



What is the impact of anti-takeover provisions on the acquirer's shareholder value?

A research of short-term impact on shareholder value

This study empirically examines the impact of anti-takeover provisions (ATPs) on shareholder value. First, the ATPs which are used to measure the impact of ATPs on shareholder value is *Poison Pill*, *Staggered Board Structure*, *Supermajority or Qualified Majority Vote Requirements*, *Golden Parachute*, *Significant Company Transactions (M&A)* *Shareholders Approval*. Next, to measure the shareholder value, an event study on the announcement of the acquisition of the total shareholder return is conducted. Furthermore, the research considers that the institutional environment in which the company is located could lead to a different impact on the effect of ATPs on shareholder value. Therefore, two different samples are composed, one sample contains United States merger and acquisition (M&A) data and the second sample contains Europe (excluding GB) M&A data. The data is hand collected and consisting for Europe, 231 acquisitions and the US, 1356 from 2004 until 2018. The results lead to the presence of two opposing effects for both institutional environments. Were, there is no significant effect of ATPs on shareholder value conducted for the continental Europe. On the other hand, for the US sample only Staggered board structure and golden parachute have a significant impact on shareholder value. The results maintain multiple robustness checks.

Keywords: Anti-takeover provisions, Institutional environment, Event study, Market of corporate control, Governance, Shareholder value

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1 Introduction

Since the hostile takeover wave during The 1980s, anti-takeover provisions (ATPs) have become an increasingly important governance mechanism to restrict shareholders' rights and empower managers during takeover attempts. While protecting firms from takeovers and preserving the management's tenure, the intervention in market dynamics through ATPs may undermine shareholder value. These dual implications cause agency problems. Agency problems are conflicts that result from a misalignment of incentives between the owners and executives of a company (Berle and Means, 1932; Jensen and Meckling, 1976). To investigate if ATPs create shareholder value, this research measures the impact of ATPs on the return of acquirer based on an event study. On the basis of this impact one can argue whether companies with ATPs available engage in either value-creating or value-destroying acquisitions and therefore measure the impact on shareholder value.

The literature on the effect of ATPs on shareholder value has rendered divergent results. Several studies have emphasized the advantages of protecting managers through ATPs, particularly in cases where strong shareholder oversight may cause severe disruptions by favoring short-term gains over long-term performance (Comment and Schwert, 1995; Stein, 1988). ATPs may also permit managers to settle upon a higher selling price in the event of a hostile takeover (Harris, 1990) resulting in increasing shareholder value. Other studies, however, point to ATPs' limitations. ATPs may delay or reduce the likelihood of a takeover, which, in turn, can decrease a firm's value by preventing managerial discipline (Ryngaert, 1988; Pound 1987; Malatesta and Walkling, 1988; Comment and Schwert, 1995; Karpoff et al. 2015). Masulis, Wang, and Xie (2007), for example, argue that ATPs negatively affect shareholder value because it limits the impact of the market of corporate control as a governance mechanism. Hence, the literature indicates the dual implications of ATPs on firm value as well as on acquirers' and acquirees' benefits. That is, ATPs may either hinder or stimulate value-creating takeovers.

The existing literature shares two methodological and theoretical limitations. First, the grand majority of research has been conducted in the US, leaving out potentially important insights from other parts of the world. Second, current studies rely upon the principal-agent model,

and ignore the extent to which a country's institutional make-up shapes shareholder influence over managerial decisions (North 1990). As a consequence, they oversee the context specificity of the effect of ATPs on acquirer return. However, research conducted by Kumar & Zattoni (2016) suggests that the institutional environment has important implications for ownership structures, management-shareholder consensus, and therefore the managerial decisions on adequate governance mechanisms. Accordingly, findings from the US may not be generalized to other jurisdictions. This research addresses these limitations and contributes to the literature by assessing the impact of ATPs on acquirer return. Notably, it incorporates different institutional environments in order to assess whether the effect differs between countries that hold different ownership dispersions. In pursuance of this endeavor, this research poses the following research question:

“What is the impact of anti-takeover provisions on acquirer return in continental western Europe and the US?”

This research provides an insight into whether companies with ATPs in place commit in value-creating or value-destroying acquisitions and therefore, increase or decrease shareholder value. This study's contribution to the literature is twofold. First, it considers the effect of ATPs on acquirer return in continental Europe, thereby adding European insights into a predominantly US-centric stream of research. Second, by bringing new geographies into the equation, this research elucidates the extent to which country-specific characteristics condition the effect of ATPs on acquirer return. More specifically, it compares the Anglo-Saxon ATPs with the one prevalent in Western Europe. In western Europe, ownership structures/ownership configurations are characterized by large shareholders who are able to monitor managerial decisions, and align ATPs with their own incentives—i.e. optimizing shareholder value. Under such conditions, there is less need to rely upon markets for corporate control as mechanism for governance (Al Kuwari, 2010). Anglo-Saxon ownership structures, on the other hand, are characterized by greater ownership dispersion which results in powerful managers and relatively weak owners. As a consequence, governance mechanisms tend to be market-oriented. Jensen (1986), however, argued that takeover threats are an important form of managerial discipline. As such, ATPs lead to less managerial discipline and reduce the alignment of interests between managers and

shareholders (Scharfstein, 1988 and Hirshleifer and Thakor, 1998). Moreover, research conducted in the US by Cunat et al. (2012) demonstrated that the removal of ATPs has a positive impact on shareholder value, therefore this could suggest that companies with ATPs in place engage in shareholder value-creating acquisitions.

This research relies upon data collected in the period 2006-2018. The dependent variable is the cumulative abnormal return (CAABR), which is conducted to measure the impact of the acquisition announcement. These returns are calculated on the basis of the event study tool of the Erasmus University. This research assumes that value-creating acquisitions are acquisitions where the CAABR of the announcement effect is positive. Consequently value-decreasing acquisitions consist of an announcement effect with a negative CAABR. Next, the CAABR of the announcement is not significantly different from 0, but based on an ANOVA test there are indeed differences between CAABR over time. To calculate the impact of the ATPs is conducted by an ordinary least square's regression. the ATPs used are based on the E index which contains the following ATPs: staggered boards, limits to shareholder bylaw amendments, limits to shareholder charter amendments, supermajority requirements for mergers, poison pills, and golden parachutes. Following several bidder and transaction characteristics are added as control variables. This study finds that, for cases collected in continental Europe, there is no significant causal relationship between ATPs and shareholder value. Only a significant impact on CAABR is found for cases where the transaction was paid in stock. For cases that occurred in the US, however, there exists a significant relationship between ATPs and shareholder value for two ATPs significant impact is conducted. The particular ATPs are golden parachute and staggered board. Golden parachute has a negative impact on CAABR which is in line with literature presented in section 2.0. For the presence of a staggered board, a positive impact is found which is in contrast to the literature regarding this topic. Nevertheless, there are differences between the impact of ATPs depending on the institutional environment.

Furthermore, the regression analysis is controlled for bidder characteristics and deals characteristics. Bidder characteristics consist of Firm size, Leverage, Free cash flow, Tobin's Q, and High-tech industry. The impact on shareholder value is explained in section 2.3.1. The deal characteristics are the following: payment method, friendly versus hostile takeover, the

size of the deal compared to the firm value, if the bidder and the targeted firm are operating in a high-tech industry. The impact of the deal characteristics on shareholder value is stated in 2.3.2. In the research only for stock payment and companies operating in a high-tech industry show a significant impact on the CAABR is conducted.

2 Literature review and theoretical background

2.1 Agency problem

The agency theory constitutes the most influential theory explaining corporate financial decisions. Agency theory argues that corporations' (1) limited liability and (2) separation of ownership and control may pose so-called agency problems for shareholders. Limited liability refers to the fact that shareholders' financial responsibility is limited to the assets of the firm, which precludes shareholders' personal responsibility. The separation of ownership and control denotes the fact that, in most large firms, those 'owning' the firm (shareholders) are usually not the ones controlling its operations (the management).

Jensen and Meckling (1976) have identified the agency problem associated with separating ownership and control and documented how agency problems impact firm decisions. According to the researchers, with any level of separation between ownership and control, there is some level of agency problem (Jensen and Meckling 1976). So, there is no threshold for the occurrence of agency problems. One way to mitigate agency problems is to have large shareholders (Shleiffer and Vishny 1986), who not only possess a greater ability to monitor the directors, but also have a more vested interest in doing so. Kaplan and Minton (1994) demonstrate how large shareholders' willingness and ability to exert greater control lead to higher levels of management turnover. When the incumbent management does not manage operations at optimal levels, large shareholders are more likely to replace the management with outside acquiring investors, increasing shareholder value. For this reason, the threat of takeover has also been proposed as a means of eliminating agency problems and succeeds in mitigating the cash-flow problem (see, for example, Scharfstein (1988), and Jensen (1988)). Another way to deal with agency problems is to rely upon the market for corporate control. This governance mechanism can effectively eliminate corporate empire building, because market mechanisms prevent bad acquisitions (Mitchell & Lehn, 1990). However, in some cases managers have the ability to through the use of ATPs substantially delay the process, thus raising the expected costs of a hostile acquisition. Here, ATPs come in: ATPs have an impact on mergers and acquisitions, which increases the costs related to the acquisition and thus disincentivizes the acquirer to place a bid. The purpose of an ATP is

to limit the rights possessed by shareholders and to empower managers during a corporate takeover attempt. The impact of ATPs is related to a decrease of shareholder value is conducted in a research of Bebchuk and Cohen (2003).

2.2 Types of anti-takeover provisions

ATPs can either be preventive (i.e., prior to the hostile bid), or reactive (i.e., after the bid). Preventive ATPs are created in the interest of entities that are susceptible to a takeover. However, some companies decide not to implement these provisions, due to their (expected) negative effect on shareholder value (Sundaramurthy et al., 1997). The use of ATPs as a preventive defense has strong psychological effects, signaling to shareholders that directors fear that the company will be taken over in the future, thereby placing downward pressure upon share prices. Another reason for abstaining from the implementation of ATPs is that they do not fully prevent the risk of (hostile) takeovers. In such a situation, reactive defenses must still be used to protect the company from an acquisition. As any company can introduce reactive measures, these defenses are more frequent than preventive defenses. However, due to data limitations, the next section only lays out the most common preventive ATPs.

2.2.1 Preventive Defenses

This section discusses four preventive ATPs: (1) the poison pill, (2) the golden parachute, (3) the classified board, and (4) supermajority requirements. First, the poison pill can be described as a form of a call option, which is exercised as soon as the acquisition is made. Two types of poison pills can be discerned: The flip-in poison pill and the flip-over poison pill. A flip-in poison pill gives specific shareholders the right to buy a certain number of stocks against a discounted price, which enables this group to make a profit, at the cost of the acquirer's share value. This loss in share value, in turn, renders a takeover unattractive. The flip-over poison pill gives existing target shareholders an obligation after the acquisition. That is, it offers the right to acquire shares of the 'merged company' at a discount.

Research conducted by Malatesta and Walkling (1988) holds that when an poison pill is adopted it has a negative effect on shareholder value. It finds that one year prior to

adoption, firms make significantly less profit than companies within the same industry, and managers hold significantly fewer shares in the firm compared to the industry average. These findings are in accordance with research conducted by Ryngaert (1988), who has found similar results. In contrast, Brickley, Coles, and Terry (1994) have found a negative effect, when firms have fewer outside board members.

The second form of a preventive defense is the golden parachute. Like the poison pill, the golden parachute is implemented after a takeover. In order to align management and shareholders' interests and incentives, the golden parachute offers directors and senior executives' additional compensation. A good example of a situation in which managers and shareholders' interests are incompatible arises when an acquisition increases the target company's shareholder value but threatens managers' retainment. Albeit advantageous for shareholders, the acquiree's management may reject the offer, because it fears job losses as a result of the acquisition. In such a case, the golden parachute may reduce managerial entrenchment. In addition, when a golden parachute provision is in place, it becomes costlier to acquire the target company, which discourages takeover. Importantly, however, a golden parachute has a relatively small impact on large-scale acquisitions. The literature on golden parachutes has found varying results. For example, a study examined by Mogavero and Toyne (1995) found no significant impact of a golden parachute on stock returns for the period 1982 to 1990. On the other hand, an examination of the stock returns in the early and late 1980s shows both positive and negative effects. This difference may be explained by increased merger and acquisition activities and increased regulation on golden parachutes in this period. However, based on the previously conducted research, the impact of golden parachutes on shareholder value is ambiguous.

The third type of preventive ATP is the classified board, also known as a staggered board. This ATP selects 1/3 of the board's members to engage in voting. In contrast to normal voting procedures, in which the full board of directors has the right to vote, the classified board allows only those selected—i.e. only the 'voting class—to cast their votes. Mahoney and Mahoney (1993) and Faleye (2007) have found that classified boards have a negative effect on abnormal returns and therefore reduce shareholder value. Because, it is more

difficult for the bidder to gain influence and power over the board of directors, a classified board decreases the chance of being acquired.

Fourth, supermajority requirements are a form of ATP, which requires that more than a simple majority of those voting must vote in favor of a proposal for approval. Such requirements normally require 66.7%, 75%, or 85% of all shareholders to endorse the proposal. Research conducted by Mahoney et al. (1997), and Jarrell and Poulsen (1987) have found significant negative effects of supermajority requirements on abnormal return.

2.3 The impact of ATPs on shareholder value

Managers sometimes engage in mergers and acquisitions that do not maximize shareholder value. The aforementioned reactive and preventive ATPs demonstrate that ATPs may lead to various benefits and perks for managers, while negatively impacting shareholder value. As a consequence, conflicts of interest may arise. Corporate governance mechanisms serve to manage and alleviate these tensions. There are different types of corporate governance mechanisms. An important mechanism that decreases the possibility of empire-building is the market for corporate control, empire-building leads to value-destroying acquisitions. Research (Mitchell and Lehn 1990) demonstrates that the probability of being acquired increases when companies make value-destroying investments. The possibility of a takeover, however, reduces the conflict between the shareholders and management. This finding suggests that takeover threats reduce the chance of empire building and therefore agency costs. Given the conflict between the management and shareholders and the market of corporate control, the management can establish an anti-takeover provision (ATP) which decreases the possibility of an acquisition.

The first researchers to claim that ATPs impact shareholder value was DeAngelo and Rice (1983). They argue that ATPs defend the target firm's management at the cost of its shareholders, and therefore decrease shareholder value. Their work is based upon the managerial entrenchment hypothesis, which states that agency conflict is greater when ATPs are present. There are four important assumptions upon which DeAngelo and Rice's research rests. Firstly, they assume that managers prefer control over asset value, which

creates conflict between shareholders and managers' respective preferences. Secondly, research conducted by Manne (1965) found that agency problems caused by external equity are reduced by the market of corporate control. Therefore, the threat of a hostile takeover disciplines the management into making decisions that maximize shareholder value, because they face the possibility of being replaced (Jensen and Ruback, 1983). The third assumption underlying DeAngelo and Rice's (1983) hypothesis is that when there are inefficiencies within the management, the market of corporate control is the best mechanism; alternative governance mechanisms—like controlling of managers or incentive-based compensation plans—do not deal with the inefficiencies caused by the management. The fourth and final assumption is that ATPs go at the expense of shareholder value due to the market-distorting nature of such governance mechanisms, which decreases the chance of a takeover. A takeover, however, aims to revise the agency cost associated with managerial inefficiencies. If all of the stated assumptions are valid, the disciplining nature of the market of corporate control will be reduced by ATPs, and, consequently, create suboptimal shareholder value.

Recent studies on the impact of ATPs on firm value and performance confirm DeAngelo and Rice's (1983) findings, and demonstrate a negative impact. A study conducted by Gompers, Ishii, and Metrick (2003) (GIM) examined the impact of an ATP on shareholder value and return. Their research picked various governance provisions tracked by the Investor Responsibility Research Center (IRRC). From this research center, GIM used 24 provisions to produce an index that indicates the level of shareholder rights held within a company. Based on the index, GIM (2003) has found a negative relationship between the performance of a company and the number of ATPs. In their work, GIM (2003) defined firm performance by Tobin's Q, and assessed that in 1999, when the GIM index gained by one point, the impact was an 11.4% decrease in the Tobin's Q. Furthermore, they found that in the 90s, firms with a below-average index performed significantly better than firms with an above-average index with an abnormal return of 8.5% per annum. These findings suggest that ATPs have a negative impact on firm performance. GIM (2003) offered two explanations that clarify the negative effect between ATPs and abnormal returns. First, a higher number of ATPs decrease shareholder rights and therefore creates agency conflicts. As investors will receive new information regarding the expenses relating to these agency conflicts, the relevant share price will decrease in value. Second, an omitted variable bias may be present, which

entails that a variable other than the GIM index is strongly correlated with the index and thus causes poor firm performance.

The index created by GIM has provided the foundation for subsequent studies examining the impact of ATPs on the firm and shareholder value. Core, Guay, and Rusticus (2006), for example, assessed whether investors underestimate the impact of ATPs on shareholder value. They conclude that, in addition to lower stock returns, companies with an above-average GIM index tend to perform worse than companies with a below-average GIM index. Discrepancies may be caused by market model misspecification or other factors that are unique to the study's time frame. In line with this research, Johnson, Moorman & Sorescu (2009) support Core, Guay, and Rusticus' assumptions, holding that differences are explained by the population of firms, and the degree of clustering across industries. Therefore, there is no significant difference in abnormal returns by the GIM index.

Bebchuk and Cohen (2005) have also conducted research on the impact of ATPs on firm value. Rather than including a wide range of ATPs, Bebchuk and Cohen focuses only upon the staggered board. Their findings demonstrate a significant negative impact of the staggered board upon firm value. Bebchuk, Cohen and Ferrell (2009) built upon this research, extending the number of ATPs, yet limiting the sub-set to, what they expect to be, only the most relevant provisions, The resulting E-index comprises only those ATPs that exhibit the strongest negative impacts on firm value/shareholder value?: (1) staggered boards, (2) limits to shareholder bylaw amendments, (3) limits to shareholder charter amendments, (4) supermajority requirements for mergers, (5) poison pills, and (6) golden parachutes. Accordingly, the E index has a stronger negative impact on shareholder return and long-term shareholder value compared to the GIM index as a whole. Furthermore, the effect of the GIM index without the provisions of the E index does not significantly impact the shareholder value. This confirms that the E-index captures ATPs that are most relevant to this study's main effect. Therefore, the E-index and the ATPs which contain in the E-index are adopted in this study to conduct the effect of ATPs on shareholder value.

Additionally, Machlin, Choe, and Miles (1993) examined the relation between change-in-control provisions and deal activity and found that firms with golden parachutes received

more offers on average in the four years following adoption ($\bar{X} = 2.87$ vs. $\bar{X} = 1.32$ in the control group). These firms also received higher takeover premiums (43.7% vs. 39.1%) and increase shareholder value. Machlin, Choe, and Miles, therefore, concluded that golden parachutes raise the likelihood of value increasing acquisition, which contrasts with other research regarding ATPs.

Adding new insights to the GIM index, Bebchuk, Cohen, and Wang (2012) notice that during the 90s, governance was receiving increasingly more attention from institutional investors, media, and academic researchers. The researchers demonstrated that the effect of ATPs on abnormal return for companies holding a long-short portfolio was only significant in the 90s; after this point, the effect became insignificant. Additional academics conducted research on the same effect during the same period and affirmed these results post controlling for industry clustering (Johnson, Moorman, and Sorescu, 2009) and the takeover factor (Cremers, Nair, and John, 2009). These findings suggest that, in contrast to Core, Guay, and Rusticus' findings (2006), companies do not necessarily exhibit poorer performance when they have more ATPs in place. Instead of relying upon ATPs as governance mechanisms, firms may also decide to open up to market dynamics. The first researchers to study the market of control on the lucrativeness of mergers and acquisitions were Masulis, Wang, and Xie (2007). They find that when managers are protected by ATPs and therefore less exposed to the market for control, the chance of a value-destroying acquisition increases. Drawing upon, inter alia, the GIM index, Masulis, Wang, and Xie's findings showcase a significant negative correlation between the number of ATPs in place and the abnormal stock returns around the announcement date. Humphery-Jenner and Powell (2008) further specify that the more ATPs are in place, the fewer managers are disciplined by the market of control. This results in overpayment and fosters hubris.

Unlike what the aforementioned stream of research suggests, Masulis, Wang and Xie (2007) argue that the so-called 'ATP effect' is caused by a missing variable—the takeover premium. The takeover premium captures the impact of managerial overconfidence within the acquiring firm. As such, they refute the idea that ATPs distort market dynamics and therefore lead to value-destroying takeovers. Instead, they hold that managerial overconfidence is the cause of bad investments. This argument is supported by Harford,

Humphery-Jenner, and Powel (2012), who find that a significant number of value-destroying takeovers are caused by managers who are entrenched, and are trying to retain this entrenchment position.

2.4 The use of ATPs in different institutional environments

The literature on the impact of ATPs on shareholder value shares a number of striking features. First, the grand majority of research is conducted in the US. Second, scholars posit that ATPs undermine the market of control and, consequently, weaken managerial discipline, causing inter alia value-destroying acquisitions. Third, findings predominantly confirm that the bigger the number of ATPs in place, the lower the acquirer return.

Interestingly, however, alternative views argue that the impact of ATPs on shareholder value is not as straightforward as it seems. Franks and Mayer (1996) argue that the impact of ATPs on shareholder value depend on the institutional environment. Drawing upon Scott and Mayer (1994), this research distinguishes between two different institutional environments (Scott and Meyer, 1994): (1) The western European model, and (2) the Anglo-Saxon model.

The western-European model is characterized by (Baums, 1993 and Kester, 1997): (1) Low dispersion of ownership; (2) strong shareholder control on management; (3) Interconnectedness between executives and large shareholders, (4) capital markets have relatively strong control on management and are not liquid, (5) Strong mutual trust between managers; (6) weak presence of the market for corporate control, and; (7) significant influence of equity-holding banks in governance. Simply put, the western European model is characterized by a low dispersion of shareholders, which endows shareholder blocks with substantial influence and fosters a shareholder-oriented environment.

The Anglo-Saxon model, on the other hand, features a greater dispersion of a shareholder, allowing for a more market-oriented environment. Anglo-Saxon environments are characterized by (1) high dispersion of ownership, where outside directors play an important role in the board of directors; (2) capital markets perform strong governance and are liquid, and (3) shareholders are more protected than debt-holders. These differences make both

environments fundamentally different, and it is therefore important that the effect of governance mechanisms is not generalized for both environments.

It is worth noting that various assumptions underpinning DeAngelo and Rice's (1983) appear inapplicable to the institutional environment of continental Europe. Notably, ATPs, therefore, do stimulate agency problems and discourage takeovers in continental Europe (M. Humphery-Jenne., 2012) and have a negative impact on shareholder value. In Anglo-Saxon countries, agency problems are caused by managers holding excessive power over shareholders. In contrast, in continental western Europe, block holders typically have the ability to monitor the management (Gugler and Yurtoglu 20003). Rather than creating misalignments between management and shareholders, this engenders misalignments among majority and minority shareholders.

Shleifer and Vishny (1986) observe that when block holders have a majority share in the company, they tend to make choices based upon self-interest, which could go at the cost of minority shareholders. Alternatively, Straska and Waller (2010), who note that ATPs are more often in place when ownership dispersion is high. However, Jarrell and Poulsen (1987) claim that a majority shareholder who has the ability to control the company uses ATPs to protect their interests, which affects the total shareholder value negatively. This effect can be interpreted as the entrenchment of majority shareholders.

Back to DeAngelo and Rice's (1983), Al-Kuwari (2010) further claims that principal-agency problems are less likely to appear in western continental Europe. Managers propose ATPs not only in favor of their own interest but also in the interest of block holders. Hence, because block holders are capable of shaping managerial decisions, consequently the market of control becomes a less important mechanism to discipline managers. This may suggest that the effect of ATPs on shareholder value could have similar implications as those of block holders in western continental Europe. And therefore, one can assume that there could be no impact of ATPs on shareholder value at all.

Also, the managerial shortsighted argument by Stein (1988) maintains that when there is a threat of takeover or fear of acquisition due to an undervalued price, this is at the expense

of long-term value and places emphasis on short-term gains. This is due to the asymmetry of information between managers and shareholders—where managers possess more knowledge on the business situation than shareholders—which makes it difficult for shareholders to assess the true value of a long-term investment. Managerial shortsightedness creates two issues for block holders. Firstly, long-term shareholder value could be destroyed because of the preference for short-term profit. Secondly, if the stock is undervalued, it could increase the chance of a company being acquired at a tender offer—even below the true value of the company. Managers face a trade-off between preferring short-term gains—to decrease the risk of a takeover—or investing in long-term projects, which may have a temporary negative effect on firm performance. ATPs, however, could eliminate the risk of a takeover and create more room for managers to enter into long-term investments.

On the note, block holders, therefore, prefer ATPs over the market for corporate control. In western continental Europe, block holders have greater incentives to monitor the management. ATPs are in favor of large block holders and therefore there is a positive impact of ATPs on the abnormal returns of the acquirer in the institutional environment of continental Europe. In addition, previous studies did not consider that the effect of governance mechanism on firm value depends on the institutional environment. In order to test the different impact of ATPs on shareholder value. Two samples are created, the first sample consists of M&A data for continental western-Europe. The second sample consists of M&A data in the US. For both samples, the different impact of ATPs on shareholder value is expected. Therefore, one is able to compare the impact of the two distinct institutional environments.

2.5 The effects of acquirer & deal characteristics on the performance of the acquiring firm.

2.5.1 Acquirer characteristics

This section discusses the control variables in this research and their relevance to the literature. Regarding the acquirer's characteristics, this research controls for the following variables: (1) firm size, (2) leverage, (3) free cash flow (FCF), and (4) Tobin's Q.

2.5.1.1. firm size

Moeller et al. (2004) explain that there is a negative relation between cumulative abnormal return (CAR) and firm size of the acquirer, because large firms are able to acquire companies for a higher premium than smaller firms. This relationship can then result in a lower, or negative, synergy of the acquisition. In addition, their results imply that the large firm size of the acquirer can act as an anti-takeover mechanism because it is costlier to acquire a large firm compared to a small firm. Therefore, this research expects the same impact of firm value on abnormal returns as stated above.

2.5.1.2 Leverage

The rationale for including 'leverage' and 'FCF' as control variables is that Jensen (1986) argues that firstly, Leverage is calculated by dividing the acquirer's firm's debts by its assets, and reveals the amount of debt a company has compared to the assets it owns. Debt reduces FCF and therefore reduces the degree of freedom of managers (Stulz 1990). Leverage also stimulates managers to not make value-destroying investments. If debt increases, the control of the debt holder will also increase, potentially driving the company into bankruptcy, which would entail managers' job loss (Gilson & Vetsuypens, 1994).

Gilson and Vetsuypens, (1994) found a relationship between leverage and anti-takeover mechanisms. This research, therefore, presumes that there exists a positive relationship between leverage and cumulative abnormal returns.

2.5.1.3 Free cash flow

Secondly, the theory postulated by Jensen (1986) argues that the availability of excess cash increases the likelihood of empire building. Alternatively, the degree of free cash flows may also imply competent management and positive firm performance. Therefore, this research presumes an ambiguous effect of FCF on cumulative abnormal returns.

2.5.1.4 Tobin's Q

Finally, the Tobin's Q equals the market value of a company divided by its assets' replacement costs (Brainard & Tobin, 1977). The purpose of a Tobin's Q is to determine

whether a firm is undervalued or overvalued. Previous studies have found both negative and positive relationships between Tobin's Q and abnormal returns. On the one hand, according to Lang, Stulz, and Walking (1991), companies with a low Tobin's Q have lower abnormal returns than companies with a high Tobin's Q. On the other hand, Moeller et al. (2004) and Dong et al. (2006) found that when a company has a high Tobin's Q, it earns lower abnormal returns during an acquisition. This study, therefore, presumes a positive or negative relationship between Tobin's Q and abnormal returns.

2.5.2 Deal characteristics

This section addresses the following characteristics of a deal: (1) Payment method; (2) target's ownership composition; (3) the size of the deal compared to firm value, and; (4) if the bidder and the targeted firm are operating in a high-tech industry; (5) whether it is a hostile or friendly takeover.

2.5.2.1 *Payment method*

First, the literature on the payment method demonstrates that there is a strong relationship between the payment method and the cumulative abnormal return around the announcement date of the acquisition. Partial payment with equity has been found to have a negative effect on share value. This is explained due to the fact that issuing equity causes adverse selection (Myers & Majluf, 1984).

2.5.2.2 *Target's ownership composition*

Second, the ownership composition of the target company has been found to have far-reaching implications for the CAR of an acquisition. Harford et al. (2012) have found that entrenched managers are unlikely to engage in acquisitions that weaken their position. Managers tend to continuously try to retain their entrenched position by favoring investments that will increase or retain their entrenchment. A study conducted by Chang (1998) found that the acquisition of a private company is more likely to create value than the acquisition of a public company, through which value is more likely to be destroyed. Importantly, however, when both variables are combined, the outcome changes. For example, the CAR for the bidder is negative if the acquisition is paid in equity. However, if an acquisition of a private company is paid in equity, the CAR of the bidder is positive. The literature assigns this variation to the

emergence of new block holders. This study distinguishes between the following ownerships composition and payment methods: a *public company or private firm* is taken over with shares, cash, or a mix of both.

2.5.2.3 The size of the deal compared to firm value

Third, this research controls for the relative size of the deal. Both Asquith, Bruner, and Mullins (1983) and Moeller et al. (2004) found a positive correlation between the deal size and CARs.

2.5.2.4 The bidder and the targeted firm are operating in a high-tech industry

The fourth deal characteristic controlled for in this research is whether the bidder and the target operate in a high-tech industry. Loughran and Ritter (2004) argue that it is extremely difficult for companies to merge intellectual property and human capital in high-tech. This particularly holds for high-tech industries where these elements are crucial to firms' competitive advantage. Furthermore, if an acquirers operates in the high tech sector, the possibility increases that the costs are underestimated and that the synergy is overestimate generated by the merge of both companies (Meier, Saulquin and Schier, 2012). Therefore, this research presumes that a takeover in high-tech industries will result in a negative CAR.

2.5.2.5 Takeover attitude: Friendly versus hostile takeover.

Fifth, this research controls for takeover type. One can distinguish between two types of takeovers: Hostile takeovers or friendly takeovers. An acquisition is hostile if the initial bid for the target (which does not need be the eventual acquirer) was neither negotiated with the acquiree's board nor accepted by the board (Morck, Shleifer & Vishny, 1987). As noted by the united states securities and exchange commission, "If the hostile bidder makes an uncalled-for offer to purchase all the outstanding shares including a premium, this is referring to a tender offer. Another type of a hostile takeover is the proxy fight. In this case, the bidder tries to convince the shareholders of the targeted firm to vote in favor of the bidder's tender offer. Next, the friendly takeover, Targets that are not classified as hostile are called friendly". In contrast to hostile takeovers, friendly takeovers often create synergies that benefit both the target and bidder firms (Morck et al., 1987).

Following empirical research on friendly and hostile takeovers, the type of takeover has a significant effect on the CAR. Studies conducted in the US and the UK (Servaes 1991; Mayer

1996) suggest that hostile takeovers allow for greater CARs than friendly takeovers. From the point of the acquiring firm which undertakes a friendly takeover on average earns a higher CAABR in contrast to the acquiring firms undertaking a hostile takeover.

3 Hypothesis development

Based on the literature review, this thesis has formulated the following hypotheses to answer this thesis' main research question.

Hypotheses:

H1: the announcement of an acquisition has an impact on the cumulative abnormal return of the acquiring firm in the period, 2006-2018.

H2: does the announcement of an acquisition has an impact on the cumulative abnormal return of the acquiring firm in the period, 2006-2018 deviates across industries.

H3: does the announcement of an acquisition has an impact on the cumulative abnormal return of the acquiring firm in the period 2006-2018 deviates across years.

H4: does the announcement of an acquisition has an impact on the cumulative abnormal return of the acquiring firm in the period 2006-2018 deviates in Pre-crisis period, crisis period, and Post-crisis period.

H4: Anti-takeover provisions have an impact on the cumulative abnormal return of the acquiring firm in the US during the period 2006-2018.

H5: Anti-takeover provisions have an impact on the cumulative abnormal return of the acquiring firm in continental Europe during the period 2006-2018.

H6: There is a difference between the impact of anti-takeover provisions on the cumulative abnormal return of the acquiring firm in continental western Europe and the US during the period 2003-2018.

The above hypotheses are tested on the basis of an event study. In addition, the hypotheses are tested for robustness. The robustness test looks into how the 'core' regression coefficient

reacts when the regression specification is modified by removing or adding regressors (Lu & White, 2014).

4 Methodology

4.1 Introduction

This research examines the impact of ATPs on the acquirer's cumulative abnormal returns in the period 2003-2018. This research considers various ATP indices to assess the impact of ATPs on cumulative abnormal returns (CAR).

4.2 Event Study

It is necessary to note that two assumptions underpin this event study. The first assumption is that capital markets are efficient (Brown et al., 1980). Second, the occurrence of a particular event which is in the research an announcement of an acquisition happens randomly and is not reflected in the share prices of the acquirer.

This event study analyzes the announcement effect of the acquisition that affects the share price of the acquirer. It builds upon the process laid out by MacKinlay (1997), which passes X stages. First, an event date is picked. In this research, the event date equals the announcement date of the acquisition. Second, an event window is selected in order to calculate the total impact of the acquisition on the share prices of the acquiring firm. An event window begins with a period prior to the event date and ends with a particular period after the event date, and serves to measure potential information leakage before the announcement and/or the impact of additional information regarding the deal. Accordingly, the optimal event window captures the total impact of the acquisition on the share price. In line with Brown and Warner (1985), this research uses three distinct event windows. The main event window will be 5 days prior to the announcement and 5 days after the announcement. As explained above, the days prior to and after the announcement capture information leakages. The other two event windows $[-1;1]$, $[-10;10]$ are used as robustness tests. Third, the sample is selected, which is elaborated upon in the data section. Fourth, the estimation period is formulated to calculate normal returns. The estimation period includes the share prices of the acquiring firm prior to

the event window. This research uses the same estimation period as MacKinlay (1997) which is 120 days before the event window. This estimation period is shorter than the more common estimation period of 220 days. To go more into depth a longer estimation period the likelihood of shocks in share prices increases. These shocks may remove biases that affect normal returns. Finally, to estimate the normal returns the market model is used. The market model assumes that there is a constant and linear relationship among the return of the market index and the asset returns (MacKinlay, 1997). In order to verify the validity of the market model's outcome, the constant mean return model is used to conduct as a cross-check (robustness check). This market model estimates the stock returns in the absence of an event, i.e. in this study: the announcement of a merger or acquisition. The model can be written as follows:

(1)

$$Rt_{it} = \alpha_i + \beta_i \cdot R_{MRt,t} + \varepsilon_{i,t}$$

$MMt_{i,t}$ is defined as the normal expected daily return on the acquiring firm's stock. α_i is the expected average return on a stock over a certain time period absent the announcement of the acquisition, and; β_i is the slope of the return on the stock and the market return, which explains the relationship between these variables. Finally, the $R_{m,t}$ and $\varepsilon_{i,t}$ represent the market return and the error term respectively.

On the basis of the returns in equation 1, the expected returns can be measured by determining the estimated α and β . From this comes the following equation:

$$Expt(Rt_{it}) = \alpha_i + \beta_i \cdot R_{MRt,t}$$

With the market model, the abnormal return can be calculated using the following formula:

(3)

$$ABRt_{it} = Rt_{it} - Expt(Rt)_{it}$$

ABR_{it} is the calculated abnormal return for a company i on day t ; Rt_{it} is the retrieved return for the company i on day t , and; $MMt_{i,t}$ is the market model. The market model estimates the

stock returns in the absence of the event, which, in this research, is the announcement of the acquisition. On the basis of the ABR_{it} it is possible to calculate the average abnormal return ($AABR_t$) using the following formula:

(4)

$$AABR_{i,t} = \frac{1}{N} \sum_{i=1}^N ABR_{i,t}$$

Here the concerning security is (i) the size of the event window (N) the given moment is (t). Using the ABR the CAR can be calculated by the sum of the ABR of the event window:

(5)

$$CABR_i(t_1, t_2) = \sum_{t=t_1}^{t_2} ABR_{i,t}$$

This research adopts three distinct event windows on the basis of research conducted by Brown and Warner (1985). The [-5;5] event window is the principal event window in this research, as it captures many information leakages both before and additional information after the announcement. Moreover, event windows of [-1;1] and [-10;10] are included for robustness purposes. A robustness check is conducted to examine whether the results from these event windows differ significantly. Taking the total sum of all CABRs, the CAABR is calculated for the given event windows using the following formula:

(6)

$$CAABR_i(t_1, t_2) = \frac{1}{N} \sum_{i=1}^N CAR_i$$

To test whether both abnormal returns are significant, a t-test is conducted. It is important to note that this research assumes that returns of the acquiring firm are independent and normally distributed. The t-test is conducted based on the following formula:

(7)

$$t_{CAAR} = \frac{CAABR_i(t_1, t_2)}{\sqrt{var(CAABR_i(t_1, t_2))}}$$

4.3 OLS regression

Based upon the event study a cross-sectional OLS multiple regression is conducted. Dummies were created for the staggered board, limits to shareholder bylaw amendments, limits to shareholder charter amendments, supermajority requirements for mergers, poison pill and golden parachute, each of which is equal to one of the ATP is in place for the particular firm in a given fiscal year. Subsequently, the deal and bidder characteristics were added to the regression to account for additional factors that could affect an acquirer's abnormal returns. The following regression was run:

(8)

$$CABR_{it} = c + \beta_1 ATP_{it} + \beta_2 DealC_{it} + \beta_3 BidderC_{it}$$

is the cumulative abnormal return of the acquirer and constitutes the model's dependent variable. The contains the three aforementioned event windows— [-1, 1], [-5, 5], and the [-10,10] of the market model. ATP represents this study's independent variables and comprises all anti-takeover provisions analyzed in this study. DealC and BidderC are control variables, which include the dealer and bidder's characteristics respectively. Furthermore, to test if the explanatory power of the model differs significantly between different institutional environments, the results from the US sample are compared with the results from the sample from continental western Europe. Additionally, the effect of the whole sample is measured.

The regression model controls for time fixed effects as well as for industry fixed effects. However, it is necessary to test for the following assumptions: normality, linearity,

homoscedasticity, and multicollinearity. The variables with multicollinearity are not included in the OLS regression. As a result, this research is able to test for the impact of ATPs on CAR.

4.4 The two-sample t-test.

To test if there is a significant difference between the cumulative abnormal returns (4) of the institutional environments, a two-sample t-test is a conduct. Importantly, three assumptions underlie this test. First, this study assumes that the scale of measurement applied to the value of the data collected follows a continuous or ordinal scale. Second, it assumes that the selection of the data is random. Third, it holds that the data is normally distributed, and; fourth, it assumes homogeneity of the variance. This test includes Sample A which consists of the CABRs of the US and sample B which comprises the CABRs of continental Europe. The t-test is conducted on the basis of the following formula:

(9)

$$t = \frac{CAABR_a - CAABR_b}{\sqrt{\frac{s_a^2}{n_a} + \frac{s_b^2}{n_b}}}$$

Here, the $CAABR_x$ is conducted using formula (5); the x denotes the sample that has been used; the s represents the standard deviation of the cumulative abnormal return (4); and the n the sample size of all CAABRs conducted.

4.5 Post hoc Bonferroni

The post hoc Bonferroni is conducted to determine whether the cumulative abnormal return in the European and US sample is significantly different during the pre-crisis, crisis, and post-crisis periods. The following formula has been used:

(9)

$$EC = \alpha_B = \frac{\alpha_{FWE}}{K}$$

Here, EC indicates the new α established by the post hoc Bonferroni test. This result is used to assess whether the difference is significant. α represents the familywise error value, which in this research is based upon an α of 0.05. K is the number of comparisons computed. Given that this research compares three time-fragments—pre-crisis, crisis and post-crisis— K equals 3.

4.4 Variables description

The following section explains how all the variables are created. The variables mentioned are the ones included in the OLS regression model described in section 4.3. First, all the different anti-takeover provision is exemplified, followed by the bidder characteristics and the section ends with a brief description of the deal characteristics.

4.4.1 Anti-takeover provisions

4.4.1.1 Staggered board

The staggered board is a dummy variable which values 1 when the acquiring company has a staggered board in place and values 0 when it does not have a staggered board in place. Information regarding the staggered board is retrieved from the Institutional Shareholder Services (ISS) dataset.

4.4.1.2 Limits to shareholder bylaw amendments

In order to measure the effect of Limits to shareholder bylaw amendments on the abnormal returns of the acquiring company a dummy variable is created. This variable denotes 1 if there are Limits to shareholder bylaw amendments are place and denotes when this ATP is not in place. The data regarding the Limits to shareholder bylaw amendments is retrieved from the ISS dataset.

4.4.1.3 Limits to shareholder charter amendments

In order to measure the effect of Limits to shareholder charter amendments on the abnormal returns of the acquiring company a dummy variable is created. This variable value 1 when there are Limits to shareholder charter amendments in place, and values 0 if this ATP is not in

place. The information regarding the Limits to shareholder bylaw amendments is retrieved from the ISS dataset.

4.4.1.4 Supermajority requirements for mergers

A dummy variable is created which equals 1 when the acquirer has a supermajority requirement for the merger in place, and values 0 when this ATP is absent. The data is retrieved from the ISS dataset.

4.4.1.5 Poison pill

To measure the impact of the poison pill, a dummy variable is created, the variable equals 1 when the target has implemented a poison pill, and equals 0 if this is not the case. The information is retrieved from the ISS dataset.

4.4.1.6 Golden parachute

A dummy variable is created which equals 1 when there is a golden parachute in place, and equals 0 when this is not the case. Data on the golden parachute is retrieved from the ISS dataset.

4.4.1.7 E-index

This index includes all ATPs mentioned in 4.4.1. The value of the E-index indicates the number of ATPs that the company has in place. The E-index is conducted by the sum of the ATPs and consequently retrieved from ISS dataset

4.4.2 Bidder characteristics variables

4.4.2.1 Firm size

Firm size of the acquirer is defined as the natural logarithm of the market capitalization, which, in turn, is estimated by multiplying the total number of shares outstanding by the acquirer times the acquirer's stock price four weeks before the announcement date. The data is retrieved from the SDC database.

4.4.2.2 Leverage

Leverage of the acquirer is calculated by dividing the natural logarithm of liabilities by the shareholders' equity (Nissim, Doron, and Stephen H. Penman, 2003). The dates and financial data are the most recent available for a 12-month period before the original announcement date of the deal. Both variables were retrieved from the SDC database.

4.4.2.3 Free cash flow

The free cash flow is defined as the natural logarithm of the free cash flow and calculated by adding up the net income and non-cash expenses, and subtracting the increase in working capital and capital expenditures. The income and expenses are conducted for the last 12 months of the announcement effect of the acquiring company. The data is retrieved from the SDC database.

4.4.2.4 Tobin's Q

The Tobin's Q is defined as the natural logarithm of the market-to-book ratio two weeks before the announcement date of the acquisition/merger. The ratio is retrieved from the SDC database.

4.4.2.4 High-tech industry

In line with the SDC database, this study defines the high-tech industry as the four most significant high-tech industries. These industries are: (1) Aerospace and defense; (2) computers and office machinery; (3) pharmaceuticals, and; (4) electronics and communication. Here the dummy variable is created that values 1 when the company operates in one of the industries stated above and values 0 when it operates outside of these industries. The data are retrieved from the SDC database.

4.4.3 Deal characteristics

4.4.3.1 Payment method

The payment method includes three different payment methods: (1) cash, (2) stock, and (3) a mix of both. Therefore, three dummies are created: CASH, STOCK, and MIX. When the acquisition/merge is paid in cash the dummy CASH denotes 1, and the other payment dummies denote 0. Consequently, if the acquisition/merge is paid in stock, the dummy Stock denotes 1, and the other dummies denote 0. The relevant data on the payment method is obtained from the SDC database.

4.4.3.1 Takeover attitude: Friendly versus hostile takeover.

Takeover attitude describes whether the acquisition or merger involved a hostile takeover or a friendly takeover. This variable is measured as a dummy variable, which takes the value 1 when the takeover concerned is a friendly 1, and 0 when it concerned a hostile takeover. The attitude is retrieved from the SDC database.

4.4.3.2 The size of the deal compared to the firm value.

The size of the deal compared to the firm value is calculated by dividing the logarithm of the deal size by the firm size as described in section 4.4.1.1. both variables are retrieved from the SDC database.

4.4.3.3 If the bidder and the targeted firm are operating in a high-tech industry.

To control for this deal characteristic a dummy variable is created with the label 'HIGH-TECH'. It equals 1 when the deal is struck between two companies within a high tech industries. The information used for this variable is retrieved from the SDC database.

4.4.3.4 Transaction value

The amount which is paid by the bidder to acquire the targeted company. The information used for this variable is retrieved from the SDC database.

5 Data selection and description

5.1 Data selection

To analyse the impact of ATPs on the share performance of acquiring companies, data is retrieved from the ISS dataset and the SDC database. The SDC database contains all M&A data used in this research and the ISS contains all ATP data for US-based companies. The next selection method is used to retrieve all relevant M&A data:

1. Takeover type: Mergers and Acquisitions;
2. The announcement date of the merger or acquisition occurred between the first of January 2006 and first of January of 2019;
3. The merger or acquisition is completed;
4. The acquirer is located in the US or continental Europe (so, excluding the United Kingdom);
5. The acquirer is public;
6. The target is public or private;
7. The transaction consists of more than 50% of the shares outstanding, to reach majority ownership;
8. The deal attitude includes hostile and friendly takeovers;
9. The payment method: cash, stock and mix of cash and stock;
10. The deal values are above 10 million, this is due to the fact that irrelevant small deals could have impact on the results of the research;
11. All acquirers must be in possession of a Ticker symbol and a SIC code;

The ticker symbols are retrieved in order to merge the M&A data from the SDC database with the ISS dataset. The data from the ISS database include information on ATPs, which are the independent variables in this research. In order to calculate the CABR (4) and CAABR (5), the Erasmus event study tool is used. To fully capture the impact of ATPs on the return of the acquirer it is necessary that all control variables' values—for each event—are present. Therefore, this research assumes that if a value of a control variable is missing it is random for

the particular M&A event. Therefore, the events with missing values are not included in this research. To decrease endogeneity issues, and, hence, to increase the comparability of the acquisitions this research only focuses on acquisitions among independent firms. This means that all bids are excluded if the acquirer is either the firm's own management, its employees, or and if the target company is a subsidiary. Next, all deals struck in special regulatory environments, subject to accounting issues, or related to financial institutions are not included in this research. This is done by excluding all companies that have SIC codes that begin with '6'. This number represents companies operating in the finance, insurance, and real estate sector. It is also worth noting that the database for European data on ATPs—the Thomson One Banker database—combine two ATPs— 'the limits to shareholder bylaw amendments' and 'limits to shareholder charter amendments'—into a single ATP. Hence, in order to allow for consistent comparisons between the US and Europe, this research consistently combines these two ATPs into one ATP—that is, for both the US and Europe.

Table 5.1 Sample selection criteria

	US	EUR
Initial sample;	N= 2788	1885
Excluding events with no US (Sedol code) or EU (ISIN code)	N= 1431	1885
Preliminary sample;	N= 1357	1885
Missing values of explanatory variables and dependent variables	N= 0	1653
Sample for descriptive statistics	N= 1357	232
Treatment of outliers based on natural logarithm	N= 1356	231
Final sample	N= 1356	231

5.2 Descriptive statistics

This part contains the descriptive statistics for both the sample of continental Europe and the sample of the United States. Table 1a of the appendix elaborates upon the statistics. First, both samples need to be compared to see whether there a significant difference between continental Europe and the United States. As can be observed in table 1a, the research

analyzes M&A activity taking place between 2006-2018. The rationale for this time window is that the ISS database started collecting data on ATPs in 2006. It is considerable to mention that while the sample size of the EU consists of 231 acquisitions. For the sample of US size consist of 1356 acquisitions, this research assumes that both samples are normally distributed. This allows for sample comparisons. Comparing the amount of yearly transactions between European and US (Table 5.2), one can observe that both samples experience a large decrease in transactions during the financial crisis period and its direct aftermath (2008, 2009). After 2009, one can discern an increase in M&A activity and a decrease in activity in 2013 followed by a stable amount of the transaction from 2014 until 2018. Furthermore, when one compares payment methods, the results in the US and Europe are relatively similar. In the US, 65 percent of all M&A transactions involve cash payments; in the EU, the proportion 'cash payments' reach 79 percent. Hence, cash transactions represent the most dominant method of payment. This is followed by a mix of share, which covers 33% of the total EU payments, and 20% of total US payments. Finally, transactions that involve only shares almost never occur 4% for the US, and 1% in the EU. Therefore, this payment method is not included in this research. It is worth noting that during the financial crisis both samples experienced a relative increase in cash transactions vis-à-vis mix transactions. Reversely, three years following the financial crisis—i.e. 2010, 2011, and 2012—there is a small proportional increase in Mix and Share transactions vis-à-vis cash transactions.

Table a1 of the appendix also distinguishes between friendly and hostile takeovers and illustrates that, in both cases, 99 percent of the acquisitions involve friendly takeovers. Given the relative infrequency of a hostile takeover, this analysis excludes hostile takeovers. As mentioned in the data collection, all financial institutions are excluded from this research. Furthermore, if one analyzes the M&A activity for every industry separately one can conclude that in the US Construction and Mining industry only capture 2% of the total sample, therefore this research cannot draw a conclusion about this industry for the US. The largest industry in both samples is the manufacturing industry which covers 35% of all industries in the US sample, and 62% in the European sample. In both samples, the services industry is the second biggest industry, which accounts for 22% in the US and 23% in the EU. The number of transactions that involve high-tech industries, constitute 65% and 44% of US and European

samples respectively. This proportion is significantly higher in the US than in the EU. It is therefore important to take this into account when drawing a conclusion.

Table 5.2 Yearly payments for both samples

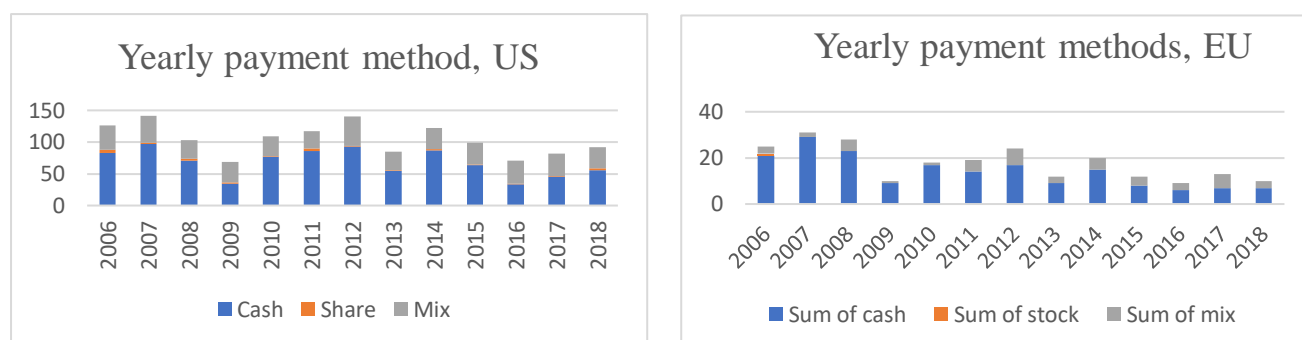
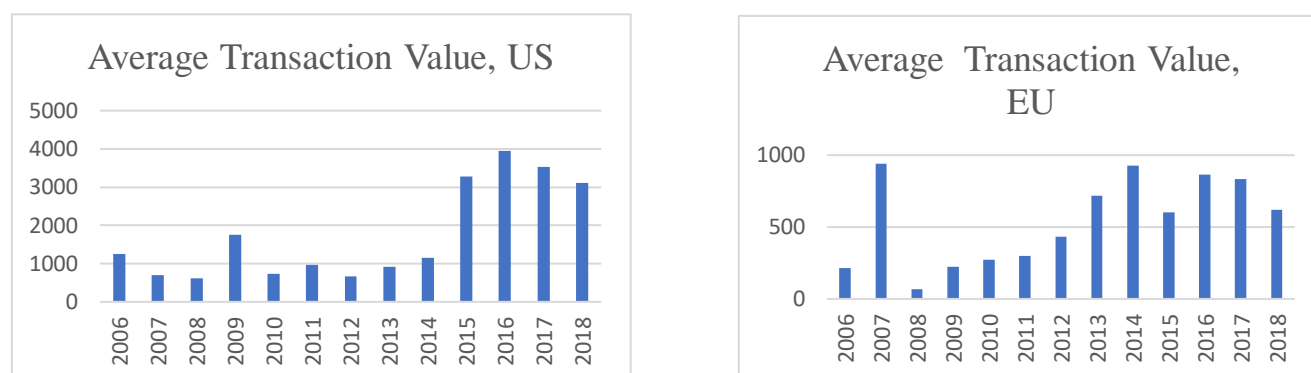


Table 1B of the appendix presents the descriptive statistics of all the variables used in this research. To give more insight into these values mentioned above it is necessary to mention the fact that all the variables regarding firm characteristics are taken as the natural logarithm of the true value, with the exception of the free cash flow. Using natural logarithms, it may be possible that some minimum statistics are negative as values below 1 have negative natural logarithms. Next, examining the average deal size in both samples one can discern a clear trend: After the financial crisis of 2008 there is a recovery period, followed by an evident increase in average transaction value between 2014 and 2018. While this pattern is present in both samples, the average transaction values in Europe are significantly lower than the average transaction values in the US. To compare the ATP (presented in Table 1A of the appendix), it is important to recognize that the number of ATPs in place differs greatly between the US and Europe. For example, statistics on the poison pill demonstrate that, on average, there are 0,02 and 0,67 poison pills in European and US companies respectively. Likewise, supermajority requirements are showcase 0,44 and 0,90 in Europe and the US respectively. It is necessary to take these differences into account when measuring the impact of ATPs on CAABR. Lastly, if one compares the CAABR in both statistics, the CAABR with an event window of [-10;10] has a negative mean, and the CAABR with an event window of [-1;1] has a positive mean.

In sum, the statistical findings show that there are clear similarities between deal characteristics, firm characteristics, and ATPs. Nevertheless, there are also significant differences between the number of ATPs in place in both institutional environments.

Table 5.2 average transaction value for both samples



6 Results

This section first, contains the variable treatment, where the outliers of the variables are treated. Secondly, an analysis of the CAABR, at which the CAABR could differ across industries or countries. Thirdly, a correlation analysis is executed. Next, the OLS regression is conducted. And finally, the hypotheses are discussed.

6.1 Variable treatment

This section contains a check on whether the variables are in the regression are normally distributed. If this is not the case, the variables are winsorized and the outliers are trimmed. First, the dependent variables are assessed on a normal distribution. To do this, a Jarque Bera-test is conducted, which verifies whether skewness and kurtosis match a normal distribution. The H_0 is a combined hypothesis where both skewness and kurtosis equal zero. A sample is considered to be normally distributed when the expected skewness equals zero and expected excess kurtosis is equal to zero (which is the same as a kurtosis of 3). When the p-value is greater than 0.05 one accepts H_0 , and the sample is normally distributed. If the p-value is below 0.05 the sample is not normally distributed. The results of the Jarque Bera-test are stated in table 6.1, which shows that all p-values are lower than 0.05. As such, none of the CABRs are normally distributed.

Table 6.1 Jarque bera-test.

Jarque Bera-test United States:

CAABR	Jarque-Bera	P-value
CARMeanadjustedreturn55	288.7	2.0e-63
CARMarketmodeladjustedreturn55	422.5	1.8e-92
CARMeanadjustedreturn1010	416.8	3.1e-91
CARMarketmodeladjustedreturn1010	312.5	1.4e-68
CARMarketmodeladjustedreturn11	3224	0
CARMeanadjustedreturn11	1887	0

Jarque Bera-test Continental European:

CAABR	Jarque-Bera	P-value
CARMeanadjustedreturn55	27.12	1.3e-06
CARMarketmodeladjustedreturn55	23.33	8.6e-06
CARMeanadjustedreturn1010	64.67	9.1e-15
CARMarketmodeladjustedreturn1010	456.9	6.e-100
CARMeanadjustedreturn11	283.6	2.7e-62
CARMarketmodeladjustedreturn11	560.1	2.e-122

For both the EU and US all P-values are below 0.05 this implies the fact on the basis of the Jarque-Bera test the samples regarding the CABR are not normally distributed. A possible explanation for the absence of normal distributions is that the results are heavily influenced by spurious outliers. This research addresses this problem by winsorizing the sample. So hence, the next step is to winsorize all CAABR for 99% and 1% cut off. That is, all CABRs with extreme values below the 1th percentile, or above the 99th percentile, are set at the same value as the smallest and largest outliers respectively. After correcting for non-normality, the results, presented in table 6.2, are as follows:

Table 6.2 Jarque bera-test.

Jarque Bera-test with winsorized variables United States:

CABR	Jarque-Bera	P-value
CARMeanadjustedreturn55	16.64	2.4e-04
CARMarketmodeladjustedreturn55	6.736	.0345
CARMeanadjustedreturn1010	9.529	.0085
CARMarketmodeladjustedreturn1010	10.57	.0051
CARMarketmodeladjustedreturn11	4.614	.0995
CARMeanadjustedreturn11	2.855	.2399

Jarque Bera-test with winsorized variables Continental Europe:

CABR	Jarque-Bera	P-Value
CARMeanadjustedreturn55	5.871	.0531
CARMarketmodeladjustedreturn55	7.954	.0187
CARMeanadjustedreturn1010	34.73	2.9e-08
CARMarketmodel1010	89.99	2.9e-20
CARMeanadjustedreturn11	.2956	.8626
CARMarketmodeladjustedreturn11	4.136	.1265

After winsorizing all CABR results, the p-values are significantly higher. The CABR with an event window of [1,-1] has a p-value greater than 0,05, and, therefore, can be held to be normally distributed. For both samples, the CAABR [1, -1] remain subject to non-normality, which will be taken into account in the conclusion. For the remaining CAABRs, one can assume that the samples are normally distributed, because their p-values are extremely close or below to 0,05.

Next, this research tests the independent variables: (1) Firm size, (2) leverage, (3) free cash flow, (4) Tobin's Q, and (5) relative deal size. On the basis of the Jarque-Bera test, this research finds that none of the variables are normally distrusted. Therefore, it has taken the natural logarithm of these variables—with the exception of FCFs, because some of the FCF values are negative, and an LN of a negative value does not exist. Therefore, one should take into account that FCF is not normally distributed.

Before conducting the LN of (1) relative deal size, and (2) Tobin's Q, this research has rewritten added 1 to both the values of Tobin's Q and relative deal size. Even after taking the natural logarithms from the samples' independent variables, the variables' p-values remain smaller than -0.05. That is, they remain subject to non-normality.

6.2 Sample t-test of the CAABR

To test whether the CAABR differs significantly from zero, a one-sample t-test is conducted. The result is presented in tables 6.3 and 6.4. For the US, the CAABR for the CARMark[10,-10], CARMean[1,-1], and CARMark[1,-1] are significantly different from zero. On average, there is a positive abnormal return for the bidding company, but its return, on average, is low. The fact that the CAABRs are positive contradicts the dominant findings in the literature, which suggests that the target return is positive and the bidder return is negative, because of the price premium that is paid by the bidder.

Table 6.3: One-sample t-test result of the US

CAABR	Mean	df	T-stat	The 95% Interval Low	Confidence High
CARMean5,-5	.0015508	1355	0.7774	-.0023623	.0054639
CARMark5,-5	.0023226	1355	1.6504	-.0004381	.0050833
CARMean10,-10	-.0025285	1355	-1.1415	-.0068737	.0018167
CARMark10,-10	.0029758	1355	2.3768	.0005197	.0054319
CARMean1,-1	.0020531	1355	2.0348	.0000737	.0040324
CARMark1,-1	.0029758	1355	2.3768	.0005197	.0054319

The results for the EU sample are stated in table 6.4. regarding the CAABRs there is both a negative impact as a positive impact of the announcement effect. But, moving further in the table and discussing the result for the one-sample t-test, Only the CAABR of the CARMean[-10,10] is significantly different from zero. The other CAABRs are not significantly different from zero, which implies that there are no abnormal returns generated.

Table 6.4: One-sample t-test result of EU sample

				The 95% Confidence	
				Interval	
CAABR	Mean	df	T-stat	low	high
CARMean[-5,5]	-.0054788	230	-1.4363	-.0129948	.0020372
CARMarket[-5,5]	.0012432	230	0.4310	-.0044404	.0069267
CARMean[-10,10]	-.0108202	230	-1.9772	-.0218828	.0002423
CARMarket[-10,10]	-.0050282	230	-0.6952	-.0192801	.0092237
CARMean[-1,1]	.0000847	230	0.0453	-.0036015	.0037709
CARMarket[-1,1]	.0019549	230	1.1611	-.0013626	.0052725

Because both one-sample t-tests are conducted on the basis of the whole sample, one can not only relate to the outcome of the basis of the whole sample, and it is therefore relevant to analyze the CAABR for every industry separately. It is also important to view the CAARB for each year. This leads to a more complete view regarding the CAARB, and may explain why in Europe there is no impact on the CAABR.

6.2.1 Testing the Industry specific difference in CAABR with a one-way ANOVA and post hoc Bonferroni

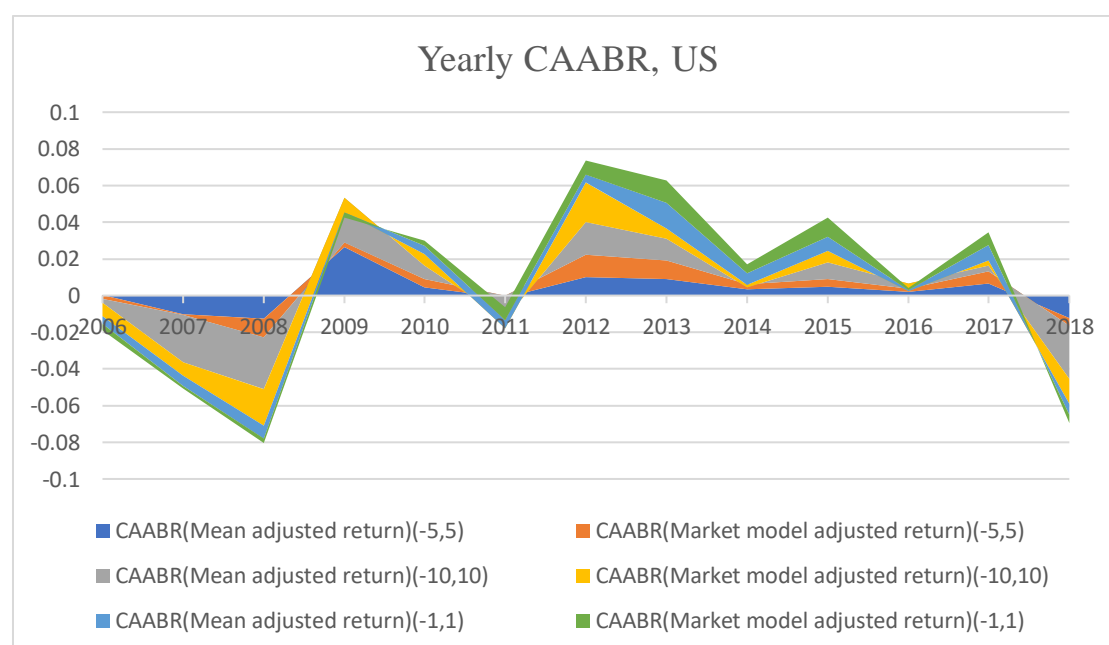
Because the results whether the CAABRs is or is not significantly different from zero are ambiguous, there is a possibility that there are indeed differences, but that these differences are industry-specific. That is, industry-level differences might explain ambiguity. This section tests whether CARs are significantly different per industry, which is conducted through a one-way ANOVA test. A one-way ANOVA tests whether the means of independent groups are equal. In this research, the industry in which the company operates is assumed to be independent of one another so, there is no overlap between industries. First, the results from the ANOVA presented in table 2A in the appendix are interpreted. When the probability-value exceeds 0.05 one can argue that the groups are not significantly different from one another. The results of both samples suggest that, for all distinct CAABRs, there are no significant differences between the industry in which the companies operate; all p-values

exceed 0,05. Only for the CAABR of the CAR mean $[-5,5]$ in the US the probability is rather low (0,1). Hence, there might be cross-industry differences. To verify this, a post hoc Bonferroni pairwise comparison between group means has been conducted. This test gives a more complete view of cross-industry differences because it calculates the difference between means separately. The results are stated in table 2B of the appendix, and support the results from the one-way ANOVA test. Therefore, one can conclude that there are no cross-industry differences between CAARS. In the next paragraph of this research, similar tests are conducted to assess whether there are significant differences between CAABR per year.

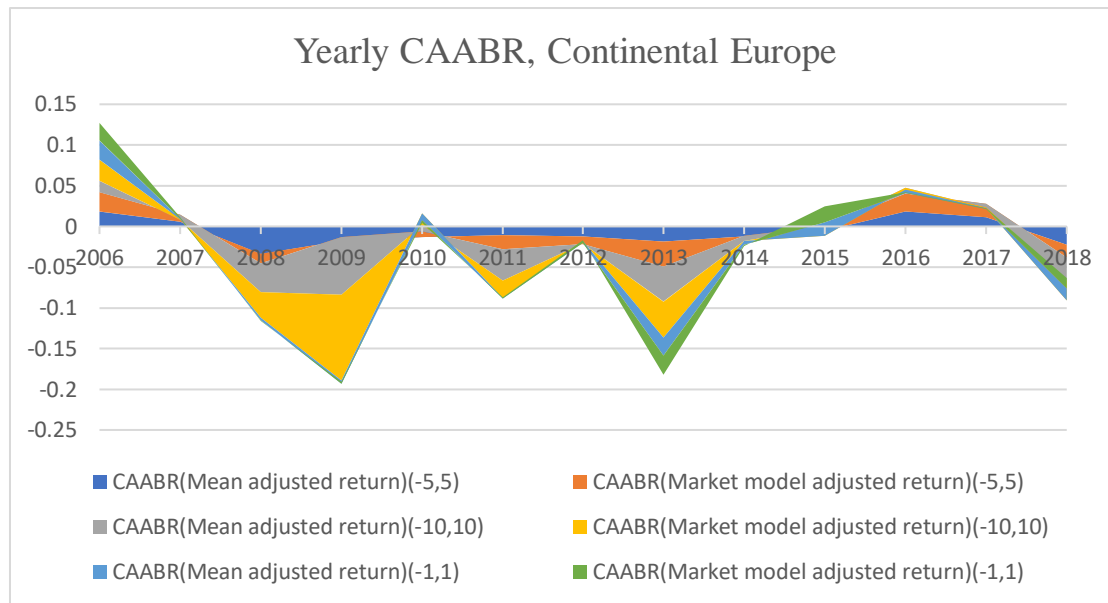
6.2.2 Testing the Yearly difference in CAABR with a one-way ANOVA and post hoc Bonferroni

First, to test the yearly difference in CAABR, it is useful to conduct a graph regarding the CAABR per year to visualize large differences. In graph 6.1 and 6.2, both samples clearly illustrate major differences between CAABRs per year. A One-sample ANOVA test is computed to test whether these differences are significant.

Graph 6.1: Yearly CAABR, US



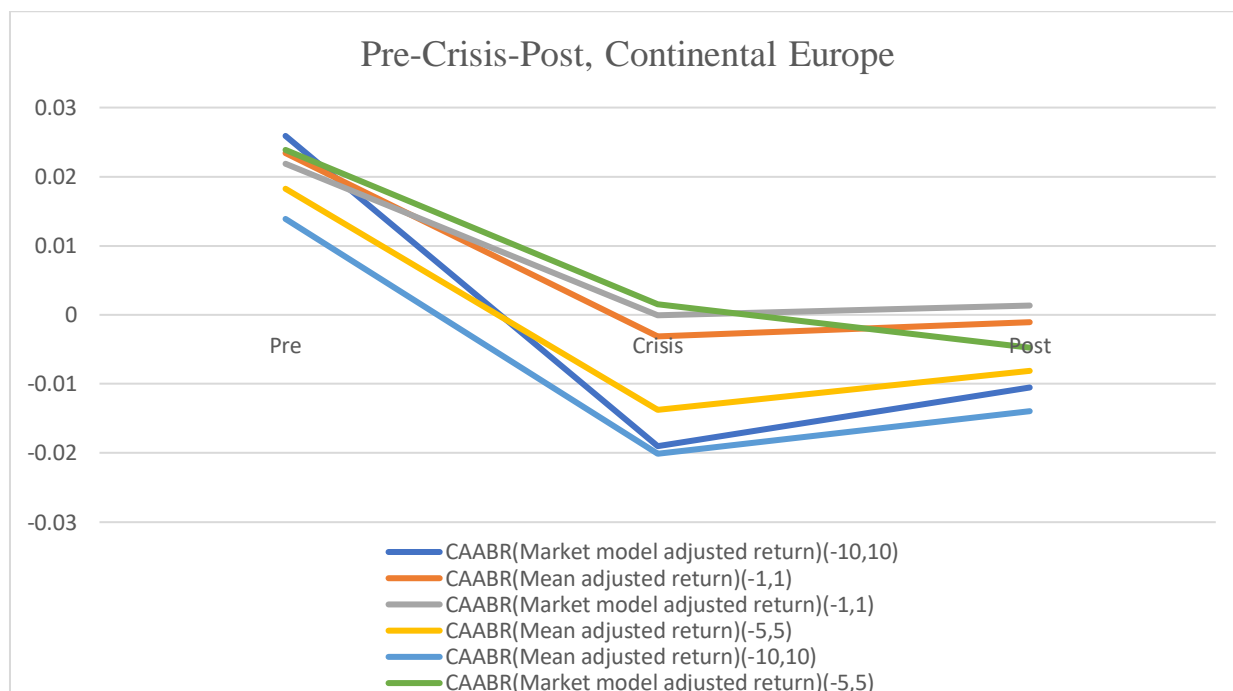
Graph 6.2: Yearly CAABR, continental Europe



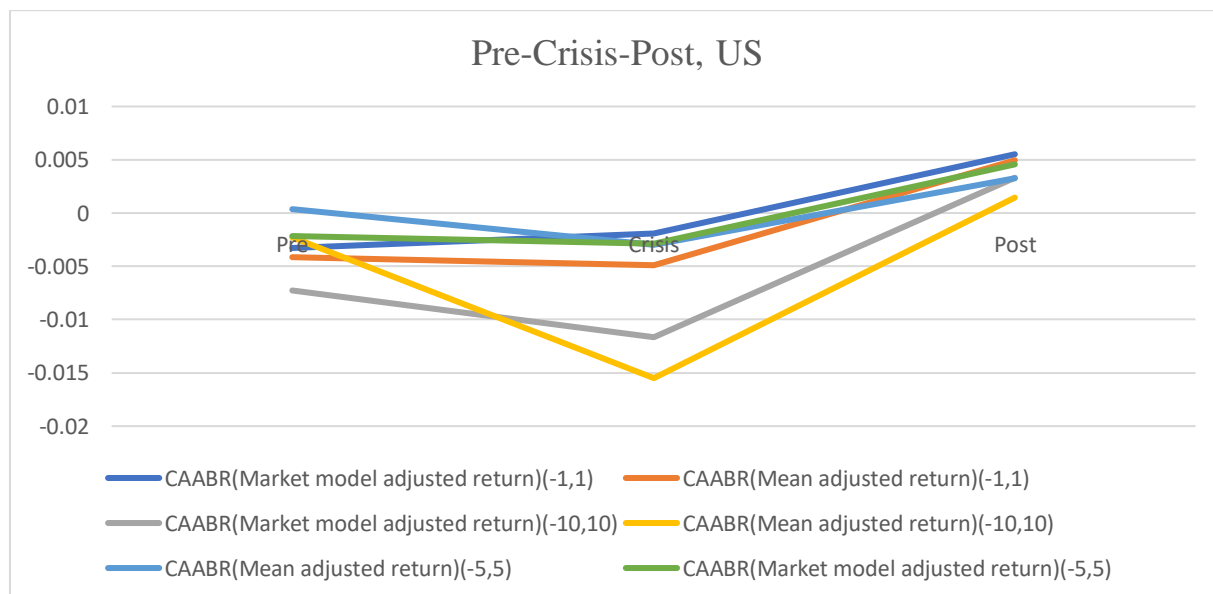
The results conducted from the one-sample ANOVA test (see table 2C of the appendix) are in line with the graphs. For the US, the CAABRs with the event windows $[-10,10]$ and $[-5,5]$ differ significantly per year, with the respectively P-values of 0.0318 for the cumulative mean adjusted return with the event window of $[-5,5]$. for the CAABR with an event window of $[-10,10]$ a P-values of 0.0001 for the mean adjusted model and a p-value of 0.0385 for the cumulative market model return. However, in the case of continental Europe, only the event window of $[-1,1]$ demonstrates significant annual differences in CAABR.

In addition, there is a large decrease in CAABR during the period 2007-2009—which corresponds with the global financial crisis. One might, therefore, argue that there are also significant differences in CAABR during the financial crisis. To verify this, a post hoc Bonferroni test is conducted. Accordingly, the time series is divided into three periods: “pre-period” which is 2006, “crisis” 2007-2009, and “post-crisis 2010-2018”. In graph 3 and 4, the CAARB per period are represented for Europe. While it shows a drop during the crisis, it does not demonstrate strong signs of recovery in the post-crisis period. The US graph, on the other hand, does not showcase a drop during the crisis, but does illustrate clear recovery in the post-crisis period. Were it being clearly visible that the CAABRs are higher during the post-crisis period compared to the crisis period and post-crisis period. An explanation for this may be that the pre-crisis period is relatively short—including 2006 only—and, therefore, more emphasis should be placed on the crisis and post-crisis periods.

Graph 6.3: CAABR, pre-crisis-post continental Europe



Graph 6.4: CAABR, Pre-crisis-post US



Hereafter, a post hoc Bonferroni pairwise comparison is performed because this test is valid for unequal sample sizes. The outcomes are presented in the appendix' table 2D. The results match with the difference seen in graphs 6.3 and 6.4. For Continental Europe, there are significant differences between the pre-crisis, crisis, and post-crisis and pre-crisis when comparing the CAABR mean adjusted abnormal return $[-1, 1]$ ($p = 0.002$, $p = 0.003$, $p = 0,006$ and $p = 0,009$). However, because the sample size of the pre-crisis period only consists of 25 observations, one can argue that there may be sampling bias. Therefore, one concludes that there are no significant differences in CAABR before, during, and after the global financial crisis for continental Europe. The results for the US are stated in the appendix 2D. The results lead to the conclusion that there are significant differences between the crisis and post-crisis in CAARB with an event window of $[-10, 10]$ & $[-1, 1]$ ($p = 0.026$, $p = 0.020$, $p = 0.008$ and $p = 0.040$), which is in line with graph 4. Hence, for the US there are indeed differences between the periods before, during, and after the global financial crisis.

6.3 Pearson correlation analysis

To test whether there are linear relationships between the independent and dependent variables, a Pearson correlation is conducted. Beginning with the results of Continental Europe, only the variables on friendly and hostile takeover are excluded, because of the large number of friendly takeovers compared to hostile takeovers. First, the following variables are not significantly correlated to one of the dependent variables: *Transaction value*, *Tobin's Q*, *relative deal size*, *Poison Pill*, *Staggered Board Structure*, *Supermajority or Qualified Majority Vote Requirements*, *Golden Parachute*, *Significant Company Transactions (M&A)* *Shareholders Approval*, *cash*, *mix* and *High-tech industry*. Albeit the variable related to stock-transactions is significantly correlated with all the CAABRs, it is not clear whether it involves a negative or positive correlation. These results are therefore partly in contrast with research by Myers & Majluf (1984), which finds that there is a negative impact of stock transactions on shareholder value. Significant Company Transactions (M&A) Shareholders Approval is negatively related to all CAABR, which is in line with research conducted by Bebchuk, Cohen, and Ferrell (2009), which finds a similar impact.

There is a positive significant correlation between the variable measuring the presence of a poison pill and all CAABR. This finding contrasts with Malatesta and Walkling's (1988) findings, which point to that there is a positive effect of poison pills on shareholder value.

There are no large significant correlation coefficients between the dependent and independent variables, where the correlation coefficient between the poison pill and CAABR is 0,253 is the strongest. This implies that there is no strong relationship between the independent variable and the dependent variable.

Furthermore, it is worth noting that MIX and Cash transactions are strongly correlated (-0,987). The variables regarding the US which do not correlate with one of the CAABR are *Free cash flow*, *Leverage*, *Poison pill*, *Classified board*, *Supermajority vote*, *Golden parachute*, *Supermajority or Qualified Majority Vote Requirements*, *Cash*, and *MIX*. The variables that do significantly correlate are Firm size, classified board, Tobin's q and transaction value. These variables are significantly correlated to all distinct dependent variables. Firm size is negatively correlated with the dependent variables and the relationship between a classified board and the CAABR is positive. In line with research conducted by Moeller et al. (2004), the results from the Pearson correlation analysis related to firm size supports the claim by Moeller et al. (2004). Differently, the positive correlation between a classified board and CAABR contradicts research done by Mahoney and Mahoney (1993), and Faleye (2007), which find that there is a negative impact.

Lastly, to conclude this analysis for both samples, the majority of the ATPs are not significantly correlated to the CAABR. Furthermore, both in continental Europe and the US the correlation between Mix payments and cash payment is highly correlated ($r = -0.957$). This could lead to multicollinearity in the OLS regression, which affects calculations regarding individual predictors. To further test for multicollinearity, a variance inflation factor analysis is conducted in the next paragraph.

6.4 The regression analysis

6.4.1 Testing the assumptions regarding OLS regression

To conduct an OLS regression it is important to ensure that there is no multicollinearity. As stated earlier, multicollinearity affects calculations on individual predictors. Because of the high correlation between Mix payments and Cash payments, another test is conducted with the aim to verify the absence of multicollinearity. This test is the variance inflation factor test (VIF). the rule of thumb is that when the VIF value is greater than 10, multicollinearities is high (Kutner, M. H.; Nachtsheim, C. J.; Neter, J., 2004), and one should assume the presence of multicollinearity. On the basis of the VIF test the value of Cash payments (US = 12,74, EU = 34.90) is greater than 10 and, consequently, the variable Cash payments are removed from the OLS analysis.

Next, linearity is tested on the basis of creating scatterplots for discrete variables in respect of the dependent variable for both samples. These results are presented in the appendix (in graph 1A and 1B) and show that there are no major deviations. To analyze whether the residuals are normality distributed, a P-plot regarding the residuals is conducted. Both graphs are stated in the appendix graph 2A. Based on the p-plot, this research concludes that there is a deviation from the line present. Nevertheless, this deviation is relatively small and, therefore, this assumption for the OLS is not violated.

To check whether there is homoscedasticity, a scatterplot is conducted for the Residuals against the fitted values (appendix graph 2B). In line with the results from both the P-plot and the linearity, there are no major deviations in both scatterplots. To test for autocorrelation, a Durbin Watson test is conducted. The rule of thumb is that test statistic values ranging from 1.5 to 2.5 are relatively normal. For the sample of continental Europe, the value of the test is 1.48. The US sample shows a value of is 2.03. Therefore, this research finds that there is no mutual autocorrelation for the residuals. In paragraph 5.2, the normality for the dependent variables was tested following the outlier that was removed by means of winsorizing. To conclude, the assumptions for the OLS regression are not violated, and, therefore, a valid conclusions can be made from the OLS regression.

6.4.2 The OLS regression

This section contains the OLS regression analysis, here the output with respect to the explanatory variables of the CAABR is discussed. The first two regressions are conducted on

the basis of both samples, including the E-index, which equals the number of ATPs the particular company has in place. Furthermore, CAABR is calculated on the basis of the market model. Regressions 3 and 4 are conducted by examining the impact of ATPs individually on the CAABR. Where the latter is calculated on the basis of a market model which is the dependent variable. Finally, regression 5 and 6 are using the same variables but control for time fixed effects. The industry fixed effects are excluded for this research because—as mentioned in section 5.5—no industry-specific differences are found across both samples. As laid out in section 6.1, the assumptions for the OLS regression are not violated, and, therefore, valid conclusions can be made from the OLS regression.

Table 6.5 presents regression 1 and 2. Regression 1 ($R^2 = 0,123$) analyzes the US sample and finds that there is no significant impact of the E-index on the CAABR calculated by Market model. However, when one considers the control variables, there is a significant effect of firm size ($b = -0.00354$, $P = 0.023$), high-tech industry ($b = -0.00799$, $P = 0.044$) and stock payments ($b = -0.0286$, $P = 0.027$) on CAARB. This implies that an increase in the firm size of 1% leads to a decrease of 0,354% in CAARB. Additionally, if the acquirer operates in a high-tech industry this causes a decrease of 0,799% on CAARB. Finally, if the target is acquired with stocks transaction this leads to a decrease of 2,86% on CAARB. Regression 2 ($R^2 = 0,057$) possesses a low R^2 and therefore showcases low explanatory value. Only stock transaction significantly effects CAABR. In contrast to the US sample, when the acquisition is done on the basis of a stock transaction this leads to an increase of 11,6% in CAABR.

Table 6.5. OLS regression results for the impact of the E-index on shareholder value

VARIABLES	US	EU
E-index	0.00194 (0.00162)	-0.00320 (0.00407)
Marketvalue	-0.00354** (0.00156)	0.00340 (0.00447)
Leverage	0.000515 (0.00209)	0.00278 (0.00245)
Tobins Q	-0.00166 (0.00149)	-0.000749 (0.00634)
Transaction value	-0.000289 (0.00129)	0.00182 (0.00279)

Relative deal size	-0.000251 (0.000244)	0.0150 (0.0251)
FCF	6.01e-07 (5.60e-07)	-4.53e-06 (4.13e-06)
High-tech industry	-0.00799** (0.00397)	0.00514 (0.00868)
Stock transaction	-0.0286** (0.0130)	-0.116** (0.0553)
Mix transaction	0.00171 (0.00422)	-0.00943 (0.0103)
Constant	0.0351*** (0.0131)	-0.0428 (0.0480)
Observations	1,339	182
R-squared	0.123	0.057

Note. Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

This OLS regression models includes both the small sample of the US and continental Europe. Furthermore, the time fixed effect is excluded in the OLS regression and the CAABR is calculated on the basis of the market model with an event window of [-5, 5]. This index includes all ATPs mentioned in 4.4.1. The value of the E-index indicates the number of ATPs that the company has in place. the E-index is conducted by the sum of the ATPs. Market value: firm size of the acquirer is defined as the natural logarithm of the market capitalization, which, in turn, is calculated by multiplying the total number of shares outstanding by the acquirer times the acquirer's stock price four weeks prior to the announcement date. Leverage: The Leverage of the acquirer is calculated by dividing the natural logarithm of liabilities by the shareholders' equity (Nissim, Doron, and Stephen H. Penman, 2003). The dates and financial information are the most recent available for a 12-month period prior to the original announcement date of the deal. Tobin's q: The Tobin's Q is defined as the natural logarithm of the market-to-book ratio two weeks prior to the announcement date of the acquisition/merger. Transaction value: The amount which is paid by the bidder to acquire the targeted company. FCF: The free cash flow is defined as the natural logarithm of the free cash flow and calculated by adding up the net income and non-cash expenses, and subtracting the increase in working capital and capital expenditures. The income and expenses are conducted for the last 12 months of the announcement effect of the acquiring company. High-tech industry: Here a dummy variable is created that values 1 when the company operates in one of the industries stated above and values 0 when it operates outside of these industries. Stock transaction: When the acquisition/merge is paid in cash the dummy Stock transaction denotes 1 if not the dummy denotes 0. Mix transaction: if the acquisition/merge is paid in stock and cash, the dummy Mix transaction denotes 1.

Table 6.6 includes regression 3 and 4. Here the impact of the individual ATPs on CAABR is conducted. For regression 3 ($R^2 = 0.130$), which is the output related to the US sample, there is a significant effect on the CAABR present for the classified board ($b = 0.00697$, $P = 0.067$), golden parachute ($b = -0.0118$, $P = 0.05$), the presence of either or both of the limits to shareholder bylaw amendments and limits to shareholder charter amendments ($b = 0.0113$, $P = 0.05$), Firm size ($b = -0.00338$, $P = 0.031$), High-tech industry ($b = -0.00797$, $P = 0.046$), and Stock payments ($b = -0.0281$, $P = 0.030$). Elaborating upon the betas, there exists a positive impact between the presence of an (a) classified board, (b) limits to shareholder bylaw amendments, and/or (c) limits to shareholder charter amendments and the CAABR. The opposite holds for the golden parachute, where the presence of this ATP leads, on average,

to a decrease of 1,18% in the CAABR of the acquirer. Furthermore, for the control variables in line with the results from regression 1. (1) Firm size, (2) Engagement in high-tech industry, and (3) Payment through stocks have a negative impact on the CAABR. If a company operates in a high-tech industry the CAABR decreases, on average, with 0,08%; an increase of 1% in market value will decrease the CAABR, on average, by 0,03%. Alongside the result of regression 4 are in line with the results conducted in regression 2. Only 'stock transactions' ($b = 0.124$, $P = 0.026$) show a negative impact on the CAABR of the acquirer. In addition, the Beta is even higher compared to regression 2, resulting in the interpretation that if the acquisition is paid in stocks the CAABR increases with 12,4%.

Table 6.6: OLS regression results for the impact of the ATPs separately on shareholder value

VARIABLES	US	EU
Poison-Pill	-0.000249 (0.00401)	0.0260 (0.0291)
Classified Board	0.00697* (0.00381)	0.00955 (0.00901)
Supermajority to approve merger	0.000821 (0.00424)	-0.00810 (0.00837)
Golden Parachute	-0.0118** (0.00603)	0.000103 (0.0103)
Limitabchby	0.0113** (0.00578)	-0.0148 (0.0110)
Marketvalue	-0.00338** (0.00156)	0.00170 (0.00457)
Leverage	0.000685 (0.00209)	0.00181 (0.00255)
Tobins Q	-0.00171 (0.00149)	-0.000954 (0.00636)
Transaction value	2.15e-05 (0.00130)	0.00167 (0.00282)
Relative deal size	-0.000225 (0.000245)	0.0112 (0.0252)
FCF	6.50e-07 (5.67e-07)	-3.13e-06 (4.28e-06)
High-tech industry	-0.00797** (0.00399)	0.00354 (0.00882)
Stock transaction	-0.0281** (0.0129)	-0.122** (0.0553)
Mix transaction	0.00170	-0.00852

	(0.00422)	(0.0103)
Constant	0.0364***	-0.0203
	(0.0134)	(0.0491)
Observations	1,339	182
R-squared	0.130	0.087

Note. Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

This OLS regression models includes both the small sample of the US and continental Europe. Furthermore, the time fixed effect is excluded in the OLS regression and the CAABR is calculated on the basis of the market model with an event window of [-5, 5]. Also, this regression includes all the ATPs separately. Poison-pill: To measure the impact of the poison pill, a dummy variable is created, the variable equals 1 when the target has implemented a poison pill, and equals 0 if this is not the case. The classified board: is a dummy variable which values 1 when the acquiring company has a classified board in place and values 0 when it does not have a classified board in place. Supermajority to approve merger: A dummy variable is created which equals 1 when the acquirer has a supermajority requirement for the merger in place, and values 0 when this ATP is absent. Golden parachute: A dummy variable is created which equals 1 when there is a golden parachute in place, and equals 0 when this is not the case. Limitabchby: This variable denotes 1 if there are Limits to shareholder bylaw amendments are place and denotes when this ATP is not in place. In order to measure the effect of Limits to shareholder charter amendments on the abnormal returns of the acquiring company a dummy variable is created. This variable value 1 when there are Limits to shareholder charter amendments in place, and values 0 if this ATP is not in place. Market value: firm size of the acquirer is defined as the natural logarithm of the market capitalization, which, in turn, is calculated by multiplying the total number of shares outstanding by the acquirer times the acquirer's stock price four weeks prior to the announcement date. Leverage: The Leverage of the acquirer is calculated by dividing the natural logarithm of liabilities by the shareholders' equity (Nissim, Doron, and Stephen H. Penman, 2003). The dates and financial information are the most recent available for a 12-month period prior to the original announcement date of the deal. Tobin's q: The Tobin's Q is defined as the natural logarithm of the market-to-book ratio two weeks prior to the announcement date of the acquisition/merger. Transaction value: The amount which is paid by the bidder to acquire the targeted company. FCF: The free cash flow is defined as the natural logarithm of the free cash flow and calculated by adding up the net income and non-cash expenses, and subtracting the increase in working capital and capital expenditures. The income and expenses are conducted for the last 12 months of the announcement effect of the acquiring company. High-tech industry: Here a dummy variable is created that values 1 when the company operates in one of the industries stated above and values 0 when it operates outside of these industries. Stock transaction: When the acquisition/merge is paid in cash the dummy Stock transaction denotes 1 if not the dummy denotes 0. Mix transaction: if the acquisition/merge is paid in stock and cash, the dummy Mix transaction denotes 1.

Table 6.7 presents regression 5 & 6 Here, the time fixed effect is included in the OLS regression and the CAABR is calculated on the basis of the market model with an event window of [-5, 5].

Regression 5 ($R^2 = 0,14$) concerns the US sample. Here the same variables show a significant effect on the CAABR; however, there is no significant relationship between the presence of limits to shareholder bylaw amendments and/or limits to shareholder charter amendments and CAABR. The variables that do showcase a significant relationship with the dependent variable are: (1) Classified board ($b = 0.00825$, $P = 0.033$); (2) Golden Parachute ($b = -0.0118$, $P = 0.049$); (3) Firm Size ($b = -0.00325$, $P = 0.040$); (4) whether the firm operates in a high-tech industry ($b = -0.00764$, $P = 0.047$), and (5) whether the transaction is paid in stock ($b = -0.0250996$, $P = 0,044$). When a classified board is present the announcement effect of the acquisition has a positive impact on CAABR of 0,83%.

Contrarily, if there is a golden parachute in place the announcement of the acquisition has a negative impact of 1,18%, on average, on the CAABR. Looking at the control variables, both stock

payments and high-tech industries have a negative impact on the CAABR around the announcement period. If transactions involve stock payments there is an average negative impact of 2,51%. If the firm operates in a high-tech industry the impact is likewise negative with 0,7%, on average. Regression 6, includes, again, the time fixed effects. In contrast to regression 2 and 4, the stock transaction ($b = 0,104$, $P = 0.061$) falls outside the 95% confidence interval in regression 6.

Table 6.7: OLS regression results for the impact of the ATPs separately on shareholder value

VARIABLES	US	EU
Poison-Pill	-0.00400 (0.00428)	0.0143 (0.0297)
Classified Board	0.00825** (0.00387)	0.0125 (0.00941)
Supermajority to approve merger	-0.00604 (0.00538)	-0.00202 (0.00863)
Golden Parachute	-0.0118** (0.00613)	0.00585 (0.0107)
Limitabchby	0.0115 (0.00750)	-0.0162 (0.0111)
Marketvalue	-0.00325** (0.00158)	-0.000758 (0.00478)
Leverage	0.000877 (0.00210)	0.00128 (0.00258)
Tobins Q	-0.00224 (0.00157)	-0.000731 (0.00650)
Transaction value	-0.000420 (0.00132)	0.00215 (0.00290)
Relative deal size	-0.000260 (0.000247)	0.00283 (0.0256)
FCF	6.11e-07 (5.71e-07)	-9.86e-07 (4.34e-06)
High-tech industry	-0.00764** (0.00401)	0.00428 (0.00922)
Stock transaction	-0.0251** (0.0130)	-0.104* (0.0549)
Mix transaction	0.00174 (0.00424)	-0.00616 (0.0107)
Constant	0.0413*** (0.0140)	0.0241 (0.0526)
Observations	1,339	182
Time FE	YES	YES
Country FE	NO	NO

R-squared	0.140	0.188
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Note. Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This OLS regression models includes both the small sample of the US and continental Europe. Furthermore, the time fixed effect is included in the OLS regression and the CAABR is calculated on the basis of the market model with an event window of [-5, 5]. Poison-pill: To measure the impact of the poison pill, a dummy variable is created, the variable equals 1 when the target has implemented a poison pill, and equals 0 if this is not the case. The classified board: is a dummy variable which values 1 when the acquiring company has a classified board in place and values 0 when it does not have a classified board in place. Supermajority to approve merger: A dummy variable is created which equals 1 when the acquirer has a supermajority requirement for the merger in place, and values 0 when this ATP is absent. Golden parachute: A dummy variable is created which equals 1 when there is a golden parachute in place, and equals 0 when this is not the case. Limitabchby: This variable denotes 1 if there are Limits to shareholder bylaw amendments are place and denotes when this ATP is not in place. In order to measure the effect of Limits to shareholder charter amendments on the abnormal returns of the acquiring company a dummy variable is created. This variable value 1 when there are Limits to shareholder charter amendments in place, and values 0 if this ATP is not in place. Market value: firm size of the acquirer is defined as the natural logarithm of the market capitalization, which, in turn, is calculated by multiplying the total number of shares outstanding by the acquirer times the acquirer's stock price four weeks prior to the announcement date. Leverage: The Leverage of the acquirer is calculated by dividing the natural logarithm of liabilities by the shareholders' equity (Nissim, Doron, and Stephen H. Penman, 2003). The dates and financial information are the most recent available for a 12-month period prior to the original announcement date of the deal. Tobin's q: The Tobin's Q is defined as the natural logarithm of the market-to-book ratio two weeks prior to the announcement date of the acquisition/merger. Transaction value: The amount which is paid by the bidder to acquire the targeted company. FCF: The free cash flow is defined as the natural logarithm of the free cash flow and calculated by adding up the net income and non-cash expenses, and subtracting the increase in working capital and capital expenditures. The income and expenses are conducted for the last 12 months of the announcement effect of the acquiring company. High-tech industry: Here a dummy variable is created that values 1 when the company operates in one of the industries stated above and values 0 when it operates outside of these industries. Stock transaction: When the acquisition/merge is paid in cash the dummy Stock transaction denotes 1 if not the dummy denotes 0. Mix transaction: if the acquisition/merge is paid in stock and cash, the dummy Mix transaction denotes 1.

6.4.3 Robustness test

This section contains the robustness check for the regression analyses conducted in section 6.2. To test the robustness of the results from the regression analysis discussed in paragraph 6.2. The OLS regressions are conducted on the basis of event windows ([-1,1] & [-10,10]), and the CAABR is calculated on the means of the mean adjusted return. All results presented in the appendix table 3A and 3B, first comparing the results from the robustness test from the US sample with the event window with a longer horizon [-10,10]. The explanatory variables poison pill ($\beta = -0.0138$, $P = 0.014$ & $\beta = -.0136$, $P = 0.037$) and leverage ($\beta = 0.00564$, $P = 0.041$ & $\beta = .0065$, $P = 0.043$) have a significant impact on CAABR. Furthermore, when a firm operates in a high-tech industry there is no significant impact on the CAABR which is in line with the results from post hoc Bonferroni test in section 5.6. On the other hand, if one compares the results from the regression conducted in section 6.2 to the event window with a short horizon [-1, 1] the impact of golden parachute and high-tech industry on CAABR become less significant and fall outside of the 95% confidence interval besides, firm size and classified board are still significant. Based on the result of this research are in line with the

results presented in the robustness test. The results from the sample for continental Europe are also tested in the same manner as the US sample. First, for the event window with the longer horizon $[-10, 10]$, the results are in accordance with the results conducted in section 6.2. That is, only stock transactions show a significant impact on CAABR. Contrarily, for the short-horizon $[-1, 1]$ poison pills as well as firm value have a significant impact on CAABR. Looking at the results conducted to form the robustness check for the EU sample, the results are inclusive. Therefore, this will be discussed more in depth in the next section.

6.5 Discussion

In this section, the rejection or acceptance of the hypotheses are comprehensively discussed.

H1: “the announcement of an acquisition has an impact on the cumulative abnormal return of the acquiring firm in the period 2006-2018”

According to the T-test conducted in section 5.4, hypothesis 1 is rejected for the US sample under the following models: CAR mean model $[5, -5]$ and $[10, -10]$, and CAR market model $[5, -5]$. Under these models, no significant effects are observed. However, hypothesis 1 can be accepted for the US sample for market model $[1, -1]$ & $[10, -10]$, and CAR mean model $[1, -1]$. All the significant CARs show that there is a positive effect of the announcement on the share price. For market model $[1, -1]$, the average effect ranges between 0,5% and 0,05%; for market model $[10, -10]$ it also ranges between 0,5% and 0,05%, and; for the mean model $[1, -1]$ it ranges between 0,007% and 0,004.

For the European sample, the significant CAR explains the negative impact of the announcement effect on the stock price. For the CAR mean model $[10, -10]$, the effect ranges from -2,2% to 0,02%. Hence, Given the inconclusive findings, there is not sufficient evidence to reject the null hypothesis. That is, there is not enough evidence to reject the hypothesis 1.

H2: “The announcement of an acquisition has an impact on the cumulative abnormal return of the acquiring firm in the period 2006-2018 differs across industries”.

Based on the findings laid out in section 5.5., this study rejects hypothesis 2. The one-way ANOVA test and post hoc Bonferroni test indicate p-values exceeding 0.05, which indicates that there are no cross-industry differences affecting CAARS-

H3: *"If the announcement of an acquisition has an impact on the cumulative abnormal return of the acquiring firm in the period 2006-2018 differs across years".*

Hypothesis 3 is tested in section 5.6, the results for this hypothesis are inconclusive as for the US sample significant results for a CAABRs with an event window of [-10, 10] and [-5, 5] for the market model. Significant results are having also been found in the EU sample; however, significant findings are limited to the CAABR with an event window of [-1, 1]. Based on these results, this research holds that the findings are inconclusive.

H4: *"The announcement of an acquisition has an impact on the cumulative abnormal return of the acquiring firm in the period 2006-2018 differs in Pre-crisis period, crisis period and Post-crisis period"*

This hypothesis is tested on the basis of a post hoc Bonferroni pairwise comparison, because of the unequal sample sizes. The US sample produces statistically significant results across all given periods for those CAABR that are based upon the market model with event windows [-10, 10] and [-1, 1] ($p = 0.026$, $p = 0.020$, $p = 0.008$ and $p = 0.040$). The EU sample only produces statistically significant results for event window [-1, 1] ($p = 0.002$, $p = 0.003$, $p = 0.006$ and $p = 0.009$). Hence, while the US sample provides multiple time frames that demonstrate that the extent to which the announcement of an acquisition impacts the CAABR differs between pre-crisis, crisis, and post-crisis periods, the European sample only finds one timeframe in which results uphold this view. That is, the results engender inconclusive results, and therefore, we can/cannot reject H4.

H5: *"Anti-takeover provisions have an impact on the cumulative abnormal return of the acquiring firm in the US during the period 2006-2018".*

To assess hypothesis 5, this research relies upon the OLS regression model accepts the hypothesis because, classified board and golden parachute have an impact on the CAR. For golden parachute, the presence of the ATP leads, on average, to a 1.18% decrease of the CAR with $p < 0.05$. The presence of limits to shareholder bylaw amendments leads to a 0.83%

increase of the CAR with a $p < 0.05$. Furthermore, the presence of a classified board causes an increase of 0,07% in the CAR. It is worth noting, however, that the effect of classified boards on the CAR is only significant at the .10 level, as the effect has $P < 0,10$ and $P > 0,05$. For the remaining ATPs no significant effect is examined, and, therefore, hypothesis 4 can be accepted.

H6: *“means Anti-takeover provisions have an impact on the cumulative abnormal return of the acquiring firm in continental Europe during the period 2006-2018”.*

On the basis of the OLS regression—elaborated upon in section 6.2. —the presence of ATPs has no significant impact on the CAABR of the announcement of the acquisition. Hence, if a company is located in Europa there is no significant impact of ATPs on the CAABR is conducted. Therefore, this research rejects Hypothesis 6.

H7: *“There is a difference between the impact of anti-takeover provisions on the cumulative abnormal return of the acquiring firm in continental western Europe and the US during the period 2003-2018”.*

Finally, hypothesis 7 is examined, which examines whether there is a difference between the impact of ATPs on CARs in US and Europe. While sufficient evidence has been found to support hypothesis 5, which assumes that there is an effect of ATPs on CAABR, the results of the OLS regression do not measure findings in favor of hypothesis 7. Therefore, this research rejects hypothesis 7.

To summarize the findings in this section, there is inconclusive evidence to accept or reject hypothesis 1. Furthermore, while hypothesis 2 is accepted, hypothesis 3 is rejected. Lastly, hypothesis 4 can be accepted because differences between both samples are found. The next section contains the link between the results conducted in this section and the literature review and theoretical background.

7 Conclusion

This research engages with the following research question: What the impact is of anti-takeover provisions on the acquirer return in continental western Europe and the US between 2006-2018? Based on the hypotheses this research question is answered. At first, based on a one-sample t-test whether the CAABR is significantly different from zero. The result does not give conclusive proof and therefore this hypothesis is rejected. Following, this study does not find significant differences between industries. However, it does find year-specific differences. More specifically, in the US sample, it finds significant differences between the effects measured in crisis- and post-crisis times, whereas, in continental Europe, significant differences are found between the pre-crisis period and the crisis period. Next, the impact of the E-index—denoting the five ATPs with the highest expected impact—on the CAABR is conducted. For both samples, no significant impact is found, which contradicts Bebchuk, Cohen, and Ferrell's findings (2008), which show a negative significant impact.

The effect has been further examined through an OLS regression, which computed ATPs' effect on the CAABR. This research finds that, in continental western Europe, the only stock transaction has a significant impact on shareholder value. This finding is congruent with research conducted by Myers & Majluf (1984). Because, in Europe, firms are not required to publish their ATPs in place, the results are based upon relatively small sample size. Accordingly, they may be prone to bias. Also due to the small R^2 , which makes this model fairly unpredictable, the results may be subject to omitted variable bias. This is considered when comparing the institutional environments.

Finally, the regression ran on the US sample to assess the impact of individual ATPs on CAARB delivers significant results. More specifically, this study finds that two specific ATP—(1) classified board and (2) golden parachute—have a significant impact on shareholder value.

The negative impact of golden parachutes on the CAABR is in line with the consensus in the literature. What stands out from the results is the the positive impact of the classified board on the CAABR which contrasts research conducted by Bebchuk and Cohen (2005) on the other hand it is in line with research conducted by Masulis, Wang, and Xie (2007). The

positive impact may be explained by the fact that a large part of the sample operates within a high-tech sector (912 out of the 1356 acquisitions were done in by a company operating in a high-tech sector). High-tech sectors tend to have high R&D expenditure, and research conducted by Daines and Klausner (2001) explains that if a company has high, long-term, R&D expenditures, the presence of a staggered board has a positive effect on firm value.

In sum, answering the main research question— “What is the impact of anti-takeover provisions on the acquirer return in continental western Europe and the US? —this study finds that, in the US, ATPs may have a significant impact on shareholder value, whereas, in western continental Europe, no significant impact is measured of ATPs on shareholder value. Hence, one can conclude that there is, indeed, the impact of ATPs on shareholder value significantly differs between the US and continental Europe. This is in line with the literature, which likewise suggests that the impact of ATPs on shareholders’ value is divergent across institutional environments. Furthermore, whereas the impact of ATPs on shareholders’ value is expected to be more extensive for the US sample than the EU sample. If one compares the results conducted in section 6.2, only significant results are established for the US sample consequently, no significant results are found in the EU sample. The fact that there is no impact in continental Europe could be in line with Al-Kuwari (2010) where because the managers propose ATPs not only in their interest but largely in the interest of the block holders and therefore no negative impact is found. Therefore, this research gives a comprehensive insight into if the institutional environment leads to an ATPs different impact on shareholder value.

8 Limitation & recommendations for further research

This part contains the limitations of this and recommendations for further research are discussed. Firstly, the limitations are discussed following the recommendation for further research on this topic.

To conduct an event study there is an assumption to be made which causes limitation. Especially assuming that markets are efficient, this means that particular events happen at random and are not reflected in share prices. This implies that during the event window there are no other events that affect the share price. But research regarding this topic presents the fact that markets are not always efficient and that is hard to predict future shareholder value (Harrison & Schijven, 2015). Also, to calculate the normal returns for the event study in further research one could calculate these based on an economic model like the Carhart four-factor model or Fama–French factor model. Furthermore, there are limitations regarding the sample selection because the continental Europe sample is rather small. Therefore, this limits the predictability of this the OLS regression model. Next, both samples exclude companies that operate in Finance, Insurance, and Real Estate thus the conclusion is not comprehensive for all industries. Following in section 5.6 the pre-crisis period is small, because the US data for ATPs only goes back to 2006, therefore maybe there are databases with a more extensive data selection. And finally, the adjusted R² for both regression models is low and as mentioned in section 7, in the next research it is perhaps auspicious to add more control variables to develop a stronger regression model. Furthermore, adding more ATPs to the regression model also could give more insight into the effect of ATPs on the CAABR during the announcement of the acquisition. Therefore, a more comprehensive database should be consulted. Nevertheless, this thesis enhances the academic understanding of the effect of ATPs on CAABR in two distinct institutional environments. Also, in further research one could consider what the impact is of ATPs on shareholder value when there is no takeover in place. One could conduct this impact by firstly, viewing the impact of the E-index on shareholder value and secondly, view the impact of the ATPs on shareholder value separately.

9 References:

- Al-Kuwari, D. (2010). To pay or not to pay: using emerging panel data to identify factors influencing corporate dividend payout decisions. *International Research Journal of Finance and Economics*, (42).
- Asquith, P., Bruner, R. F., & Mullins Jr, D. W. (1983). The gains to bidding firms from merger. *Journal of financial economics*, 11(1-4), 121-139.
- Baums, T. (1993). Takeovers versus institutions in corporate governance in Germany. *Contemporary issues in corporate governance*, 151-183.
- Bebchuk, L. A., & Cohen, A. (2005). The costs of entrenched boards. *Journal of Financial Economics*, 78(2), 409-433.
- Bebchuk, L. A., A. Cohen and C. C. Y. Wang, 2012, Learning and the disappearing association between governance and returns, *Journal of Financial Economics*, forthcoming.
- Bebchuk, L. A., Coates IV, J. C., & Subramanian, G. (2002). *The powerful antitakeover force of staggered boards: theory, evidence and policy* (No. w8974). National Bureau of Economic Research.
- Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What Matters in Corporate Governance? 22 *Rev. Fin. Stud*, 783, 823.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New Brunswick. NJ: Transaction.
- Brickley, J. A., Coles, J. L., & Terry, R. L. (1994). Outside directors and the adoption of poison pills. *Journal of financial Economics*, 35(3), 371-390.
- Brown, S. J., & Warner, J. B. (1985). Using daily stock returns: The case of event studies. *Journal of financial economics*, 14(1), 3-31.
- Brown, S.J. and J.B. Warner, 1980, Measuring security price performance, *Journal of Financial Economics* 8, 205-258.
- Chang, S. (1998). Takeovers of privately held targets, methods of payment, and bidder returns. *The Journal of Finance*, 53(2), 773-784.
- Comment, R., & Schwert, G. W. (1995). Poison or placebo? Evidence on the deterrence and wealth effects of modern antitakeover measures. *Journal of Financial Economics*, 39(1), 3-43.
- Core, J. E., Guay, W. R., & Rusticus, T. O. (2006). Does weak governance cause weak stock returns? An examination of firm operating performance and investors' expectations. *The Journal of Finance*, 61(2), 655-687.

- Cunat, V.; M. Gine; and M. Guadalupe. "The Vote Is Cast: The Effect of Corporate Governance on Shareholder Value." *Journal of Finance*, 67 (2012), 1943–1977.
- Daines, R., & Klausner, M. (2001). Do IPO charters maximize firm value? Antitakeover protection in IPOs. *Journal of Law, Economics, and Organization*, 17(1), 83-120.
- DeAngelo, H., & Rice, E. M. (1983). Antitakeover charter amendments and stockholder wealth. *Journal of Financial Economics*, 11(1-4), 329-359.
- Dong, M., Hirshleifer, D., Richardson, S., & Teoh, S. H. (2006). Does investor misvaluation drive the takeover market? *The Journal of Finance*, 61(2), 725-762.
- Faleye, O. (2007). Classified boards, firm value, and managerial entrenchment. *Journal of Financial Economics*, 83(2), 501-529.
- Field, L. C., & Karpoff, J. M. (2002). Takeover defenses of IPO firms. *The Journal of Finance*, 57(5), 1857-1889.
- Franks, J. and C. Mayer (1996) 'Hostile Takeovers and the Correction of Managerial Failure', *Journal of Financial Economics*, 40: 163–81.
- Gilson, S. C., & Vetsuypens, M. R. (1994). Creditor Control in Financially Distressed Firms: Empirical Evidence. *Wash. ULQ*, 72, 1005.
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The quarterly journal of economics*, 118(1), 107-156.
- Gugler, K., & Yurtoglu, B. B. (2003). Corporate governance and dividend pay-out policy in Germany. *European economic review*, 47(4), 731-758.
- Harford, J., Humphery-Jenner, M., & Powell, R. (2012). The sources of value destruction in acquisitions by entrenched managers. *Journal of Financial Economics*, 106(2), 247-261.
- Harris, E. G. (1990). Antitakeover measures, golden parachutes, and target firm shareholder welfare. *The Rand Journal of Economics*, 614-625.
- Harrison, J. S., & Schijven, M. (2015). Event-study methodology in the context of M&As. *The Routledge Companion to Mergers and Acquisitions*, 221.
- Hirshleifer, D., & Thakor, A. V. (1998). Corporate control through board dismissals and takeovers. *Journal of Economics & Management Strategy*, 7(4), 489-520.
- Humphery-Jenner, M. L., & Powell, R. G. (2011). Firm size, takeover profitability, and the effectiveness of the market for corporate control: Does the absence of anti-takeover provisions make a difference? *Journal of Corporate Finance*, 17(3), 418-437.

Jarrell, G. A., & Poulsen, A. B. (1987). Shark repellents and stock prices: The effects of antitakeover amendments since 1980. *Journal of Financial Economics*, 19(1), 127-168.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American economic review*, 76(2), 323-329.

Jensen, M. C. (1988). The takeover controversy: Analysis and evidence. *Knights, raiders, and targets*, 314-354.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, 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.

Johnson, S. A., Moorman, T. C., & Sorescu, S. (2009). A reexamination of corporate governance and equity prices. *The Review of Financial Studies*, 22(11), 4753-4786.

Kaplan, S. N., & Minton, B. A. (1994). Appointments of outsiders to Japanese boards: Determinants and implications for managers. *Journal of Financial Economics*, 36(2), 225-258.

Karpoff, J. M., & Wittry, M. D. (2015). *Institutional and political economy considerations in natural experiments: The case of state antitakeover laws*. Working paper.

Kester, C., 1997, Governance, contracting, and investment horizons: A look at Japan and Germany. In D. H. Chew (ed.) *Studies in International Corporate Finance and Governance Systems*. New York: Oxford University Press.

Kumar, P., & Zattoni, A. (2016). Institutional environment and corporate governance. *Corporate Governance: An International Review*, 24(2), 82-84.

Lang, L. H., & Rene, M. (1991). Stulz and Ralph A. Walking. t test of the free cash flow hypothesis. *Journal of Financial Economics*, 29, 315-335.

Loughran, T., & Ritter, J. (2004). Why has IPO underpricing changed over time? *Financial management*, 5-37.

Lu, X., & White, H. (2014). Robustness checks and robustness tests in applied economics. *Journal of econometrics*, 178, 194-206.

Machlin, J. C., Choe, H., & Miles, J. A. (1993). The effects of golden parachutes on takeover activity. *The Journal of Law and economics*, 36(2), 861-876.

MacKinlay, A. C. (1997). Event studies in economics and finance. *Journal of economic literature*, 35(1), 13-39.

- Mahoney, J. M. and J. T. Mahoney (1993). 'An empirical investigation of the effect of corporate charter antitakeover amendments on stockholder wealth', *Strategic Management Journal*, **14**(1), pp. 17–31.
- Malatesta, P. H., & Walkling, R. A. (1988). Poison pill securities: Stockholder wealth, profitability, and ownership structure. *Journal of Financial Economics*, *20*, 347-376.
- Manne, H. G. (1965). Mergers and the market for corporate control. *Journal of Political economy*, *73*(2), 110-120.
- Martijn Cremers, K. J., Nair, V. B., & John, K. (2009). Takeovers and the Cross-Section of Returns. *Review of Financial Studies*, *22*(4).
- Masulis, R. W., Wang, C., & Xie, F. (2007). Corporate governance and acquirer return. *The Journal of Finance*, *62*(4), 1851-1889.
- Meier, O., Saulquin, J. Y., & Schier, G. (2012). Medium sized high-tech international acquisitions: A longitudinal perspective (1990-2011). *International Business Research*, *5*(6), 94.
- Mitchell, M. L., & Lehn, K. (1990). Do bad bidders become good targets? *Journal of Political Economy*, *98*(2), 372-398.
- 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.
- Mogavero, D. J., & Toyne, M. F. (1995). The impact of golden parachutes on Fortune 500 stock returns: A reexamination of the evidence. *Quarterly Journal of Business and Economics*, 30-38.
- Morck, R., Shleifer, A., & Vishny, R. W. (1988). Alternative mechanisms for corporate control.
- Morck, R., Shleifer, A., & Vishny, R. W. (1990). Do managerial objectives drive bad acquisitions? *The Journal of Finance*, *45*(1), 31-48.
- 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.
- North, D. C. (1990). A transaction cost theory of politics. *Journal of theoretical politics*, *2*(4), 355-367.
- Pound, J. (1987). The effects of antitakeover amendments on takeover activity: Some direct evidence. *The Journal of Law and Economics*, *30*(2), 353-367.

- Ryngaert, M. (1988). The effect of poison pill securities on shareholder wealth. *Journal of Financial Economics*, 20, 377-417.
- Scharfstein, D. (1988). Product-market competition and managerial slack. *The RAND Journal of Economics*, 147-155.
- Scott, W. R., & Meyer, J. W. (1994). *Institutional environments and organizations: Structural complexity and individualism*. Sage.
- Servaes, H. (1991). Tobin's Q and the Gains from Takeovers. *The Journal of Finance*, 46(1), 409-419.
- Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of political economy*, 94(3, Part 1), 461-488.
- Stein, J. C. (1988). Takeover threats and managerial myopia. *Journal of political economy*, 96(1), 61-80.
- Stráska, M., & Waller, G. (2010). Do antitakeover provisions harm shareholders? *Journal of Corporate Finance*, 16(4), 487-497.
- Stulz, R. (1990). Managerial discretion and optimal financing policies. *Journal of financial Economics*, 26(1), 3-27.
- Sundaramurthy, C., Mahoney, J. M. and Mahoney, J. T. (1997). 'Board structure, antitakeover provisions and stockholder wealth'. *Strategic Management Journal*, 18, 231–45.
- Tobin, J., & Brainard, W. C. (1977). Asset Markets and the Cost of Capital, Cowles Foundation Paper no. 440, reprinted from: "Private Values and Public Policy. Essays in Honor of William Fellner".

10 Appendix

TABLE 1A: descriptive statistics US and continental Europe sample

US sample:

Percentage of transactions	Amount of cash transactions	Amount of share transactions	Amount of mix transactions	Percentage of cash transactions	Percentage of share transactions	Percentage of mix transactions	Sum of High Tech Industry	Percentage of High Tech Industry	Sum of Attitude is Friendly	Sum of Attitude is Hostile	Percentage of Attitude is Friendly	Percentage of Attitude is Hostile
9%	83	5	38	66%	4%	30%	80	63%	126	0	100%	0%
10%	97	2	42	69%	1%	30%	104	74%	141	0	100%	0%
8%	71	3	29	69%	3%	28%	74	72%	99	4	96%	4%
5%	34	2	33	49%	3%	48%	51	74%	69	0	100%	0%
8%	77	1	31	71%	1%	28%	74	68%	109	0	100%	0%
9%	86	4	27	74%	3%	23%	75	64%	116	1	99%	1%
10%	93	1	46	66%	1%	33%	102	73%	139	1	99%	1%
6%	55	1	29	65%	1%	34%	59	69%	85	0	100%	0%
9%	87	2	33	71%	2%	27%	75	61%	122	0	100%	0%
7%	64	1	34	65%	1%	34%	67	68%	99	0	100%	0%
5%	33	1	37	46%	1%	52%	48	68%	71	0	100%	0%
6%	46	1	35	56%	1%	43%	46	56%	82	0	100%	0%
7%	56	3	33	61%	3%	36%	57	62%	91	1	99%	1%
100%	882	27	447	65%	2%	33%	912	67%	1349	7	99%	1%

Industry Type	Frequency	Percentage
Mining	12	1%
Construction	13	1%
Manufacturing	841	62%
Transportation, Communications, Electric, Gas and Sanitary service	94	7%
Wholesale Trade	40	3%

Retail Trade	46	3%
Services	310	23%
Total	1356	100%

Continental Europe sample:

Percentage of Transaction value	Sum of cash	Sum of stock	Sum of mix	Percentage of cash	Percentage of stock	Percentage of mix	Sum of High-tech industry	percentage of High-tech industry	Sum of Friendly	Sum of Hostile	Percentage of Friendly	Percentage of Friendly
11%	21	1	3	84%	4%	12%	8	32%	25	0	100%	0
13%	29	0	2	94%	0%	6%	14	45%	31	0	100%	0
12%	23	0	5	82%	0%	18%	9	32%	28	0	100%	0
4%	9	0	1	90%	0%	10%	4	40%	10	0	100%	0
8%	17	0	1	94%	0%	6%	10	56%	18	0	100%	0
8%	14	0	5	74%	0%	26%	14	74%	19	0	100%	0
10%	17	0	7	71%	0%	29%	6	25%	24	0	100%	0
5%	9	0	3	75%	0%	25%	6	50%	12	0	100%	0
9%	15	0	5	75%	0%	25%	7	35%	20	0	100%	0
5%	8	0	4	67%	0%	33%	7	58%	12	0	100%	0
4%	6	0	3	67%	0%	33%	5	56%	8	1	89%	0.11111111
6%	7	0	6	54%	0%	46%	8	62%	13	0	100%	0
4%	7	0	3	70%	0%	30%	3	30%	9	1	90%	0.1
100%	182	1	48	79%	0%	21%	101	44%	229	2	99%	0.008658009

Industry Type	Frequency	Percentage
Mining	19	8%
Construction	15	6%
Manufacturing	80	35%
Transportation, Communications, Electric, Gas and Sanitary service	18	8%
Wholesale Trade	16	7%
Retail Trade	32	14%
Services	51	22%
total	231	100%

TABLE 1B: descriptive statistics US and continental Europe sample

United States sample:

Variable	Obs	Mean	Std.	Min	Max
Dealvalue	1,356	5.380.198	1.833.666	2.302.585	11.88989
Tobinsq	1,342	1.245.265	1.438.884	-668.728	9.97218
FCF	1,356	1.962.599	4.264.347	-17111	29877
Leverage	1,348	-.0863114	.9309435	-7.128.015	4.652303
Marketvalue	1,356	8.885.054	1.899.039	-1.555.897	13.51343

Reldealsize	1,356	.5857013	.8309938	-291.224	1.673328
StaggBoard	1,356	.3915929	.4882865	0	1
PoisonPill	1,356	.6718289	.4697207	0	1
GoldenPara	1,356	.9019174	.297536	0	1
LimitAbchby	1,356	.8510324	.3561878	0	1
Supermajor	1,356	.7028024	.4571929	0	1
Gindex	1,356	3.654.867	117.051	0	6
Cash	1,356	.6504425	.4770061	0	1
Stock	1,356	.0199115	.1397478	0	1
MIX	1,356	.329646	.470258	0	1
HighTechIn	1,356	.6725664	.4694501	0	1
Friendly	1,356	.9948378	.0716895	0	1
Hostile	1,356	.0051622	.0716895	0	1
CARMark55	1,356	.0022245	.0640192	-.3331836	.2900218
CARMean55	1,356	.0015508	.0734536	-.3272041	.3385505
CARMark1010	1,356	-.0011299	.0844723	-.3606292	.3894431
CARMean1010	1,356	-.0028086	.0985392	-.4640496	.5852389
CARMark11	1,356	.0029758	.0461044	-.2984989	.2644742
CARMean11	1,356	.0018352	.0503903	-.3033238	.2560292

Continental Europe Sample:

Variable	Obs	Mean	Std.	Min	Max
Marketvalue	231	8.873.614	1.383.994	3.875.338	11.76852
Dealvalue	231	4.592.353	1.892.036	-.4732088	9.696354
TobinsQ	230	.7078354	.7641551	-3.909.661	2.364478
FCF	231	7.750.383	1.246.416	-3408.06	7133.75
Leverage	182	.3393658	1.702.591	-3.228.147	4.730192
Reldealsize	231	.5174975	.2008027	-.0872823	1.13513
PoisonPill	231	.021645	.1458375	0	1
StaggBoard	231	.5411255	.4993879	0	1
Supermajor	231	.4112554	.4931299	0	1
GoldenPara	231	.2597403	.4394442	0	1
Limitabchby	231	.8138528	.3900706	0	1
G-index	231	2.047.619	105.599	0	5
Stock	231	.004329	.0657952	0	1
Mix	231	.2077922	.4066083	0	1
HightechIn	231	.4372294	.4971214	0	1
Friendly	231	.991342	.0928459	0	1
Hostile	231	.008658	.0928459	0	1
CARMark55	231	.0007058	.0521421	-.2041512	.1498294
CARMeana55	231	-.0073946	.0677515	-.2595657	.2205779
CARMark1010	231	-.009759	.148061	-.8515758	.5040228
CARMean1010	231	-.0132605	.105506	-.4434178	.2806072
CARMark11	231	.0030542	.031456	-.0634888	.2028968
CARMean11	231	.0008263	.0343568	-.076908	.2064887

TABLE 2A: ANOVA test results for US Sample and continental Europe

ANOVA result for United States sample:

		SS	df	Mean Square	F-stat	Prob>F
CARMeanadjustedreturn55	Between groups	.055170733	6	.009195122	1.71	0.1151
	Within groups	7.25564552	1349	.005378536		
	Total	7.31081625	1355	.005395436		
CARMarketmodeladjustedreturn55	Between groups	.035351124	6	.005891854	1.44	0.1956
	Within groups	5.51805771	1349	.00409048		
	Total	5.55340883	1355	.004098457		
CARMeanadjustedreturn1010	Between groups	.071494277	6	.011915713	1.23	0.2887
	Within groups	13.0855141	1349	.009700159		
	Total	13.1570083	1355	.009709969		
CARMarketmodeladjustedreturn1010	Between groups	.03906918	6	.00651153	0.91	0.4851
	Within groups	9.62963402	1349	.00713835		
	Total	9.66870319	1355	.007135574		
CARMeanadjustedreturn11	Between groups	.018248832	6	.003041472	1.20	0.3041
	Within groups	3.42234159	1349	.002536947		
	Total	3.44059042	1355	.002539181		
CARMarketmodeladjustedreturn1010	Between groups	.013270856	6	.002211809	1.04	0.3969
	Within groups	2.86694462	1349	.002125237		
	Total	2.88021547	1355	.00212562		

ANOVA result Continental Europe sample:

		SS	df	Mean Square	F-stat	Prob>F
CARMeanadjustedreturn55	Between groups	.01105291	6	.001842152	0.39	0.8818
	Within groups	1.04470833	224	.004663876		
	Total	1.05576124	230	.004590266		
CARMarketmodeladjustedreturn55	Between groups	.00478042	6	.000796737	0.29	0.9424
	Within groups	.620542365	224	.002770278		
	Total	.625322785	230	.002718795		
CARMeanadjustedreturn1010	Between groups	.021815466	6	.003635911	0.32	0.9257
	Within groups	2.53843236	224	.011332287		
	Total	2.56024783	230	.011131512		
CARMarketmodeladjustedreturn1010	Between groups	.026841225	6	.004473538	0.20	0.9766
	Within groups	5.01523538	224	.022389444		
	Total	5.0420766	230	.021922072		
CARMeanadjustedreturn11	Between groups	.001107915	6	.000184653	0.15	0.9883
	Within groups	.270381314	224	.001207059		
	Total	.271489229	230	.001180388		
CARMarketmodeladjustedreturn11	Between groups	.021795491	6	.003632582	0.16	0.9864
	Within groups	5.02028111	224	.022411969		
	Total	5.0420766	230	.022411969		

TABLE 2B:

Comparison of CAR (Mean adjusted return)(-5,5) by SIC Code (Bonferroni)

2 = Mining, 1000-1499

3 = Construction, 1500-1799

4 = Manufacturing, 2000-3999

5 = Transportation, Communications, Electric, Gas and Sanitary service, 4000-4999

6 = Wholesale Trade, 5000-5199

7 = Retail Trade, 5200-5999

9 = Services, 7000-8999

TABLE 2C: correlation analysis, US sample

US sample:

Mean Difference	2	3	4	5	6	7		
3	.018578 1.000							
4	.043151 0.907	.024573 1.000						
5	.055782 0.276	.037203 1.000	.01263 1.000					
6	.052623 0.608	.034045 1.000	.009472 1.000	-.003158 1.000				
7	.055873 0.391	.037295 1.000	.012722 1.000	.000092 1.000	.00325 1.000			
9	.04645 0.662	.027872 1.000	.003299 1.000	-.009331 1.000	-.006173 1.000	-.009423 1.000		
				SS	df	Mean Square	F-stat	Prob>F
CARMeanadjustedreturn55			Between groups	.121307555	12	.010108963	1.89	0.0318
			Within groups	7.1895087	1343	.00535332		
			Total	7.31081625	1355	.005395436		
CARMarketmodeladjustedreturn55			Between groups	.044957168	12	.003746431	0.91	0.5326
			Within groups	5.50845166	1343	.004101602		
			Total	5.55340883	1355	.004098457		
CARMeanadjustedreturn1010			Between groups	.37232105	12	.031026754	3.26	0.0001
			Within groups	12.7846873	1343	.009519499		
			Total	13.1570083	1355	.009709969		
CARMarketmodeladjustedreturn1010			Between groups	.155911174	12	.012992598	1.83	0.0385
			Within groups	9.51279202	1343	.007083241		
			Total	9.66870319	1355	.007135574		
CARMeanadjustedreturn11			Between groups	.051171455	12	.004264288	1.69	0.0634
			Within groups	3.38941897	1343	.002523767		
			Total	3.44059042	1355	.002539181		
CARMarketmodeladjustedreturn11			Between groups	.037761273	12	.003146773	1.49	0.1222
			Within groups	2.8424542	1343	.002116496		
			Total	2.88021547	1355	.00212562		

TABLE 2D: Bonferroni test, for Pre-Crisis-Post

United states sample:

CAR(Mean adjusted return) [-5,5]

Mean	Pre-Crisis	Crisis
Crisis	-.003336 1.000	
Post-Crisis	.002908 1.000	.006244 0.583

CAR(Market model adjusted return) [-5,5]

Mean	Pre-Crisis	Crisis
Crisis	-.000726 1.000	
Post-Crisis	.006717 0.808	.007443 0.227

CAR(Mean adjusted return) [-10,10]

Mean	Pre-Crisis	Crisis
Crisis	-.013226 0.608	
Post-Crisis	.003721 1.000	.016947 0.026

CAR(Market model adjusted return) [-10,10]

Mean	Pre-Crisis	Crisis
Crisis	-.004364 1.000	
Post-Crisis	.0106 0.557	.014964 0.020

CAR(Mean adjusted return) [-1,1]

Mean	Pre-Crisis	Crisis
Crisis	-.000785 1.000	
Post-Crisis	.009067 0.173	.009852 0.008

CAR(Market model adjusted return) [-1,1]

Mean	Pre-Crisis	Crisis
Crisis	.001335 1.000	
Post-Crisis	.008795 0.133	.00746 0.040

Continental Europe sample:

CAR (Mean adjusted return) [-5,5]

Mean	Pre-Crisis	Crisis
Crisis	-.031994 0.113	
Post-Crisis	-.026382 0.230	.005612 1.000

Mean	Pre-Crisis	Crisis
Crisis	-.003336 1.000	

Post-Crisis	-.002908	-.006244
	1.000	0.583

CAR (Market model adjusted return) [-5,5]

Mean	Pre-Crisis	Crisis
Crisis	-.022353	
	0.173	
Post-Crisis	-.028616	-.006264
	0.037	1.000

CAR (Mean adjusted return) [-10,10]

Mean	Pre-Crisis	Crisis
Crisis	-.033979	
	0.472	
Post-Crisis	-.027842	.006137
	0.695	1.000

CAR (Market model adjusted return) [-10,10]

Mean	Pre-Crisis	Crisis
Crisis	-.044898	
	0.549	
Post-Crisis	-.036388	.00851
	0.796	1.000

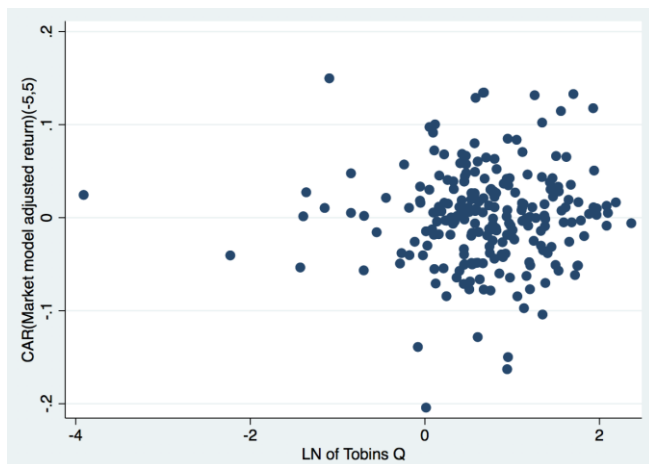
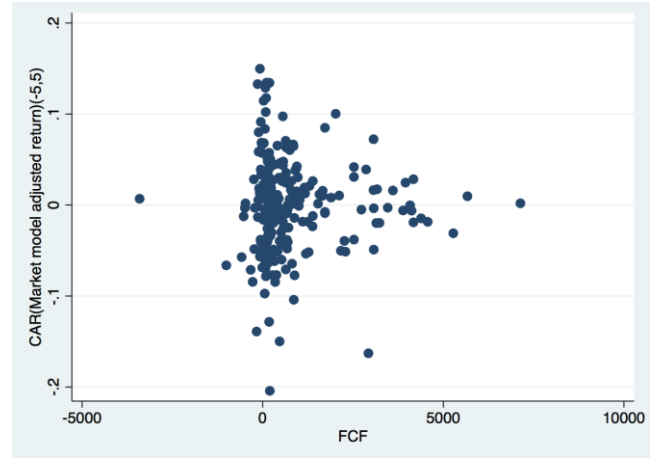
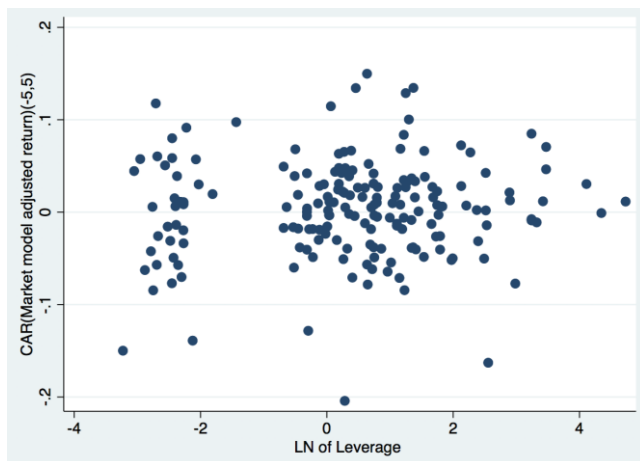
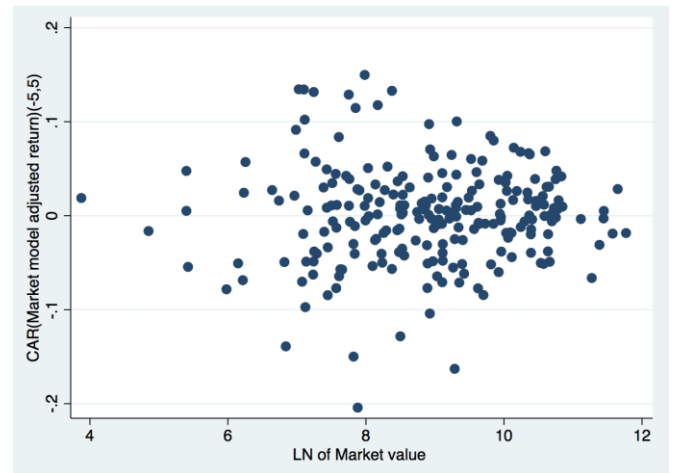
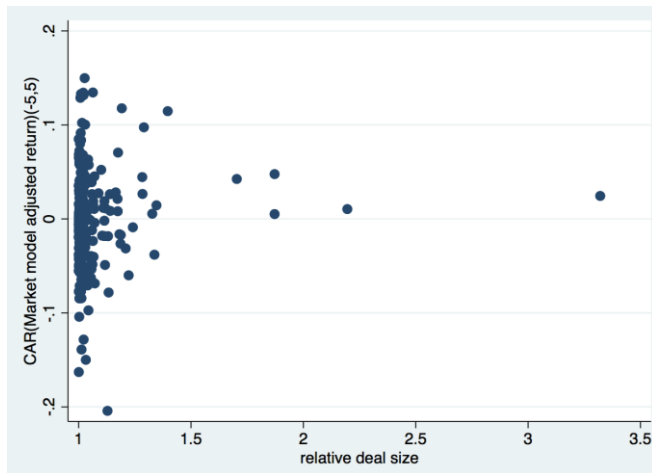
CAR (Mean adjusted return) [-1,1]

Mean	Pre-Crisis	Crisis
Crisis	-.0265290	
	.002	
Post-Crisis	-.024441	.002088
	0.003	1.000

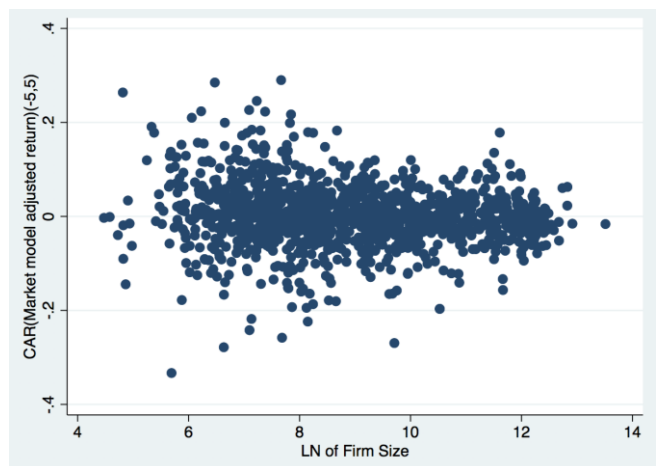
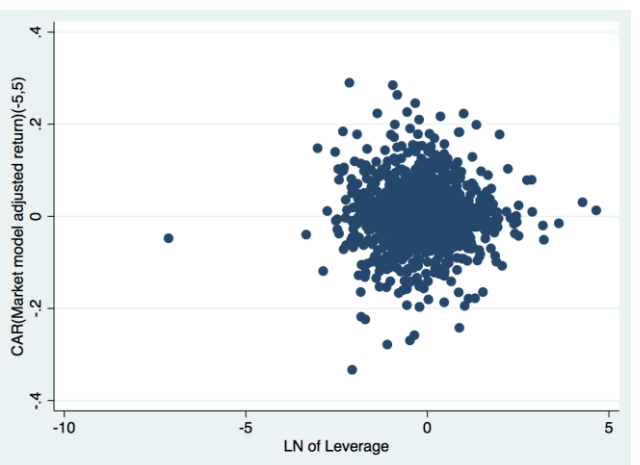
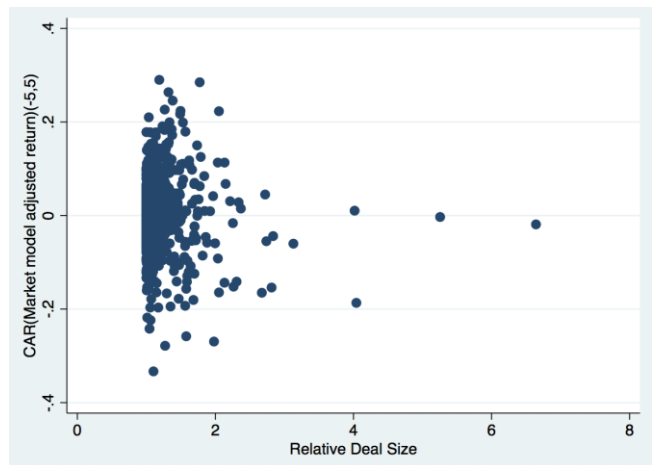
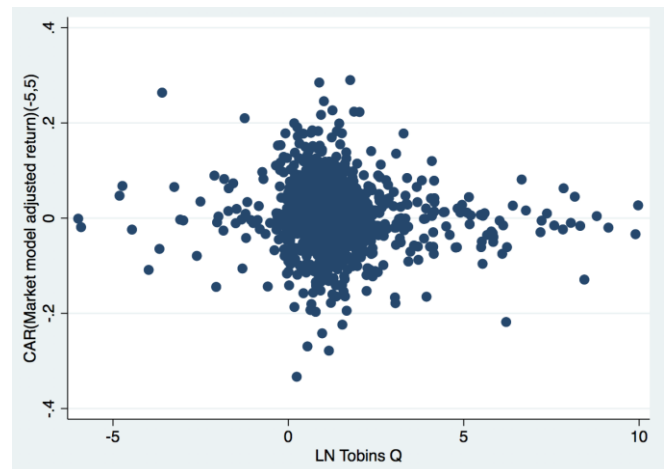
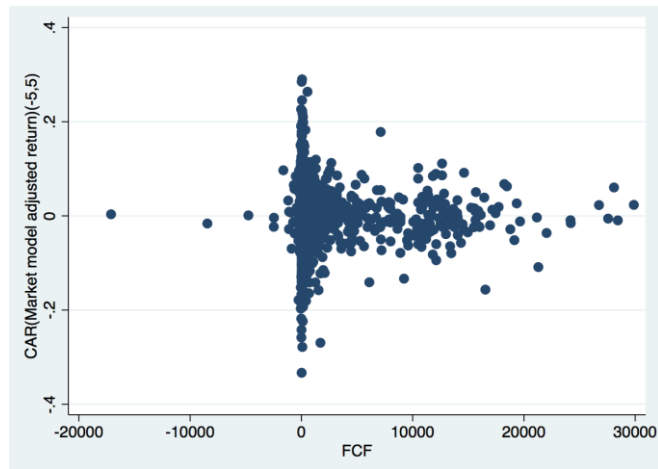
CAR (Market model adjusted return) [-1,1]

Mean	Pre-Crisis	Crisis
Crisis	-.021927	
	0.006	
Post-Crisis	-.020485	.001442
	0.009	1.000

Graph 1A: scatterplots residuals, **Continental Europe sample**

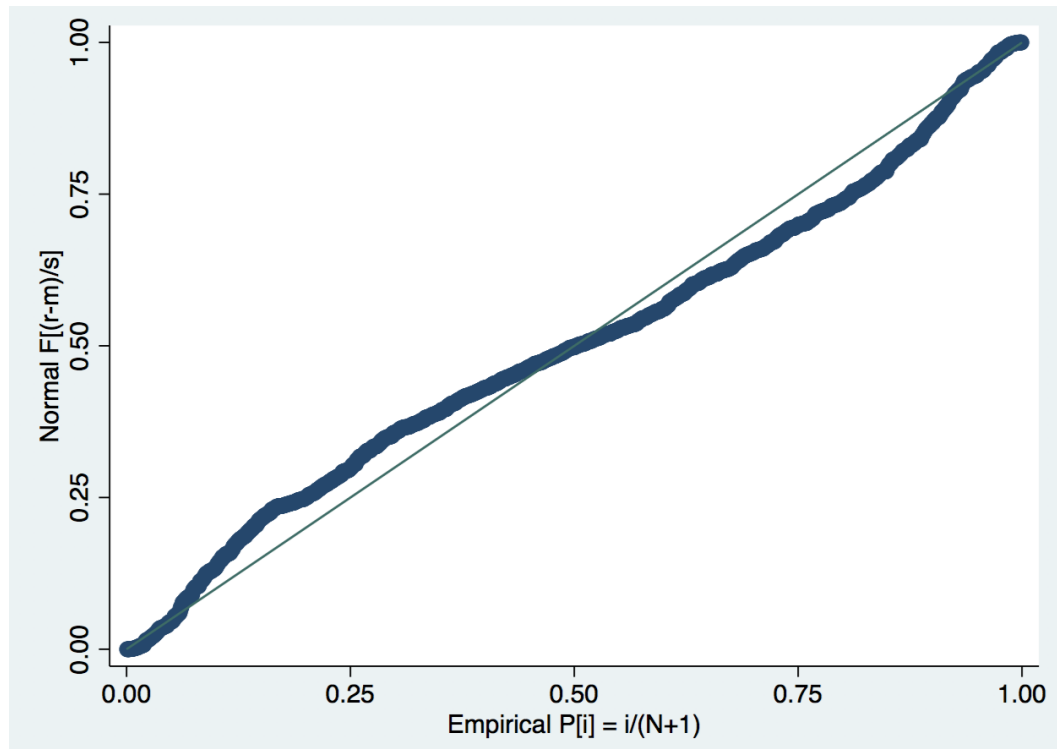


Graph 1B: scatterplot residuals, **US sample**

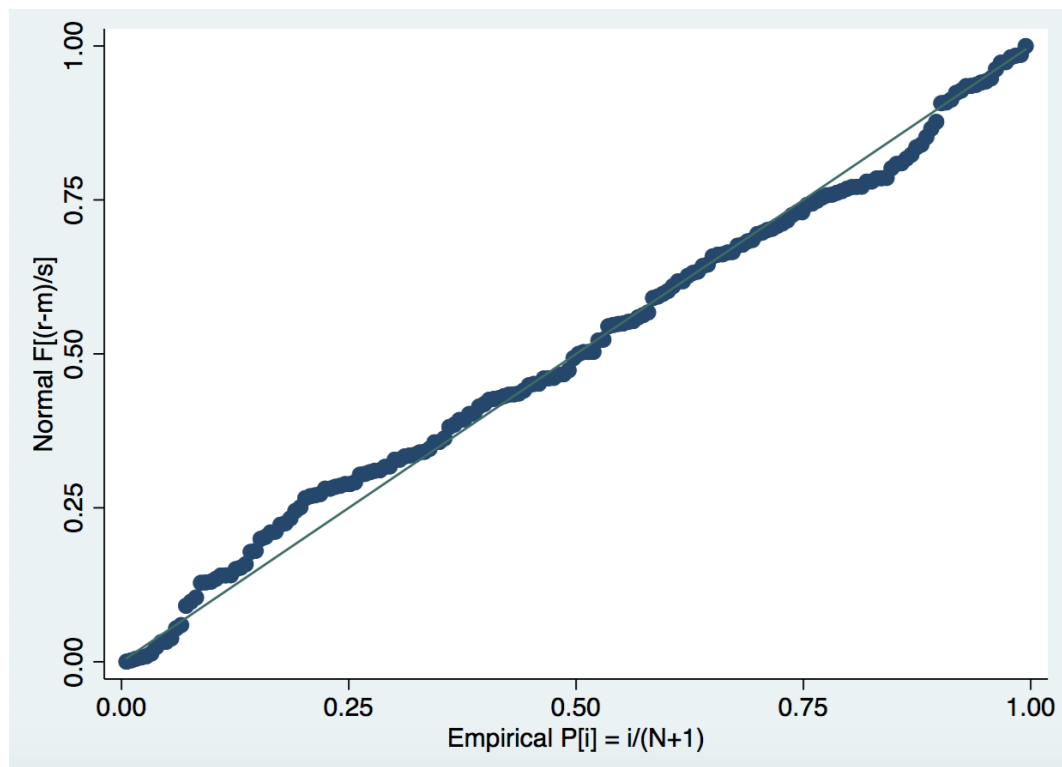


Graph 2A: P-value plot US sample and Continental Europe sample

US sample

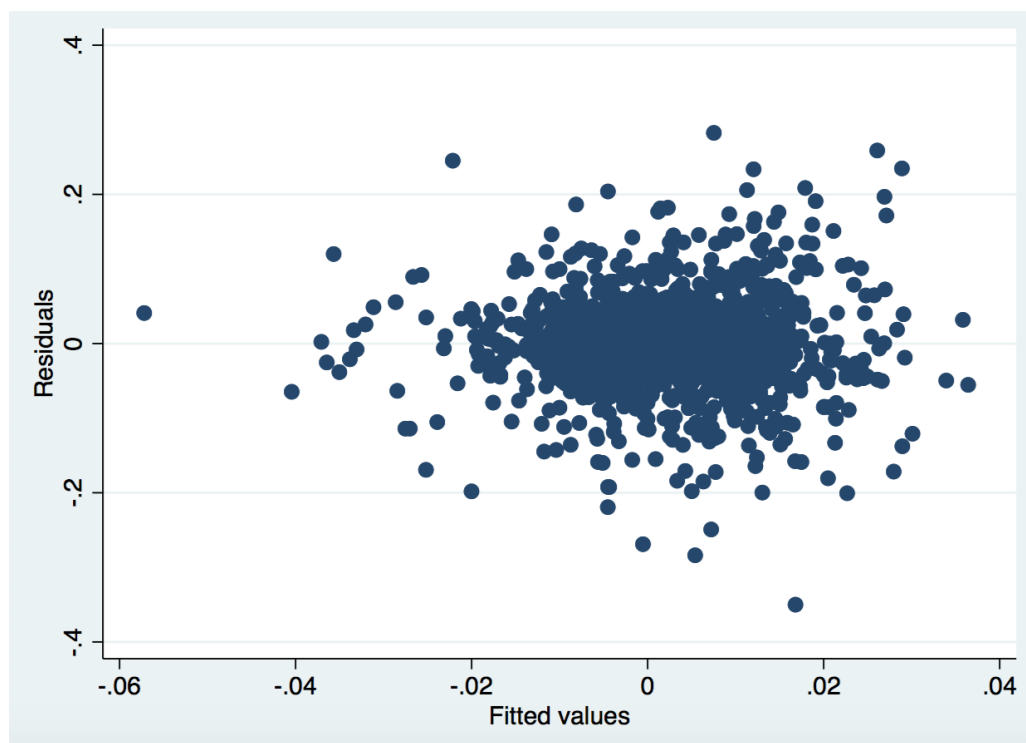


Continental Europe sample



Graph 2B: residual scatterplot both samples:

US sample



Continental Europe sample

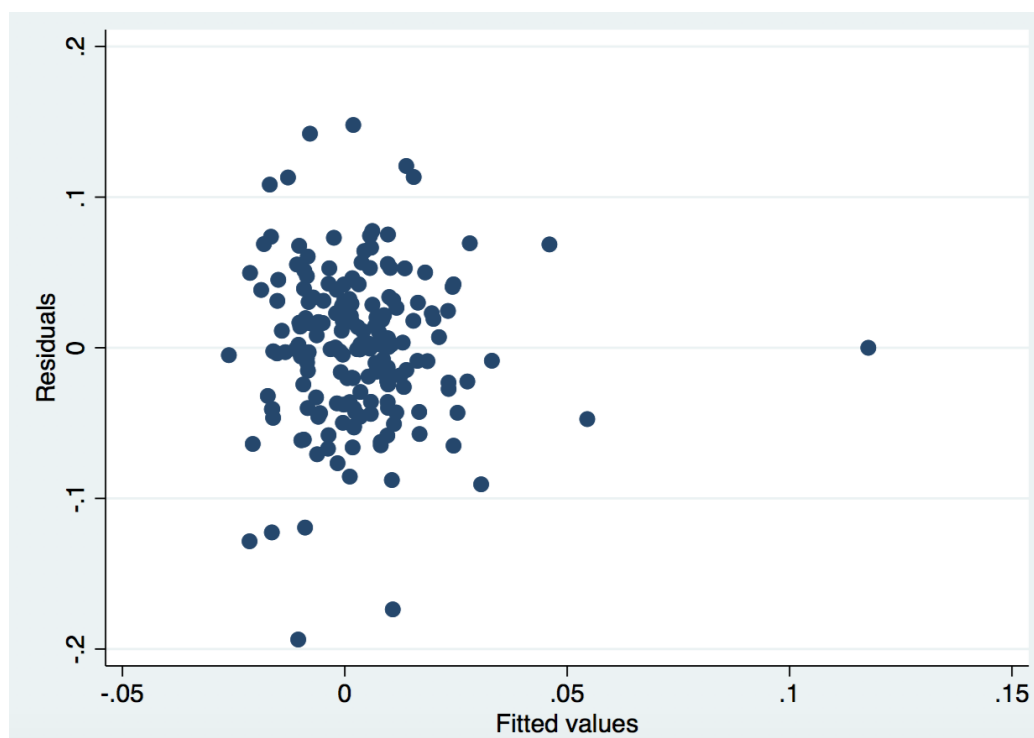


Table 3A: US sample, robustness test

VARIABLES	regressionUS Market[-10,10]	regressionUS Mean[-10,10]	regressionUS Market[-1,1]	regressionUS Mean[-1,1]
ClassifiedBoard	0.0159*** (0.00591)	0.0129** (0.00508)	0.00594** (0.00303)	0.00543** (0.00276)
PoisonPill	-0.0136** (0.00653)	-0.0138** (0.00561)	-0.00272 (0.00334)	-0.00455 (0.00305)
GoldenParachute	-0.0214** (0.00935)	-0.0195** (0.00804)	-0.00825* (0.00479)	-0.00791* (0.00437)
Supermajorityto ApproveMerger	-0.00892 (0.00821)	-0.00558 (0.00706)	-0.00671 (0.00421)	-0.00601 (0.00384)
Limitabchby	0.0179 (0.0114)	0.0141 (0.00984)	0.00704 (0.00586)	0.00686 (0.00535)
LNofFirmSize	-0.00569** (0.00242)	-0.00470** (0.00208)	-0.00263** (0.00124)	-0.00238** (0.00113)
LNofLeverage	0.00651** (0.00321)	0.00564** (0.00276)	0.00121 (0.00164)	0.000936 (0.00150)
LNTobinsQ	-0.00229 (0.00240)	-0.00234 (0.00207)	-0.000349 (0.00123)	2.05e-05 (0.00112)
LNoftransaction	-0.00222 (0.00201)	-0.00146 (0.00173)	-0.00107 (0.00103)	-0.00117 (0.000939)
RelativeDealSize	-0.000341 (0.000377)	-0.000271 (0.000324)	-3.36e-05 (0.000193)	6.19e-05 (0.000176)
FCF	9.04e-07 (8.72e-07)	3.66e-07 (7.50e-07)	4.05e-07 (4.47e-07)	3.87e-07 (4.08e-07)
HighTechIndustry	-0.00203 (0.00612)	0.000586 (0.00526)	-0.00525* (0.00313)	-0.00545* (0.00286)
Stock	-0.0116 (0.0199)	-0.0288* (0.0171)	-0.0152 (0.0102)	-0.0189** (0.00928)
MIX	0.00592 (0.00648)	0.00130 (0.00557)	0.000423 (0.00332)	0.000482 (0.00303)
Constant	0.0715*** (0.0213)	0.0553*** (0.0183)	0.0323*** (0.0109)	0.0318*** (0.00997)
Observations	1,339	1,339	1,339	1,339

R-squared

0.161

0.151

0.143

0.145

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

This OLS regression models includes both the small sample of the US and continental Europe. Furthermore, the time fixed effect is excluded in the OLS regression and the CAABR is calculated on the basis of the market model with an event window of [-10, 10], [-1, 1]. Also the CAABR is calculated on the basis of the Mean model with an event window of [-10, 10], [-1, 1]. This regression includes all the ATPs separately. Poison-pill: To measure the impact of the poison pill, a dummy variable is created, the variable equals 1 when the target has implemented a poison pill, and equals 0 if this is not the case. The classified board: is a dummy variable which values 1 when the acquiring company has a classified board in place and values 0 when it does not have a classified board in place. Supermajority to approve merger: A dummy variable is created which equals 1 when the acquirer has a supermajority requirement for the merger in place, and values 0 when this ATP is absent. Golden parachute: A dummy variable is created which equals 1 when there is a golden parachute in place, and equals 0 when this is not the case. Limitabchby: This variable denotes 1 if there are Limits to shareholder bylaw amendments are place and denotes when this ATP is not in place. In order to measure the effect of Limits to shareholder charter amendments on the abnormal returns of the acquiring company a dummy variable is created. This variable value 1 when there are Limits to shareholder charter amendments in place, and values 0 if this ATP is not in place. Market value: firm size of the acquirer is defined as the natural logarithm of the market capitalization, which, in turn, is calculated by multiplying the total number of shares outstanding by the acquirer times the acquirer's stock price four weeks prior to the announcement date. Leverage: The Leverage of the acquirer is calculated by dividing the natural logarithm of liabilities by the shareholders' equity (Nissim, Doron, and Stephen H. Penman, 2003). The dates and financial information are the most recent available for a 12-month period prior to the original announcement date of the deal. Tobin's q: The Tobin's Q is defined as the natural logarithm of the market-to-book ratio two weeks prior to the announcement date of the acquisition/merger. Transaction value: The amount which is paid by the bidder to acquire the targeted company. FCF: The free cash flow is defined as the natural logarithm of the free cash flow and calculated by adding up the net income and non-cash expenses, and subtracting the increase in working capital and capital expenditures. The income and expenses are conducted for the last 12 months of the announcement effect of the acquiring company. High-tech industry: Here a dummy variable is created that values 1 when the company operates in one of the industries stated above and values 0 when it operates outside of these industries. Stock transaction: When the acquisition/merge is paid in cash the dummy Stock transaction denotes 1 if not the dummy denotes 0. Mix transaction: if the acquisition/merge is paid in stock and cash, the dummy Mix transaction denotes 1.

Table 3b: Continental Europe sample, robustness test

VARIABLES	regressionEU mean[-10,10]	regressionEU market[-10,10]	regressionEU mean[-1,1]	regressionEU market[-1,1]
PoisonPill	0.0358 (0.0575)	0.00588 (0.0799)	0.0403** (0.0189)	0.0483*** (0.0174)
StaggeredBoardStructure	0.0290 (0.0182)	0.0255 (0.0253)	0.0114* (0.00599)	0.00965* (0.00550)
SupermajorityorQualifiedMajor	0.00509 (0.0167)	0.0293 (0.0232)	0.00205 (0.00549)	0.00620 (0.00504)
GoldenParachute	-0.0124 (0.0207)	-0.0190 (0.0287)	0.0119* (0.00681)	0.00751 (0.00625)
SignificantCompanyTransactions	-0.0284 (0.0215)	-0.0430 (0.0299)	-0.00771 (0.00709)	-0.00625 (0.00651)
LNofMarketvalue	0.00315 (0.00923)	0.00490 (0.0128)	-0.00517* (0.00304)	-0.00530* (0.00279)
LNofLeverage	-0.00341 (0.00499)	-0.00340 (0.00693)	-0.00159 (0.00164)	-0.00124 (0.00151)
LNofTobinsQ	0.000692	-0.00126	0.00327	0.00583

	(0.0126)	(0.0174)	(0.00414)	(0.00380)
LNoTransactionvalue	-0.00144	-0.00263	0.00163	0.00139
	(0.00561)	(0.00779)	(0.00185)	(0.00170)
relativedealsize	0.0214	0.0269	0.00887	0.00442
	(0.0495)	(0.0688)	(0.0163)	(0.0150)
FCF	6.63e-07	1.56e-06	-2.02e-07	1.22e-06
	(8.38e-06)	(1.16e-05)	(2.76e-06)	(2.54e-06)
Hightechindustry	-0.00118	-0.00875	-0.00229	-0.00153
	(0.0178)	(0.0248)	(0.00587)	(0.00539)
stock	-0.403***	-0.651***	0.0837**	0.0941***
	(0.106)	(0.148)	(0.0350)	(0.0321)
mix	0.0236	0.0359	-0.00760	-0.00892
	(0.0206)	(0.0286)	(0.00679)	(0.00623)
Constant	-0.0145	0.00347	0.0481	0.0502
	(0.102)	(0.141)	(0.0335)	(0.0308)
Observations	182	182	182	182
R-squared	0.201	0.191	0.269	0.290

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

This OLS regression models includes both the small sample of the US and continental Europe. Furthermore, the time fixed effect is excluded in the OLS regression and the CAABR is calculated on the basis of the market model with an event window of [-10, 10], [-1, 1]. Also the CAABR is calculated on the basis of the Mean model with an event window of [-10, 10], [-1, 1]. This regression includes all the ATPs separately. Poison-pill: To measure the impact of the poison pill, a dummy variable is created, the variable equals 1 when the target has implemented a poison pill, and equals 0 if this is not the case. The classified board: is a dummy variable which values 1 when the acquiring company has a classified board in place and values 0 when it does not have a classified board in place. Supermajority to approve merger: A dummy variable is created which equals 1 when the acquirer has a supermajority requirement for the merger in place, and values 0 when this ATP is absent. Golden parachute: A dummy variable is created which equals 1 when there is a golden parachute in place, and equals 0 when this is not the case. Limitabchby: This variable denotes 1 if there are Limits to shareholder bylaw amendments are place and denotes when this ATP is not in place. In order to measure the effect of Limits to shareholder charter amendments on the abnormal returns of the acquiring company a dummy variable is created. This variable value 1 when there are Limits to shareholder charter amendments in place, and values 0 if this ATP is not in place. Market value: firm size of the acquirer is defined as the natural logarithm of the market capitalization, which, in turn, is calculated by multiplying the total number of shares outstanding by the acquirer times the acquirer's stock price four weeks prior to the announcement date. Leverage: The Leverage of the acquirer is calculated by dividing the natural logarithm of liabilities by the shareholders' equity (Nissim, Doron, and Stephen H. Penman, 2003). The dates and financial information are the most recent available for a 12-month period prior to the original announcement date of the deal. Tobin's q: The Tobin's Q is defined as the natural logarithm of the market-to-book ratio two weeks prior to the announcement date of the acquisition/merger. Transaction value: The amount which is paid by the bidder to acquire the targeted company. FCF: The free cash flow is defined as the natural logarithm of the free cash flow and calculated by adding up the net income and non-cash expenses, and subtracting the increase in working capital and capital expenditures. The income and expenses are conducted for the last 12 months of the announcement effect of the acquiring company. High-tech industry: Here a dummy variable is created that values 1 when the company operates in one of the industries stated above and values 0 when it operates outside of these industries. Stock transaction: When the acquisition/merge is paid in cash the dummy Stock transaction denotes 1 if not the dummy denotes 0. Mix transaction: if the acquisition/merge is paid in stock and cash, the dummy Mix transaction denotes 1.