depend on ownership coalition (Sekerci and Ravid, 2015). Thus, this database is ideal since the registration provides information about the owners' portfolio holdings and exposures which have been crucial to fulfill the purpose of this study.

The sample used in this study consist of listed companies from the whole Swedish market between the time period 2001-2015. The time period and country specification in this study was a choice dependent on the database Holdings which only provides its data back to year 2001 and only on Swedish firms. (Holdings 2017). The purpose of this study is to measure wealth effects of M&As and therefore only what can be defined as mergers and acquisitions is included i.e. reverse takeovers, buyouts repurchases, privatization deals and restructuring deals are excluded. Moreover, only listed acquiring companies are included to be able to measure wealth effects through abnormal returns, since wealth effect is not measured for the target company there is no criteria for the target company to be listed and hence the sample includes both

listed and unlisted target companies (Golubov et al. 2012). The sample consist of deal values exceeding 1 million euros (Fuller et al 2002). Further the sample includes acquisitions in which more than 50% of the target company has been acquired in order to be controlled (Fuller et al 2002).

Ultimately, there are other aspects to why the Swedish market is of interest. For instance, Sweden scores above world average on corporate governance, because of their investor-centered governance system which have allowed powerful (and therefore easier defined) investors that is not common on other international markets (Sekerci and Ravid, 2015). Below, a summary of the sample criteria is listed:

Table 4.1 Sample-criteria for observations

Sample Criteria
1. Firms listed on the Swedish market
2. Deal value of at least 1 million euro
3. Deals completed between 2001-2015
4. At least 50% of the bidding firm acquired
5. Returns covered in DataStream
6. Ownership data available in Holdings
7. Only listed acquiring firms

4.3 Event Study

An event study was chosen in order to analyse and evaluate the empirical results of the hypotheses. This choice was motivated by MacKinlay (1997) who suggest that event studies are an efficient and a commonly used method when investigating an effect of stock returns processed by a certain event that can be easily identifiable – such as a M&A. Hence, an event study will have the possibility to fulfil our purpose by investigating the effects on shareholder wealth, represented by cumulative abnormal return, reacting to a M&A event (Binder, 1998). In following sub-chapters this study will follow the general sequence of an event study, thus 1) defining the event of interest and event window, 2) outlining the selection criteria, 3) describing and motivating abnormal returns, 4) defining the estimation window and 5) calculating and analysing the abnormal returns (MacKinlay, 1997)

4.3.1 Event Window

The event window when measuring abnormal have been estimated to five days before the announcement and five days after the announcement, thus replicating the same time period for measuring abnormal returns as previous studies see Kaplan & Weisbach (1992); Jarell & Poulsen (1989); Lang, Stulz & Walkling (1989). The rationality behind the event window is since it is customary to include one ore several days before and after the announcement to capture possible “leaks” to the market before the announcement and also to measure the full effect of the event (MacKinlay, 1997). Additionally, other researches usually also use short event-windows (between one to twenty days) to prevent slow market-reactions hence receiving an accurate result (Benninga, 2008) and to prevent that the result will be affected by other company-specific events, a problem that long event windows suffers from (Tuch & O’Sullivan, 2007).

4.3.2 Estimation Window - Normal and Abnormal Returns

The purpose of doing an event study is to measure the impact of an M&A (the event) on cumulative abnormal return at the announcement of the deal. To be able to measure abnormal return it is first needed to define a model measuring expected return since the abnormal return can be defined as the difference between expected return and observed actual return (MacKinlay 1997).

The method to measure expected return can be of different choice. The most widely used model is the capital asset pricing model (Sharpe, 1966) that simplifies the modern portfolio theory (Markowitz, 1952). MacKinlay (1997) argue that more sophisticated models like CAPM can be of limited benefit, and therefore he points out that the most common alternative is to use the constant mean model or the market model. Hence, in this study the expected return is determined by the market model since the constant mean model assumes that average return is constant where the market model removes variation related to the market from the abnormal return and additionally is a more commonly used method (MacKinlay 1997).

The market model is given by the equation:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}$$

- R_{it} = Actual return of stock on the announcement day
- R_{mt} = The return of the market portfolio at announcement day
- $\alpha_i \beta_i$ = Interpreted as coefficients related to the return of the market portfolio
- ε_{it} = The error term estimated to 0 which is an underlying assumption for the model to hold

By using Ordinary Least Squares, OLS the parameters alpha- and beta value can be estimated for every single firm in the total sample over the estimation window of -300, -60 days with an estimation period of 240 days. This estimation period has been used in previous studies also measuring abnormal returns in a M&A context such as Saunders & Srinivasan (2001); Kale et al. (2003). Furthermore, expected return can be calculated applying the market model to all of the firms in the sample (Benninga 2008).

The market portfolio will be represented by MSCI Sweden All Cap Index. The rationality behind using this index is since it captures the Swedish micro-, small-, mid- and large cap – hence covering approximately 99% of the equities in Sweden. Therefore, this index will be representable as a market portfolio, that theoretically is a portfolio containing investments in all firms. Also, since this study only investigates M&A on the Swedish market, this index will be a good comparison since it covers the same market.

Further after the estimation of the market model the abnormal return have to be estimated to measure the certain impact of an M&A on the company value within the event window (Benninga 2008). MacKinley (1997) defines abnormal return as:

$$AR_{it} = R_{it} - \alpha_i - \beta_i R_{mt}$$

To be able to analyze and draw conclusions about the event window it is necessary to estimate the cumulative abnormal return which is the sum of the abnormal returns which can be explained by the following formula (MacKinlay 1997):

$$CAR_i(t_1, t_2) = \sum_{t=t_1}^{t_2} AR_{it}$$

4.4 Independent Variables

In the following sub-chapters, the different independent variables used in order to test the three different hypotheses will be displayed. Note that these variables derive from chapter two and three.

4.4.1 Ownership Concentration

In this study we approximate ownership concentration and thereby control as percentage of the total voting rights in a corporation held by a certain single owner, which is a definition frequently used in previous literature (Overland 2012). The definition of controlling through ownership can in its most simplistic form be described as ownership of fifty percent of the outstanding voting shares in a company (Overland 2012). Previous research has shown that corporate control can occur in ownership constellation below this threshold of 50 percent and the question of control rather refer to ownership concentration, since ownership concentration is assumed to be positively related to control. This factor has been studied ever since Berle and Means in 1932 defined ownership concentration as when a single owner held more than 20% of the shares in a company (Berle & Means 1932). Further, modern research within the ownership literature commonly define ownership concentration and hence control as when the largest owner holds a percentage stake between 5 to 20 percent (Overland 2012).

Having only one fixed level of percentage as determination of ownership concentration can be questioned. For example, if assuming 20% as a fixed threshold of ownership concentration it will exclude all companies where the largest owner holds a block just below 20% e.g. 19,5% 18 % (Overland 2012). To have a narrow definition of concentration might lead to more accurate interpretation of results but might also lead to limited statistical results. Instead multiple measurement methods as

well as multiple thresholds of ownership concentration has been applied in this study to better capture the impact of ownership concentration through block holding on company value in M&As (McConell & Servaes 1990).

To be able to measure ownership concentration differently this study uses a single definition of a major shareholder or a block-holder as a percentage term where we in line Zingales (1994), Rydqvist (1996) and McConell & Servaes (1990) define a major shareholder or a block holder as one that holds at least five percent of the voting shares in a corporation.

The method to approximate ownership concentration in this study measures the largest shareholder block of voting shares. Additionally, we have created dummy variables taking on value 1 if the largest shareholder holds a stake of 10, 15, 25 or 50% respectively. The usage of multiple thresholds was used in Serkeri & Ravid (2015) study to best capture and approximate ownership concentration. Moreover, this approximation and hence variable has been used in a number of studies conducted in the previous literature (Craninckx & Huyghebaert 2015; Faccio & Lang 2002; La porta (2000).

4.4.2 Institutional Ownership

To be able to capture the purpose of the study and examine how institutional ownership affects CAR for the acquiring company in mergers and acquisitions, it is favorable to have multiple threshold of institutional block holdings (Serkeri & Ravid, 2015). The underlying explanation posits that institutional investors differ in the degree of incentives to monitor the management depending on their ownership stake in a specific firm (Maug, 1998) and hence different constellations of measuring institutional ownership is created to best fulfill the purpose of the study.

The first variable used approximates institutional ownership as all institutional owners with a block of share exceeding five percent compressed together. These institutional blocks create an institutional ownership block which will be measured as a continuous variable depending on its total size. Additionally, dummy variables will be created if the institutional block consist of a percentage stake of 10, 15, 25 and 50%. This

method was used as an approximation of institutional ownership in a study conducted by Kurshed, Lin & Wang (2007). The second way of measuring institutional ownership in this study will be an approximation of the identity of largest shareholder (Craninckx & Huyghebaert 2015). Hence this variable will be measured as a dummy variable taking on the value 1 if the largest shareholder is an institutional owner and zero otherwise.

4.4.3 Portfolio Exposure

To measure the portfolio exposure of institutional ownership in a specific firm, two different variables have been developed. In the process of developing these variables we have been inspired by Ekholm & Maury (2014) which constructed a portfolio exposure variable called AWI (Average Weighted Index) which is variable measuring the average weight of a specific stock in a certain stockholder portfolio at a specific time relative an index (Ekholm & Maury 2014).

Our first variable is measuring the ownership held in a specific company relative the owners' total portfolio of Swedish ownership. The second variable developed, is measuring the average portfolio exposure towards a specific company of all large (>5%) institutional owners in a specific company. This variable seeks to explore if portfolio exposure has a negative relationship towards CAR in institutional block holdings. The theoretical interpretation of this variable is just as in Ekholm's & Maury's (2014) study that this variable measures a certain stocks importance based on its weight in the investor portfolio. The first portfolio exposure variable can then be measured in combination with the institutional ownership variable to explore if portfolio exposure in institutional owners' portfolios impact negatively on M&A wealth effects.

The underlying collected ownership data which have been used to develop these variables is only available on a quarterly basis which does not always correspond with the announcement date of the M&A's. We argue that M&A is a process that is planned long before the announcement date and therefore it is rather the date of the decision that is the event of interest when measuring ownership in a M&A context

and hence the ownership data still capture the monitoring effect that is of interest (Gaughan, 2007).

4.5 Control Variables

To be able to control for potential influences of wealth creation it is necessary to, apart from the independent variable, also control for a number of control variables which are listed below. These variables are frequently used in earlier studies within this research area.

4.5.1 Size

Previous studies have explored a negative relationship of the the acquiring firms size and cumulative abnormal returns (DePamphilis 2010). Hence in this study the size of the target company is measured as total equity value and incorporated as a variable where the purpose is to measure a negative relationship between size and cumulative abnormal returns (DePamphilis 2010).

4.5.2 Payment Method

The theory regarding payment method and its influence on wealth effects suggest that shareholders of both the acquirer and the target firm are better off in cash deals than using stock issuance as payment method (Datta et al 1992). Thus, in this study we measure the influence of payment method on CAR as a dummy variable which takes on the value 1 if the deal is paid with cash and 0 otherwise. Additionally, we also include a dummy variable taking on value 1 if paid with shares and 0 if otherwise, in which we expect a negative relationship towards CAR (Travlos, 1987).

4.5.3 Cross-border Deal

Whether the merger or acquisition is a domestic or a cross-border deal is a factor that has interested a number of previous studies (Datta & Puia, 1995; Harris and Ravenscraft, 1981; Kang, 1993; Markides and Ittner, 1994; Morck and Yeung, 1992). Consequently, previous studies performed on the US market show that if the merger or acquisition is a cross-border deal the M&A wealth effect is increased (Morck and Yeung 1992; Markides and Ittner 1994). Hence this variable is measured as 1 if the deal is a cross-border deal and 0 if it is a domestic deal.

4.5.4 Diversification

Salter and Weinhold (1979) argued that in M&As between related firms a transfer of core skills arises between acquiring firm and target firm which consequently creates greater wealth to shareholders than M&As between firms that are not related (conglomerate M&As). Thus, Flanagan (1996) finds no evidence of that the theoretical explanation that related firms' shareholders on average earn higher return in purely related acquisitions than in unrelated acquisitions.

The underlying theoretical explanation behind diversification as wealth factor can be measured as a dummy variable taking on a value 1 if the acquiring firm and target firm involved operates within the same industry and 0 if the firms operates in different industries (Flanagan 1996). When defining industry, we have used the company specific US SIC-code for every acquiring and target company in the sample (Nasdaq 2017). Since the SIC-code system is based on scales where a sector can be divided into subsectors with unique codes. Therefore, companies can be classified to the same sector but are not directly related when looking at the core operation of the two companies (Nasdaq 2017).

Since an approximation of the relationship between transfer of core operation and value creation is needed it is a necessity to make sure that the acquiring company pursue the M&A to strengthen its core operation (Flanagan 1996). Hence, when coding this variable, we have taking into account both the primary SIC-code and all of the SIC-codes connected to each company. By analysing all the SIC-codes related to both the acquiring and the target company the approximation of the theoretical relationship of transferring core knowledge as a variable can be improved.

Table 4.2 Summary of control-hypotheses and the expected impacts on CAR

Variable	Expectation
Size	Negative
Cash	Positive
Share	Negative
Cross-Boarder deal	Positive
Diversification	Positive

4.6 Regression Analysis

To be able to capture the effect and explore the relationship between several independent variables and the dependent variable a multiple regression has been chosen and applied as method in this study (Pallant 2013). The rationale behind using a multiple regression is to explore the effect of ownership concentration, institutional ownership and portfolio exposure on wealth effects in M&A's but at the same time to control for already verified relationships in previous literature (Brooks, 2014). Hence, the model tests this study's three hypotheses which can be described as following:

Hypothesis 1:

$$CAR = \alpha_0 + \beta_1 \text{Largest_Owner} + \beta_2 \ln(\text{size}) + \beta_3 \text{Industry} + \beta_4 \text{Cash} \\ + \beta_5 \text{Shares} + \beta_6 \text{Cross_Boarder} + \varepsilon$$

Hypothesis 2:

$$CAR = \alpha_0 + \beta_1 \text{Largest_Institutional_Owner} + \beta_2 \ln(\text{size}) + \beta_3 \text{Industry} \\ + \beta_4 \text{Cash} + \beta_5 \text{Shares} + \beta_6 \text{Cross_Boarder} + \varepsilon$$

$$CAR = \alpha_0 + \beta_1 \text{Institutional_Block} + \beta_2 \ln(\text{size}) + \beta_3 \text{Industry} + \beta_4 \text{Cash} \\ + \beta_5 \text{Shares} + \beta_6 \text{Cross_Boarder} + \varepsilon$$

Hypothesis 3:

$$\begin{aligned}
 CAR = & \alpha_0 + \beta_1 \text{Largest_Institutional_Owner} + \beta_2 \text{Portfolio_Exposure} \\
 & + \beta_3 \ln(\text{size}) + \beta_4 \text{Industry} + \beta_5 \text{Cash} + \beta_6 \text{Shares} \\
 & + \beta_6 \text{Cross_Boarder} + \varepsilon
 \end{aligned}$$

$$\begin{aligned}
 CAR = & \alpha_0 + \beta_1 \text{Institutional_Block} + \beta_2 \text{Block_Portfolio_Exposure} \\
 & + \beta_3 \ln(\text{size}) + \beta_4 \text{Industry} + \beta_5 \text{Cash} + \beta_6 \text{Shares} \\
 & + \beta_6 \text{Cross_Boarder} + \varepsilon
 \end{aligned}$$

Note that both hypothesis 2 and hypothesis 3 will be tested with two separate regressions¹. The rationality behind this is, as explained in chapter 4.4, due to the ambition of the study to use different variables that will capture the issue of which the hypothesis being tested for.

For the linear regression to be considered valid a number of assumptions need to be verified. These assumptions are described by Pallant (2013):

“1) The variance of residuals is constants, 2) The values of the residuals are independent of each other, 3) The errors are uncorrelated with the explanatory variables, 4) The residuals are normally distributed, 5) The residuals have a zero mean” (p.157).

These assumptions stated above can further be interpreted as the regression having a linear relationship, no or little multicollinearity between independent variables, no auto correlation nor any homoscedasticity if the assumptions are fulfilled (Brooks 2014).

4.7 Method Discussion

It is crucial in a quantitative study that the research is reliable (Lind, 2014). The indications of the trustworthiness in a research are mainly verified by validity, reliability and transmissibility. A researcher must guarantee that the indications,

¹ Note that Hypothesis 1 and 2 will be tested with regressions containing dummy-variables created from the continuous variables (largest_owner and institutional_block)

quotes and formulas that is used is reliable, to make it possible to do a replicate of the research and still receive an equal result. A research that not can be considered to be reliable nor generalizable does not qualify to be a scientific or academic research (Denscombe, 1998).

4.7.1 Reliability

To ensure that the study will present reliable result, we made a choice of using public information in the data-collection phase. The rationality behind selecting public information is to make it possible to further research to replicate this study (Lind, 2014). Also, we use reliable and certified databases – such as Thompson Reuters DataStream, Modular Finance and Zephyr – in order to collect data about M&As and stock prices. With our ambition to provide a reliable and replicable result, we have been restrictive to exclude certain information and observations since we do not want to interfere with our subjective perceptions or interpretations of the data material which may bias the outcome of the results (Denscombe, 2009).

Since the data material is manually transferred from the different databases to Microsoft Excel, the data may be suffering from the human factor. The transfer between the databases might interfere with the reliability of the results, but since we have tried to carefully monitor this transferring process with distinctive working routines and random sample checks we hope that the human factor is minimized (Benninga, 2008). Ultimately, the regressions and the independent sample t-test is performed through the reliable analysis- and statistics programme SPSS, which will be used in order to statistically confirm or reject the outcome of the results (Pallant, 2013).

4.7.2 Validity

In this section, we will describe the ambition of keeping validity of the study, and thus guarantee that the choice of method describes and measures the phenomenon being treated (Denscombe, 2009). Firstly, we will consider the internal validity followed by the external validity, in order to first deliberate the right measuring method for the purpose and secondly discuss if the results can be generalized (Wiedersheim and Eriksson, 1991).

According to Wiedersheim and Eriksson (1991) and Denscombe (2009) a study with high internal validity can ensure that the created model can capture what is being aimed to capture and therefore making it possible for the researcher to study what is aimed to be studied. This study is categorizing different acquiring firms and corporations and classify them as institutional or non-institutional but also different thresholds using dummy-variables. The problem with these categorisations done by the researcher is that the material can be biased, for instance categorise a firm as “institutional” when another researcher would categorise the same firm as non-institutional (Shefrin, 2007). As a precaution of making the results biased, we therefore display our definitions and interpretations of the data material continuously in previous chapters hence making it clear for both readers and future replicating studies to repeat this study. The definitions are based on valid arguments from earlier published academic journal studies within the research area, in which the methods being used has been scientifically approved.

In order to fulfil the criteria of external validity and mitigate validity issues, several empirical results and diagnostics were completed. The study had the opportunity to gather all potential observations regarding the area of research through a combination of several databases, and thereby does not suffer from only providing a small sample which might not have been representable for the whole population (Denscombe, 2009). Furthermore, the data material did not suffer from a high frequency of outliers which helped avoid skewness and kurtosis of the data (Gray and Malone, 2008). In line with Körner and Wahlgren (2015) we defined outliers as approximately three standard deviations from the mean of the sample.

4.7.3 Literature Study

The fundament of the material has it origin from books and scientific journals to thoroughly create a greater knowledge about the area of research. All of the used material have been reviewed and published by different originators and thereby considered to provide the thesis with reliable and trustworthy information. The study has taken into consideration that the quality between different publishing journals may vary, hence rejecting academic journals in which the credibility could be

distrusted (for instance articles with low- or no cites). The rationality behind different sources of academic literature is mainly to create a dynamic theoretical framework by using advantages of both a more holistic and eclectically information from the books, while being supported by more recent research from the articles, since scientific articles have the possibility to be published quicker than books (Denscombe, 1998).

5. Empirical Results

This fifth chapter will display the empirical results of the research and the potential violations of the underlying assumptions. The results will be presented with tables and matrixes – attached either in this chapter or in appendix. Furthermore, the results will also be verified through a robustness-test where the authors describe how outliers and other adjustments in the data material affects the result. Ultimately, the three main hypotheses will be answered.

5.1 Sample Descriptive Statistics

The total sample of this study consist ultimately of 338 observations. As presented in table 5.1 and Appendix 3, 130 firms had a non-institutional owner as the largest owner and 208 firms had an institutional owner as the largest owner. Originally, the test contained of 417 observations but was later reduced to 338 observations due to the lack of ownership data and historical returns in 79 observations, which therefore got excluded in the ultimate selection². Table 5.1 displays the descriptive statistics regarding the sample of the thesis. Due to the Kolmogorov-Smirnov test (see Appendix 1) the null-hypotheses was not rejected, implying that the data material is not normal distributed. Since the number of observations is larger than 30 and by inspecting the observation through a histogram (Appendix 2) it can although be concluded that the sample can be treated as normal distributed (Pallant 2013).

The median CAR for the whole sample is 1,54% with a standard deviation of 8,85%, after performing a one sample t-test the p-value resulted in 0,06 which indicates that there exists a positive wealth effect of the acquiring company's shareholders in a merger or acquisition. The mean value of CAR with institutional owners were 0,62% while the mean of CAR with non-institutional owners were 2,2504% (See appendix 3), hence lower than its counterpart and in line with the studies of Craninckx & Huyghebaert (2015). This value indicates that in the presence of an institutional investor as “largest owner” CAR is negatively affected and the M&A wealth effect is therefore lower rather than higher in acquiring companies with institutional ownership which has been described in previous studies (Pound, 1988).

² The original selection consisting of 417 observations can be demonstrated on request

Table 5.1 Descriptive Statistics

Variable	N	Mean	STDEV	Minimum	Maximum	P-value
CAR (%)	338	1,39%	8,85%	-33,72%	27,14%	0,06
ln_Size	338	13,66%	2,45	7,13%	17,57	
Cross-Border	338	0,64	0,48	0%	1,0	
Cash	338	0,57	0,50	0%	1,0	
Share	338	0,18	0,39	0%	1,0	
Industry	338	0,73	0,44	0%	1,0	
Largest Own	338	19,21%	12,40%	5,01%	70,58%	
Institut.	338	0,62%	0,49	0%	1	0,077
Block Inst.	338	18,87%	15,33%	0%	70,58%	
Portf. Exp.	338	35,40%	33,24%	0,03%	100%	
Block port. exp.	338	19,58%	22,84%	0%	100%	
Largest 10%	338	0,76	0,43	0%	100%	
Largest 15%	338	0,54	0,50	0%	100%	
Largest 25%	338	0,25	0,44	0%	100%	
Largest 50%	338	0,03	0,17	0%	100%	
Inst. Block 10%	338	0,67	0,47	0%	100%	
Inst. Block 15%	338	0,53	0,50	0%	100%	
Inst. Block 25%	338	0,30	0,46	0%	100%	
Inst. Block 50%	338	0,07	0,25	0%	100%	

Regarding the control variable “size”, the sample did not display as normal-distributed with in skewness and kurtosis in the data material. To handle this problem, the variable was transformed by taking the log of the variable (Körner and Wahlgren, 2015), which resulted in a normal distributed data material (see Appendix 2)

As mentioned, the sample consist of 338 observations – a sample that was reduced from the origin 417 observations due to the lack of ownership data for some companies and in some cases a lack of historical trade data. Specifically, ownership data is rare to get and hence our database Modular Finance Holding could not be supplemented by any other database.

5.1.1 Pearson's Correlation Matrix

According to Pallant (2013) and Gray and Malone (2008) the independent variables should be searched for multicollinearity before running the regressions to make sure that one of the underlying assumptions are not violated and thus making the regression sensitive to small variations. A correlation between two variables above 0,8 - which by Pallant (2013) is considered to be a critical value of multicollinearity - should be redeemed by dropping an independent variable. In table 5.2 below, the result of a Pearson's Multicollinearity test is displayed in the matrix. Also, the matrix is of interest to study because it clarifies the relationship between different variables since these correlations is what a multiple regression model is built on (Pallant, 2013).

Table 5.2: Pearson's Correlation Matrix

Correlation	CAR	ln_size	Cross-Board	Cash	Share	Indust.	Instit.	Largest 10%	Largest 15%	Largest 25%	Largest 50%	Inst. Block 10%	Inst. Block 15%	Inst. Block 25%	Inst. Block 50%	Port. Exp.	Block Port. Exp.	Block Inst.	Largest Owner	
CAR	1,000																			
ln_size	,123**	1,000																		
Cross-Boarder	-,008	,413***	1,000																	
Cash	-,059	,217***	,196***	1,000																
Share	,013	-,302***	-,268***	-,544***	1,000															
Industry	,022	,158***	,048	-,085*	-,074*	1,000														
Institut.	-,077*	,192***	,196***	,047	-,112**	,055	1,000													
Largest 10%	,050	-,113**	-,101**	-,014	,069	-,028	-,173***	1,000												
Largest 15%	,029	-,089*	-,077*	,002	,043	-,017	-,163***	,603***	1,000											
Largest 25%	,049	-,038	,020	,037	,042	-,048	-,088*	,325***	,540***	1,000										
Largest 50%	,101**	-,064	-,052	-,024	,053	-,091**	-,077*	,098**	,163***	,301***	1,000									
Inst. Block 10%	-,057	,043	,109**	-,037	-,108**	,115**	,431***	,316***	,145***	,057	-,027	1,000								
Inst. Block 15%	-,019	-,003	,046	-,025	-,056	,079*	,432***	,370***	,269***	,126**	-,044	,738***	1,000							
Inst. Block 25%	-,005	-,051	,043	,047	-,042	,032	,397***	,336***	,362***	,352***	,039	,456***	,619***	1,000						
Inst. Block 50%	-,013	,083*	,104**	,022	-,037	,085*	,189***	,152***	,228***	,385***	,230***	,189***	,256***	,414***	1,000					
Port. Exp.	-,014	,130***	,124**	,110**	-,022	-,002	-,329***	,130***	,117**	,236***	,099**	-,126**	-,123**	-,013	,207***	1,000				
Block Port. Exp.	-,069	,197***	,200***	,041	-,117**	,102**	,236***	,058	,014	,131***	,038	,226***	,233***	,229***	,262***	,205***	1,000			
Block Inst.	-,006	,042	,111**	,020	-,076*	,114**	,486***	,333***	,335***	,353***	,089**	,677***	,758***	,827***	,658***	,006**	,331	1,000		
Largest Owner	,053	-,063	-,062	,027	,055	-,058	-,150***	,534***	,714***	,810***	,580***	,140***	,207***	,380***	,469***	,270***	,112***	,430**	1,000	

The symbols *, ** and *** denote the significance levels at 1%, 5% and 10%

5.1.2 Violations of Regression-Assumptions

Before running the regressions, the data material was searched for various biases and violations of the underlying assumptions in order to see if the following outcome of the regression could be treated as reliable, which in this study was considered to be a prerequisite to conduct a valid regression (Pallant, 2013; Gray and Malone, 2008).

The correlation matrix in table 5.2 indicated the existence of multicollinearity in two different variables and hence the total regression model is run in two different formats: one measuring institutional block holding and ownership concentration through different threshold and one measuring these factors as continuous variables through the largest owner or institutional block. The sample in these two regressions thereby do not suffer from any multicollinearity because none of the independent variables have a correlation exceeding 0.8 (Pallant 2013). Additionally, VIF-values of the independent variables generated by the regression in table 5.3 states that none of the independent variables have a value exceeding 5 which indicates that they do not have a perfect linear relationship (Pallant 2013). Thereby multicollinearity is not considered a problem.

Further, the data material did not show any signs of violation of autocorrelation since the values of the independent variables ended up approximately around the value 2 which indicate that the level of autocorrelation is close to zero (see appendix 4) (Gray and Malone, 2008).

By analyzing the normal probability plot of the regressions' standard residuals it can be concluded that non-normality is not a problem since the points are going in a diagonal line following the line of predicted values from this graph, it can be concluded that neither non-linearity is a problem and the assumptions about linearity and normality remains not violated (Appendix 4).

Moreover, by analyzing the scatterplot in appendix 4 it can be found that the residuals have a rectangular pattern where most of the observations are concentrated to the middle. This pattern indicates that errors have close to a constant mean and thereby it can be concluded that there exists homoscedasticity in this sample (Pallant 2013).

5.1.3 Results of Regressions – 1 and 2

After collecting and compiled the data material, it was tested in *SPSS* in order to seek for significance and hence to respond to the given hypotheses. Firstly, the data material associated with all of the three hypotheses was tested at once. Further to seek additional explanations the hypotheses was tested in separated regressions.

Since the data-material did not suffer from violations and biases, a multiple-regression of the dependent- and independent variables were initiated in two different formats: one with ownership concentration and institutional block-holding measured as a continuous variable and one measuring these factors as dummy variables. The result of the regressions (1) and (2) can not show a significant relationship that can confirm the three underlying hypotheses regarding the wealth effects in M&A being increased or mitigated by ownership concentration, institutional ownership or portfolio exposure.

As can be seen in Table 5.3 (regression 1 and 2) a significance of the models could not, in contrast with the results of Craninckx and Huyghebaert (2015), Yen & André (2007 and Bhaumik & Selarka (2012), be confirmed and hence not provide any statistically evidence of the regressions as a whole. The R square value is rather low and indicated that the independent variables only explain a low part of the total variance in the dependent variable CAR. The variables “ln_size”, “institutional block 10%” and “Largest Owner 50%” were the only variables with a significant result – which is in line with previous studies conducted by Moeller et al (2004) and Craninckx and Huyghebaert (2015). To seek further explanations of the non-significant result of regression 1 & 2, separate regression has been run testing each hypothesis separately.

Table 5.3 – Summary of Regressions

Regression	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(Constant)	(3,340)	(3,203)	(3,348)	(3,063)	(3,181)	(3,328)	(3,074)
ln_size	-0,131** (0,232)	-0,134 (0,230)	-0,182*** (0,231)	-0,144** (0,225)	-0,143* (0,229)	-0,167** (0,241)	-0,141 (0,227)
Cross-Border	0,078 (1,149)	0,072 (1,143)	0,087 (1,155)	0,061 (1,123)	0,65 (1,132)	0,097 (1,202)	0,064 (1,135)
Cash	-0,074 (1,200)	-0,065 (1,187)	-0,055 (1,211)	-0,062 (1,173)	-0,069 (1,188)	-0,053 (1,261)	-0,059 (1,180)
Share	-0,071 (1,570)	-0,057 (1,554)	-0,023 (1,587)	-0,052 (1,537)	-0,060 (1,554)	-0,044 (1,651)	-0,051 (1,543)
Industry	0,057 (1,132)	0,041 (1,130)	0,058 (1,148)	0,036 (1,110)	0,040 (1,122)	0,066 (1,194)	0,037 (1,112)
Largest_Owner		0,057 (0,050)					
Institut.	-0,031 (1,431)	-0,061 (1,390)		-0,067 (1,015)	-0,059 (1,169)		-0,075 (1,096)
Largest 10%	0,072 (1,582)		0,068 (1,457)				
Largest 15%	0,054 (1,401)		-0,061 (1,398)				
Largest 25%	0,042 1,479		0,020 (1,410)				
Largest 50%	0,110** (3,065)		0,090* (3,076)				
Block. Own. Inst.		0,007 (0,046)				-0,041 (0,036)	
Inst. Block 10%	-0,114* (1,607)				-0,092 (1,169)		
Inst. Block 15%	-0,063 (1,607)				0,053 (1,568)		
Inst. Block 25%	-0,106 (1,570)				0,019 (1,463)		
Inst. Block 50%	-0,027 (2,322)				-0,005 (2,123)		
Port. Exp.	-0,22 (1,017)	-0,023 (1,017)					-0,023 (1,016)
Block Port. Exp.	-0,055 (2,024)	-0,055 (1,024)				-0,025 (1,024)	
R^2	0,047	0,047	0,045	0,030	0,030	0,030	0,027
Number of Obs.	338	338	338	338	338	338	338
Significance	0,477	0,384	0,084*	0,183	0,433	0,177	0,255
VIF-value	3,016	2,154	1,980	1,539	2,888	1,539	1,546

The values presented in the table denote the standard beta coefficient (β) followed by the standard error in the parentheses. Furthermore, the significance levels are divided into three different levels: * - 10%, ** - 5%, *** - 1%

5.2 Results of Hypotheses

In this section the results of the three hypotheses tested in separate regressions will be presented. Observe that the analysis of the result will be provided in the upcoming chapter.

5.2.1 Results of Hypothesis 1 - Regression 3

Firstly, the data material associated to the first hypothesis was tested. The hypothesis was stated as follows:

Hypothesis 1:

A concentrated ownership structure has a positive affection of shareholder wealth

The first hypothesis is primarily based on the empirical evidences of Yen and André (2007) and Bhaumik and Selarka (2012), and test whether acquiring firms with concentrated ownership structures generate significant higher CAR than firms with dispersed ownership structures. The variable measuring ownership concentration is measuring the block of shares held by the largest shareholder in a specific company at the announcement date of the M&A (Craninckx and Huyghebaert, 2015).

As can be seen in Table 5.3 (regression 3) a significance of the model could be confirmed, which is in contrast to the non-significant regressions 1 and 2. Though, the R-square value is rather low and indicates that the independent variables only explain a low part of the total variance in the dependent variable. The variable “ln_size” showed a significant result – which is in line with previous studies conducted by (Moeller et al, 2004).

In order to seek for potential answers of a significant relationship between ownership concentration and CAR, the regression and hypothesis was tested with four dummy variables to explore if different levels of ownership can provide evidence if concentrated ownership have a positive affection on CAR. Hence, different thresholds were applied on the ownership variable taking on value 1 if the largest shareholder held an ownership block of respectively 10%, 15%-, 25%- or 50%.

Regarding the thresholds of 10%, 15% and 25%, the results were not significant. On the other hand, when the largest owner of a firm possessed 50% of the shares the concentrated ownership variable had a significant positive relationship with CAR on a 10% level (see table 5.3).

Ultimately, with the above stated statistic significances in mind we could not reject the null hypothesis.

5.2.2 Results of Hypothesis 2 – Regression 5 and 6

The second hypothesis is being tested in regression 4 and 5 which includes two different institutional ownership variables. The first regression (4) test whether the identity of the largest individual shareholder being an institutional owner affect CAR negatively, and thereby have a negative wealth effect on shareholder value of the acquiring company (Craninckx & Huyghebaert, 2015). The second regression (5) measures the effect of institutional ownership on CAR as block holding, where all the large institutional owners with blocks of shares exceeding 5% are summarized into one single block for each of the company included in the sample. Further 4 different dummy variables are included in the second regression (5) taking on value 1 if the block of institutional owners exceeding thresholds of 10, 15, 25 and 50 percent respectively. After conducting relevant data, the following hypothesis was tested for in SPSS:

Hypothesis 2:

Institutional ownership has a negative affection of shareholder wealth

The result of the first regression (4), displayed in Table 5.3, shows that the model as a whole is not significant and the determination coefficient has a value of 3%. This value of the coefficient is rather low, which indicates that the independent variables in the model fail to explain a high portion of the existing variance of CAR in the sample. Furthermore, we find significance for the relationship between \ln_size and CAR at the 5% level. The variables cross-border, industry, institutional shares and cash shows insignificant relationships to CAR.

In line with earlier studies we find a significant negative relationship CAR and size (Craninckx & Huyghebaert, 2015). The result of regression 4 indicates a positive correlation between industry and CAR which is in line with previous literature, although this relationship is not significant. The regression fails to show significant results for the negative relationship between institutional ownership and CAR, hence the result can not confirm a significant lower CAR if the largest shareholder is an institutional investor - which previous studies earlier have proven Craninckx & Huyghebaert (2015).

Moreover, regression 5 measures the effect of institutional block-holding on shareholder wealth which is measured through a block variable which have been tested with different thresholds taking on value 1 if the block of institutional owners is larger than r 10-, 15, 25 and 50 percent respectively. The underlying ownership data is the same in the two different variables and hence do not violate any of the assumptions (appendix 4) (Pallant 2013).

When measuring different thresholds as dummy variables, the model is not significant and with a R-square value of only 3%. Only \ln_size indicates significant results where size have a negative relationship which is in line with previous literature. Furthermore, the result from the two regressions (4) and (5), displayed in table 5.3, does not show a significant relationship between CAR and the variable industry neither for the variables measuring payment method.

Finally, the institutional block-ownership variable in regression five, which measures if the block of large institutional owners, indicates a negative relationship for CAR with different thresholds which is in line with Craninckx & Huyghebaert (2015) but is not significant and hence this relationship can not be confirmed. Ultimately, because of the lack of statistic significances the null hypothesis could not be reject.

5.2.3 Results of Hypothesis 3 – Regression 6 and 7

After collecting the data material and compiled the dependent and independent variables, the third hypothesis was tested for in two different regressions (6) and (7).

Hypothesis 3:***Low portfolio exposure has a negative effect of shareholder wealth in institutional ownership***

When testing of Hypothesis 3, the regressions 6 and 7 (Table 5.3) includes the two developed portfolio exposure variables in order to explain the relationship between the negative effect of institutional ownership and M&A wealth effects. The first regression (6) includes a portfolio-exposure variable which measures the largest owner's portfolio exposure to the specific company at the announcement date. The portfolio exposure variable - included in the second regression (7) - measures the portfolio exposure in institutional block holding. That is, the average portfolio exposure amongst the block of institutional owners in a specific company.

The regressions were consequently not significant neither on a five percent level nor a ten percent level. Because of this, the study can not provide any statistical evidence of the relationship between low portfolio exposure for institutional owners and shareholder wealth, as can further be seen above in table 5.3.

Furthermore, the correlation between CAR and "block_ownership_exp" showed a negative correlation, which is in contradiction to what the hypothesis suggested. Since the study already stated that the material did not suffer from any violations, alternative explanations of biased material was rejected.

Secondly, another regression (7) was performed including the portfolio exposure and the variable measuring the identity of the largest owner being an institutional owner. The rationale of using different variables was to seek for potential significance and support of the hypothesis. The outcome was consistent with former results in this study: a negative correlation between portfolio exposure and CAR in institutional owners and a non-significant model. In conclusion, due to the non-significance we could not reject the null hypothesis of the third hypothesis.

5.3 Robustness

In this section the robustness of the thesis's regression and statistical tests will be displayed with the ambition to treat the results as durable and undoubted. This section will thereby provide tables where the data-material is slightly changed, for instance excludes outliers in the regressions stated in previous sub-chapters. Please note that the change of different thresholds or criteria has already been displayed in previous sub-sections and tables and thus will not be repeated in this sub-chapter.

5.3.1 Excluding of Outliers

After running the untreated regressions, eight outliers out of total 338 observations were identified. In order to ensure that the outliers do not affect the authenticity and reliability of the result, the outliers got excluded and thereafter the regressions were run again (Pallant, 2013). Descriptive statistics without outliers can be seen in appendix 5.

The excluding of the outliers resulted in an inferior result in terms of significance relative to the regressions with the outliers included. Also, the reduction of the outliers did not improve the non-linearity, the non-normality nor the homoscedasticity in a considerably manner, and hence the regressions of the hypotheses remained to be tested containing the outliers. Consequently, since we did not find it obvious that the outliers affected our assumptions or affected the entered data incorrectly, we did not exclude them (Pallant, 2013).

5.3.2 Excluding Owners >90%

To seek an explanation to the contradictory relationship between Portfolio exposure and CAR an additional regression was applied excluding observations where the portfolio exposure was at a level above 90%. The rationale for this exclusion was to isolate the effect of abnormal high portfolio exposure derived from foreign ownership in the portfolio data. The result in the original regressions (see 5.2.3) indicates a positive correlation between portfolio exposure and value creation which is contradictory to previous literature see (Cronqvist & Nilsson 2003). The interpretation of this abnormal correlation which was found after running the original regression

testing the third hypothesis indicates that something in the data material might fail to explain the natural relationship between portfolio exposure and CAR.

The additional regression used as a part of a robustness test of the model have a large number of missing values and do not show a significant positive relationship between CAR and portfolio exposure. However, by analysing the correlation matrix (see Appendix 6) a positive correlation between CAR and portfolio exposure can be identified. Hence, this indicates that it might be the data material rather than the variable measuring portfolio exposure that fail to show the rational positive relationship between CAR and portfolio exposure.

6. Analysis and Discussion

In this sixth chapter, the authors will elaborate and analyse the results, with the ambition to give theoretical explanations on the outcomes of the hypotheses. These explanations will be supported of theories and earlier empirics from chapter two and three. Ultimately, the authors will give their opinions about the exposure-variable and discuss its validity.

6.1 Analysis of Hypothesis 1

Our results from the first hypothesis suggested that we could not reject the null hypothesis, and hence that concentrated ownership does not have any affect on shareholder wealth. As described in the result and in “empirical findings”, earlier studies have been successful to reject the null hypothesis and thus provide evidence that concentrated ownership structure would have a positive affection of shareholder wealth (Craninckx & Huyghebaert, 2015; Yen & André, 2007; Bhaumik & Selarka, 2012; Pound, 1998).

Although, the hypothesis is proven to be significant when the largest shareholder possess ownership of 50%. This result might imply that heavily concentrated ownership by one large owner have a positive affect of CAR, there might not be as much agency costs or incentive conflict – causing empire buildings or hubris – since the largest owner controls the majority of the business and therefore is exposed to the performances of the company (Jensen and Meckling, 1976; Koller et al, 2015). Also, another angle of this might be that when the firm is controlled by only one dominant shareholder, the acquiring firm’s keenness to pay a high takeover premium reduces. The dominant shareholder can also utilize his or her power to replace the incumbent board or top management team or recruit new top-leaders after his or her own preferences and thus keep control of the firm (Craninckx & Huyghebaert, 2015).

On the other hand, it is interesting that this relationship can not be confirmed for the other ownership-thresholds, that is when the largest owner does not have a majority of the ownership we can not confirm that it will generate a higher shareholder wealth. Since we could not provide significance for neither of the thresholds 10%, 15%, 25%, we can not support the hypothesis that ownership concentration has a positive effect

on shareholder wealth but the result indicates that an ownership exceeding 50% of one single owner and thereby per definition control generates higher shareholder wealth in M&As (Overland 2012).

Although, one must be reminded of that this result does not imply the opposite, that - in line with managerial hubris theories or principle-agent conflict – large shareholders utilize their position and thus taking value-destructing decisions, for instance initiating an unsuccessful M&A (Schweiger and Very, 2003; Jensen and Meckling, 1976; Gaughan, 2007). The result must be interpreted that there is a “passivity” among the largest shareholders, generating nor higher or lower CAR than an average investor. A possible answer to this might be that this study is documented with observations on the Swedish market. Sweden is documented to have a highly functional corporate governance-culture and also have high investor-protection, leading to top managers or large shareholders can not utilize their position as freely as much of the theories of managerial hubris and empire building suggest (Jakobsson & Wiberg, 2014). Due to this, we believe that our result would be different if we had generated the same study but on a different market with low investor protection and a non-effective corporate governance culture, for instance on an emerging market. Therefore, we believe that our results are a reflection of the Swedish market considering the data material provided from Modular Finance and Zephyr.

Lastly, Chen, Lu and Sougiannis (2012) suggested that the agency-costs takes presence in a larger extent for large firms – and hence a firm’s size would have a negative impact on shareholder wealth. As can be seen in the correlation matrix 5.2 and in table 5.3 this study can confirm this relationship, implying the negative relationship between \ln_size and CAR. Ultimately, this relationship might imply that acquiring firms tend to pay larger premiums to buy other large target firms.

6.2 Analysis of Hypothesis 2

The purpose of the second hypothesis was to test the existence of a negative relationship between M&A wealth effects and the presence of institutional ownership in either 1) the identity of the largest shareholder or 2) by the block of several large institutional shareholders. The underlying theoretical explanation posits that in

institutional organizations, like a pension fund, management holds no ownership in the controlled firm which mitigate the agency costs since the management might lose their job if they do not maximize the shareholder value. That is, there exist higher incentives to monitor incumbent management of the controlled firm if the large shareholder is an institutional owner (Cronqvist & Nilsson 2003).

In this study, we argued that institutional ownership rather has a negative shareholder wealth effect in the M&A process. This opposition from the theoretical explanation of effective monitoring in institutional ownership is in line with Celik & Isaksson (2013) who argue that because of the internal regulations of the institutional owners it might lead to a passive management of a company instead of an active participation, mainly because of reducing costs. As a consequence, the shareholder wealth might be reduced since the institutional owners of the firm neglect to manage the firm in the best interest of the shareholders, because there are no incentives of taking on the costs of an active monitoring (Celik and Isaksson, 2013).

The T-test performed on CAR and the identity of the largest controlling shareholder shows a significant lower CAR in companies where the largest owner is an institutional investor (See table 5.1) This result is in line with Craninckx & Huyghebaert (2015) who also shows that firms that have an institutional investor as largest owner have negative CAR. Apart from Craninckx & Huyghebaert (2015) this study implicate that the wealth effect in M&A is mitigated by institutional ownership rather than be value-destroying. The difference between mitigating and value-destroying is that in this study, CAR generated from M&A's - where an institutional owner is present as the largest owner - still have a positive wealth effect whereas in Craninckx & Huyghebaert (2015) this presence leads to negative CAR.

Hence, the result of this study can at first glance indicate a lack of monitoring in the presence of institutional ownership. This interpretation is in line with Celik & Isaksson (2013) that the shareholder wealth is mitigated in firms with institutional ownership due to lack of incentives and to high monitoring costs. Even though the T-test shows significance, this mitigation of wealth can not be confirmed since the two

different variables capturing institutional ownership fail to show significance when included in the various multiple regression models.

Apart from the institutional ownership variable, three out of five control variables also fail to show significance. These are variables that in previous literature have thoroughly proven to impact CAR in either positive or negative directions, but in the model performed in this study fail to do so. These insignificant relationships might indicate that something in the data used in this study can not confirm what earlier studies have successfully showed. Even if the data has been handled in a correct way and several test supports the robustness of the model we can not rule out this possible factor since the interpretation of the result in this study otherwise would implicate that earlier studies is not correct.

6.3 Analysis of Hypothesis 3

The purpose of testing portfolio exposure of large institutional shareholder and thereby the development of the variables included in the regressions testing hypothesis 3 was to explore and seek an explanation to the mitigation of wealth effects in M&A where the acquiring company's ownership structure is driven by institutional ownership.

The regressions (6) and (7) in table 5.3 shows a negative relationship rather than a positive, which according to theory is the rationale relationship. Thus, the third hypothesis can not be confirmed and this study can not provide an explanation of the negative relationship between CAR and institutional ownership. A possible explanation to why there is a positive rather than a negative correlation between portfolio exposure-variables and CAR can be since the only available ownership data only covers portfolios consisting Swedish companies. This limitation of ownership data result in a high portfolio exposure-value when a certain owner's portfolio consists of a majority of shares in foreign companies and only a small portion of Swedish companies.

This limitation of foreign ownership data might be a possible explanation of why this approximation of portfolio exposure based on the data in this sample fail to explain

the mitigation on wealth effects in the presence of institutional ownership. This possible explanation can be supported by the additional regression described in the robustness section 5.3 where portfolio with values of above 90% is excluded, the result of the regression is still not significant but looking at the correlation matrix (Table 5.2) the correlation between exposure and CAR is positive which it theoretically should be (Cronqvist & Nilsson 2003).

On the other hand, given that the outcome of the third hypothesis actually reflects the truth about portfolio exposure and shareholder wealth, we can not exclude that the Swedish institutional investors actually do not care of their inferior ownership in a certain firm. That is, even if the largest institutional owners do not have any incitement due to their low portfolio exposure they still – according to the results – follow the regulations of the Swedish market and hence do not interfere with their responsibility to optimize shareholder value (Jakobsson and Wiberg, 2014). Although, this contradicts the arguments of this study. With the rationality based on the results, an investor's largest investment in his portfolio should cause equal incitement to monitor his lowest investment.

7. Conclusion

This seventh chapter will display the conclusion of this research, where the authors firstly will describe the conclusions and secondly the academic contributions to the research area. Finally, proposals for further research and reflections about the potential shortcomings will be described.

7.1 Conclusion

The purpose of this thesis was to examine how investors' portfolio exposure in a concentrated ownership-structure affects abnormal returns for the bidding company in a merger and acquisition on the Swedish market.

The results can not show an overall significant result of the regression testing the three underlying hypotheses, although there is an indication of a positive relationship between ownership concentration and CAR when testing the hypothesis separately. Moreover, this study can at first glance indicate a lack of monitoring in the presence of institutional ownership, since it displays a significant lower CAR in M&As where the largest owner in the acquiring company is an institutional owner. Even though the T-test shows significance, this mitigation of wealth can not be confirmed since the two different variables capturing institutional ownership fail to show significance when included in the various multiple regression models.

Finally, the third hypothesis showed a negative correlation between portfolio exposure and CAR which is somewhat contradictory to the previously proven positive relationship. Though, an additional regression showed a positive correlation after abnormal portfolio exposure data of foreign investors had been excluded, which indicate that it is rather the lack of foreign ownership data that is insufficient than the developed variable measuring portfolio exposure.

This study has investigated the problem within institutional ownership and highlighted the discrepancy between well-known theories and empirical studies to provide an explanation if an institutional investor's incentives can affect shareholder value. In order to answer the research question, we hereby conclude that we can not

with today's limited foreign portfolio data confirm that high portfolio exposure of an institutional investor does create higher CAR in the event of a M&A.

The major contribution has been the development of a variable that captures the incentives of the investors, a variable that has been possible to create with the ownership data from the Swedish market. These contributions are therefore suggesting alternative explanations of the lack of monitoring within institutional ownership: an area of research that is yet to be further and fully investigated (Bhaumik and Selarka, 2012).

7.2 Proposal for Future Research

In this study, we have tried to capture how an investor's portfolio exposure affects the shareholder wealth in the context of a M&A. We believe that our hypotheses are valid and shareholder wealth can be a function of the incentives by the large shareholders. Although, we propose for future research to develop these theories when more accurate data material is available. For now, we have had the possibility to capture the portfolio exposure of the Swedish-market and hence the Swedish portfolios. In the future, we hope that this unique data material and the tracking of investor's portfolios can be expanded to the whole Scandinavian- or European market, where future research therefore more accurately can capture the exposure and hence utilize our variable in a larger extent.

7.3 Reflections and Criticism

Because of showing transparency in our research, we hereby will present some smaller reflections and criticism of what could have been done differently in this study. Firstly, in order to capture cumulative abnormal return of the acquiring firms we only observed one estimation window in our event study. We believe that if we had analysed a shorter- or longer estimation window parallel to the actual window we maybe could have revealed interesting differences in the results.

Secondly, we are confident that our beliefs and arguments whether incentives of a large shareholder can have an impact on the shareholder value have a logic and valid substance. Although, the data material provided from Modular Finance was not as extensive as this study promised. Although, with the data and material given we

succeeded to create our variable and provide results in the context of the Swedish M&A-market. On the same time, we suppose that if the data material would have been more accurate – for instance taken into consideration of foreign investments – more interesting relationships and results could have been revealed.

References

Academic Journals

Abazov, V. M., Abbott, B., Abolins, M., Acharya, B. S., Adams, M., Adams, T., ... & Alton, A. (2009). Observation of single top-quark production. *Physical review letters*, 103(9), 092001.

Agrawal, A., Jaffe, J. F., & Mandelker, G. N. (1992). The post-merger performance of acquiring firms: A re-examination of an anomaly. *The Journal of Finance*, 47(4), 1605-1621

Akben-Selcuk, E. (2015). Factors Influencing College Students' Financial Behaviours in Turkey: Evidence from a National Survey. *International Journal of Economics and Finance*, 7(6), 87.

Allen, L., & Peristiani, S. (2004). Conflicts of interest in merger advisory services.

Allen, L., Jagtiani, J., Peristiani, S., & Saunders, A. (2002). The role of bank advisors in mergers and acquisitions.

Aliaga, M., & Gunderson, B. (2002). Interactive statistics. Virginia. *America: Pearson Education*.

Amit, R. and B. Villalonga, 2006, "How Do Family Ownership, Control, and Management Affect Firm Value?", *Journal of Financial Economics* 80, 385-417

Anderson, R. C. and D. M. Reeb, 2003, "Founding-Family Ownership and Firm Performance -Evidence from S&P 500", *The Journal of Finance* 58(3), 1301-1328

Andrade, G., M. Mitchell and E. Stafford, 2001, "New Evidence and Perspectives on Mergers", *Journal of Economic Perspectives* 15(2), 103-20

Arnold, B. (2006). M&A Benchmarks: Energy and Utility Networks.

Asquith, P., R.F. Bruner and D.W. Mullins Jr., 1983, “The Gains to Bidding Firms from Mergers”, *Journal of Financial Economics* 11(1-4), 121-140

Bauer, F., & Matzler, K. (2014). Antecedents of M&A success: The role of strategic complementarity, cultural fit, and degree and speed of integration. *Strategic management journal*, 35(2), 269-291.

Ben-Amar, W. and P. André, 2006, “Separation of Ownership from Control and Acquiring Firm Performance: The Case of Family Ownership in Canada”, *Journal of Business Finance & Accounting* 33(3-4), 517-543

Berle, A. A., & Gardiner, C. (1968). Means. 1932. *The modern corporation and private property*, 204-5.

Bhaumik, S. K., & Selarka, E. (2012). Does ownership concentration improve M&A outcomes in emerging markets?: Evidence from India. *Journal of Corporate Finance*, 18(4), 717-726.

Bigelli, M. and S. Mengoli, 2004, “Private Benefits from New Acquisitions: Evidence from the Italian Stock Market”, *Journal of Management and Governance* 8(4), 373-405

Bjuggren, P-O., J.E. Eklund and D. Wiberg, 2007, “Ownership Structure, Control and Firm Performance: The Effects of Vote Differentiated Shares”, *Applied Financial Economics* 17(16), 1323-1334

Bruner, R. F. (2002). Does M&A pay? A survey of evidence for the decision-maker. *Journal of Applied Finance*, 12(1), 48-68.

Çelik, S., & Isaksson, M. (2013). Institutional investors as owners: who are they and what do they do?. *OECD Corporate Governance Working Papers*, (11), 1.

- Chen, C. X., Lu, H., & Sougiannis, T. (2012). The agency problem, corporate governance, and the asymmetrical behaviour of selling, general, and administrative costs. *Contemporary Accounting Research*, 29(1), 252-282.
- Claessens, S., S. Djankov, J. Fan and L. Lang, 2002, "Disentangling the Incentive and Entrenchment Effects of Large Shareholdings", *Journal of Finance* 57(6), 2741-2771
- Craninckx, K., & Huyghebaert, N. (2015). Large shareholders and value creation through corporate acquisitions in Europe. The identity of the controlling shareholder matters. *European Management Journal*, 33(2), 116-131.
- Cronqvist, H. and M. Nilsson, 2003, "Agency Costs of Controlling Minority Shareholders", *Journal of Financial and Quantitative Analysis* 38(4), 695-719
- Cubbin, J., & Leech, D. (1983). The effect of shareholding dispersion on the degree of control in British companies: theory and measurement. *The Economic Journal*, 93(370), 351-369.
- Datta, D.K., Pinches, G.E, and V.K. Narayanan, 1992, "Factors Influencing Wealth Creation from Mergers and Acquisitions: A Meta-Analysis", *Strategic Management Journal* 13(1), 67-84
- Datta, D. K., & Puia, G. (1995). Cross-border acquisitions: An examination of the influence of relatedness and cultural fit on shareholder value creation in US acquiring firms. *MIR: Management International Review*, 337-359.
- Deng, H., Moshirian, F., Pham, P. K., & Zein, J. (2013). Creating value by changing the old guard: The impact of controlling shareholder heterogeneity on firm performance and corporate policies. *Journal of Financial and Quantitative Analysis*, 48(06), 1781-1811.
- Demsetz, H. (1983). The structure of ownership and the theory of the firm. *The Journal of Law and Economics*, 26(2), 375-390.

Dye, R. A. (1985). Disclosure of non-proprietary information. *Journal of accounting research*, 123-145.

Ekholm, A., & Maury, B. (2014). Portfolio concentration and firm performance. *Journal of Financial and Quantitative Analysis*, 49(04), 903-931.

Faccio, M. and L. Lang, 2002, "The Ultimate Ownership of Western European Corporations", *Journal of Financial Economics* 65(3), 365-395

Faccio, M., McConnell, J. J., & Stolin, D. (2006). Returns to acquirers of listed and unlisted targets. *Journal of Financial and Quantitative Analysis*, 41(01), 197-220.

Faccio, M., Marchica, M. T., & Mura, R. (2011). Large shareholder diversification and corporate risk-taking. *Review of Financial Studies*, 24(11), 3601-3641.

Fich, E. M., Harford, J., & Tran, A. L. (2015). Motivated monitors: The importance of institutional investors' portfolio weights. *Journal of Financial Economics*, 118(1), 21-48.

Flanagan, D. J. (1996). Announcements of purely related and purely unrelated mergers and shareholder returns: Reconciling the relatedness paradox. *Journal of Management*, 22(6), 823-835.

Fuller, K., J. Netter and M. Stegemoller, 2002, "What Do Returns to Acquiring Firms Tell Us? Evidence from Firms that Make Many Acquisitions", *Journal of Finance* 57(4), 1763-1793

Gaspar, J. M., Massa, M., & Matos, P. (2005). Shareholder investment horizons and the market for corporate control. *Journal of financial economics*, 76(1), 135-165.

- Golubov, B., Efimov, A., & Skvortsov, V. (2012). *Walsh series and transforms: theory and applications* (Vol. 64). Springer Science & Business Media.
- Gottlieb, B., Beitel, L. K., Wu, J. H., & Trifiro, M. (2004). The androgen receptor gene mutations database (ARDB): 2004 update. *Human mutation*, 23(6), 527-533.
- Graham, J. R., Lemmon, M. L., & Wolf, J. G. (2002). Does corporate diversification destroy value?. *The Journal of Finance*, 57(2), 695-720
- Gray, D. & Malone, S.W. (2008). *Macrofinancial risk analysis*. England: J.Wiley & Sons Inc.
- Harris, R. S., & Ravenscraft, D. (1991). The role of acquisitions in foreign direct investment: Evidence from the US stock market. *The Journal of Finance*, 46(3), 825-844.
- Hartzell, J. C., Ofek, E., & Yermack, D. (2004). What's in it for me? CEOs whose firms are acquired. *Review of Financial Studies*, 17(1), 37-61.
- Jansen, I. P., Sanning, L. W., & Stuart, N. V. (2013). On the relation between the relative size of acquisitions and the wealth of acquiring firms. *Applied Economics Letters*, 20(6), 534-539.
- Jarrell, G. A., & Poulsen, A. B. (1989). The returns to acquiring firms in tender offers: Evidence from three decades. *Financial management*, 12-19.
- Jensen, M. and W. Meckling, 1976, "Theory of the Firm: Managerial Behaviour, Agency Costs, and Ownership Structure", *Journal of Financial Economics* 3(4), 305-360
- Jensen, M. C., & Ruback, R. S. (1983). The market for corporate control: The scientific evidence. *Journal of Financial economics*, 11(1-4), 5-50.
- Kang, N. H., & Johansson, S. (1993). *Cross-Border Mergers and Acquisitions*.

Kaplan, S. N., & Weisbach, M. S. (1992). The success of acquisitions: Evidence from divestitures. *The Journal of Finance*, 47(1), 107-138.

Khurshed, A., Lin, S., & Wang, M. (2011). Institutional block-holdings of UK firms: do corporate governance mechanisms matter?. *The European Journal of Finance*, 17(2), 133-152.

Lang, L. H., Stulz, R., & Walkling, R. A. (1989). Managerial performance, Tobin's Q, and the gains from successful tender offers. *Journal of financial Economics*, 24(1), 137-154.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1999). The quality of government. *Journal of Law, Economics, and organization*, 15(1), 222-279.

La Porta R., F. Lopez-De-Silanes and A. Shleifer, 1999, "Corporate Ownership Around the World", *Journal of Finance* 54(2), 471-517

La Porta R., F. Lopez-De-Silanes and A. Shleifer, 2000, "Investor Protection and Corporate Governance", *Journal of Financial Economics* 58(1-2), 3-27

La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. Vishny, 2002, "Investor Protection Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. (2004). Firm size and the gains from acquisitions. *Journal of financial economics*, 73(2), 201-228.

Le Nadant, A. L., & Perdreau, F. (2006). Financial profile of leveraged buy-out targets: some French evidence. *Review of Accounting and Finance*, 5(4), 370-392.

Lewellen, W., Loderer, C., & Rosenfeld, A. (1985). Merger decisions and executive stock ownership in acquiring firms. *Journal of Accounting and Economics*, 7(1-3), 209-231.

Malhotra, M. K., & Grover, V. (1998). An assessment of survey research in POM: from constructs to theory. *Journal of operations management*, 16(4), 407-425.

Maloney, M. T., McCormick, R. E., & Mitchell, M. L. (1993). Managerial decision making and capital structure. *Journal of Business*, 189-217.

Markides, C. C., & Ittner, C. D. (1994). Shareholder benefits from corporate international diversification: Evidence from US international acquisitions. *Journal of International Business Studies*, 25(2), 343-366.

Markowitz, H. (1952). Portfolio selection. *The journal of finance* , 77-91.

Martynova, M., & Renneboog, L. (2009). What determines the financing decision in corporate takeovers: Cost of capital, agency problems, or the means of payment? *Journal of Corporate Finance*, 15(3), 290-315.

Masulis, R. W., & Mobbs, S. (2014). Independent director incentives: Where do talented directors spend their limited time and energy? *Journal of Financial Economics*, 111(2), 406-429.

McConnell, J. J., & Servaes, H. (1990). Additional evidence on equity ownership and corporate value. *Journal of Financial Economics*, 27(2), 595-612

McEachern, D.M., Sandoval, O. & Iniguez, J.C. (1975). The vapour pressures derived enthalpies of sublimation, enthalpies of fusion, and resonance energies of acrid nine and phenazine. *The Journal of Chemical Thermodynamics*, 7(3), 299-306

Mintzberg, H. (1983). The case for corporate social responsibility. *Journal of Business Strategy*, 4(2), 3-15

Morck, R., Shleifer, A., & Vishny, R. W. (1990). Do managerial objectives drive bad acquisitions? *The Journal of Finance*, 45(1), 31-48.

Morck, R., & Yeung, B. (1992). Internalization: an event study test. *Journal of international economics*, 33(1), 41-56.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*, 13(2), 187-221.

Overland, C., Mavruk, T., & Sjögren, S. (2012). Keeping it real or keeping it simple? Ownership concentration measures compared. In *The 4th workshop of the Nordic Corporate Governance Network, Reykjavik University June 15, 2012*

Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of political economy*, 106(6), 1113-1155.

Pound, J. (1988). Proxy contests and the efficiency of shareholder oversight. *Journal of financial economics*, 20, 237-265

Rau, P. R., & Vermaelen, T. (1998). Glamour, value and the post-acquisition performance of acquiring firms. *Journal of financial economics*, 49(2), 223-253.

Roberts, M. R., & Whited, T. M. (2012). Endogeneity in empirical corporate finance.

Roll, R. (1986). The hubris hypothesis of corporate takeovers. *Journal of business*, 197-216.

Rydqvist, K. (1996). Takeover bids and the relative prices of shares that differ in their voting rights. *Journal of Banking & Finance*, 20(8), 1407-1425.

Salter, M. S., & Weinhold, W. A. (1979). *Diversification through acquisition: Strategies for creating economic value*. Free Pr.

Saunders, A., & Srinivasan, A. (2001). Investment banking relationships and merger fees.

Schweiger, D. M., & Very, P. (2003). Creating value through merger and acquisition integration. In *Advances in mergers and acquisitions* (pp. 1-26). Emerald Group Publishing Limited.

Seth, A. (1990). Value creation in acquisitions: A re-examination of performance issues. *Strategic Management Journal*, 11(2), 99-115.

Sharpe, W. F. (1966). Mutual fund performance. *The journal of business* , 119-138.

Shleifer, A. and R.W. Vishny, 1986, "Large Shareholders and Corporate Control", *Journal of Political Economy* 94(3), 461-488

Short, H. (1994). Ownership, control, financial structure and the performance of firms. *Journal of economic surveys*, 8(3), 203-249.

Smith, A. (1937). *The wealth of nations* (1776).

Stulz, R., 1988, "Managerial Control of Voting Rights, Financing Policies and the Market for Corporate Control", *Journal of Financial Economics* 20, 25-54

Söderström H.T., E. Berglöf, B. Holmström, P. Högfeldt and E. M. Meyerson Milgrom, 2003, *Ägarmakt och Omvandling – Den Svenska Modellen Utmanad*, Ekonomirådets rapport, SNS förlag, Stockholm.

Thomsen, S., & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, 689-705.

Travlos, N.G., 1987, "Corporate Takeover Bids, Method of Payment, and Bidding Firms" Stock Returns", *Journal of Finance* 42(4), 943-963

Tuch, C., & O'Sullivan, N. (2007). The impact of acquisitions on firm performance: A review of the evidence. *International Journal of Management Reviews*, 9(2), 141-170.

Yen, T. Y., & Andre, P. (2007). Ownership structure and operating performance of acquiring firms: The case of English-origin countries. *Journal of Economics and Business*, 59(5), 380-405.

Wiedersheim-Paul, F., & Eriksson, L. T. (1991). Att utreda, forska och rapportera.

Wright, J., Yang, A. Y., Ganesh, A., Sastry, S. S., & Ma, Y. (2009). Robust face recognition via sparse representation. *IEEE transactions on pattern analysis and machine intelligence*, 31(2), 210-227.

Books

Alvehus, J. (2013). *Skriva uppsats med kvalitativ metod: En handbok*. Stockholm: Liber.

Benninga, S. (2008). *Corporate Financial Management*. Edinburgh: Pearson Educational Limited

Bryman, A., & Bell, E. (2003), *Business Research Methods*. Oxford University Press, Oxford

Denscombe, M. (1998). *Forskningshandboken*. Lund: Studentlitteratur.

DePamphilis, D. (2010). *Mergers and acquisitions basics: all you need to know*. Academic Press.

Gaughan, P. (2007). *Mergers, Acquisitions and Corporate Restructurings*. Canada: J.Wiley & Sons Inc.

Koller, T., Goedhart, M., & Wessels, D. (2011). *Valuation. Measuring and Managing the Value of Companies*. New Jersey: John Wiley & Sons Inc.

Körner, S., & Wahlgren, L. (2015). *Statistiska Metoder*. Lund: Studentlitteratur.

Lewis, P.; Thornhill, A.; Saunders, N. (2009). *Research methods for Business Students*, 5th edition, Essex: Pearson Education Limited

Lind, R. (2014). *Vidga vetandet*. Lund: Studentlitteratur.

Pallant, J. (2013). *SPSS survival manual* (5th Edition uppl.). Berkshire: Open University press.

Hansson, B. (2011). *Skapa vetande: Vetenskapsteori från grunden*. Lund: Studentlitteratur.

Shefrin, H. (2007). *Behavioural Corporate Finance: Decisions that create value*. McGraw-Hill Inc. New York

Appendix

Appendix 1 – Kolmogorov Smirnov

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Size	,248	338	,000	,701	338	,000

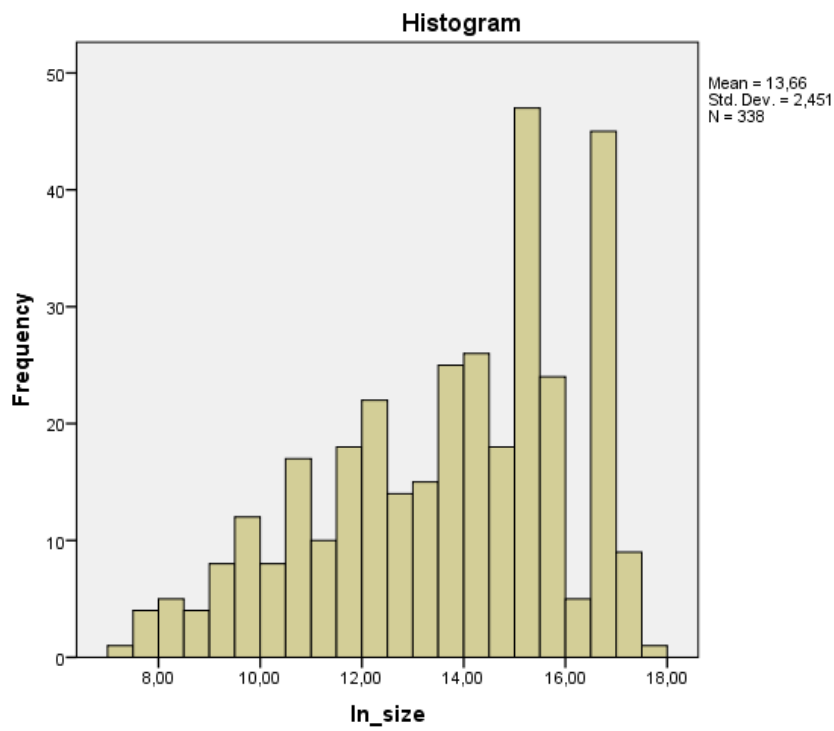
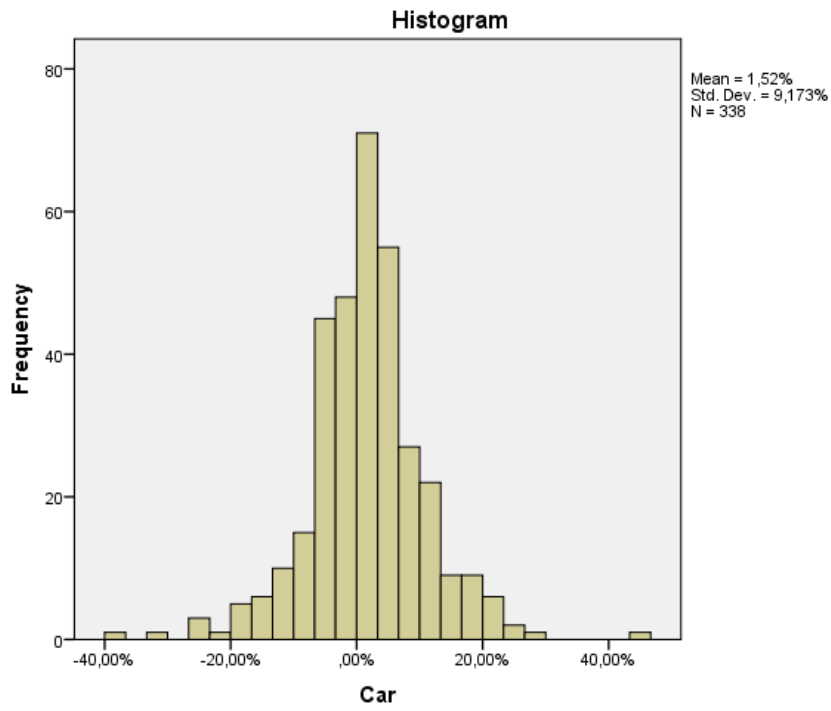
a. Lilliefors Significance Correction

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
In_size	,103	338	,000	,945	338	,000

a. Lilliefors Significance Correction

Appendix 2 – Normal Distribution



Appendix 3 - T-test of institutional and non-institutional

Group Statistics

	Institutional	N	Mean	Std. Deviation	Std. Error Mean
Car	0	130	2,2504%	9,26671%	0,81274%
	1	208	0,6615%	10,96429%	0,76024%

Appendix 4 – Tests for OLS-violations

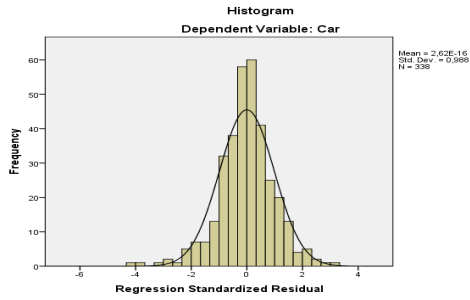
Durbin Watson

Model Summary^b

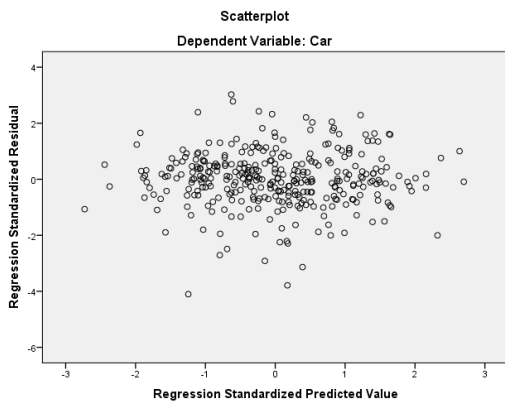
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,180 ^a	,032	,000	8,85575%	,032	,992	11	326	,453	1,742

a. Predictors: (Constant), Institutionellt block 50%, Cash, Industry, Institutional, Crossborder-deal, Block_Portfolio_exposure_inst, Institutionellt block 10%, In_size, Shares, Institutionellt block 25%, Institutionellt block 15%
 b. Dependent Variable: Car

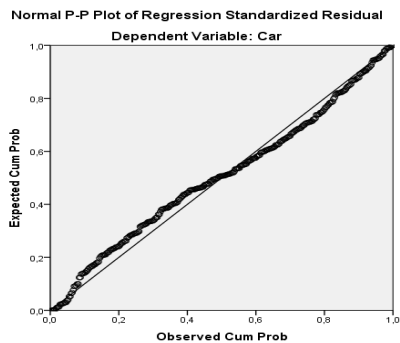
Non-normality



Scatterplot – Homoscedasticity



Non-Linearity



Appendix 5 – Descriptive Statistics without outliers

Variable	N	Mean	STDEV	Minimum	Maximum
CAR (%)	330	1,84%	8,15%	-23,74%	27,14%
ln_Size	330	13,64%	2,47	7,13%	17,57
Cross-Border	330	0,639	0,48	0%	1,0
Cash	330	0,558	0,49	0%	1,0
Share	330	0,188	0,39	0%	1,0
Industry	330	0,730	0,44	0%	1,0
Institut.	330	0,62	0,49	0%	1
Largest Own	330	19,08%	12,28%	5,01%	70,58%
Portf. Exp.	330	35,66%	33,29%	0,03%	99,99%
Block Inst.	330	18,7%	15,41%	0%	70,58%
Block port. exp.	330	19,78%	22,84%	0%	99,96%
Largest 10%	330	0,76	0,43	0%	100%
Largest 15%	330	0,53	0,50	0%	100%
Largest 25%	330	0,25	0,44	0%	100%
Largest 50%	330	0,03	0,16	0%	100%
Inst. Block 10%	330	0,67	0,47	0%	100%
Inst. Block 15%	330	0,53	0,50	0%	100%
Inst. Block 25%	330	0,30	0,46	0%	100%
Inst. Block 50%	330	0,07	0,26	0%	100%

Appendix 6 – Correlation Matrix Excluding Owners >90%

Correlations^a

		Car	Crossborder-deal	Cash	Shares	Industry	Institutional	Blockägarskap	Blockportfölj
Pearson Correlation	Car	1,000	,062	-,080	,000	,089	,001	,110	,029
	Crossborder-deal	,062	1,000	,190	-,350	,009	,228	-,008	,220
	Cash	-,080	,190	1,000	-,520	-,084	,046	-,040	-,044
	Shares	,000	-,350	-,520	1,000	-,031	-,172	,022	-,082
	Industry	,089	,009	-,084	-,031	1,000	,015	,067	,088
	Institutional	,001	,228	,046	-,172	,015	1,000	,397	,214
	Blockägarskap	,110	-,008	-,040	,022	,067	,397	1,000	,129
	Blockportfölj	,029	,220	-,044	-,082	,088	,214	,129	1,000
Sig. (1-tailed)	Car	.	,183	,122	,500	,095	,492	,053	,334
	Crossborder-deal	,183	.	,003	,000	,446	,000	,452	,001
	Cash	,122	,003	.	,000	,108	,251	,278	,258
	Shares	,500	,000	,000	.	,323	,006	,373	,116
	Industry	,095	,446	,108	,323	.	,412	,163	,098
	Institutional	,492	,000	,251	,006	,412	.	,000	,001
	Blockägarskap	,053	,452	,278	,373	,163	,000	.	,029
	Blockportfölj	,334	,001	,258	,116	,098	,001	,029	.
N	Car	216	216	216	216	216	216	216	216
	Crossborder-deal	216	216	216	216	216	216	216	216
	Cash	216	216	216	216	216	216	216	216
	Shares	216	216	216	216	216	216	216	216
	Industry	216	216	216	216	216	216	216	216
	Institutional	216	216	216	216	216	216	216	216
	Blockägarskap	216	216	216	216	216	216	216	216
	Blockportfölj	216	216	216	216	216	216	216	216

a. Selecting only cases for which part_of_portfolio < 90,00%