THE IMPACT OF MERGERS AND ACQUISITIONS ON SHORT-TERM STOCK PRICE REACTIONS ON THE ACQUIRER SIDE IN THE U.S. INSURANCE SECTOR

Lappeenranta–Lahti University of Technology LUT

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Examiner: University lecturer, Roman Stepanov

ABSTRACT

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This bachelor's thesis examines the impact of mergers and acquisitions on short-term stock price changes in the U.S. insurance sector. The topic has been studied in various industries and markets, with results often varying. Target companies typically show positive short-term stock price changes, while acquiring companies experience more variable reactions, which are frequently negative. The importance of the insurance sector for both individuals and businesses highlights its relevance as a research focus. The U.S., as the largest insurance market, offers critical insights into the overall dynamics of market reactions.

This study analysed 91 mergers and acquisitions from 2015 to 2023. Using the event study methodology, the results revealed that the cumulative average abnormal return for acquiring companies was -0.86% during the first two days following the announcement. This result is statistically significant at the 5% level. Additionally, the research explores the effects of the COVID-19 pandemic and different types of mergers and acquisitions on acquiring companies' market reactions. The findings indicate that the pandemic moderated market reactions, reducing the negative impact on acquiring companies' stock prices. Among different types of transactions, domestic and industry-related deals produced more favourable market reactions compared to cross-border and cross-industry acquisitions.

TIIVISTELMÄ

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Kauppatieteet

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Yrityskauppojen ja fuusioiden vaikutus hankkivan yrityksen osakekurssin lyhyen aikavälin reaktioihin Yhdysvaltojen vakuutusalalla

Kauppatieteiden kandidaatintutkielma

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Tässä kandidaatintutkielmassa tutkitaan yrityskauppojen ja fuusioiden vaikutusta lyhyen aikavälin osakekurssimuutoksiin Yhdysvaltojen vakuutusalalla. Aihetta on tutkittu eri aloilla sekä markkinoilla ja tulokset ovat vaihtelevia. Kohdeyrityksillä on havaittu usein positiivisia osakekurssimuutoksia, kun taas hankkivien yritysten osakekurssien muutokset ovat olleet vaihtelevampia, mutta usein lyhyenaikavälin muutokset ovat olleet negatiivisia. Vakuutusalan merkitys sekä yksilöille että yrityksille korostaa sen tärkeyttä tutkimuskohteena. Yhdysvallat ovat suurin markkina vakuutusalalla ja tämän markkinan reaktioiden tutkiminen on tärkeää kokonaiskuvan kannalta.

Tässä tutkimuksessa analysoitiin 91 yrityskauppaa aikaväliltä 2015–2023. Tapahtumatutkimusmenetelmällä saadut tulokset osoittavat, että hankkivan yrityksen keskimääräinen kumulatiivinen epänormaali tuotto on -0,86 % ensimmäisen kahden päivän aikana. Tämä tulos on tilastollisesti merkitsevä 5 %:n merkitsevyystasolla. Lisäksi tutkimuksessa käsitellään COVID-19-pandemian sekä erityyppisten yrityskauppojen vaikutuksia hankkivan yrityksen markkinareaktioihin. Tutkimuksen perusteella pandemia lievensi markkinareaktioita, ja negatiivinen vaikutus hankkivien yritysten osakekursseihin väheni. Erityyppisissä kaupoissa maan ja vakuutusalan sisäiset yrityskaupat vaikuttivat markkinoihin positiivisemmin verrattuna rajat ylittäviin ja toimialojen välisiin yrityskauppoihin.

ABBREVIATIONS

AAR	Average Abnormal Returns
AR	Abnormal Returns
CAAR	Cumulative Average Abnormal Returns
CAR	Cumulative Abnormal Returns
EMH	Efficient Market Hypothesis
M&A	Mergers and Acquisitions

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1 Introduction

The announcement of mergers and acquisitions (M&A) typically triggers a market reaction, most notably reflected in the share prices of the companies involved. From the target company's perspective, numerous studies agree that the effect of an acquisition on the share price is generally positive. However, this study focuses on the acquirer's side and the short-term market reaction to M&A announcements. On the side of the acquiring company, the results have varied significantly more. (Cummins, Klumpes & Weiss, 2015, 444-448) In the insurance sector, particularly, limited research with variable results has been conducted on stock price movements in the context of M&A, creating a gap that this study aims to address.

In recent years, the U.S. insurance industry has witnessed significant M&A activity. In 2023, there were 807 insurance brokerage transactions, representing a 10.6% decrease from 2022, yet it was still the third-highest year on record for M&A activity in the industry. This high level of activity was largely driven by private equity-backed acquirers, who accounted for the majority of the deals. (MarshBerry, 2024) By mid-2024, the insurance sector had completed 145 announced deals totalling more than $34 billion in deal value (PwC, 2024). Consistent activity makes the U.S. an ideal market for studying the effects of M&A on stock returns, particularly as it is the largest insurance market globally and often sets trends for the industry.

The short-term market reaction to M&A announcements is often a direct reflection of investor sentiment regarding the potential profitability of the deal. Therefore, it is essential to not only study the market's response but also examine the broader motivations for M&A. The most common reason for M&A is the pursuit of growth, often through synergies such as cost savings or efficiencies created by combining two entities (Bauer & Friesl, 2024, 51-52). Acquisitions can also facilitate expansion into new markets or product areas. Historically, the market has reacted more strongly to cross-border deals than domestic transactions, though there is significant variation across sectors, and research in the insurance sector remains limited. A more positive market reaction has also been observed in inside-industry M&A transactions compared to M&A transactions between different industries.

In addition to the various motivations for and forms of acquisitions, the overall economic environment plays a role in shaping the market's initial reaction to M&A announcements. For instance, the financial crisis created a weak and unstable market environment, which reduced M&A activity (Rao-Nicholson & Salaber, 2016). Similarly, the COVID-19 pandemic has been a major crisis that disrupted global markets. Investigating the impact of such crises on M&A reactions provides valuable insight into how external factors influence investor behaviour. Understanding the market's response to M&A announcements during times of crisis, such as COVID-19, is critical, as these reactions can change significantly based on the macro-economic situation.

1.1 Research Questions and Goal of the Study

The aim of this study is to examine the short-term stock price reactions to the announcement of mergers and acquisitions (M&A) in the insurance sector. This study focuses on the moment of the announcement rather than the transaction itself, as the announcement phase is often the most critical in shaping market responses. Different market conditions and transaction types significantly influence how the market reacts to this new information, with investors processing the potential impact of the future transaction at this stage. The analysis covers events from 2015 to 2023, providing a comprehensive view and ensures the best possible data for researching the topic. This timeframe includes the globally impactful COVID-19 pandemic, which significantly affected the economy. One purpose of this thesis is to investigate how the pandemic influenced market reactions following M&A announcements. Additionally, this thesis aims to examine different types of M&A transactions, as these variations significantly influence market reactions. Specifically, the study will investigate differences in market reactions between domestic and cross-border M&As, as well as between inside-industry and cross-industry transactions.

All transactions analysed are related to the U.S. market, ensuring that the acquiring company is based in the U.S. Given the U.S.'s position as a key player in the global insurance market, the findings will be relevant to the industry and allow for direct comparability. The quantitative analysis will be conducted using the event study methodology, which is particularly effective for examining short-term stock market changes in response to unexpected announcements due to its ability to isolate the effects of specific events. This methodology allows for a varied evaluation of market reactions to various types of acquisitions.

To achieve the goals of this thesis and address the central research issue, the following main research questions have been defined:

Is there a short-term stock price reaction in the insurance sector following the announcement of mergers and acquisitions?

Is the possible short-term stock price reaction generally positive or negative?

The first question directly addresses the main focus of this research, seeking to uncover the immediate reaction of M&A announcements on shareholder value. The second question complements the first by further refining the investigation into the nature of these reactions. It also highlights the complexities of predicting stock price movements. Together, these questions create a structured framework for the research and provide the reader with a clear understanding of the overall focus of the study.

The following sub-questions have been developed to complement the main research questions and provide a more in-depth analysis:

How did COVID-19 affect short-term stock price reactions to mergers and acquisitions?

How does short-term stock price reactions differ between domestic and cross-border mergers and acquisitions?

What are the differences in short-term stock price reactions between expansive and diversifying mergers and acquisitions?

Given the timeframe of this research, it is essential to consider the significant global crise that influenced the economic landscape during this period. The first sub-question investigates the impact of COVID-19, offering key insights into how major economic disruptions affect M&A outcomes. By comparing these findings with prior research on financial crises, this study can identify patterns and commonalities in market responses, helping reveal how different crises shape initial stock price reactions to M&A announcements. The second sub-question addresses market reactions to domestic versus cross-border M&A, offering a deeper understanding of the different types of M&A transactions and their short-term market responses. Lastly, the third sub-question broadens the analysis by investigating the effects of expansive (inside-industry) versus diversifying (cross-industry) M&A transactions on stock price reactions, creating a multi-dimensional understanding of the subject. Together, these sub-questions are designed to enrich the study and contribute to a comprehensive understanding of the topic.

1.2 Research Boundaries

The factors influencing share price changes in the context of M&A announcements are numerous and complex. Different types of M&A transactions carry unique implications that can significantly affect the market reaction. This complexity is heightened in the insurance sector, where companies often face varied operational environments and regulatory challenges. Furthermore, external conditions, such as economic trends and industry developments, can also impact how the market reacts to M&A announcements, underscoring the need for a nuanced analysis in this diverse field. (Agrawal, Jaffe & Mandelker, 1992) It is impossible to isolate all these factors in a single study and therefore individual cases may change the result to a less correct one.

The event study methodology is predicated on the assumption that the efficient market hypothesis holds true for market prices. The efficient market hypothesis does not need to hold perfectly, but the assumption is the semi-strong form, which means that all publicly available information is reflected in the stock price. This allows us to interpret the relevance of the occurrence. Furthermore, variations in the information available about the financial conditions of the companies involved and the specifics of the transactions can lead to inaccuracies in the results. (Fama, 1970)

1.3 Structure

This thesis is structured into seven main chapters. The first chapter, the introduction, presents the research topic, outlines the objectives of the study, and defines the research questions. The second major component of the thesis is the theoretical framework, which encompasses chapters two and three. Chapter two delves into different types of mergers and acquisitions (M&A), while chapter three explores the theories and assumptions behind M&A.

Chapter four reviews existing literature and relevant studies, highlighting their findings and contributions to the field. In chapter five, the data collection process is detailed, along with an explanation of the event study methodology employed in the research. Chapter six presents the results of the event studies, along with an evaluation of the hypotheses and their validity based on the findings, as well as an assessment of the reliability of the results and the factors influencing the outcomes. Finally, chapter seven provides the conclusion, summarizing the key findings, addressing the research questions, and suggesting potential directions for future research.

2 Understanding of Mergers and Acquisitions

This section provides an overview of the general theories related to the key themes of this thesis, focusing primarily on mergers and acquisitions (M&A) and their various aspects. Although "mergers" and "acquisitions" are distinct concepts, they are often collectively referred to as M&A. This section will clarify the differences between these terms, but for simplicity and consistency, the term "M&A" will be used throughout this thesis, as is common in many studies. The section begins by introducing different types of M&A transactions and highlighting their key differences. It then explores the benefits that companies aim to achieve through these transactions and outlines the M&A process in brief. Following this, study focuses on insurance industry and the current state of the insurance in the U.S. market will be discussed in more detail. Lastly, the section examines the impact of crises on the market, with particular emphasis on the effects of the COVID-19 crisis.

2.1 Overview of M&A

Mergers and acquisitions (M&A) are strategic transactions through which companies aim to enhance their efficiency from various perspectives. While M&A deals can have different objectives, the primary goal should always be to increase shareholder value, which is a fundamental principle in finance theory. According to this theory, both parties in an M&A transaction strive to make a deal that is beneficial for their own company, meaning that such transactions should ideally occur under mutually advantageous terms. (Berkovitch & Narayanan, 1993)

The overall number of mergers and acquisitions has generally been on the rise. M&A provides companies with the opportunity to streamline and potentially expand their operations without relying solely on their internal resources. It is often considered a more cost-effective way to grow compared to internal development. Particularly, cross-border M&A, where companies expand internationally, has seen significant growth, largely driven by increasing globalization. (Bauer & Friesl, 2024)

Despite the general upward trend in M&A activity, there are fluctuations. M&A transactions, especially from the acquiring company’s perspective, are significant investments involving substantial risks and capital, which might limit other operations. M&A activity is highly cyclical; it tends to increase during periods of economic growth and decline in downturns (Goergen & Renneboog, 2004). For example, the COVID-19 pandemic led to a big decrease of up to 50% in M&A activity during its early stages (EY, 2021). However, the insurance sector was less affected, making it interesting to study how the pandemic influenced short-term stock returns in this industry and whether the market reaction was particularly strong.

2.1.1 Types of M&A

There are almost as many ways to categorize mergers and acquisitions (M&A) as there are studies on the subject. This section presents two alternative methods for classifying these transactions. The first method divides M&A into two main categories: diversify and expansive. Diversify acquisitions are further subdivided into concentric and conglomerate, while expansive acquisitions are divided into horizontal and vertical. (Cartwright & Cooper, 1996)

Diversify acquisitions involve expanding into new industries, meaning that the acquiring and target companies operate in different industries. The first subcategory, concentric acquisitions, occurs when the companies share certain similarities, allowing the acquiring company to benefit from the target's resources. This might include, for example, shared distribution channels or technology that could enhance the acquiring company's operations, which is one of the most common reasons for concentric M&A in the insurance sector (Gaughan, 2015). The second subcategory, conglomerate acquisitions, refers to cases where the companies involved have no business-related commonalities. Here, the acquiring company aims to enter a completely new industry, thus diversifying its business and revenue streams (Tenhunen & Werner, 2000). The insurance industry includes many large players, and many insurance companies are often owned by large capital firms as parent companies. The operations of such groups can be very diversified, making conglomerate acquisitions common in this context.

The second main category is expansive acquisitions, which aim to grow the core business by merging with or acquiring other companies within the same industry. In the context of this study, this would mean an insurance company acquiring another insurance company. Tenhunen and Werner (2000, 13) further divide this category into two subcategories:

horizontal acquisitions and vertical acquisitions. Horizontal acquisitions involve direct competitors. In the insurance sector, where large amounts of capital are at stake, these transactions often seek economies of scale and increased financial stability. The second subcategory, vertical acquisitions, involves companies operating within the same industry but at different stages of the value chain. Vertical acquisitions can occur either upstream or downstream in the insurance industry's value chain. For instance, an insurance company might acquire a brokerage firm to facilitate its own insurance sales process. Figure 1. visualises the first presented way of classifying mergers and acquisitions.

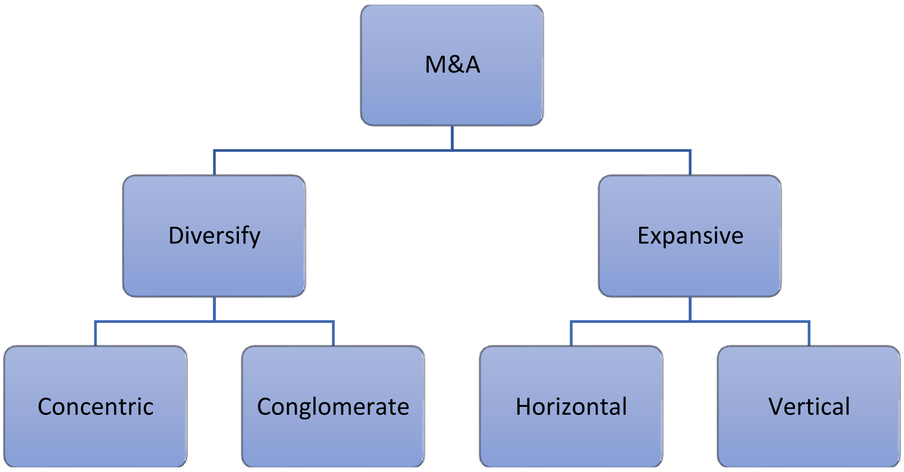

Figure 1. Types of mergers and acquisitions

According to Damodaran (2002), mergers and acquisitions can be categorized into four distinct types: merger, consolidation, acquisition of stocks, and acquisition of assets. The first two categories, merger and consolidation, are quite similar in nature. In these cases, the management of the involved companies decides to combine their operations, reaching an agreement on the continuation of activities. However, this decision is not formally binding until it receives approval from the shareholders. The key difference between the two lies in the following: in a merger, the target company is fully integrated into the acquiring company and stops to operate independently. In contrast, consolidation occurs when two companies merge to form an entirely new entity, thereby terminating the operations of the previous companies altogether.

The term "acquisition of stocks" refers to the process where the acquiring company intends to purchase all shares of the target company directly from its shareholders. This acquisition can be conducted in cash or through other means, such as shares or derivatives of the acquiring company. When acquiring shares, the purchasing company assumes all previous and future obligations of the target company and gains rights to all its assets. In large insurance firms, acquisition offers often take the form of tender offers. These public proposals commit the acquiring company to buy all shares at a specified price within a designated timeframe. Such offers typically exceed the prevailing market price, yet acceptance is not mandatory and may not always be advantageous for shareholders. Tender offers may also involve hostile takeovers, where the target company’s management may resist the acquisition while the acquiring company persists in purchasing shares. (Damodaran, 2002)

The final category in this classification is the acquisition of assets, where the acquiring company purchases all assets of the target company. This method allows for the acquisition of another company's capabilities without necessitating the integration of its entire business. Additionally, in this scenario, the buyer does not assume responsibility for the target company's debts or similar obligations. While shares are not exchanged in this case, approval for the acquisition still requires the consent of the shareholders. (Damodaran, 2002) Figure 2. visualises the second way to classify mergers and acquisitions.

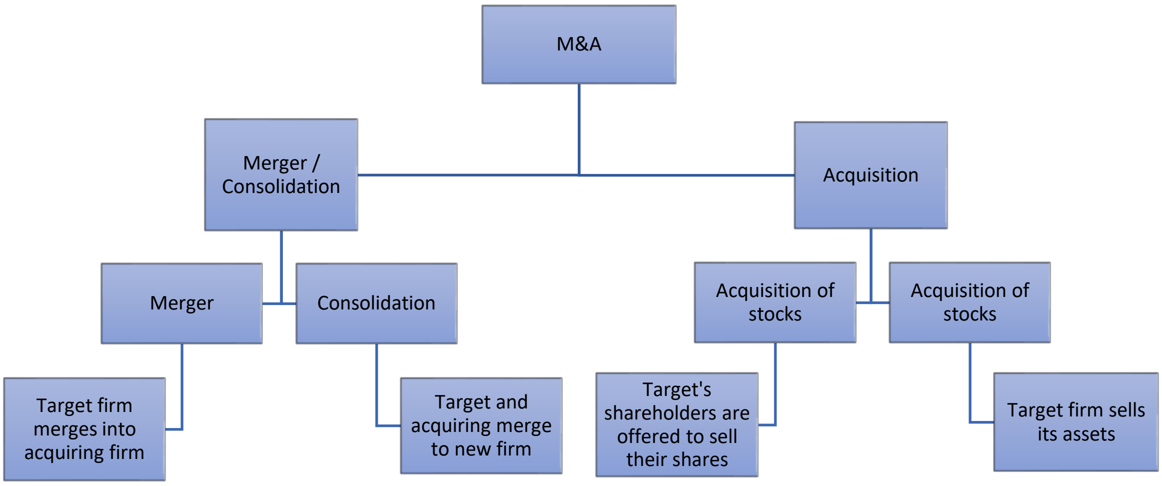

Figure 2. Types of mergers and acquisitions from targets' point of view (Modified from Damodaran, 2002)

2.1.2 Motives and Drivers

If there are many different types of mergers and acquisitions (M&A), there are even more reasons behind these transactions. According to Cummins et al. (2015), perhaps the most cited reason in insurance is achieving economic growth through economies of scale. Acquiring companies often aim to expand by acquiring other firms to create an optimal operational structure. A typical source of cost benefits is the reduction of average costs, achieved by spreading large, fixed costs across the entire company. For insurance companies, significant fixed costs might include systems and their development expenses (Cummins et al., 2015). The insurance sector is highly competitive, making continuous development, including potential M&A activities, essential for companies' survival.

In addition to economies of scale, another common motivation for M&A is synergy benefits, which can be divided into financial synergies and operational synergies. Operational synergies are often sought in horizontal and vertical acquisitions, as previously described. In the insurance industry, one operational synergy is the ability to price products more competitively (Juma et al., 2012). Additionally, rapid expansion and the optimization of daily operations are key objectives driving many M&A transactions (Damodaran, 2005).

Financial synergies are also a significant driver of M&A activity. Companies should continuously aim to improve their operations through profitable investments. According to the theory of financial synergy, acquisitions can increase a company’s resources and risk tolerance, making it more willing to engage in new investments (Cummins et al., 2015). Reduced risk because of an acquisition can also led to better access to financing. A larger company may secure loans more easily and on better terms, enabling further investments and operational improvements. In addition, many other financial synergies can exist, which are often highly specific to the company and industry in question. (Bauer & Friesl, 2024)

2.1.3 M&A Process

According to Immonen (2015), the M&A process can be divided into several stages depending on the situation. Similar to the motives behind M&A, the stages of the process vary significantly based on the companies and their industries. This study focuses specifically on the acquiring company, making a traditional process description highly relevant. Typically, the acquiring company starts M&A situations, which is why most general process descriptions are from the perspective of the acquirer.

The M&A process is broadly divided into two parts: pre-deal phase and post-deal phase. The pre-deal phase is often further divided into two stages: planning and execution. During the planning stage, preliminary work is done before the actual execution of the process. It begins with identifying a need and recognizing that an M&A transaction could bring positive outcomes. From there, the acquiring company conducts a preliminary assessment of potential target companies and selects possible candidates in theory. The acquirer then performs target screening and evaluates potential synergy benefits, which, as previously discussed, are a key motivation for M&A. This stage also includes valuing the target company, which is often done using multiple methods to ensure a comprehensive assessment. (Immonen, 2015)

In the execution stage, companies negotiate the specific terms of the deal. Key aspects of these negotiations usually include the deal’s financing and payment method. The final price is heavily dependent on the target company's future revenue prospects, meaning that an evaluation of the situation at the time of the deal alone is not sufficient. Due diligence is an important part of this phase, involving a thorough examination of the target to ensure the buyer obtains an accurate and comprehensive assessment. In the insurance sector, legal considerations are particularly demanding, making legal due diligence an essential part of M&A transactions in insurance sector. If an agreement is reached on all aspects, the deal can then proceed. (Gaughan, 2015; Immonen, 2015)

The post-deal phase in the M&A process is called integration. This involves combining the operations of the two companies to realize the targeted synergy benefits. Angwin and Meadows (2015) note that the integration phase is the most critical for the overall success of the process and for creating potential value. Successful integration is often a challenging and lengthy process. In many M&A cases, the desired results are not achieved during this phase, making it one of the most difficult stages (Immonen, 2015). If all the stages described above are executed successfully, the companies can achieve a successful acquisition. However, obstacles can arise at any stage, which explains why many M&A deals fail as early as the planning stage (Renneboog & Vansteenkiste, 2019). The whole M&A process can be seen in figure 3.

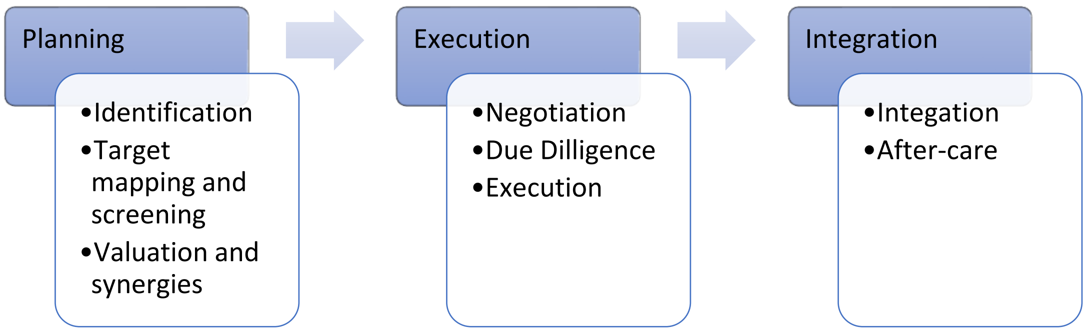

Figure 3. Three phases of M&A process (Modified from Immonen, 2015)

2.2 Insurance Industry and U.S Market

The United States remains the world's most significant economic power, although the gap with other countries has narrowed in recent years. Thus, the U.S. market serves as a useful example when analysing the insurance industry and understanding the broader global landscape. In recent years, the U.S. insurance sector has experienced significant changes, driven by shifts in market conditions and increased regulatory scrutiny. These factors have had a substantial impact on the volume and outcomes of mergers and acquisitions (M&A) in the industry. (Bain, 2024)

Key drivers of change in the insurance sector include the COVID-19 pandemic, technological advancements, and stricter regulations. The COVID-19 pandemic had a massive effect on the global insurance market, which was also reflected in the U.S., influencing market dynamics overall. Initially, M&A activity slowed considerably as economic uncertainty and market volatility made companies more cautious. Many firms delayed acquisitions and shifted their focus to managing immediate risks. In the first half of 2020, global M&A activity in the insurance sector saw a steep decline, with estimates indicating a reduction of up to 50% during the pandemic's early stages. However, the U.S. insurance market is heavily influenced by private equity, which helped maintain post-pandemic market activity and kept M&A opportunities alive. (Deloitte, 2024; Bain, 2024).

Partly due to the impact of COVID-19 and partly because of broader global changes, the importance of digital transformation has become increasingly pronounced in the insurance sector. This has emerged as a key synergy benefit in potential acquisitions. The insurance market is highly competitive, and beyond pricing, one of the biggest competitive advantages is the ease of doing business, which strongly correlates with technological advancement (EY Assets, 2024). During the pandemic, the number of insurance applications surged, and in-person interactions declined, driving companies to enhance their technological capabilities for greater efficiency and speed. (PwC, 2024)

The future outlook for the insurance industry is positive yet competitive. As a critical sector for both individuals and businesses, it is unlikely that the industry will decline. However, continuous changes, like those discussed earlier, create an environment that encourages M&A activities. To remain significant players in the market, companies must continuously improve their operations. The U.S. insurance market is characterized by substantial capital flows and even greater potential, which has drawn increased interest from private equity firms. (PwC, 2024; KPMG, 2024; Deloitte, 2024)

3 Theories behind Mergers and Acquisitions

This section delves deeper into the underlying factors behind mergers and acquisitions (M&A), offering a more detailed analysis of the complexities involved. The topics discussed here are closely tied to the broader business environment and its diversity, highlighting how different aspects of the business world interact with M&A activities. By examining the various concepts related to M&A, this section aims to provide a comprehensive understanding of how these elements connect with and influence merger and acquisition events.

3.1 Efficient Market Hypothesis

Eugene Fama (1965) is considered the developer of the Efficient Market Hypothesis (EMH). In his theory, Fama focuses on market efficiency through changes in stock prices. The main question of the theory is whether it is possible to predict stock price movements and achieve returns using historical information or if stock price changes follow a random walk. According to Fama's (1965) theory, the market is efficient when all available information is accessible to the market and is reflected in stock prices. In practice, this means that it is impossible to consistently outperform the market through professional stock-picking, and returns can only be increased by taking on more risk in the investment. This situation is highly theoretical and rarely occurs in reality. For this reason, Fama developed three levels of market efficiency: strong-form efficiency, semi-strong-form efficiency, and weak-form efficiency.

Strong-form efficiency describes an ideal situation, as mentioned earlier, where all public and private information is available. This scenario is largely theoretical, and most studies assume the semi-strong form of efficiency. According to the semi-strong form, stock prices reflect only publicly available information, such as financial reports and M&A announcements. The final form, weak-form efficiency, suggests that stock prices reflect all past market data, particularly historical prices and trading volumes. In other words, the market has already accounted for all publicly available historical information related to stock price movements (Fama, 1965; Fama, 1970).

The Efficient Market Hypothesis is closely related to mergers and acquisitions (M&A), as it influences how markets react to information about these events. According to EMH, markets are efficient, meaning that all publicly available information is immediately reflected in stock prices. However, if markets are not efficient, opportunities for profit may arise if investors or analysts can identify information or analyse situations more effectively than the broader market. In such cases, M&A-related information, such as rumours of potential acquisitions or analyses of synergy possibilities, could provide opportunities to capitalize on undervalued or overvalued stocks (Fama, 1970; Berkovitch & Narayanan, 1993).

3.2 Asymmetric Information

Asymmetric information is strongly connected to the previously discussed efficient market hypothesis (EMH). Asymmetric information refers to situations where all relevant information is not equally available between companies and markets, meaning that EMH does not hold perfectly. In the context of mergers and acquisitions (M&A), this is not only about the information gap between the market and companies but also about the uncertainty between the acquiring and target companies. For instance, distance can be a significant factor contributing to information asymmetry between M&A parties. According to Lehto (2006), companies operating on different continents often face high levels of asymmetric information, even if they strive to be as transparent as possible. This information imbalance can create uncertainty and potentially lead to substantial losses for the party with less knowledge (Yook, 2003).

In the context of M&A, signalling theory is also associated with asymmetric information. Signalling theory assumes that there is asymmetric information between the market and the company's management. Through their actions, companies can send signals to the market that convey positive messages. For instance, the announcement of an acquisition is a significant signal, potentially indicating synergies or the undervaluation of the target company. This often leads to a positive reaction in the target company's stock price.

Signalling theory, by assuming the existence of asymmetric information, helps in understanding market reactions to various announcements and events. (Yook, 2003)

The role of asymmetric information is also crucial when selecting a payment method for M&A transactions. Common methods include cash, stocks, or a combination of both (Brown & Rynagaert, 1991). According to Hansen (1987), stock transactions are more likely when the acquiring company has less information about the target than vice versa. Stock deals are also preferred when the acquiring company believes its own shares to be overvalued, reflecting mutual asymmetric information. Using stock for the transaction allows the acquirer to share risk, whereas a cash purchase is inherently riskier. However, a cash offer can serve as a strong positive signal, indicating confidence in the company's growth prospects and anticipated future synergies (Berkovitch & Narayanan, 1990; Hansen, 1987).

3.3 Agency Theory and Managerial Hubris

In an earlier section of this thesis, there were stated the motivations behind mergers and acquisitions (M&A), emphasizing those that are typically seen as positive drivers aimed at improving company performance. However, there are also motivations or drivers considered damaging from the company’s perspective, such as agency theory and managerial hubris, which focus on individual behaviour that may not align with the best interests of the company and its shareholders.

Agency theory addresses scenarios where one party, referred to as the agent, performs actions on behalf of another party, known as the principal. Ideally, the agent should work to maximize the principal's benefit, but in practice, this alignment can be challenging, as maximizing the principal's interests does not always align with the agent's personal goals (Jensen & Meckling, 1976). Ross (1973) was among the first to apply agency theory to corporate finance. In the context of M&A, the agent often refers to company management, while the principal is the company itself. For example, management's compensation may increase if the company grows through acquisitions, even when such deals might not benefit the company's long-term interests. This can lead to situations where M&A activities decrease shareholder value.

The core issue is that both the agent and the principal often aim to maximize their own benefits, creating potential conflicts as described by agency theory. Addressing this problem is crucial for companies. Common solutions include offering managers stock options or shares in the company, aligning their incentives with shareholder interests. However, these solutions generate agency costs, which are the expenses associated with aligning the agent's behaviour with the company’s objectives. (Pepper & Gore, 2015)

Jensen (1986) notes that firms with substantial free cash flow are more prone to agency costs compared to those with limited cash or those that finance acquisitions through debt. Companies with excess cash often face increased conflicts between shareholders and management. Instead of returning excess cash to shareholders through dividends, these companies may pursue unprofitable acquisitions. Furthermore, managers with excess cash may seek to expand the company beyond its optimal size, as their compensation often increases with company size and revenue growth.

Managerial hubris, on the other hand, is not directly related to managers pursuing their own interests but rather to their overconfidence in their own skills and knowledge. Managers may overestimate potential synergies in M&A, leading them to overpay for target companies. This behaviour is also related to herd behaviour, where managers mimic the actions of market leaders by making similar acquisitions, which may not necessarily suit their own firm. Both managerial hubris and agency theory can result in negative outcomes for M&A activities, diminishing the overall value of acquiring company. (Berkovitch & Narayanan, 1993; Roll, 1986)

4 Review of Existing Literature on M&A Performance

This section delves deeper into the focus of this thesis: the short-term stock price reactions following mergers and acquisitions (M&A). Here, will be a review of findings from previous research on this topic, paying special attention to studies within the insurance industry. Additionally, this section will explore different kinds of M&A transactions and analyse how they affect short-term stock price movements differently. There is a good amount of research surrounding this subject, and the outcomes vary widely, as will be evident in this section.

4.1 Short-term Stock Performance

Research across various industries and markets has extensively examined stock price movements following M&A announcements. A consistent finding is that target firms often achieve positive abnormal returns due to these events, while results for acquiring firms are much more mixed. Bruner (2002) reviewed 44 studies on acquirers, showing that about half observed positive abnormal returns, while the other half recorded negative short-term returns, with average shareholder returns for acquirers being close to zero.

Certain studies yield more definitive outcomes. Goergen and Renneboog (2004) noted a generally positive, though modest, market reaction to M&A announcements, which aligns with Yilmaz and Tanyeri's (2016) findings in a global study of 47 countries from 1992–2007. Their research indicated substantial abnormal returns for target companies, with acquirers demonstrating smaller but statistically positive returns.

In a U.S. study covering large firms from 1989 to 2003, Kiymaz and Baker (2008) analysed M&A announcements across industries and found that acquirers tended to experience negative abnormal returns, while targets showed positive returns. Industry differences were evident, particularly for acquiring firms. This pattern of negative returns for acquirers is also observed by Moeller, Schlingemann and Stulz (2003).

In the insurance industry specifically, research on M&A impact has been relatively limited. Garcia-Nieto et al. (2024) emphasize the challenges of nowadays competitive markets and the limited ability of companies to utilize potential synergies. Similarly, Krishnan and

Yakimenko (2022) observed negative cumulative average abnormal returns in both insurance companies and other industries. Staikouras (2009) reached similar conclusions in a more detailed study of insurance firms. Cummins et al. (2015) studied global M&A deals involving insurance companies, finding positive abnormal returns for acquirers, with Akhigbe and Madura (2001) reporting comparable results. Overall, prior research suggests that acquiring firms face significant challenges, often resulting in negative market reactions to M&A. However, outcomes vary considerably based on circumstances, emphasizing the need to examine diverse M&A types.

4.1.1 Effect of Crisis

Crises impacting the companies and broader economy have been frequent over the years, with the 2008 financial crisis being one of the most extensively studied. This crisis injected considerable uncertainty into the markets, particularly affecting the financial sector, where it was most strongly felt. Increased volatility during this time had a generally negative impact on the share prices of acquiring firms, with decreased market confidence resulting not only in falling stock prices but also in a substantial reduction in M&A activity (Rao-Nicholson & Salaber, 2016). In the post-crisis phase, however, interest in sectors like technology and healthcare began to attract renewed investor attention, which ultimately supported an M&A recovery (Gigante, Baldacchini, Cerri, Ferri, Wachtel & Miklaszewska, 2023).

This thesis focuses on short-term stock price changes after M&A transactions specifically in response to the COVID-19 pandemic. Although less studied than the financial crisis, COVID-19 generated similar effects, especially in terms of the uncertainty that slowed M&A activity and dampened market reactions to these and other corporate events. Unlike the financial crisis, whose effects were more concentrated within the financial sector and debt-laden companies, COVID-19 had widespread effects across nearly all industries (BCG, 2024; Maddock, 2021).

Different industries react with varying intensity to crises. Across sectors, initial M&A activity generally declines, as companies prioritize immediate risks and liquidity preservation. Some industries, however, resume M&A activity more quickly (Rao-Nicholson & Salaber, 2016). Insurance has been among the quicker sectors to rebound. Its critical role for businesses and individuals alike maintains its relevance even in challenging times, while the involvement of private equity firms and major banks in the industry has further favoured the sector's resilience, as seen in the post-COVID-19 recovery (BCG, 2024; MarshMcLennan, 2024).

4.1.2 Regional Differences in M&A

One approach to examining different types of mergers and acquisitions (M&A) is to categorize them into domestic and cross-border transactions. Numerous studies have explored the differences in stock returns following these events. In a comprehensive study, Black, Carnes, Jandik and Henderson (2007) found that shareholder returns from domestic M&As were less negative than those from cross-border M&As, suggesting domestic transactions tend to "perform better." Similarly, Moeller and Schlingemann (2004) reported that abnormal returns were approximately one percentage point higher in domestic M&As. Andriosopoulus, Yang and Li (2015) even found that abnormal returns from domestic events were twice as high compared to cross-border transactions.

Contrastingly, other studies have shown different results. Gregory and O'Doherty (2014) analysed M&A effects from 1990–2005 and observed that cross-border M&As yielded higher short-term returns than domestic transactions. Biswas and Fraser (1997) observed similar trends in U.S. markets, where cumulative abnormal returns for domestic M&As were negative, while cross-border transactions produced positive returns.

In the insurance sector, the effects of domestic and cross-border M&As are also varied. Cummins et al. (2015) noted a slightly more positive market reaction to cross-border events, though the difference was minimal. Andriosopoulos, Yang and Li (2015) conclude that cross-border transactions carry higher risks, which can logically lead to greater returns due to new market entry potential. However, in uncertain global conditions, such as during the COVID-19 pandemic, markets tend to slow, and investors may avoid additional risks. Consequently, domestic M&As are often the more profitable option for shareholders in the insurance industry.

4.1.3 Industry-related versus Cross-industry M&A

This division between mergers and acquisitions was previously discussed at the theoretical level in this thesis. In practice, many studies focus on examining industry-related (expansive) versus cross-industry-related (diversify) M&As and their short-term impacts on shareholder wealth. Numerous studies have shown similar results, with expansive M&As often yielding higher short-term returns for shareholders. Singh and Montgomery (1987) attribute these gains to the greater synergy benefits found in expansive M&As compared to diversifying transactions. Supporting this, Schleifer and Vishny (1989) also highlighted potential agency problems and issues related to asymmetric information, which can hinder diversifying M&As.

In the insurance sector, the benefits and possible outcomes of diversifying transactions are less discussed. However, studies generally indicate that shareholders react more favourably to expansive transactions. Cummins et al. (2015), in their research on the insurance industry, found that cumulative abnormal returns were statistically positive for expansive transactions, whereas diversifying transactions yielded negative, statistically insignificant returns.

5 Data and Methodology

This section transitions to the empirical research of this thesis. First, the collected data is presented, which forms the basis of the study. All the data, including the announcement dates of mergers and acquisitions (M&A), along with daily stock prices was collected using Refinitiv Workspace. Following the data overview, the event study method is detailed step-by-step. This method is used here to examine short-term stock price changes following M&A announcements. The data has been collected comprehensively, and the event study is a well-established approach for investigating this topic, as will be demonstrated in this section. Limitations and weaknesses associated with this method are also addressed, as they must be considered when analysing the results of the research.

5.1 Data

The data for this study was collected entirely using LSEG Refinitiv Workspace, a comprehensive platform that provides extensive information for financial research. For this thesis, Refinitiv Workspace was used to obtain key data such as acquisition announcement dates, long-term stock prices, the industries of the acquiring and target companies, and their primary countries of operation. In addition, the platform provided daily price data for the benchmark index, S&P 500.

To ensure the validity of this research, several limitations were set. The acquiring company must be listed on either the NYSE or NASDAQ, with the company's headquarters located in the United States. Announcements of acquisitions must have occurred between 2015 and 2023, and the transaction must have been completed within the same period. Another criterion was that the acquiring company should fully own (100%) the target company post-acquisition, and the deal should involve more than 50% of the target company’s shares. Companies that had multiple events within the event window were excluded, as multiple acquisitions at the same time could differently affect the market’s reaction. Additionally, firms with acquisitions during the estimation window were removed, as this could affect the stock’s variance. Lastly, companies with incomplete stock data during the estimation or event window periods were excluded from the dataset.

After applying these limitations, a dataset comprising 91 acquisitions from 2015 to 2023 was constructed for this research. The events were categorized according to the research questions. The first classification separates events into those occurring before the COVID-19 pandemic and those after. This classification can be used to examine the short-term stock price impacts of M&A announcements before and after the crisis. In this study, 48 events occurred before the pandemic, spanning from 2015 to 2019. Post-pandemic, there are 38 events, ranging from 2021 to 2023. Five events from 2020 were excluded from this dataset, as the pandemic spread to different regions at varying times, making its timing and impact in 2020 still unclear. This classification is illustrated in Figure 4.

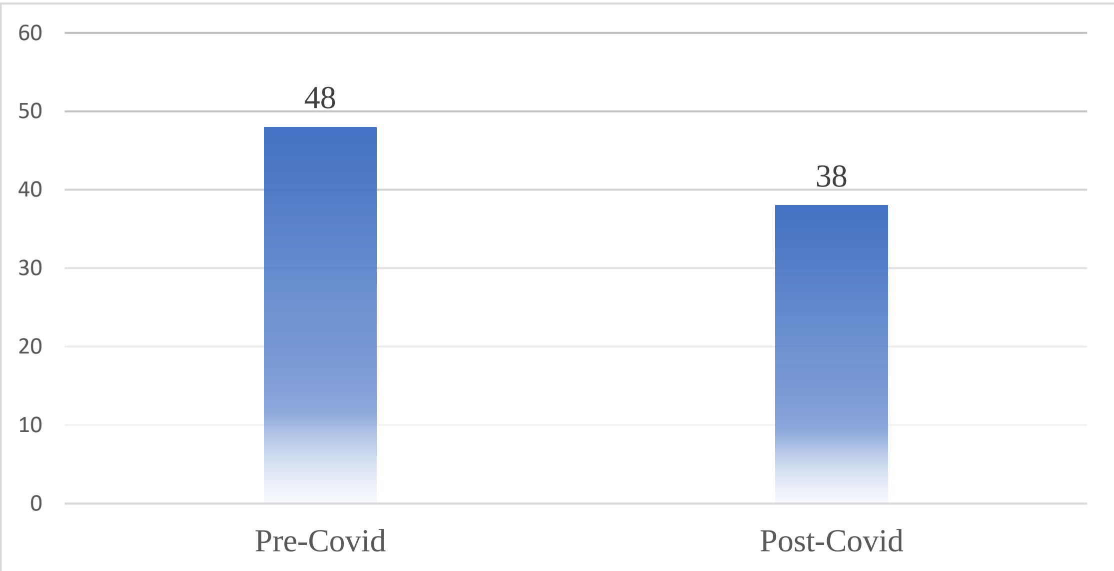

Figure 4. Data - Before COVID-19 (2015-2019) versus after COVID-19 (2021-2023)

The next categorization is done between domestic and cross-border events. This classification is used to explore the differences in market reactions to domestic versus cross-border acquisitions. In the insurance sector, particularly in the U.S. market, domestic transactions are more common than cross-border ones. This is reflected in the dataset shown in Figure 5, which includes 51 domestic acquisitions and 40 cross-border acquisitions.

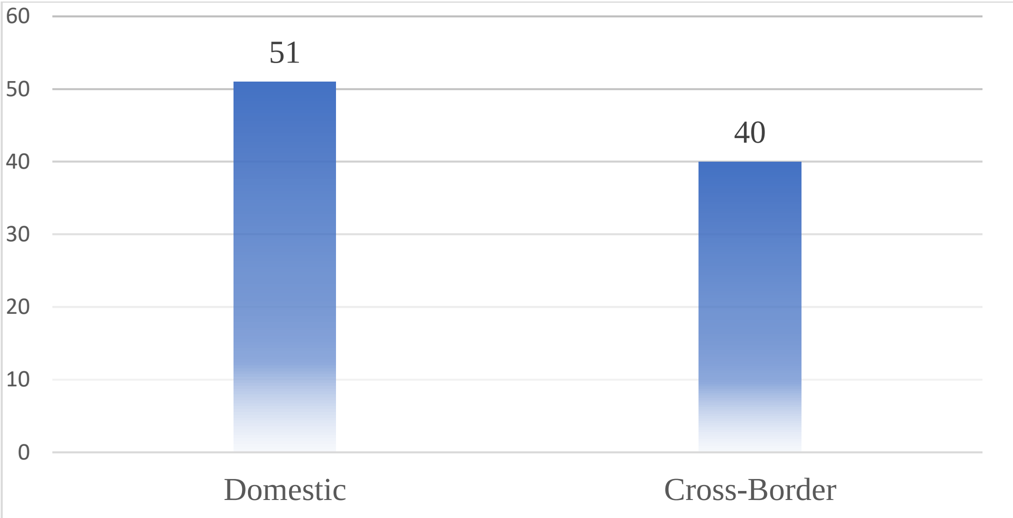

Figure 5. Data - Domestic versus cross-border

The final categorization is between industry-related and non-industry-related acquisitions, previously defined in this study as expansive and diversify events. In the insurance sector, expansive acquisitions are more common than diversifying ones. This trend is also evident in the dataset, with 53 expansive events compared to 38 diversify events. This breakdown is illustrated in the figure below.

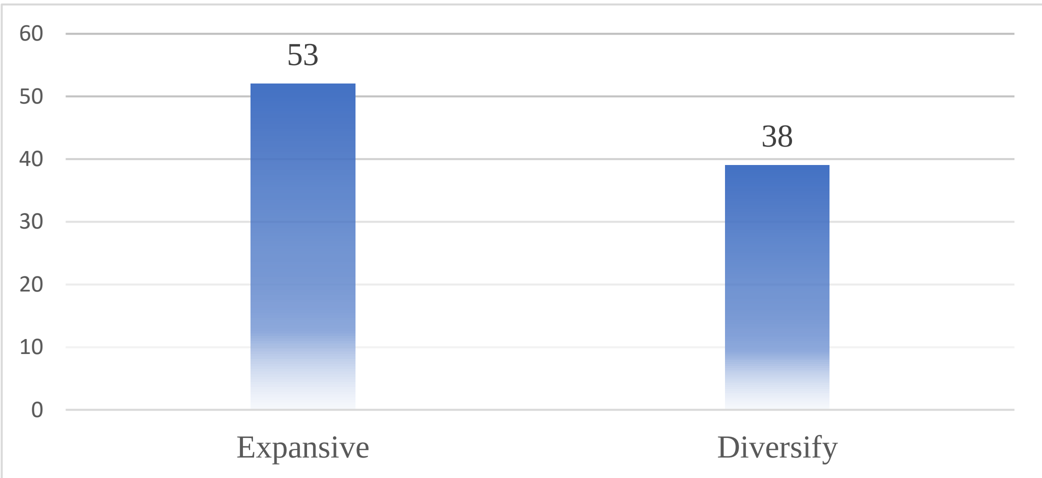

Figure 6. Data - Expansive versus diversify

5.2 Event Study

The event study methodology is used in this study to examine stock price changes following unexpected events. When an unforeseen event occurs, event studies allow researchers to calculate the average changes in stock prices and draw conclusions about how industries or countries, and the companies within them, respond to various events. Event studies have been most extensively used in economic research, which frequently deals with unexpected occurrences. In addition to mergers and acquisitions, these unexpected events include quarterly earnings announcements, large investments, and significant shifts in macroeconomic conditions. (McWilliams, Siegel & Teoh, 1999; MacKinlay, 1997)

According to MacKinlay (1997), the event study methodology follows specific guidelines, though the calculations in each phase can vary considerably depending on the researcher. The first step is to define the event of interest that the study will examine in depth. Next, the time window for the analysis is established, which is divided into two parts: the estimation window and the event window. In this study, the estimation window length is set to 250 days, a duration commonly used in numerous studies. The event window is 21 days, including 10 days prior to the event date and 10 days following it. The time window is illustrated in the figure below.

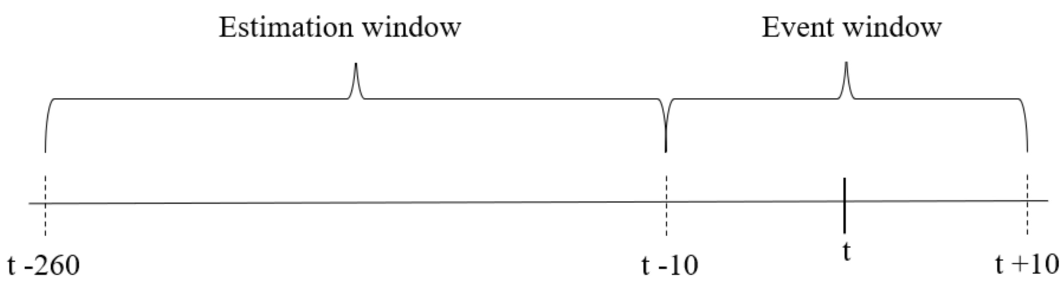

Figure 7. Estimation window and event window

For the event study conducted in this study, daily returns data was gathered using LSEG Refinitiv Workspace. The logarithmic return was calculated for each acquiring company's stock, as well as for the benchmark index used in this research, which is the S&P 500. Including 500 major U.S. companies, the S&P 500 effectively represents the market in focus. It is also one of the most widely used benchmark indexes, making it both a generally accepted and comparable choice for results analysis. The logarithmic returns were calculated using formula 1.

$$r_{pt} = \ln\left(\frac{P_t}{P_{t-1}}\right) \tag{1}$$

r_{pt} = return of security at time t

P_t = value of security at day t

P_{t-1} = value of security at day $t - 1$

This study seeks to analyse the impact of merger and acquisition announcements on short-term stock prices. To do so, it is necessary to calculate abnormal returns, as this will help determine whether these unexpected announcements have led to deviations in the acquiring company's stock performance. Abnormal returns are calculated by subtracting the expected returns from the actual returns. The actual returns were calculated using formula 1, and the next step is to calculate the expected returns of each stock by using the market model. The market model assumes a linear relationship between stock returns and market returns. Expected returns were calculated using formula 2, after which daily abnormal returns for each stock were calculated using formula 3. (MacKinlay, 1997)

$$E(R_{it}|X_t) = \alpha + \beta R_m + \varepsilon \tag{2}$$

$E(R_{it}|X_t)$ = expected return

α = alpha (estimated with linear regression)

β = beta (estimated with linear regression)

R_m = market return

ε = error term

$$\mathrm{AR_{it}} = \mathrm{R_{it}} - \mathrm{E}(\mathrm{R_{it}}|\mathrm{X_t}) \tag{3}$$

$\mathrm{AR_{it}}$ = abnormal return

$\mathrm{R_{it}}$ = actual return

$\mathrm{E}(\mathrm{R_{it}}|\mathrm{X_t})$ = expected return

Cumulative Abnormal Returns (CAR), Average Abnormal Returns (AAR), and Cumulative Average Abnormal Returns (CAAR) are all used to measure the impact of events on stock prices, each serving a distinct purpose in evaluating market reactions. CAR measures the changes in an individual stock's returns over the event window. (MacKinlay, 1997) CAR is calculated using formula 4.

$$\mathrm{CAR_i}(\mathrm{t_1}, \mathrm{t_2}) = \sum_{\mathrm{t}=\mathrm{t_1}}^{\mathrm{t_2}} \mathrm{AR_{it}} \tag{4}$$

$\mathrm{CAR_i}(\mathrm{t_1}, \mathrm{t_2})$ = cumulative abnormal returns from day $\mathrm{t_1}$ to day $\mathrm{t_2}$

CAR measures changes in a single stock's performance only, so additional metrics are needed to assess overall results. Therefore, it is essential to compare across different stocks and time periods. Average Abnormal Returns (AAR) measure the daily impact of the event across all selected companies. AAR is calculated using formula 5. Cumulative Average Abnormal Returns (CAAR) measure the average cross-sectional performance of the sample stocks from the start of the event period. CAAR values are calculated using formula 6. (MacKinlay, 1997)

$$\mathrm{AAR_T} = \frac{1}{\mathrm{N}}\sum_{\mathrm{i=t}}^{\mathrm{N}} \mathrm{AR_{it}}$$

(5)

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

(6)

N = number of examined companies

$\mathrm{CAAR}(\mathrm{t_1}, \mathrm{t_2})$ = cumulative average abnormal returns from day $\mathrm{t_1}$ to day $\mathrm{t_2}$

The steps outlined above allow for the completion of a comprehensive event study, providing a thorough analysis of the short-term stock price impact of M&A announcements. However, the event study methodology is not without criticism and may not always be a perfect measure. It relies on assumptions about market behaviour, such as semi-strong market efficiency and rationality. Additionally, caution must be exercised regarding the potential issue of overlapping events, which can significantly influence the results. When interpreting the findings, it is essential to note that the results reflect market reactions and predictions about the future, rather than long-term profitability or synergy benefits of the M&A itself. (Bruner, 2002)

5.3 Statistical Significance

Examining the statistical significance of the study's results is crucial to determining their reliability. In this thesis, the t-test has been used to determine the statistical significance of abnormal returns. This test evaluates whether the event has a statistically significant impact by checking if the abnormal returns differ significantly from zero. The t-test in this study has been calculated using the following formula (Vaihekoski, 2022; MacKinlay, 1997):

$$t = \frac{\overline{AR_{\iota t}} - 0}{\sqrt{\sigma^2(\overline{AR_{\iota t}})}}$$

(7)

σ^2 = variance

The statistical significance of average abnormal returns has been calculated using the J1 statistic, which follows the same formula as the t-test (Vaihekoski, 2022; MacKinlay, 1997):

$$J_1 = \frac{\overline{AAR}(t_1, t_2)}{\sqrt{\sigma^2(\overline{AAR}(t_1, t_2))}}$$

(8)

Similarly, the J1 statistic for cumulative average abnormal returns has also been calculated using the same approach (Vaihekoski, 2022; MacKinlay, 1997):

$$J_1 = \frac{\overline{CAAR}(t_1, t_2)}{\sqrt{\sigma^2(\overline{CAAR}(t_1, t_2))}}$$

(9)

The null hypothesis (H_0) states that the abnormal returns are equal to zero. Therefore, if the p-value of the J1 statistic exceeds the chosen significance level (5%), it indicates no abnormal excess returns during the chosen period. Conversely, the alternative hypothesis suggests that the abnormal excess returns differ from zero, which is supported if the p-value of the J1 statistic falls below the significance level (5%).

5.4 Issues of the Event Study

In the context of event studies, various regression-related issues may arise, and these must be considered when analysing the results. Heteroskedasticity occurs when the variance of the error term varies across observations, leading to unreliable p-values. In time series data, such as the daily returns used in this study, consecutive observations can be correlated, resulting in autocorrelation, which distorts standard errors. (Youssef, 2022) These are common examples of potential regression issues in event studies. In this thesis, regression problems are not addressed in detail due to the limited scope of the study. However, their potential impact on the results should be acknowledged during the analysis of results.

One limitation specific to this study is the reuse of the same acquisitions across multiple datasets. This means that each selected transaction influences multiple results, reducing the reliability of the study as outlier results can distort overall findings. However, the dataset has been collected to be sufficiently large to minimize the impact of these regression-related issues on the results.

Determining the exact event date can also be challenging, which may reduce the precision of the study. In this research, the event date is defined as the first public announcement of the acquisition. However, information may reach the market before it is reported in the media, and factors like stock exchange trading hours may also play a role. This issue is partially mitigated by focusing on cumulative average abnormal returns, reducing the emphasis on the exact event date itself. (Vaihekoski, 2022; MacKinlay, 1997)

As previously mentioned, this study includes only companies that did not engage in other acquisitions during the measurement period. However, this does not eliminate the possibility of other significant events within the company or major macroeconomic changes, such as interest rate fluctuations, affecting the results. These issues cannot be entirely removed and may introduce some unreliability into the findings. Nevertheless, a sufficiently large dataset and a long estimation window reduces the impact of individual events on the overall results. (Vaihekoski, 2022)

6 Hypotheses and Results

In this section, the results of the event study are presented alongside an alternative method of displaying the findings. Additionally, hypotheses formulated based on previous research and the research questions under investigation are reviewed, section by section. Analyses are drawn from the hypotheses and results, providing answers to the research questions defined at the beginning of the study.

6.1 Full Study

All the following event study results are presented in the same format to ensure clarity and facilitate comparison between tables, eliminating the need for repeated explanations. The upper section of the table displays the cumulative average abnormal returns (CAAR) across various time intervals, while the lower section provides the average abnormal returns (AAR) for specific individual days. The event date is marked as day zero (0), the day before the event as (-1), and following days are numbered logically after the event day. For example, CAAR (0,0) represents only the event day, while CAAR (0,1) is the sum of average abnormal returns for days 0 and 1. Similarly, CAAR (0,2) includes days 0, 1, and 2 as the cumulative total, and this logic extends to CAAR (1,5) and CAAR (-1,1).

Both the CAAR and AAR sections include the minimum (Min) and maximum (Max) values for individual companies within the study. While these values do not directly provide conclusions, they illustrate the degree of variation in stock prices in both directions following an acquisition announcement. Below this, the probability test section includes N, which indicates the number of companies included in the event study.

The “J1 statistic / t-ratio” measures the magnitude of the observed difference relative to a scenario where the event has no impact on returns. A higher t-ratio (or a high negative value) corresponds to a smaller p-value, which is listed as the final column of the table. The p-value is critical for determining statistical significance. This study applies a 5% significance level, meaning the null hypothesis (H_0) is rejected if the p-value is smaller than 0.05.

With this framework, the results can now be examined in detail. Below is Table 1, which presents the results for the full sample, including all selected acquisition events.

Table 1. Results - Full sample

Stock price reaction - Full sample					
	CAAR (0,0)	CAAR (0,1)	CAAR (0,2)	CAAR (1,5)	CAAR (-1,1)
	-0,24 %	-0,68% **	-0,86% **	-0,22 %	-0,61% *
Min	-10,43 %	-16,00 %	-18,89 %	-17,92 %	-14,33 %
Max	10,56 %	15,11 %	16,23 %	14,23 %	14,12 %
Probability test					
N	91	91	91	91	91
J1 statistic / t-ratio	-0,8889	-1,7704	-1,8304	-0,3578	-1,2958
p-ratio	0,1870	0,0383	0,0336	0,3603	0,0975
**=Statistically significant at 95% confidence level					
*=Statistically significant at 90% confidence level					
	AAR (0)	AAR (1)	AAR (2)	AAR (5)	AAR (-1)
	-0,24 %	-0,44 %	-0,18 %	0,01 %	0,07 %
Min	-10,43 %	-11,97 %	-9,43 %	-7,11 %	-9,80 %
Max	10,56 %	7,56 %	5,23 %	6,72 %	6,83 %
Probability test					
N	91	91	91	91	91
J1 statistic / t-ratio	-0,889	-1,615	-0,667	0,037	0,259
p-ratio	0,376	0,110	0,507	0,971	0,796

When examining the full sample, the aim is to gain as comprehensive an understanding of the overall results as possible. Based on previous literature and studies, market reactions have shown significant variability, making the formulation of hypotheses for this research particularly challenging. Nevertheless, two hypotheses have been developed to address this overall dataset:

Hypothesis 1: Mergers and acquisitions impact the stock price of the acquiring company in the short-term.

Hypothesis 2: potential short-term reaction is negative.

Based on this study, the effects of mergers and acquisitions are visible in the short-term through cumulative abnormal returns (CAAR). The CAAR (0,1) is -0,68%, and this result is statistically significant with a p-value of 0,0383. Similarly, the CAAR (0,2) is statistically significant with a p-value of 0,0336 and a value of -0,86%. Based on these findings, Hypotheses 1 and 2 are confirmed: mergers and acquisitions negatively impact the stock price of the acquiring company in the short-term. This result aligns with findings from Staikouras (2009), who observed similar outcomes in his study on the insurance sector. Negative effects on the stock prices of acquiring companies were also identified by Krishnan and Yakimenko (2022) in their focused investigations of the U.S. markets. One of the most significant reasons for the market's negative reaction on the acquiring company's side is the overpayment often observed in M&A (Datta & Puia, 1995). This overpayment can result from factors such as managerial hubris or lack of knowledge. Additionally, intense competition and the poor integration of potential synergies are common reasons for the market's negative short-term reactions to M&A announcements (Garcia-Nieto et al., 2024).

While the hypotheses were supported in this case, the results can also be interpreted more deeply. During the first few days, the cumulative abnormal return was statistically significant, but none of the individual daily abnormal returns (AAR) were statistically significant, meaning that, for example, the event date itself did not have a statistically significant effect. Furthermore, in the days following the event, returns even became positive, indicating that the stock price began to recover from the initial decline caused by the merger or acquisition. This reflects a certain level of market irrationality and the varying reactions among investors. Bruner (2002) emphasized similar challenges in interpreting market responses in his study on the effects of M&A.

6.2 Effects of COVID-19

The COVID-19 pandemic brought significant changes to the global economy, heavily impacting all industries. Crises generally reduce the number of mergers and acquisitions (M&A), as observed following the financial crisis (Rao-Nicholson & Salaber, 2016). Broadly speaking, the pandemic created immense uncertainty for both businesses and individuals. Based on these observations, the following hypothesis related to COVID-19 has been formulated for this thesis:

Hypothesis 3: The short-term stock price reaction following mergers and acquisitions was more negative after COVID-19.

Tables 2 and 3 present the event study results, comparing the periods before and after the pandemic.

Table 2. Results - Before COVID-19 (2015-2019)

Stock price reaction - Before COVID-19 (2015-2019)					
	CAAR (0,0)	CAAR (0,1)	CAAR (0,2)	CAAR (1,5)	CAAR (-1,1)
	-0,48% **	-1,00% **	-1,34% **	-0,45 %	-0,84% **
Min	-10,43 %	-14,83 %	-18,89 %	-17,92 %	-13,01 %
Max	10,56 %	15,11 %	14,88 %	14,23 %	13,54 %
Probability test					
N	48	48	48	48	48
J1 statistic / t-ratio	-1,8462	-2,7196	-2,9756	-0,7740	-1,8653
p-ratio	0,0324	0,0033	0,0015	0,2195	0,0311
**=Statistically significant at 95% confidence level					
*=Statistically significant at 90% confidence level					
	AAR (0)	AAR (1)	AAR (2)	AAR (5)	AAR (-1)
	-0,48% *	-0,52% *	-0,34 %	-0,05 %	0,16 %
Min	-10,43 %	-10,98 %	-9,02 %	-7,11 %	-9,80 %
Max	10,56 %	7,15 %	5,23 %	6,62 %	5,99 %
Probability test					
N	48	48	48	48	48
J1 statistic / t-ratio	-1,846	-2,000	-1,308	-0,192	0,615
p-ratio	0,071	0,051	0,197	0,848	0,541

Table 3. Results - After COVID-19 (2021-2023)

Stock price reaction - After COVID-19 (2021-2023)					
	CAAR (0,0)	CAAR (0,1)	CAAR (0,2)	CAAR (1,5)	CAAR (-1,1)
	-0,18 %	-0,56% **	-0,46 %	-0,18 %	-0,58% *
Min	-8,59 %	-16,00 %	-15,87 %	-17,12 %	-14,33 %
Max	10,41 %	13,20 %	16,23 %	13,33 %	14,12 %
Probability test					
N	38	38	38	38	38
J1 statistic / t-ratio	-0,7826	-1,7217	-1,1547	-0,3500	-1,4559
p-ratio	0,2169	0,0426	0,1241	0,3632	0,0727
**=Statistically significant at 95% confidence level					
*=Statistically significant at 90% confidence level					
	AAR (0)	AAR (1)	AAR (2)	AAR (5)	AAR (-1)
	-0,18 %	-0,38 %	0,10 %	-0,06 %	-0,02 %
Min	-8,59 %	-11,97 %	-9,43 %	-7,03 %	-8,89 %
Max	10,41 %	7,56 %	5,00 %	6,72 %	6,83 %
Probability test					
N	38	38	38	38	38
J1 statistic / t-ratio	-0,783	-1,652	0,435	-0,261	-0,087
p-ratio	0,439	0,107	0,666	0,796	0,931

The results are, in many ways, quite surprising. Before the pandemic, CAAR was negative and statistically significant across all defined time intervals, except for CAAR (1,5). For instance, CAAR (0,2) before the pandemic was -1,34%, which is relatively high within the context of this study and the generally stable U.S. insurance sector. After COVID-19, CAAR (0,1) was statistically significant only at a value of -0,56%. These findings again support the argument that mergers and acquisitions negatively impact the market value of the acquiring company. However, the results contradict Hypothesis 3, indicating that the impact of M&A on stock prices was negatively greater before the pandemic than after it.

The COVID-19 pandemic significantly impacted people's health and sense of security, which, in the context of this study, can be viewed as a strength for the insurance sector. Insurance and healthcare industries are always critical for individuals, and this importance contributed significantly to their recovery and growth after the pandemic. (Gigante et al., 2023) The markets also began identifying these critical sectors as key investment opportunities, influencing market reactions to mergers and acquisitions within the insurance sector (Rao-Nicholson & Salaber, 2016). Overall, this result is quite surprising but highlights how predicting market behaviour based solely on intuition is virtually impossible.

6.3 Domestic versus Cross-border

Tables 4 and 5 present the event study results showing the impact of domestic and cross-border acquisitions on the stock prices of acquiring companies. According to previous studies, domestic mergers and acquisitions are generally considered more profitable than cross-border deals from the perspective of the acquiring company. Domestic acquisitions are often seen as safer, with better pricing compared to cross-border transactions. Datta & Puia (1995) suggest that in cross-border acquisitions, acquiring company managers are willing to overpay based on overly optimistic expectations. Additionally, insufficient knowledge of the target market further contributes to overpayment in cross-border deals. Based on previous research findings, the following hypothesis has been developed for this study:

Hypothesis 4: The market reacts more positively to domestic mergers and acquisitions compared to cross-border merger and acquisitions from the perspective of the acquiring company.

Table 4. Results - Domestic

Stock price reaction - Domestic					
	CAAR (0,0)	CAAR (0,1)	CAAR (0,2)	CAAR (1,5)	CAAR (-1,1)
	-0,24 %	-0,44% *	-0,40 %	0,02 %	-0,56% *
Min	-10,01 %	-16,00 %	-16,17 %	-15,94 %	-12,76 %
Max	9,99 %	14,88 %	13,02 %	14,23 %	14,12 %
Probability test					
N	51	51	51	51	51
J1 statistic / t-ratio	-1,0000	-1,2964	-0,9623	0,0373	-1,3472
p-ratio	0,1587	0,0974	0,1680	0,4851	0,0890
**=Statistically significant at 95% confidence level					
*=Statistically significant at 90% confidence level					
	AAR (0)	AAR (1)	AAR (2)	AAR (5)	AAR (-1)
	-0,24 %	-0,20 %	0,04 %	-0,07 %	-0,12 %
Min	-10,01 %	-10,99 %	-9,11 %	-6,51 %	-9,80 %
Max	9,99 %	7,36 %	5,23 %	6,72 %	6,83 %
Probability test					
N	51	51	51	51	51
J1 statistic / t-ratio	-1,000	-0,833	0,167	-0,292	-0,500
p-ratio	0,322	0,409	0,868	0,772	0,619

Table 5. Results – Cross-border

Stock price reaction - Cross-Border					
	CAAR (0,0)	CAAR (0,1)	CAAR (0,2)	CAAR (1,5)	CAAR (-1,1)
	-0,41% *	-1,08% **	-1,45% **	-0,75 %	-0,95% **
Min	-10,43 %	-14,85 %	-18,89 %	-17,92 %	-14,33 %
Max	10,56 %	15,11 %	16,23 %	12,44 %	11,94 %
Probability test					
N	40	40	40	40	40
J1 statistic / t-ratio	-1,4643	-2,7274	-2,9898	-1,1979	-1,9589
p-ratio	0,0716	0,0032	0,0014	0,1155	0,0251
**=Statistically significant at 95% confidence level					
*=Statistically significant at 90% confidence level					
	AAR (0)	AAR (1)	AAR (2)	AAR (5)	AAR (-1)
	-0,41 %	-0,67% **	-0,37 %	-0,02 %	0,13 %
Min	-10,43 %	-11,97 %	-9,43 %	-7,11 %	-8,31 %
Max	10,56 %	7,56 %	5,00 %	5,81 %	6,04 %
Probability test					
N	40	40	40	40	40
J1 statistic / t-ratio	-1,464	-2,393	-1,321	-0,071	0,464
p-ratio	0,151	0,022	0,194	0,943	0,645

The results show that none of the CAAR or AAR values in the domestic table are statistically significant at the 5% significance level. Therefore, no direct conclusions can be drawn from these results. However, the cross-border table reveals that both CAAR (0,1) and CAAR (0,2) are statistically significant and negative. Additionally, in the cross-border table, AAR (1) is statistically significant with a value of -0,67%. Based on this, we can conclude that cross-border acquisitions are more likely to result in negative returns for the acquiring company compared to domestic acquisitions. These results support Hypothesis 4, indicating that the market reacts more positively to domestic acquisitions from the perspective of the acquiring company.

This finding aligns with the majority of previous studies. As noted earlier, cross-border acquisitions often involve overpayment, which impacts the market's reaction (Datta & Puia, 1995). Black et al. (2007) reached a similar conclusion, finding that shareholder returns were less negative for domestic M&A compared to cross-border M&A. Similarly, Moeller and Schlingemann (2004) and Andriosopoulos et al. (2015) found that domestic acquisitions had significantly better effects on the acquiring company's stock price, often performing multiple times better than cross-border events.

6.4 Expansive versus Diversify

Hypothesis 5: The market reacts more positively to expansive mergers and acquisitions compared to diversifying mergers and acquisitions from the perspective of the acquiring company.

The final categorization in this study distinguishes between expansive and diversifying events, in other words, acquisitions within the insurance sector and those extending outside it. Previous research has consistently found better results from the perspective of the acquiring company in expansive events. The reasons for this are similar to those observed when comparing domestic and cross-border events. In diversifying acquisitions, the acquiring company often overpays due to insufficient knowledge about the target sector. Additionally, the inherent risk in diversifying events is generally higher, which can potentially lead to greater returns but also prompts negative market reactions. Tables 6 and 7 present the results for expansive and diversifying acquisitions.

Table 6. Results - Expansive

Stock price reaction - Expansive					
	CAAR (0,0)	CAAR (0,1)	CAAR (0,2)	CAAR (1,5)	CAAR (-1,1)
	-0,12 %	-0,09 %	-0,33 %	0,26 %	0,02 %
Min	-9,55 %	-14,87 %	-17,48 %	-15,45 %	-13,13 %
Max	9,66 %	13,89 %	16,23 %	12,96 %	14,12 %
Probability test					
N	53	53	53	53	53
J1 statistic / t-ratio	-0,5455	-0,2893	-0,8660	0,5285	0,0525
p-ratio	0,2927	0,3862	0,1932	0,2986	0,4791
**=Statistically significant at 95% confidence level					
*=Statistically significant at 90% confidence level					
	AAR (0)	AAR (1)	AAR (2)	AAR (5)	AAR (-1)
	-0,12 %	0,03 %	-0,24 %	0,00 %	0,11 %
Min	-9,55 %	-9,87 %	-9,43 %	-7,11 %	-9,17 %
Max	9,66 %	7,14 %	5,23 %	4,99 %	6,83 %
Probability test					
N	53	53	53	53	53
J1 statistic / t-ratio	-0,545	0,136	-1,091	0,000	0,500
p-ratio	0,588	0,892	0,280	1,000	0,619

Table 7. Results - Diversify

Stock price reaction - Diversify					
	CAAR (0,0)	CAAR (0,1)	CAAR (0,2)	CAAR (1,5)	CAAR (-1,1)
	-0,42% **	-0,82% **	-1,14% **	-0,69% *	-0,81% **
Min	-10,43 %	-16,00 %	-18,89 %	-17,92 %	-14,33 %
Max	10,56 %	15,11 %	14,41 %	14,23 %	12,06 %
Probability test					
N	38	38	38	38	38
J1 statistic / t-ratio	-1,7500	-2,4159	-2,7424	-1,2857	-1,9486
p-ratio	0,0401	0,0078	0,0030	0,0993	0,0257
**=Statistically significant at 95% confidence level					
*=Statistically significant at 90% confidence level					
	AAR (0)	AAR (1)	AAR (2)	AAR (5)	AAR (-1)
	-0,42% *	-0,40 %	-0,32 %	0,03 %	0,01 %
Min	-10,43 %	-11,97 %	-9,35 %	-5,58 %	-9,80 %
Max	10,56 %	7,56 %	5,05'%	6,72 %	4,98 %
Probability test					
N	38	38	38	38	38
J1 statistic / t-ratio	-1,750	-1,667	-1,333	0,125	0,042
p-ratio	0,088	0,104	0,190	0,901	0,967

The results are very similar to those reported in previous studies. In the expansive category, none of the values are statistically significant, and all results are very close to zero overall. In contrast, in the diversifying category, all CAAR values except CAAR (1,5) are statistically significant. For instance, CAAR (0,2) has a value of -1,14%, indicating a clearly negative impact. These results support Hypothesis 5, indicating that the market reacts more positively to expansive acquisitions from the perspective of the acquiring company. Similar findings were reported by Cummins et al. (2015) in their study on the insurance sector. Schleifer and Vishny (1989) also arrived at comparable conclusions, emphasizing that expansive events tend to generate greater synergy benefits, which are commonly recognized by the market.

7 Conclusion

The purpose of this study was to examine the short-term impact of mergers and acquisitions (M&A) on the stock prices of acquiring companies. The focus was placed on the insurance sector, with all acquiring firms listed on U.S. markets. To provide a comprehensive overview, the analysis covered a longer time frame, spanning from 2015 to 2023. This period was significantly influenced by the COVID-19 pandemic, and the study investigates how the pandemic affected market reactions to M&A events. Previous research has highlighted that different types of M&A transactions have varying impacts on short-term market reactions. Therefore, this study also focuses into the differences between cross-border and domestic transactions, as well as industry-related (expansive) and non-industry-related (diversify) events.

The impact of M&A on stock prices has been widely studied, yet the findings remain highly variable. For target companies, consistent evidence of short-term stock price increases has been observed. However, the same trend has not been identified for acquiring companies, where stock price changes are often negative. These variations are influenced by factors such as the industry involved, the relationship between the companies, and the market region. This uncertainty makes the acquirer side an interesting subject of study, enhancing the relevance and importance of this research.

The insurance industry is a significant sector, and the substantial financial sums involved in its mergers and acquisitions make it a critical area of study from a broader financial perspective. By mid-2024, the insurance sector had completed 145 announced deals, amounting to over $34 billion in deal value (PwC, 2024). The importance of the insurance industry is not only its scale but also its essential role for both individuals and businesses. This significance influences market reactions to M&A activities, which this study seeks to examine. The U.S. represents the largest insurance market globally, as it does in many other industries. Events and trends originating in the U.S. often have worldwide implications. For this reason, the U.S. was chosen as the target market for this study to provide a comprehensive understanding of the subject and the sector.

7.1 Findings of the Study

The first main research question of this study was: *Is there a short-term stock price reaction in the insurance sector following the announcement of mergers and acquisitions?* This was investigated using the full dataset, which consisted of 91 acquisitions with sufficient data for event study analysis. The study identified cumulative average abnormal returns (CAAR) that were statistically significant, indicating that M&A announcements do affect the stock prices of acquiring companies.

These CAAR values were negative, directly addressing the second main research question: *Is the possible short-term stock price reaction generally positive or negative?* Both research questions yielded results consistent with the hypotheses. The negative impact on stock prices is primarily attributed to the acquiring company's tendency to overpay for the target firm, which the market reacts to unfavourably (Datta & Puia, 1995). This finding aligns with the most previous studies. In the insurance sector, a negative market reaction to the acquiring company is a common occurrence, and this trend is consistent in the U.S. markets as well (Krishnan & Yakimenko, 2022; Staikouras, 2009).

In addition to the main questions, the study included sub-questions to further explore the primary research questions and better understand the reasons behind market reactions. The first sub-question was: *How did COVID-19 affect short-term stock price reactions to mergers and acquisitions* Following the COVID-19 pandemic, the number of M&A transactions declined, a trend typical during crises, such as the 2008 financial crisis, which also resulted in more negative market reactions (Rao-Nicholson & Salaber, 2016). While the hypothesis assumed a similar outcome, the results contradicted this expectation. After the pandemic, statistically significant negative reactions were observed, unlike the period before the pandemic. This highlights the insurance sector's critical role, especially during crises like COVID-19, and suggests that investor responses during such times tend to be more cautious, reflected in lower market reactions (Gigante et al., 2023).

In addition to examining the effects of the COVID-19 crisis, the sub-questions aimed to draw more detailed conclusions about different types of M&A transactions. The second sub-question focused on the market regions involved in the transactions: *How do short-term stock price reactions differ between domestic and cross-border mergers and acquisitions?* Cross-border transactions are generally considered riskier and more uncertain, leading to more positive short-term market reactions for domestic transactions (Andriosopoulos et al., 2015). This study reached similar conclusions, finding that cross-border transactions caused significantly larger declines in the acquiring company's stock price compared to domestic transactions. This indicates that higher risk does not necessarily translate to higher returns, at least in terms of short-term stock price movements.

The final sub-question also examines different types of companies involved in M&A transactions and their impact on market reactions: *What are the differences in short-term stock price reactions between expansive and diversifying mergers and acquisitions?* Previous studies suggest a similar pattern as seen with domestic and cross-border transactions. Diversifying M&A is considered riskier and less likely to provide synergy benefits, resulting in more negative market reactions (Cummins et al., 2015; Schleifer & Vishny, 1989). This hypothesis was supported by the findings of this study, showing that diversifying M&A generally caused a larger short-term decline in stock prices compared to expansive transactions.

7.2 Limitations

This thesis has addressed various limitations, some of which are specific to this study while others connect more broadly to the normal limitations of the event study methodology. It is crucial to keep these limitations in mind to provide a comprehensive evaluation of the reliability of the results. First, it is essential to mention the assumption of the semi-strong form of the efficient market hypothesis inherent in event studies. This concept includes the presumption of market rationality and efficiency, which must be approached with caution when analysing results. (Fama, 1970)

Regression-related issues are inherent in event studies and must be considered when interpreting results. Examples of such issues include heteroskedasticity and autocorrelation, which affect p-values and standard errors, thereby reducing the reliability of the findings (Youssef, 2022). Due to the limited scope of this bachelor's thesis, these regression issues are not addressed in detail but should be considered when evaluating the reliability of the results.

It is impossible to account for all potential factors within a single study. A more in-depth examination of individual mergers and acquisitions (M&A) would be necessary to distinguish all underlying factors influencing M&A events and to better understand the reasons behind market reactions. (Agrawal et al., 1992) Due to the scope limitations of this bachelor's thesis, the same acquisitions have been examined across different reasons for market reactions. Consequently, the same transactions may appear in multiple categories. However, even a larger and more diverse dataset would not eliminate the significance of unique case-specific features within the research.

The determination of the announcement date for mergers and acquisitions in this study relies entirely on the date provided by LSEG Refinitiv Workspace. Identifying the correct date is highly challenging, as announcements may only partially reach the market or become public through media coverage, sometimes a day later (Vaihekoski, 2022). Another difficult aspect to define is other company-specific events and broader market changes that could have simultaneous effects on stock prices alongside the M&A event (Vaihekoski, 2022; MacKinlay, 1997). These factors have been accounted for by employing a long estimation window and event window, as well as calculating cumulative average abnormal returns instead of focusing solely on individual daily returns.

7.3 Further Studies

Mergers and acquisitions (M&A), both as a broad topic and specifically within the insurance sector, represent an extensive field of study. This makes it particularly interesting and important to examine from various perspectives. Based on the findings of this study, short-term returns following M&A are mainly negative. This suggests that companies should not pursue M&A deals with the expectation of achieving short-term increases in market value. Generally, mergers and acquisitions are conducted to achieve long-term growth, which highlights the importance and interest in studying long-term stock price changes. Over a longer period, factors such as synergies and other benefits associated with the M&A are likely to materialize in the market.

To identify more precise reasons behind market reactions, it is crucial to examine individual M&A transactions and their specific characteristics. This includes, for instance, the comparison of cross-border and domestic transactions discussed in this study, as well as a more detailed analysis of the companies' financial conditions and various financial metrics. Such in-depth research could determine whether the market reacts broadly to different types of M&A deals or whether it can identify more specific underlying factors driving these transactions.

This thesis has frequently highlighted the role of private equity investors in M&A activities within the insurance sector. Over the years, private equity firms have consistently accounted for a significant portion of M&A transactions in this industry, underscoring their importance. It would be interesting to explore this phenomenon further, particularly in terms of short-term market reactions, as analysed in this study. Additionally, future research could investigate the key drivers and motivations behind the insurance sector's appeal to private equity investors.

The findings of this study align largely with previous literature and supports the hypotheses formulated. An exception to this was the impact of the COVID-19 pandemic on market reactions following M&A events. This deviation suggests the need for further and more in-depth research on the topic. For instance, it would be valuable to explore whether the more positive market reaction to M&A during the pandemic is industry-specific or if it is strongly linked to the uncertainty caused by the pandemic itself.

References

Agrawal, A., Jaffe, J.F. & Mandelker, G.N. (1992). The Post-Merger Performance of Acquiring Firms: A Re-examination of an Anomaly. The Journal of finance. 47(4). 1605-1621.

Akhigbe, A. & Madura, J. (2001). Intra-industry signals resulting from insurance company mergers. The Journal of Risk and Insurance, 68(3), 489–506.

Andriosopoulos, D., Yang, S. & Li, W. (2015). The market valuation of M&A announcements in the United Kingdom. International Review of Financial Analysis.

Angwin, D. N. & Meadows, M. (2015). New integration strategies for post-acquisition management. Long Range Planning, 48(4), 235-251.

Bain. (2024). M&A in Insurance: Deals Advance Capabilities and Risk Prevention. [Accessed 25.10.2024]. Available at: https://www.bain.com/insights/insurance-m-and-a-report-2024/

Bauer, F. & Friesl, M. (2024). Synergy Evaluation in Mergers and Acquisitions: An Attention-Based View. Journal of management studies, 61(1), 37-68.

Berkovitch, E. & Narayanan, M., (1993). Motives for takeovers: An empirical investigation. Journal of Financial and Quantitative Analysis, 28, 347-62.

Biswas, R. & Fraser, D. R. (1997). The international market for corporate control: Evidence from acquisitions of financial firms. Global Finance Journal, 8(1), 33.

Black, E.L., Carnes, T.A., Jandik, T. & Henderson, B.C. (2007). The relevance of target accounting quality to the long-term success of cross-border mergers. Journal of Business Finance and Accounting, 34, 139–168.

Brown, D. T. & Ryngaert, M. D. (1991). The mode of acquisition in takeovers: Taxes and asymmetric information. The Journal of Finance, 46(2), 653-669.

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

Cartwright, S. & Cooper, C. (1996). Managing Mergers, Acquisitions & Strategic Alliances: Integrating People and Cultures. Elsevier Ltd.

Cummins, J.D., Klumpes, P. & Weiss, M.A. (2015). Mergers and Acquisitions in the Global Insurance Industry: Valuation Effects. The Geneva Papers, 40, 444-473.

Damodaran, A. (2002). "Investment valuation: Tools and techniques for determining the value of any asset". Second Edition, New York: Wiley

Datta, D. K. & Puia, G. (1995). Cross-border acquisitions: An examination of the influence of relatedness and cultural fit on shareholder value creation in US acquiring firms. MIR: Management International Review, 337-359.

Deloitte. (2024). 2024 insurance M&A outlook: Climbing the leaderboard. [Accessed 25.10.2024]. Available at: https://www2.deloitte.com/us/en/pages/financial-services/articles/insurance-m-and-a-outlook.html

EY. (2021). Global mergers and acquisitions decrease in 2020, but 2021 is looking favorable for M&A. [Accessed 21.10.2024]. Available at: https://taxnews.ey.com/news/2021-1421-global-mergers-and-acquisitions-decrease-in-2020-but-2021-is-looking-favorable-for-m-and-ampa

EY. (2024). 2024 Global Insurance Outlook. [Accessed 25.10.2024]. Available at: https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/insurance/insurance-pdfs/ey-2024-global-insurance-outlook-report-v2.pdf

Fama, E. (1965). The Behavior of Stock Market Prices. Journal of Business, 38, 34 105.

Fama, E.F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. The Journal of Finance, 25(2), 383-417.

Garcia-Nieto, M., Bueno-Rodriguez, V., Ramon-Jeronimo, J. M. & Florez-Lopez, R. (2024). Trends and Risks in Mergers and Acquisitions: A Review. Department of Financial Economics and Accounting, 12(9).

Gaughan, P.A. (2015). Mergers, Acquisitions, and Corporate Restructurings, 6th Edition. Wiley.

Gigante, G., Baldacchini, M,. Cerri, A., Ferri, G., Wachtel, P. & Miklaszewska, E. (2023). Drivers of Shareholder Value Creation in M&A: Event Study of the European Banking

Sector in the Post-financial Crisis Era. Creating value and Improving Financial Performance, 239-265.

Goergen, M. & Renneboog, L. (2004). Shareholder Wealth Effects of European Domestic and Cross-border Takeover Bids. European Financial Management, 10(1), 9-45.

Gregory, A. & O'Donohoe, S. (2014). Do cross border and domestic acquisitions differ? Evidence from the acquisition of UK targets. International Review of Financial Analysis, 31, 61-69.

Hansen, R. G. (1987). A theory for the choice of exchange medium in mergers and acquisitions. Journal of business, 75-95

Immonen, R. (2015). Yritysjärjestelyt. 6th ed. Helsinki: Talentum Media.

Juma, O., Wawire, P., Byaruhanga, J., Okaka, O. & Odera, O. (2012). Impact of Bank Mergers on Shareholders' Wealth: A Review of Literature. International Journal of Academic Research in Accounting, Finance and Management Sciences, 2, 162-172.

Kiymaz, H. & Baker, H. K. (2008). Short-term performance, industry effects, and motives: evidence from large M&As. Quarterly Journal of Finance and Accounting, 17-44.

KPMG. (2024). Insurance Industry Forecast: Embracing M&A, AI, Talent, and Climate Change Mitigation. [Accessed 25.10.2025]. Available at: https://kpmg.com/us/en/media/news/2024-insurance-industry-forecast.html

Krishnan, C. N. V. & Yakimenko, V. (2022). Market Misreaction? Leverage and Mergers and Acquisitions. Risk and Financial Management, 15(3).

Lehto, E. (2006). Motives to restructure industries: Finnish evidence of cross-border and domestic mergers and acquisitions. Papers in Regional Science, 85(1), 1-22.

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

Maddock, L. (2021). Investor Strategy News: Super takes lead on post-covid M&A. [Accessed 31.10.2024]. Available at: https://www.proquest.com/docview/2625406068?parentSessionId=qGIt%2Bbx%2FHXQYHTTvCmX03oQ3UjpjulwvK7oAQa1hQYo%3D&pq-origsite=primo&accountid=27292&sourcetype=Blogs,%20Podcasts,%20&%20Websites

MarshBerry. (2024). Insurance Industry on Track for Most Active Year of Consolidation. [Accessed 30.09.2024]. Available at: https://www.marshberry.com/resource/insurance-ma-market-update-january-starts-slow-but-optimism-for-2024-continues/

McWilliams, A., Siegel, D. & Teoh, S. H. (1999). Issues in the use of the event study methodology: A critical analysis of corporate social responsibility studies. Organizational Research Methods, 2 (4), 340-365.

Moeller S. B., Schlingemann F. P. & Stulz, R. M. (2003). Do shareholders of acquiring firms gain from acquisitions? Working Paper.

Moeller, S. B., Schlingemann, F. P. & Stulz, R. M. (2004). Firm Size and the Gains from Acquisitions. Journal of Financial Economics, 73, 201–228.

Pepper, A. & Gore, J. (2015). Behavioral Agency Theory: New Foundations for Theorizing About Executive Compensation. Journal of management, 41(4), 1045-1068.

PwC. (2024). Insurance Deals Insights: 2024 Mid-Year Review. [Accessed 24.09.2024]. Available at: https://www.pwc.com/us/en/industries/financial-services/library/insurance-deals-outlook.html

PwC. (2024). Next in insurance: Strategic industry trends in 2024. [Accessed 25.10.2024]. Available at: https://www.pwc.com/us/en/industries/financial-services/library/insurance-industry-trends.html

Rao-Nicholson, R. & Salaber, J. (2016). Impact of the Financial Crisis on Cross-Border Mergers and Acquisitions and Concentration in the Global Banking Industry. Thunderbird international business review, 58(2), 161-173.

Renneboog, L. & Vansteenkiste, C. (2019). Failure and success in mergers and acquisitions. Journal of Corporate Finance (Amsterdam, Netherlands), 58: 650-699.

Roll, R. (1986). The Hubris Hypotheses of Corporate Takeovers. Journal of Business, 59 (2), 197-216.

Shleifer, A. & Vishny, R. W. (1989). Management Entrenchment: The Case of Manager-Specific Investments. Journal of Financial Economics, 25, 123-139.

Singh, H. & Montgomery, C. A. (1987). Corporate Acquisition Strategies and Economic Performance. Strategic Management Journal, 8 (4), 377-386.

Staikouras, S.K. (2009). An event study analysis of international ventures between banks and insurance firms. Journal of International Financial Markets, Institutions & Money 19(4), 675–691.

Tenhunen, L. & Werner, R. (2000). Yrityskaupan käsikirja. 3nd edn, rev. Helsinki: Tietosanoma.

Vaihekoski, M. (2022). Rahoitusalan Sovellukset Ja Excel. Turku: Mika Vaihekoski.

Yilmaz, I. S. & Tanyeri, B. (2016). Global Merger and Acquisition (M&A) activity: 1992 2011. Finance Research Letters, 17, 110-117.

Yook, K. C. (2003). Larger Return to Cash Acquisitions: Signaling Effect or Leverage Effect? Journal of Business, 76(3), 477–498.

Youssef, A.M.A.E.R. (2022). Diagnostic Tests for Econometric Problems in Multiple Regression Analysis. Advances, 3(3), 49-59.