A Comparison of Strategic Alliances and Mergers & Acquisitions and their Impact on Shareholder Value

Authors: Zainab Abdi, Jörn Lundahl, Pritima Patel

Advisors: Karin Jonnergård, Niclas Andrén
ABSTRACT

Forming strategic alliances or mergers & acquisitions has been an important trend for companies for the last two decades. Rarely does a day pass without companies announcing the formation of a strategic alliance or merger & acquisition. Earlier research has shown that the announcements of these two strategic approaches affect a company’s share prices, i.e., by creating or destroying shareholder value. The announcements of these two strategic approaches have been important to investors and analysts. However, managers have also started to focus more on how these announcements affect the companies’ shareholder value during these events.

The problem of this thesis has been to analyse which strategic approach of strategic alliances and mergers & acquisitions affects share prices most favourably surrounding the announcements.

The purpose of this thesis is to compare the concepts of strategic alliances and mergers & acquisitions and their effects on shareholder value surrounding the announcements.

The theoretical framework has been focused on the concepts of strategic alliances and mergers & acquisitions. Moreover, theories and earlier empirical research about the creation or destruction of shareholder value of the two approaches are an essential part in this thesis.

The empirical study has been conducted by the use of an event study methodology, which has been used to capture the market reactions on share prices at the time of the companies’ announcements of strategic alliances and mergers & acquisitions.

The study on the announcements of strategic alliances and mergers & acquisitions has been conducted on the Euro-zone. The companies that announced mergers & acquisitions were divided into target and acquirer/bidder companies. The results derived from the comparison indicate that the target companies earned excess positive abnormal return during the announcements of mergers & acquisitions over strategic alliances. However, when comparing strategic alliance announcements with that of the acquirer/bidder companies, the results show that strategic alliances create more, or destroy less shareholder value, compared to the acquirer/bidder companies, which destroy shareholder value in most of the cases.
6.4 Discussion of the results derived from the comparison between strategic alliances and mergers & acquisitions

6.4.1 A comparison between target companies and strategic alliances

6.4.2 A comparison between acquirer companies and strategic alliances

6.4.3 Comparison of results with empirical study

7. SUMMARY AND CONCLUSIONS OF THE EMPIRICAL ANALYSIS

7.1 Do strategic alliances create value?

7.2 Do mergers & acquisitions create value?

7.3 A comparison between strategic alliances and mergers & acquisitions

7.4 Conclusion

PART 4. BIBLIOGRAPHY AND APPENDICES
PART 1

INTRODUCTION

AND

METHOD
1. INTRODUCTION

Chapter one describes the background, problem and purpose of this thesis. Furthermore the delimitation, perspective and definitions are explained. The chapter ends with a presentation of the outline of the remainder of this thesis.

1.1 Background

Strategic alliances and mergers & acquisitions are vital to business and have become important strategic options for many companies, particularly those operating internationally. Few companies have the capital, skills or market access to achieve their commercial objectives entirely through their own resources. Rarely does a day pass without an announcement release of a strategic alliance formation on a national or an international base. Most probably these strategies are chosen in order to affect shareholder value of the companies (Ernst & Halevy, 2000).

The 1980s was the decade when mergers & acquisitions dominated the business and financial press and it was also at this time this approach became a world-wide growth industry within business. Merger & acquisition activity began to decline at the end of the decade as many companies started to put more effort into downsizing rather than upsizing their operation activities. In the 90s the merger & acquisition activities started to bloom again due to upturns in the world economy (Cartwright & Cooper, 1996). In recent years, strategic alliance activity has grown at an explosive rate. The current pace of alliance formation is growing at 25 percent per annum, with 10,000 new alliances being reported in 1995 alone (Bleeke & Ernst, 1995).

It has been argued that the ultimate success of a merger or acquisition is determined by the way, in which the transition is managed in the early months. The handling of merger & acquisition announcements is also the first major task faced by those responsible for making these strategic approaches a success. The announcement and the way it is handled is important, as it is the primary source of official information that the market will receive about the future of the mergers & acquisitions (Cartwright & Cooper, 1996). The market’s short-term response to the announcement of a merger provides a trustworthy direction of the forthcoming consequences of the deal (Rappaport, 1998).
1.2 Problem discussion

Earlier research indicates that strategic alliances and mergers & acquisitions have a long-term success rate of about 50 percent, measured in strategic and financial terms (Ernst & Halevy, 2000). On the other hand, many strategic alliances and mergers & acquisitions turn out to be failures in the long run and do not fulfil the expectations of success as desired by the companies (Hill, 1999). Nevertheless, empirical evidence suggests that the announcements of these strategic alliances and mergers & acquisitions in many cases lead to the increase in the companies’ share prices at the time of the announcements.

The financial and strategic aspects of strategic alliances and mergers & acquisitions have been well debated in the management literature (Cartwright & Cooper, 1996). Most of the literature is highly focusing on these aspects. The announcement of the formation of a strategic alliance, a merger or an acquisition between companies is the legal endorsement of the new organisational combination, but it has frequently been overlooked in the alliance and merger & acquisition process. By focusing more and more on short-term performance, investors and analysts are closely watching strategic alliance announcements. Managers are asking themselves whether alliance announcements affect share prices or not (Ernst & Halevy, 2000).

Much research has been done on how the two strategic approaches; strategic alliances and mergers & acquisitions individually affect share prices and thereby affect shareholder value surrounding the announcement of these formations. One area, which is not very much explored, is the comparison between strategic alliances and mergers & acquisitions, with regards to how they differ in their impact on the shareholder value creation due to the announcements of these formations.

In this thesis, the Euro-zone will be the focus of our study. Market reactions to the announcements of strategic alliances and mergers & acquisitions will be studied. In most countries in Europe, including the Euro-countries, there exist regulatory and structural barriers to take-over activity and hostile take-over attempts. Furthermore, restrictions on the availability of material information is apparent (Oxelheim, 1993). Empirical evidence within this subject has, moreover, shown differences in regulation and structure between European mergers and US mergers within the banking industry, which imply different impact on share prices. Thus, different regulations and structure in different parts of the world can have different impact on share prices at the announcements. The differences in regulations suggest that it is not evident that empirical results derived from the global market are applicable on the Euro-zone. Earlier studies have been done on strategic alliances and mergers & acquisitions on the global market, but we want to specifically look at the Euro-zone, as empirical research on this area has not, to our knowledge, been tested to any greater extent.

Our main problem will be to analyse which strategic approach of strategic
alliances and mergers & acquisitions affects share prices most favourably surrounding the announcements.

1.3 Purpose

The purpose of this thesis is to compare the concepts of strategic alliances and mergers & acquisitions and their effects on shareholder value surrounding the announcements.

1.4 Delimitation

We will be looking at the effects on shareholder value at the time of the announcements when firms form strategic alliances or mergers & acquisitions. We are only going to look at how the announcements of these strategic alliances and mergers & acquisitions affect share prices and an analysis on other factors that can have an impact on share prices, will not be included. We will neither look at future shareholder value after the event period, as shareholder value after the event would not only depend on the formation of alliances and mergers & acquisitions, but also on factors such as new investments and other strategic operations.

We will limit our study to strategic alliances and mergers & acquisitions within the Euro-zone mainly because of the above-mentioned differences in the regulations within this area. The study will not include any studies done on cross-border alliances and mergers & acquisitions outside the Euro-zone. This thesis is limited to comprise study done on entered strategic alliances and mergers & acquisitions within the Euro-zone between the years 1998-2000. The reason for choosing this time-horizon will be explained in chapter five.

1.5 Perspective

The subject of the thesis is seen from a stock market perspective. The thesis can be read from more than one perspective. The view is interesting for companies and investors, as they are both actors on the stock market.

1.6 Target group

This thesis would be of interest for the participants in the Master Seminar at the School of Economics and Management at Lund University. Companies, investors and other actors on the financial markets may also find it interesting, as well.

Further on, we want to contribute to the ongoing discussion about companies creating value through the announcements of strategic alliances and mergers & acquisitions.
A Comparison of Strategic Alliances and Mergers & Acquisitions and their Impact on Shareholder Value

1.7 Definitions and concepts

Abnormal return: Part of return that is not due to marketwide price movements.

Event day: The day when a particular event occurs. Can also be regarded as the announcement day.

Event window: The period of days over which the impact of the event will be measured.
1.8 Outline

The remainder of this thesis is divided into four parts with seven chapters.

Chapter 2 The purpose of this chapter is to present the methods used in this thesis. The general, scientific and practical approaches are presented. Moreover, the chapter includes a description of the collection of data as well as data criticism.

PART TWO- THE THEORETICAL FRAMEWORK

Chapter 3 This chapter contains a description of the concepts regarding strategic alliances and mergers & acquisitions.

Chapter 4 Chapter four includes the concept of shareholder value. Furthermore, a discussion is provided about strategic alliances and mergers & acquisitions and their impact on shareholder value. The chapter is concluded with some empirical evidence.

PART THREE- EMPIRICAL FRAMEWORK AND ANALYSIS

Chapter 5 This chapter includes the methodology for the event study.

Chapter 6 Chapter six includes the empirical research done on the announcements of strategic alliances and mergers & acquisitions. The chapter includes an analysis on the empirical research.

Chapter 7 The chapter provides the reader with conclusions and reflections over the thesis.

PART FOUR- BIBLIOGRAPHY AND APPENDICES
2. METHOD

The main objective of this chapter is to describe how the information that has been used in this thesis has been collected.

The method in this thesis is subdivided into two parts. The method described in this chapter will involve the methodology of the entire thesis. The second part, which can be found in chapter five, will concern aspects about the approach used in the empirical study.

2.1 Approach to the research problem

According to Eriksson and Wiedersheim-Paul, there are three levels for approaching a research problem, namely the general approach, the scientific approach and the practical approach. The general approach discusses different perspectives of a problem, the scientific approach refers to the scientific views which the methods used are based upon, whereas the practical approach deals with different ways of collecting data (Wiedersheim-Paul & Eriksson, 1991).

2.2 General approach

The general approach refers to the way one looks upon things (Wiedersheim-Paul & Eriksson, 1991). The general approach consists of a frame of references. Frame of reference refers to one’s total knowledge, norms, values etc. The frame of reference works as an individual scale of which the researcher’s approach is based upon. This means that the conceptions on this scale for example perspective, theory and models affects the person who makes the research. It is very important that the researcher has an objective approach (Wiedersheim-Paul & Eriksson, 1991). To achieve an objective approach a wide study of literature within this field has been studied. A total objective perspective is impossible to accomplish as articles that have been studied may contain interpretations and opinions that possibly can have influenced us.

2.3 Scientific approach

The scientific approach refers to the scientific point of view, which the method used is based upon. Wiedersheim-Paul and Eriksson describe two fundamental perspectives, rationalism and empiricism. The rationalistic way of thinking is a deductive method i.e. the researcher starts with the theory by creating hypotheses and through observations reaches a logical conclusion (Wiedersheim-Paul & Eriksson, 1991).
The empirical way of thinking is the inductive method. Induction means that general conclusions are based on empirical data. The method starts from an empirical point of view and relates to the theory.

The approach used in this thesis is the deductive method, as the research is based on the theoretical framework studied. By studying the theoretical framework, hypotheses have been derived. The hypotheses have been connected to the empirical framework in order to test the theories.

2.4 Practical approach

The practical approach refers to the way of obtaining data. Often there are many different ways and combinations to collect the data. The choice of method must be based upon the purpose of the thesis. A quantitative method has been used to do a statistical study. Statistical methods of measurement play a central role in the analysis of quantitative information (Holme & Solvang, 1997).

The empirical study, in this thesis, has been based on a methodology of an event study. A number of announcements have been collected on strategic alliances and mergers & acquisitions in order to obtain a framework for the analysis. The methodology for the practical approach is further explained in chapter five.

2.4.1 Collecting the data

2.4.1.1 Secondary data collection

Secondary data is data that is already collected and summarised. The data originated from sources such as Internet, books, databases etc. (Wiedersheim-Paul & Eriksson, 1991).

The main secondary data that have been used to deepen our theoretical knowledge within this area is earlier researchers’ articles in different journals and other literature with regards to this subject. To find the articles and literature, databases, Affärsdata, Artikelsök, EBSCO, EconLit, Helecon and Lolita have been used. References from earlier articles are also an important source. The literature and articles used to explain the concept of an event study is also secondary data. This literature has its main point in the theme methodology and statistics.

2.4.1.2 Primary data collection

Primary data is data that has been collected and is required when there is a need to complement the secondary data (Wiedersheim-Paul & Eriksson, 1991). The primary data that we have used in this thesis is daily stock- and index rates.
and short term interest rates, but also announcements of strategic alliances and mergers & acquisitions. As this data already exists it could be seen as secondary data, but when the data is put into a special relation we have considered it to become primary data. The primary data has mainly been found in the information service company Bloomberg, the database Agence Europe at Lund University and the Financial Times. The selection of primary data is further described in the methodology in chapter five.

2.5 Criticism of the sources

The purpose of the criticism of collected data is to determine if the source is valid, reliable and relevant (Wiedersheim-Paul & Eriksson, 1991).

2.5.1 Criticism of secondary data

Merchant showed in a survey how mixed previous empirical findings really are and how much they contradict to each other’s findings. The survey of joint ventures’ event studies conducted over the last 15 years concluded this work to be “atomistic and lacking cohesion” and in need of an organising framework “to prevent well-intended academic endeavours from further degenerating into a mass of disconnected empirical studies on the topic of shareholder value creation via joint ventures” (Merchant & Schendel, 2000, p. 725).

The literature within this subject is very scattered, as there are different views about whether strategic alliances and mergers & acquisitions create shareholder value or not. The subject is relatively new, as there are relatively few established theories within this subject. The problems we faced when studying the theories where, that an overview of the subject was difficult to obtain. Theories about shareholder value creation of mergers & acquisitions are divided into two reviews, which is not pointed out in most literature within this subject. Most probably the authors only consider their own point of view, which is highlighted or the only one included.

2.5.2 Criticism of primary data

The primary data that has been used is share prices, index rates, interest rates and announcements on strategic alliances and mergers & acquisitions. This data has mainly been found in the databases: Bloomberg, Agence Europe and Financial Times. The validity of Bloomberg and Financial Times can be confirmed by the fact that authors and researchers have used these sources commonly in order to collect information for their empirical research. The database, Agence Europe is considered as an important and valuable source, as it is an international press agency concentrated on business within Europe.
2.5.3 Reliability

Reliability means that the measurements are correctly made (Thurén, 1991). A method has a high reliability when one come to the same answer independent of the person that makes the research and independent of the persons, units, organisations etc. that have been studied. To attain high reliability the different parts in the measuring process must be very precise.

A quantitative method is going to be used, which we consider fulfil the reliability demands. This standpoint is based upon the fact that earlier researchers have used the event study methodology when doing similar studies. The fact that this statistical method is well known further strengthens our standpoint. Further, the event study methodology is criticised in chapter five concerning the methodology for the empirical research.

2.5.4 Validity

A research has high validity if the study only contains what one wants to study and nothing else (Thurén, 1991). This means that the result would not change if you extend the data in the study. This implies that we have to use a well-balanced time-series, with enough data and a thorough theoretical discussion about earlier investigations.

In order to increase the validity of the theoretical discussion and the empirical research, articles, which are published in well-known journals and which are required to have high standard concerning high validity have been used. Despite the fact that these articles are published in journals with a good reputation, the authors from the articles influence the works with their valuations and interpretations. This is a problem, which one cannot eliminate.
PART 2

THEORETICAL FRAMEWORK
3. THE ESSENCE OF STRATEGIC ALLIANCES AND MERGERS & ACQUISITIONS

This chapter will focus on the concepts of strategic alliances and mergers & acquisitions and their potential benefits and costs. Moreover, a discussion about failure of these strategic approaches is provided.

3.1 Strategic alliances

Strategic alliances between companies, whether they are from different parts of the world or different ends of a supply chain, are a major strategic consideration business today. We can read almost daily about strategic alliances being formed between firms on a national or international level (Bleeke & Ernst, 1995).

"Strategic alliance" is a widely used but loosely defined term that encompasses a wide range of collaborative business activities. Strategic alliances may take any number of forms; Joint ventures, minority equity investments, contractual licensing, exclusive supply arrangements, co-branding and other similar arrangements. Parkhe defines strategic alliance broadly, as including "any form of inter-firm co-operative arrangement beyond contracts completed in the ordinary course of business" (Parkhe, 1993 p. 800). Lorange’s and Roos’s definition is that strategic alliances represent a continuous scale between free market on one extreme and total internalisation on the other (Lorange & Roos, 1993). Varadarajan, Rajan and Cunningham define strategic alliances as "the pooling of specific resources and skills by the co-operating organisations in order to achieve common goals, as well as goals specific to the individual partners" (Varadarajan, Rajan, & Cunningham, 1995, p. 285). However they all agree on that strategic alliances have one goal in common, i.e. enabling the parties to use their complementary resources effectively to pursue their strategic objectives.

3.1.1 Potential benefit of strategic alliances

There are many potential benefits to the formation of corporate alliances. It is not only profit that motivates this increase. Other factors include an increasing intensity of competition, a growing need to operate on a global scale, a fast changing marketplace, and industry convergence into markets, e.g., the financial service industry; banks, investment firms, and insurance companies are overlapping more and more with regards to the services and products they offer. Especially in a time when growing international marketing is becoming
A Comparison of Strategic Alliances and Mergers & Acquisitions and their Impact on Shareholder Value

the norm, these partnerships can leverage their growth through alliances with international partners. Rather than take on the risk and expense that international expansion can demand, one can enter international markets by finding an appropriate alliance with a business operating in the marketplace one desire to enter (Lorange & Roos, 1993).

The range of benefit accruing via strategic alliances is extensive but can be organised into the following three theories:

- Transaction cost economics; is a theory developed by Williamson (1975), who suggested that firms chose alternative arrangements that minimise the sum of production and transaction costs.

- Resource dependence theory; Pfeffer and Salancik suggest that firms enter into alliances in search for valuable resources that they themselves lack. The formation of strategic alliances is a means for stabilising the flow of resources that a company needs and for reducing the risk and uncertainty confronted by the company (Pfeffer & Salancik, 1978).

- Business strategy; the third approach to strategic alliances deals with competitive strategies of firms. Porter stated that the formation of strategic alliances depends on five forces; the threat of new entrants, the bargaining power of suppliers, the bargaining power of buyers, the threat of substitute products, and rivalry among firms. The three generic strategies provided by Porter, cost leadership, product differentiation, and focus, are used in conjunction with the five forces in order to outperform competitors (Porter, 1985). The competitive strategies approach states that alliances are formed also as a defensive mechanism in order to hedge against strategic uncertainty (Kogut, 1988).

Strategic alliances represent a medium that can create scale and scope advantages necessary to be competitive on a global basis. Alliances allow firms to conserve their resources as compared to forming a wholly owned subsidiary and allow firms to gain local identity giving them an advantage over wholly owned subsidiaries when dealing with local governments and businesses. The case for collaboration is stronger than ever. It takes much capital to develop new products and to penetrate new markets and only a few companies can manage it in every situation. ICL, the British computer company, could not have developed its current generation of mainframes without Fujitsu. Motorola needs Toshiba’s distribution capacity to break into the Japanese semiconductor market (Hamel & Prahalad, 1989).
3.1.2 Potential costs of strategic alliances

Despite the benefits there are costs with the formation of strategic alliances. Reich and Markins have criticised strategic alliances on the ground that they give competitors a low-cost route to new technology and markets (Hill, 1999). Alliances are risky, unless a firm is careful it can give away more than it receives. In particular alliances between Asian companies and Western rivals seem to work against the western partner, but that is because they enter partnership without knowing what it takes to win (Hamel & Prahalad, 1989).

Most literature has recognised that a firm will consider forming a strategic alliance if the potential benefits exceed the corresponding costs. The decision to enter a strategic alliance need to be taken seriously by management because history has shown that alliances tend to be unstable and prone to failure (Berquist et al., 1995).

3.1.3 Strategic alliance failures

The failure rate for international strategic alliances seems to be quite high. For example one study of 49 international strategic alliances found that two-thirds run into serious managerial and financial troubles within two years after their formation, and although many of these problems are solved, 33 percent of strategic alliances are ultimately rated as failures by the parties involved (Hill, 1999).

Cultural, strategic and management differences may be some factors behind the failures of strategic alliances. It is apparent that the alignment of strategic, decision-making and other managerial differences between strategic alliances are very difficult to accomplish. Successful integration requires trust, which actually translates to a risk of losing one's core competence to a partner and decreasing the company's autonomy. One former Global One executive has claimed, "there is no trust among the partners" (Inkpen, 1996, p. 130). Very often the information asymmetry between partners within a strategic alliance, further contribute to the distrust (Inkpen, 1996).

Firms that enter into strategic alliances often focus on the benefits that the alliances can provide without considering costs involved in the formation and maintenance of the alliance. Despite the clear identification of the potential benefits, the costs incurred are often both substantial and often difficult to predict. In many cases, strategic alliance managers cannot adjust to the new situation in which a former competitor or companies with dissimilar cultures suddenly need to co-operate. In the real sense of the matter, a strategic alliance can be seen as a new form of competition (Morris & Hergert, 1987).
3.2 Mergers & acquisitions

A merger occurs when two companies willingly join together to form a new business. In this case they will be looking for synergy gains, which would arise from two companies sharing common tasks, which in turn would reduce unit costs the higher the level of output. As the newly merged company is going to be larger than each of the two separate ones the opportunities for achieving economies of scale will be greater.

An acquisition occurs when one firm, the acquirer or the bidder secures control of another, the target, by gaining a majority of its voting shares. This is done by offering to shareholders of the target company an attractive price of their shares, or a swap of its shares for theirs, to tempt the shareholders to merge with them. This enables the acquiring company to ensure its implementation of strategies in the newly acquired firm. The acquisition is friendly if the target is willing to be taken over, otherwise it is a hostile acquisition. In both friendly and hostile acquisitions the decisions of institutional investors such as bank and insurance companies will be of major influence since they may well hold a significant proportion of the shares (Harris, 1999).

In a merger, the corporations come together to combine and share their resources to achieve common objectives. The shareholders of the combining firms often remain as joint owners of the combined entity. An acquisition implies one firm purchasing the assets or shares of another and with the acquired firm's shareholders ceasing to be owners of that firm. In a merger a new entity may be formed subsuming the merging firms, whereas in an acquisition the acquired firm becomes the subsidiary of the acquirer (Sudarsanam, 1995).

A take-over is similar to an acquisition and does also imply that the acquirer is much larger than acquired. Where the acquired firm is larger than the acquirer, the acquisition is referred to as a reverse take-over (Harris, 1999).

3.2.1 Potential benefits of mergers & acquisitions

Companies usually justify mergers & acquisitions with four arguments:

- Synergies in forming mergers and acquisitions yield value. Combining head office activities or sales forces, for example, can create substantial and immediate benefits.

- Big companies have greater control over their own destiny. They can invest in more new ventures because they amortise development over a larger cost base. In addition, the higher equity value of a big company can protect it from unwelcome bids.
• A smaller number of players on the market can imply more control over prices. The fewer decision makers an industry segment may have, and the more revenue each of them has at risk from price movements, the less likely it is that any of them will invest in new capacity that would bring down prices in the segment as a whole.

• There is more demand for the shares of big companies. A major acquisition attracts attention in form of more coverage by analysts, more awareness among investors, and more demand for that company’s shares- which would be particularly welcomed in a thinly traded sector. As a result, the cost of capital of a company may fall, permitting it to use more of its own shares to pay for future acquisitions (Pichette & Samek, 2001).

3.2.2 Potential costs of mergers & acquisitions

In practice most mergers & acquisitions achieve only minimal cost reductions, if indeed any. This is because either firm which have merged do usually not rationalise sufficiently and fail to exploit potential economies of scale or experience diseconomies of scale due to lack of control or lack of knowledge of the new business entity by its managers. Moreover, although an increase in profitability might be expected to be the outcome of a merger or take-over, it might not be the outcome in the end (Harris, 1999).

3.2.3 Merger & acquisition failures

Many failures of mergers and acquisitions have ended up in market share losses, and reduced profits, and in the long run, less money for shareholders. For example, one study done by Mercer Management in the 1990s, on 150 mergers with values greater than $500 million, concluded that, ”50 per cent were failures” when judged by their effect on stockholder wealth after three years (Weber & Dholakia, 2000, p. 157).

Acquisitions may fail for several reasons, except managerial selfishness. Even if managers do act in the shareholder interest, acquisitions may not succeed because of weak acquisition strategy, bid dynamics and problems of pre-acquisition planning to post-acquisition integration management. Other aspects that are important to consider behavioural and strategic and financial analyses (Sudarsanam, 1995).

The causes for merger and acquisition failures are diverse, but a common factor is integration problems for the involved companies. A common mistake by companies is to assume that skills earned in one business can be easily applied to another. Another critical mistake is to assume that competitors will ignore the moves made by other companies. Corporate cultures have often hindered companies from fully realising the synergy and benefits from forming
mergers & acquisitions. Time pressure may also be a contributing factor for failures, when the companies do not have the time available to evaluate the integration issues related to organisational structure and strategic marketing (Weber & Dholakia, 2000).
4. THE CREATION OF SHAREHOLDER VALUE

This chapter contains the connection of strategic alliances and mergers & acquisitions to shareholder value and the impact of the two approaches on share prices. The chapter will be concluded with some empirical evidence from earlier research followed by a summary and the derivation of hypothesis.

The interest for shareholder value has rapidly increased especially in the United States, United Kingdom, continental Europe, Australia and Japan, due to the globalisation of competition and capital markets and the wave of privatisation. In the beginning of the 1980s many companies were without a clear commitment to shareholder value, but the wave of take-overs in the end of the 1980s created incentive for managers to focus on creating value.

Shareholder value is created only if the corporate investments exceed the cost of capital. But will the shareholders also benefit from a successful investment with an increase in the share-prices? Rappaport argues that it depends on the investor’s expectations at the time of the purchase of the shares. ”A company’s stock price is the clearest measure of the market expectations about its future performance” (Rappaport, 1998, p.101). By judging the market signals management can make a comparison between its own expectations and the market’s. If the management indicate a lack in the corporate expectations, then identifying possibilities to decrease this lack becomes a priority. Bringing together management and market expectations are important for decisions on issuing new shares, repurchasing of shares, and the financing of major investments, including mergers & acquisitions (Rappaport, 1998).

4.1 Do strategic alliances create value?

Earlier literature stress that strategic alliances do create synergy through combining resources, increasing market power, sharing risks and improving efficiency. The corporate synergy literature prescribes that the announcements of strategic alliances should result in abnormal returns for the participating firms’ stocks. McConnell and Nantell have showed that the equity markets reward parent companies’ share prices when they announce joint ventures (McConell & Nantell, 1985).

Shareholder value is created for strategic alliances when capital markets expect these firms to contribute to the firm’s return. This implies that the companies’ shareholder value is influenced by conditions indicating the competitive potential or resources committed to the alliance and the potential for its ultimate realisation. According to Merchant and Schendel, shareholder value is
created when alliances are formed in conditions that enhance the economic efficiency of the firms (Merchant & Schendel, 2000).

Although evidence rests heavily on the side that alliances create superior performance, some researchers question the value creation of alliances. There is a widespread recognition of the difficulty for creating value, as evidenced by the high rate of firms that fail to do so and by the numerous academic publications highlighting the failure of alliances (Anand & Khanna, 2000).

Lee and Wyatt report significantly negative stock price reactions associated with joint venture announcements thus leading to a decrease in the firms’ shareholder value. Most studies have found that increase in shareholder value is obtained for about half the number of firms studied, but value is destroyed for the remaining firms (Lee & Wyatt, 1990).

Chen and Shieh reported that a study done by Finnerty and Roger tested several strategic alliance effects and found little evidence of the value creation during their announcements. (Chen & Shieh, 1991).

In addition, Merchant and Schenel, have tested the value creation of strategic alliances. They claim that there are other determinants at the time of the announcements that can explain the value creation effect. These determinants could be industry, geography, size etc. of the deals. The authors reported empirical evidence from earlier researchers:

Industry: The transaction cost literature suggests that greater similarity between the partners confers production and transaction oriented gains. Koh and Venkatraman found that firms in related industries increased their shareholder value compared to firms in unrelated industries.

Geography: Evidence from Mathur and Waheed suggests that firms collaborating in new foreign markets experience a positive valuation effect. However, Chen, Hu and Shieh found that shareholder value was not created as a result of entry into new foreign markets.

Size: Mcconell and Nantell report that the wealth gain is positively related to size of the investment made in the formation of joint ventures. The authors argued that such value creation was higher for the smaller partners, and that it increased as a function of initial capital committed to the alliance. However, the results contradicts with Chen and Shier who found that shareholder value was negatively related to the criteria size (Merchant & Schendel, 2000).
4.2 Do mergers & acquisitions create value?

One of the most common objectives of a merger or an acquisition is to strive for growth and expansion of the acquirer’s assets, sales and market share. A more fundamental objective may be the enhancement of shareholders' wealth through acquisitions aimed at maintaining and creating sustainable competitive advantage for the acquirer. Managers may be taking these decisions to increase the interest of the owners of the firm, i.e. the shareholders. This is the neoclassical view of the firm, in which the shareholder interest is paramount and managerial interests are subordinated. Where managerial interests differ from those of the shareholders, acquisitions may be taken to serve the managers interests.

According to Rappaport, in order for the acquiring company to produce value for its shareholders, the price must be no greater than the stand-alone value of the target company plus the value produced by acquisition synergies. Due to these synergies these companies create more cash flow together than the cash flow they would have created operating separately. An economic break-even should be when the premium paid for the target company equals the value of the receiving synergies (Rappaport, 1998).

4.2.1 Merger & acquisition performance – two reviews

The failure and success of mergers & acquisitions and the implication for shareholder wealth creation has constantly been discussed in the literature. Further, there are some contradictory findings in the research made within this subject. There is one finding based on financial studies and another based on economic studies regarding merger & acquisition performance. The financial economists propose for the argument that mergers & acquisitions do create value for shareholders, whereas, the economic studies imply that they do not create value.

4.2.1.1 Financial review

Jensen is one of the financial economists, who believe that mergers & acquisitions are the logical results of competitive struggles in the free market. Moreover, he believes that mergers & acquisitions of companies do not harm shareholders of the target company, on the contrary, it creates wealth. Resources are not wasted, but used productively. Although managers may serve in their self-interest, the environment in which they are active gives them relatively little opportunity to operate at the shareholders’ expense. Corporate control-related actions of managers do not generally harm shareholders, according to Jensen (Jensen, 1984).

Cybo-Ottone and Murgia argue for a positive value creation that can be explained by an increase in efficiency or in the market following the deal.
Other determinants of merger & acquisition gains at the time of the announcements can be explained by scope, geography and size of the deals:

*Industry*: One may look at the existence of economies of scope by comparing the value creation effect by merger & acquisitions within the same industries as opposed to unrelated industries.

*Geography*: When mergers are formed within domestic markets instead of cross border, it is proven that more efficient firms acquire less efficient firms, with the desire to eliminate duplicated activities, which could be likely when there is considerable overlap between markets. Chen and Shieh report a study done by Doukas and Travlos who found firms making acquisitions in foreign markets experience a positive valuation effect (Chen & Shieh, 1991).

*Size*: Some evidence suggest that value creation effects are larger the larger is the deal size (Cybo-Ottone & Murgia, 2001).

### 4.2.1.2 Economic review

A common perception is that mergers & acquisitions among companies are unable to create value for their shareholders. In some cases, the feverish atmosphere and the excitement of the chase of a hostile bid may drive managers to foolish excess in the bid premium they pay (Sudarsanam, 1995).

One of the economists sharing the economic review, Goldberg (1983), has showed in his study; Seven-Countries Study, that mergers & acquisitions do not have any or much effect on profits, market power and sales. The study indicates that there is no difference in effects of vertical, horizontal, or conglomerate mergers. Mergers may be growing in size but do not improve in performance. If they do, there are only improvements on a long-term basis. The management is not considered to be improved by mergers & acquisitions either. Further on, Goldberg shows in his study that mergers are undertaken to control symbiotic interdependence. Industrial concentration does not have as much explanatory power as profitability, although, the tendency to merge with less profitable industries is apparent. Other results presented are that shareholders of acquiring/bidder firms tend to lose, and those of acquired firms tend to gain.

Whether mergers & acquisitions can create value for the acquirers’/bidders’ shareholders is a question, which has been empirically addressed by a number of researchers. Earlier, evidence suggests that the acquirer/bidder do not create value, if they do it is very small positive abnormal return. However, more recent evidence supports the view that mergers & acquisitions can add value to the acquirer shareholders. There is almost universal agreement that target shareholders earn substantial bid premium, often amounting to 30 percent in a matter of days surrounding the bids (Sudarsanam, 1995).
4.3 Empirical evidence on shareholder returns

Chan, Kensinger, Keown and Martin investigated share price reactions to the formation of 345 strategic alliances during the period from 1983 to 1992. Their finding show that establishing strategic alliances creates a statistically significant average abnormal return of 0.64 percent for the stockholders of the partnering companies. The authors also analysed the cross-sectional differences in the abnormal returns for the strategic alliance announcements using a regression analysis. The dependent variable in the analysis was the announcement date abnormal return. The independent variables consisted of a control variable to catch the influence of company size plus other variables created to catch the hypothesised influence of growth possibilities, high- versus low-tech industry classification, the potential for the transfer or pooling of technological knowledge, and industry focus. From the regression, Chan, Kensinger, Keown and Martin have presented two important results about the abnormal returns. First, company size has an invert effect on abnormal returns and is highly significant in all the regressions. Second, strategic alliances between companies in the same industry create significantly higher abnormal returns than strategic alliances between companies in unrelated industries (Chan, Kensinger, Keown, & Martin 1997).

In the article "When to think alliance" Ernst and Halevy make different comparisons between strategic alliances and acquirer companies within mergers & acquisitions. The study incorporates most major countries, all industries, and a variety of strategic alliance structures. 52 percent of large strategic alliances lead to a rise or a fall in the share prices and of these 70 percent were increases, which were substantially higher than for acquirers in merger & acquisition deals. Ernst and Halevy have derived this success for large alliances to the careful preparations before the deals. They also argue that the market tends to prefer and reward strategic alliances more than mergers & acquisitions. Additionally, the study indicated that strategic alliances were better received than mergers & acquisitions in deals with unrelated industries compared to related industries. Strategic alliances were also a preferred choice for companies trying to build new businesses, entering new geographies or access new distribution channels (Ernst & Halevy, 2000).

Houston and Ryngaert examined U.S. bank merger agreements during 1985 to 1991. Using the market model they calculated the abnormal returns for both the bidders and the targets. For the entire period there was no apparent positive abnormal return of the combined bidder and target values. For a five-day event window the targets showed positive average abnormal return of about 14 percent, while the bidders, for the same event-window, showed a negative average return of 12 percent. Deals with a high degree of market overlap are revalued more positively due to the possibility of greater cost saving potential. Houston and Ryngaert see to possible reasons to the fact that bank merger announcements do not generate more positive abnormal returns to a combined portfolio of bidders and targets. One explanation could be that these mergers
do not create real synergies. A second explanation could be that their data includes a fair number of "good" acquisitions, but these are offset by a number of ill-advised acquisitions (Houston & Ryngaert, 1994).

Alberto Cybo-Ottone and Maurizio Murgia have made a study on the stock market valuation of mergers & acquisitions in the European banking industry and compared the results with a similar study done in the American banking industry. Deals have been observed from 1988 to 1997 at the announcement time on the size-adjusted performance of both the bidder and the target. The main result derived from this study was the significant positive value creation associated with the announcement of mergers & acquisitions. The individual results for targets and acquirers where that targets increased shareholder value, while acquiring companies earned shareholder value in the total sample results. The results showed that positive abnormal returns were associated with the announcements of domestic bank to bank deals and, while cross-border deals did not capture positive expectations from the market. When considering the deals in related and unrelated industries the study showed that bidding banks received a negative market reaction in case of mergers & acquisitions between banks, while reached a positive abnormal return when they announced a diversification merger. Target companies experienced positive abnormal returns in both cases. Cybo-Ottone and Murgia explain differences in their findings on European bank mergers towards the findings Houston and Ryngaert presented regarding the US banking industry. The differences could be found in different structure and regulation of EU banking markets compared to the US banking markets. The empirical evidence on the US market showed that mergers & acquisitions, generally, did not create value (Cybo-Ottone & Murgia, 2000).

A study performed by Pichette and Samek imply that acquisitions in the forestry products sector jeopardise the company’s share price. For example when UPM-Kymmene (Finland) announced a bid for Champion International (United States) the share price fell by more than 8 percent within a day for the Finish company, which would have been the acquirer. The bids from Stora Enso for an American company and Abitibi-Consolidated (Canada) for a Canadian company was met with similar responses from the market. But, however, the study has showed that merged companies that use innovative approaches to change themselves will still be able to create considerable value. According to Pichette and Samek, investors do not believe that the profits of uniting two companies within this sector compensate the costs, due to too much trapped value, weaker strategic positions and diseconomies of scale. They also draw the conclusion that unless a management does not have certain arguments to be the acquirer they should sell rather than buy (Pichette & Samek, 2000).

In a study done by Bieshaar, Knight and Wassenaer, different strategies have been compared and evaluated. The companies, which strived for gaining new distribution channels, were the deals, which were most positive reevaluated from the stock market. These deals earned a 4,2 percent stock market premium.
If a deal aimed to consolidate a market by uniting two companies in the same industry or to expand a company’s geographical area, it earned a 1.1 percent premium. Deals where a company sells off a part of its business portfolio or a strategy were a company acquires a business that takes it outside its core industry - actually destroyed 5.3 percent of the company’s value on average (Bieshaar, Knight, & Wassenaer, 2001).

4.4 Summary and hypotheses

Whether strategic alliances and mergers & acquisitions increase value for a company’s shareholder can certainly be discussed. Economists seem to disagree on this point. Empirical research on both strategic alliances and mergers & acquisitions has shown that share prices for the companies involved can either increase or decrease at the time of the announcements of these strategic formations. Different criteria, such as size and industry have been used when research has been done within this area. Research on differences between strategic alliances and mergers & acquisitions has not been done to a greater extent. The one comparing study included in this thesis indicates that formation of strategic alliances seems to increase share prices more than acquirer/bidder companies do.

Our opinion is that the announcements of strategic alliances and mergers & acquisitions should have an impact on share prices, which in turn increase or decrease shareholder value for the companies. Most certainly, there would be some unique characteristics about the formations that may have implications for the outcome on the impact on share prices. It may be suggested that different forms of criteria, as size, industry or geography, regarding these formations should have implications on how they will affect share prices.

Whether strategic alliances increase shareholder value more than mergers & acquisitions depend on if the two approaches would increase share prices individually – in the first place. As much research has not been done on the comparison of these two strategic approaches, it is difficult to draw a clear conclusion. The empirical study that has been included in our theoretical framework suggests that strategic alliances increase value more than mergers & acquisitions do. Even the empirical evidence suggests that strategic alliances seem to have a greater positive impact on share prices, than acquirer/bidder companies. This would imply that a comparison between strategic alliances and mergers & acquisitions would show higher results on strategic alliances than on mergers & acquisitions, or it might also show the opposite result, as there is earlier research where shareholder value is proven to decrease at the formation of strategic alliances, as well. Studying the theories regarding strategic alliances and mergers & acquisitions and their impact on shareholder value, three hypotheses can be derived:
1) 
$H_0$: Strategic alliances do not increase shareholder value.  
$H_1$: Strategic alliances increase shareholder value.

2) 
$H_0$: Mergers & acquisitions do not increase shareholder value.  
$H_1$: Mergers & acquisitions increase shareholder value.

3) 
$H_0$: Strategic alliances do not affect shareholder value more favourably than mergers & acquisitions.  
$H_1$: Strategic alliances affect shareholder value more favourably than mergers & acquisitions.

The hypothesis have been tested and analysed in the empirical framework in chapter six. The hypotheses derived have either been falsified or supported. It is difficult to actually derive the hypotheses from the theoretical framework and at the same time argue that the theory will be falsified or supported, as disconnected and opposing theories exist for both strategic alliances and mergers & acquisitions.
PART 3

EMPIRICAL FRAMEWORK AND ANALYSIS
5. METHODOLOGY FOR THE
EMPIRICAL FRAMEWORK

This chapter includes the theories about event studies and the methodology to use when this study is conducted. Furthermore, the methodology underlying the empirical study done in this thesis will be presented.

5.1 Event study

The empirical methodology used in this research is the event study approach, which has been used extensively in finance, accounting, regulatory economics and management to assess the value implications of the release of firm-specific information. The event study methodology was first introduced in 1969 by Fama, Fisher, Jensen and Roll, who started a methodology revolution in economic and finance (Binder, 1998). The approach is based on the assumption that in an informative efficient market, any new information will be shown in share prices. Hence, the value relevance of any secret information and its impact on a firm can be assessed by examining the price changes surrounding the release of the information (Das, Sen & Sengupta, 1998).

The event study’s large usefulness depends on the fact that an event study will immediately reflect an event’s effect in asset prices given that the market reacts rational. An advantage using event studies is that the event’s reflection on asset prices could be observed over a rather short time period.

In an event study the researcher wants to analyse how a certain event affects the value of a company. The event could for example be a take-over, a dividend payment, a split etc. The researcher measures the returns in the period prior to and after the day the event is announced for a sample of stocks and examines whether the average returns in the pre-event and post-event periods are significantly different from each other (Campbell, Lo & McKinley, 1997).

5.2 How to accomplish an event study

To accomplish an event study you have to go through a number of steps. According to Campbell, Lo and MacKinlay, an event study includes the following seven steps:
1. Event definition

A researcher can identify events by their impact on stock prices for the firms. By defining a period of days over which the impact of the event will be measured. This period is called the event window (Campbell, Lo & McKinley, 1997). The length of the event window is crucial for the event study. The longer the event window, the more difficult it is for the researchers to claim that they have controlled for confounding effects, i.e. other events that can affect the announcement event. It has empirically been demonstrated that a short event window will capture the significant effect of an event. Thus, an event window should be long enough to capture the significant effect of the event and short enough to exclude confounding effects (McWilliams & Siegel, 1997).

2. Selection criteria

It is necessary to determine the selection criteria for a company to be included in the study. The criteria can involve time-horizon, geography, firm-specific criteria etc.

3. Normal and abnormal returns

To value an event, a measure to calculate the abnormal return is essential. The abnormal return is the actual return of the stock over the event window less the normal return of the company over the event window. The normal return is defined as the return that would be expected if the event did not arise (Campbell, Lo & MacKinlay, 1997).

Seth Armitage has presented the following models to calculate the abnormal return:

- **The index model:** \( AR_{it} = R_{it} - R_{mt} \)
  The index model assumes that over period \( t \) the share \( i \) will fluctuate at the market rate. The market rate \( R_{mt} \) is subtracted from the actual rate \( R_{it} \) and the abnormal return \( AR_{it} \), for the share \( i \) is received.

- **Average return model:** \( AR_{at} = R_{it} - \bar{R}_{i} \)
  The average return model assumes that the share \( i \) moves the same as it does on average during an estimation window before or around the test period. The abnormal return \( AR_{at} \), is the actual return \( R_{it} \), less the average return \( \bar{R}_{i} \).

\[
\text{A Comparison of Strategic Alliances and Mergers & Acquisitions and their Impact on Shareholder Value}
\]

Lund, June 2001
A common used model, according to Armitage, is the market model. This model estimates the relationship between a share’s movement and the market’s movement. Based on this relationship it is possible to estimate the expected rate of return given the returns on the market. The abnormal return, $AR_{it}$, is received by subtracting the expected return that consists of the estimated regression coefficients $\alpha_i$ and $\beta_i$ multiplied with the market return, from the actual return, $R_{it}$. (Armitage, 1995).

Another commonly used model is the capital asset pricing model (CAPM). The Capital Asset Pricing Model (CAPM) was developed by Sharpe and Lintner. CAPM is an equilibrium theory where the expected return of a given asset is determined by its covariance with the market portfolio (MacKinley, 1997). The model has been redeveloped several times after its introduction.

The CAPM-model is based on two assumptions: First, securities markets are very competitive and efficient, which implies that relevant information about the companies is quickly distributed. Second, these markets are dominated by rational, risk-averse investors, who seek to maximise returns of their investments. Even though, these assumptions may seem to be unrealistic, such simplification of reality is often necessary to develop useful models and the derivation of a concrete model of the manner in which financial markets measure risk and transform it into expected return.

Beta is the standard CAPM measure of systematic risk. It gauges the tendency of the return of a security to move in parallel with the return of the stock market as a whole (Mullins, 1982).
• **APT-model:** \( E(R_{it}) = \beta_{i1}F_{1t} + \beta_{i2}F_{2t} + \ldots + \beta_{ik}F_{kt} + \epsilon_{it} \)

Where,
- \( E(R_{it}) \) – is the expected return for share i at time t,
- \( \beta_{i1}F_{1t} \) – is the factor 1 influence on the return for share i at time t,
- \( \beta_{i2}F_{2t} \) – is the factor 2 influence on the return for share i at time t,
- \( \beta_{ik}F_{kt} \) – is the factor k influence on the return for share i at time t,
- \( \epsilon_{it} \) – is the noise.

The abnormal return for share i at time t is then the actual return less the expected return \( E(R_{it}) \) (Brown & Weinstein, 1985).

The arbitrage-pricing model assumes that each stock’s return depends partly on macroeconomic variables and partly on noise. The noise is an event unique to one particular company (Brealey & Myers, 1996, p. 190).

Further, Fama and French argue "that average returns on common stocks are related to firm characteristics like size, earnings/price, cash flow/price, book-to-market equity, past sales growth, long-term past return, and short-term past return" (Fama & French, 1996). As these variables are not explained by the CAPM, they are called anomalies. The authors find that these anomalies, except the short-term return, are explained by a three-factor APT model. But Fama and French emphasise that the three-factor model is just a model and it does not explain expected returns on all portfolios (Fama & French, 1996).

### 4. Estimation procedure

When the model has been chosen the parameters in the model must be calculated using historical data. This data is known as the estimation window (Campbell, Lo & MacKinlay, 1997). According to Armitage the estimation window should not be below 100 days and should not be more than 300 days for daily studies (Armitage, 1995).

### 5. Testing procedure

The next step is to define the null hypothesis, and to create the significance-testing framework for the abnormal returns.
6. Empirical results, interpretations and conclusions

The final step is to analyse, interpret and draw conclusions from the findings. Ideally the findings leads to insights about the events influence on stock prices (Campbell, Lo & MacKinlay, 1997).

5.3 Validity of an event study

The event study framework provides a true measure of the financial impact of an event, only if it is valid. Since the method is increasingly used to assess the impact of managerial decision making, it is important to consider whether it has been implemented correctly when it is used, whether results have been reported clearly and whether the interpretation of results has been appropriate or not. Readers can only be confident that the conclusion from an event study is valid if they can be confident that the researchers have truly identified the abnormal returns associated with the specific event analysed. This can be achieved only if a set of assumptions regarding the nature of the empirical experiment, are considered:

Market efficiency; this first assumption is important because it provides the basis for the use of the event study method. Market efficiency implies that stock prices incorporate all relevant information that is available to market investors. If this is true, then any financially relevant information that is newly revealed to investors will be quickly incorporated into stock prices. Therefore, an event is anything that results in new relevant information.

Unanticipated events; the second assumption is based on the idea that the market do not have any previous information about the event. It is possible that an event has been anticipated or information has leaked to the market in advance of a formal announcement. Such leakage makes the use of an event study methodology problematic, as it is difficult to determine when the market becomes aware of the new information. The researcher must eliminate all such anticipated announcements for the results to be valid.

Confounding effects; the third assumption is based on the claim that a researcher isolates the effect of an event from the effects of other events. It is assumed that there are no confounding effects from other events. This is the most critical assumption of the methodology in an event study. Confounding events can include the declaration of dividends, announcements of a new product, filing of a large damage suit, announcements of an impending merger, announcements of unexpected earnings and changes in a key executive. Any of these events might have an impact on the share price during the event window (McWilliams & Siegel, 1997).
5.4 Methodology for empirical research for this thesis

1. Event definition

The event that is going to be studied in this thesis is the announcements of strategic alliances and mergers & acquisitions and their impact on share prices. The announcements have been found in the Bloomberg, Financial Times, and in the database Agency Europe, at Lund University.

In the empirical study in this thesis, two event windows have been chosen, one long and one short event window. The first window will be 5 days before announcement plus the announcement day and 10 days after. The other window will reach 2 days before the announcement, the announcement day and 5 days after. The reason for choosing one long and one short event windows is that similar results in both event windows would increase the reliability in the results derived. This would imply that no confounding effects have influenced the event period and that the significant effects have been captured.

With regards to certain deals, trade on the stock exchange was not open at the announcement day. In this case we have not taken into account the announcement day, although the number of days before and after the announcement are the same.

2. Selection criteria

For the companies included in our sample, we have chosen to include the following criteria:

*Share prices*

Daily observations have been used rather than monthly. Daily share price data is easily available and has been used in recent studies to calculate normal and abnormal returns. Most of the early literature has used monthly returns, but with daily data the event can be located more precisely than with monthly data. A disadvantage with monthly data is that there is more volatility and therefore more unstable and unreliable parameters (Sudarsanam, 1995).

The event studies with daily returns perform at least as well in practice as those with monthly returns. The potential problems with daily returns are easily corrected in the standard event study and, when the event date is known, test with daily data have greater signal to noise rather than those with monthly data (Binder, 1998).


Time horizon

The reason for choosing the time horizon 1998-2000 is mainly because the Euro was introduced in January 1999. We chose to extend one year backward due to the fact that even though the introduction of the Euro occurred in 1999, we believe that the process of introducing the single currency was already in order. The process of introducing the European Monetary Union (EMU) can be divided into three phases. The first phase started in 1998 when member countries were chosen for the union, businesses started to adjust and prepare for the changeover effects, the European Central Bank was created and financial and banking sector finalised changeover preparations. The second phase occurred in 1999, when the actual introduction of the single currency was realised. The third phase will start in year 2002, when the introduction of Euro notes and coins will be available (http://amue.if.net). As we consider the first phase of 1998 to be important for the integration of the Euro-countries, we have chosen to include 1998 in our empirical study.

Population

We consider the population of our study to be all strategic alliances and mergers & acquisitions where the companies involved are listed on the stock market within the Euro-zone and the time period chosen. The first sample has been selected by choosing three different sources to find the announcements of strategic alliances and mergers & acquisitions. From this sample the announcements have been chosen randomly. A prerequisite has been that daily stock prices of these companies needed to be available in order to be included. The sources that have been used to find the announcements are Bloomberg, the database Agence Europe and Financial Times.

Choice of Criteria

The criteria geography, industry and size have been selected. We want to find out whether certain criteria lead to different revaluation of strategic alliances and mergers & acquisitions compared to the total sample of observations. Size will focus on the strategic alliances and mergers & acquisitions formed by considering the total assets that have been created at the formation. It is interesting to analyse if the criterion geography divided into, domestic or cross-border strategic alliances and mergers & acquisitions affect share prices differently from the total sample of observations. Earlier research has shown that the criterion, industry, is important in the sense that it can make a difference whether a company forms an alliance or acquires a company in a related industry or with a company in an unrelated industry.
3. Normal and abnormal returns

In this thesis we have used the CAPM to calculate the normal returns. The underlying reason for this choice is that this model is a very commonly used model. Another reason is that the differences in using different models appear to be quite small according to empirical evidence.

In the CAPM both a risk-free interest rate and a market index are included. A weekly 3-month Euro Libor interest rate has been used and as the market index we decided to use the Euro Stoxx 50 index. This index does only include companies within the Euro zone.

4. Estimation procedure

The recommendation from Armitage, of an estimation window of 100 to 300 days has been followed and 150 days has been selected as the estimation window in this event study.

5. Testing procedure

A t-test will be used in order to test the average abnormal returns for the N shares to see the significance.

Defining null hypotheses:

H₀ : µ = 0, i.e. the average abnormal return is 0.

H₁ : µ ≠ 0, i.e. the average abnormal return is different from 0.

The following t-test recommended by Armitage will be used:

\[
\sum_{i=1}^{N} \frac{SE_{a_i}}{SE}\sqrt{N}
\]

Where,

N – is the number of shares in the portfolio.

SEₐᵢ – is an standardised error, received from this formula

\[
SE_{a_i} = \frac{AR_{a_i}}{S_i}
\]

Where

ARₐᵢ – is the abnormal return for share i at time t.

Sᵢ – is the standard error for share i.

6. Empirical result, interpretation and conclusion

The upcoming chapter will include the empirical study on strategic alliances and mergers & acquisitions. Followed by an analysis and interpretations.

5.5 Validity of the empirical research in this event study

Market efficiency

The assumption that the market is efficient is accepted, as most share prices seem to have been affected by the announcements of strategic alliances and mergers & acquisitions and the market has reacted to the revealed information.

Unanticipated events

One problem which can affect the results of our study is the fact that the strategic alliances and mergers & acquisitions might not be a secret before the announcement, as speculations may have been apparent about the formations before the actual announcement, and this fact may somewhat lead to biased results. This problem has been minimised by not considering announcements that have been released regarding planning and intentions, as they have not been seen as announcements of a real formation of strategic alliances or mergers and acquisitions. The announcements are neither considered being secret if the information has leaked before the formal announcement.

Confounding effects

It is difficult to assess whether confounding effects have affected the event window that has been analysed. The long event window might have been affected, as other information can have been released, which might not have anything to do with the particular event being studied, on the other hand, to capture the significant effect of the particular event, the period needs to be long enough.
6. EMPIRICAL RESULTS AND ANALYSIS

This chapter includes the empirical results gained by doing an event study on the announcements of strategic alliances and mergers & acquisitions. These results will be followed by an analysis between strategic alliances and mergers & acquisitions.

In the empirical study, the results derived from the event study are shown. In order to serve the purpose of this thesis, individual results for each strategic approach have been presented. To compare strategic alliances and mergers & acquisitions and their impact on share prices, it is essential to analyse the two approaches individually, by answering the hypotheses derived in chapter four. Even though it is not part of our purpose to analyse each approach separately, we believe that it is necessary to include this sub-analysis due to the fact that individual calculations need to be done in order to compare the two approaches. By conducting an event study, the results can show which of the two strategic approaches has the largest impact on share prices due to the announcements.

The criteria, geography and industry will be used in order to address whether the stock market values strategic alliances and mergers & acquisitions differentially compared to the total sample of observations. By analysing which criterion has the largest impact on share prices in each strategic approach, a comparison of the criteria in both strategic approaches can be made.

The criterion, size, which was supposed to be included as a criterion in the analysis, has been excluded due to the reason that this data for strategic alliances was incomplete. The available data could only be used to analyse mergers & acquisitions and not for the comparison between strategic alliances and mergers & acquisitions. This task was therefore considered to reach beyond our purpose and was therefore not included.

The event study done on the Euro-zone will be compared to similar empirical studies. The comparison of strategic alliances and mergers & acquisitions will mainly be compared to a study done on the global market in order to see whether there are any differences in the results derived on the global level compared to the Euro-zone.

When testing the hypotheses derived in chapter four, the first step has been to either falsify or support the three hypotheses derived, by using the results gained from the total sample of observations. Secondly, the hypotheses derived from the analysis of the criteria geography and industry have been compared to the total sample of observations in order to see whether they reach the same
conclusions as the total sample has reached when falsifying or supporting the hypotheses.

Furthermore, it is important to stress that the sample is rather unequally distributed within the criteria, with regards to the number of observations. One example is the criterion industry for strategic alliances, where only 19 of 58 strategic companies entered deals with unrelated industries and the rest entered deals with related industries. These kinds of results have been considered to reflect the market, however, the small number of observations might weaken the statistical confidence in the results.

The results derived from the event study in this thesis are presented in tables within each section analysed. Each table is divided into two different event windows. The tables for mergers & acquisitions are further divided into target companies and acquirer/bidder companies. The standardised error is the sum of all abnormal returns for each share divided by the standard error of that share. The equation was described under section 5.4. This standardised error and the number of observations have been used to calculate the t-value in order to test for significance. In each table, the null-hypothesis is tested, which determines whether the cumulative average abnormal return (CAR) is significantly different from zero or not.

6.1 Share price reactions to the announcements of strategic alliances

How does the stock market react towards strategic alliance announcements? The table below presents the results derived from the total sample of observations for strategic alliances including 58 observations.

Table 1.

<table>
<thead>
<tr>
<th>Event window (days)</th>
<th>Total sample of strategic alliances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(-5, +10)</td>
</tr>
<tr>
<td></td>
<td>(-2, +5)</td>
</tr>
<tr>
<td>CAR (%)</td>
<td>1.26</td>
</tr>
<tr>
<td>Standardised error</td>
<td>-2.52</td>
</tr>
<tr>
<td>Nr. of observations</td>
<td>58</td>
</tr>
<tr>
<td>t-value</td>
<td>-0.33</td>
</tr>
<tr>
<td>Ho: μ = 0</td>
<td>Not Rejected</td>
</tr>
</tbody>
</table>

The results gained from our empirical study indicate that there was an increase in value for the companies involved in strategic alliances. The shareholders of the companies earned positive returns around the time of the announcements. For strategic alliances examined in this study, CAR was higher for the long event window rather than the short event window. However, the margin is
relatively small and the result for the long event window is not significantly different from zero at a significance level of 5 percent. Therefore, a conclusion can not be drawn whether strategic alliances increase shareholder value within this window or not.

The results show that on average, shareholders earned relatively little from the alliance announcements. However, it is important to emphasise that the announcements of these strategic alliances create value for the shareholders in the short event window, even though it is a relatively small percentage. This evidence suggests that the market reacted favourably to the news regarding the formation of strategic alliances.

Results from our study coincide with earlier research that have reached the same conclusion i.e. strategic alliances create value. For example the study done by Chan, Kensinger, Keown and Matin and that done by McConell and Nantell showed that the announcements of strategic alliances earned positive excess returns. However, their findings showed a CAR of about 0,64 percent and 0,73 percent, which is somewhat lower than our findings.

### 6.1.1 Criteria for strategic alliances

This section will present the results for strategic alliances when dividing them into the criteria geography and industry. Geography divide strategic alliances into domestic and cross border and the criterion industry is divided into related and unrelated industry.

<table>
<thead>
<tr>
<th>Table 2.</th>
<th>Domestic deals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event window (days)</td>
<td>(-5, +10)</td>
</tr>
<tr>
<td>CAR (%)</td>
<td>1.74</td>
</tr>
<tr>
<td>Standardised error</td>
<td>6.47</td>
</tr>
<tr>
<td>Nr. of observations</td>
<td>23</td>
</tr>
<tr>
<td>t-value</td>
<td>1.35</td>
</tr>
<tr>
<td>Ho: $\mu = 0$</td>
<td>Not rejected</td>
</tr>
</tbody>
</table>
When analysing the results for strategic alliances by dividing them into domestic and cross border, one can see that CAR was positive during the two event windows in both domestic and cross border deals, but the only result that was significant was the short event window for cross border deals. Thus, a conclusion can not be drawn whether cross border strategic alliances were more preferred than domestic strategic alliances.

According to earlier empirical evidence, the result in this analysis supports the study done by Mathur and Waheed, which suggested that companies entering strategic alliances, cross border, experience a positive valuation effect.

Firms were categorised in the related industry subgroup if they had partners with operations in related businesses. In the deals for related industries the
CAR was negative in both event windows, which imply that there was a negative stock market reaction to the news of the formation of strategic alliances formed within the same industry. This is the only case derived in our study, which has shown a negative CAR for strategic alliances. The market was favourable to the announcements of strategic alliances within unrelated industries, where the CAR was positive during both event windows. All results are statistically significant at a 5-percentage significance level.

One reason why strategic alliances between unrelated industries showed the highest CAR-values within this approach, might be that companies have higher possibilities to take advantage of each others’ competence and at the same time avoid the risks that cross border alliances might imply.

The results are contradictory to the study conducted by Chan, Kensinger, Keown and Martin. They show in their study that strategic alliances formed within the same industry create higher abnormal returns than strategic alliances between unrelated industries do. The results gained in this event study contradict to previous studies, as our study showed that strategic alliances in unrelated industries are more preferred than strategic alliances among related industries.

**Hypothesis 1**

After analysing the results for strategic alliances and their impact on share prices, the null-hypothesis was tested, firstly for the total outcome of all strategic alliances and secondly, with regards to the criteria geography and industry.

$H_0$: Strategic alliances do not increase shareholder value.

$H_1$: Strategic alliances increase shareholder value.

The results from the total sample of strategic alliances’ impact on share prices show that formation of strategic alliances increase shareholder value during the short event window. The null-hypothesis is falsified and hypothesis one is supported. The result for the long event window were similar to the short event window, but as the result in the long event window was insignificant, we can not draw a conclusion whether they increased or decreased shareholder value, in this case.

By considering the criterion geography only the result for cross border alliances during the short event window falsify the null-hypothesis, and supports the hypothesis one, which confirm the fact that strategic alliances increase shareholder value. Even though, the other remaining results showed positive CAR-values, they were insignificant and the null-hypothesis can therefore neither be falsified nor supported.
The criterion industry shows different results, as deals in related industries show negative CAR, which imply that these deals did not increase shareholder value. Thus, the null-hypothesis is supported for alliances entered in related industries. However, strategic alliances entered between unrelated industries increased shareholder value, which in turn falsify the null-hypothesis in this case.

6.2 Share price reactions to the announcements of mergers & acquisitions

The table below presents the results for the total sample of announcements on mergers & acquisitions, which includes 60 observations each for target companies and acquirer companies.

<table>
<thead>
<tr>
<th>Event window (days)</th>
<th>(-5, +10)</th>
<th>(-2, +5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Acquirer/Bidder</td>
</tr>
<tr>
<td>CAR (%)</td>
<td>12.86</td>
<td>-1.2</td>
</tr>
<tr>
<td>Standardised error</td>
<td>139.19</td>
<td>-27.64</td>
</tr>
<tr>
<td>Nr. of observations</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>t-value</td>
<td>17.97</td>
<td>-3.57</td>
</tr>
<tr>
<td>Ho: µ = 0</td>
<td>Rejected</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

For the short event window, the total results indicate that the target companies earned positive CAR, while the shareholders of the acquirer/bidder companies showed a negative CAR, at the time the deals were announced. The long event window showed similar results, as well. All results were statistically significant at a 5-percentage significance level. The results indicate that target companies increase shareholder value, while the acquirer/bidder companies destroy shareholder value.

A major reason for the large margin between target companies and acquirer/bidder companies might be that the acquirer/bidder companies most often pay bid premiums, often higher than desired. As the target companies gain and the acquirer/bidder companies lose, there is a wealth transfer from acquirer/bidder to target shareholders.

One other possibility why the acquirer/bidder companies show large differences in the CAR-values, compared to the target companies, might be that the target company, normally is the smaller one compared to the acquirer/bidder company and therefore, the merger or acquisition might have a larger impact on the target company.
Whether mergers & acquisitions can create value for the acquirers’ or bidders’ shareholders is a question, which has been empirically addressed by a number of researchers. Earlier, evidence suggests that the acquirer/bidder companies do not create value, and if they do it is a very small positive abnormal return. There is almost universal agreement that target shareholders earn excess return over the acquirer/bidder shareholders, and this argument coincides with our results derived for the total sample of observations on mergers & acquisitions. Further, our results coincide with the financial review, which suggests that mergers & acquisitions do create value for shareholders, with regards to the target firms. Whereas, the acquirer/bidder companies results coincide with the economic review that they do not create value.

6.2.1 Criteria for mergers & acquisitions

This section will present the results for mergers & acquisitions when dividing them into the criteria geography and industry.

Table 7.

<table>
<thead>
<tr>
<th>Event window (days)</th>
<th>Domestic deals</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(-5, +10)</td>
<td>(-2, +5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Target</td>
<td>Acquirer/Bidder</td>
<td>Target</td>
<td>Acquirer/Bidder</td>
</tr>
<tr>
<td>CAR (%)</td>
<td>13.53</td>
<td>-0.39</td>
<td>12.18</td>
<td>0.11</td>
</tr>
<tr>
<td>Standardised error</td>
<td>109.42</td>
<td>-0.71</td>
<td>62.95</td>
<td>-21.79</td>
</tr>
<tr>
<td>Nr. of observations</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>t-value</td>
<td>16.31</td>
<td>-0.11</td>
<td>9.38</td>
<td>-3.25</td>
</tr>
<tr>
<td>Ho: µ = 0</td>
<td>Rejected</td>
<td>Not rejected</td>
<td>Rejected</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Table 8.

<table>
<thead>
<tr>
<th>Event window (days)</th>
<th>Cross border deals</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(-5, +10)</td>
<td>(-2, +5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Target</td>
<td>Acquirer/Bidder</td>
<td>Target</td>
<td>Acquirer/Bidder</td>
</tr>
<tr>
<td>CAR (%)</td>
<td>10.84</td>
<td>-3.67</td>
<td>10.20</td>
<td>-2.96</td>
</tr>
<tr>
<td>Standardised error</td>
<td>29.77</td>
<td>-26.93</td>
<td>20.98</td>
<td>-25.93</td>
</tr>
<tr>
<td>Nr. of observations</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>t-value</td>
<td>7.69</td>
<td>-6.95</td>
<td>5.42</td>
<td>-6.69</td>
</tr>
<tr>
<td>Ho: µ = 0</td>
<td>Rejected</td>
<td>Rejected</td>
<td>Rejected</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

According to the results above, it was concluded that the target firms had a positive CAR, with respect to mergers & acquisitions on the domestic market. The results for both event windows were similar and significant.
The results for the acquirer/bidder companies in domestic deals showed very little positive CAR during the short event window and the results were statistically significant at a 5-percentage level. The long event window showed negative CAR for acquirer/bidder companies, but this result is insignificant. The overall evidence support the idea that, on average, shareholders of the acquirer/bidder companies earn very little, if anything from their announcement.

Mergers & acquisitions in the case of cross border deals showed a positive CAR for the target shareholders, while the acquirer/bidder companies had high negative CAR-values. The t-test on a 5 percent significance level show that all results were significant.

When comparing domestic and cross-border mergers & acquisitions, the significant CAR-values were higher for both the target and acquirer/bidder companies in domestic, rather than cross border deals. All significant results for the domestic deals created shareholder value surrounding the time of the announcements.

As both target companies and acquirer/bidder companies are more preferred in domestic deals than cross border deals, mergers & acquisitions in cross border deals are perceived to be riskier, e.g. risks associated with cultural differences. Due to the high uncertainty for cross border mergers & acquisitions for both target companies and acquirer/bidder companies, the risk of failure will be higher than for domestic mergers or acquisitions.

Our findings are consistent with the findings of Cybo-Ottone and Murgia, who found positive CAR associated with the announcements of domestic deals, while cross-border deals did not capture positive expectations from the market.

**Table 9.**

<table>
<thead>
<tr>
<th>Related industry deals</th>
<th>(-5, +10)</th>
<th>(-2, +5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Acquirer/Bidder</td>
</tr>
<tr>
<td>Event window (days)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAR (%)</td>
<td>14.03</td>
<td>-1.92</td>
</tr>
<tr>
<td>Standardised error</td>
<td>86.35</td>
<td>-23.21</td>
</tr>
<tr>
<td>Nr. of observations</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>t-value</td>
<td>13.65</td>
<td>-3.67</td>
</tr>
<tr>
<td>Ho: µ = 0</td>
<td>Rejected</td>
<td>Rejected</td>
</tr>
</tbody>
</table>
Table 10.

<table>
<thead>
<tr>
<th>Event window (days)</th>
<th>(-5, +10)</th>
<th>(-2, +5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Acquirer/Bidder</td>
</tr>
<tr>
<td>CAR (%)</td>
<td>10.53</td>
<td>0.22</td>
</tr>
<tr>
<td>Standardised error</td>
<td>52.83</td>
<td>-4.43</td>
</tr>
<tr>
<td>Nr. Of observations</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>t-value</td>
<td>11.81</td>
<td>-0.99</td>
</tr>
<tr>
<td>Ho: $\mu = 0$</td>
<td>Rejected</td>
<td>Not Rejected</td>
</tr>
</tbody>
</table>

By regarding the results gained for mergers & acquisitions in related industries, one can see that the target companies earned a higher CAR than did the acquirer/bidder companies. Both event windows show similar results in CAR, positive for the target companies and negative for the acquirer/bidder companies. A 5-percentage significance level, show that all the results derived for mergers & acquisitions are proven to be significant with regards to this criterion.

The target companies for unrelated deals show positive CAR for both event windows, although, it is a large margin between the windows. A 5-percentage significance level for unrelated industries show that the results were significant for the targets in both event windows. The results for the acquirer/bidder companies are almost the same and positive in both event windows. The positive results are unusual for acquirer/bidder companies, as they normally show negative CAR-values. However, the result gained from the long event window was not significant.

Target companies earned a higher CAR in deals within related industries compared to unrelated industries, whereas the acquirer/bidder companies earned higher CAR in unrelated industry deals. It is important to consider that the results for acquirer/bidder companies for unrelated industries earned a positive CAR in both event windows, unlike acquirer/bidder companies in related industries.

The results in our event study are contradictory, when looking at target companies and acquirer/bidders companies, as one can not draw a conclusion on whether mergers & acquisitions as a whole are more preferred when they are formed in related or unrelated industries. However, by considering both the targets’ and the acquirer/bidders’ perspective, it may be suggested that mergers & acquisitions in deals for unrelated industries create more shareholder value than in related industries, as CAR is positive for both target companies and acquirer/bidder companies, in this case.
One possible explanation for the coinciding results for target companies and acquirer/bidder companies within this criterion might be that mergers & acquisitions are perceived to be riskier in unrelated industry deals than for deals within the same industry. Because of this risk and uncertainty, the acquirer/bidder companies are not prepared to pay too high bid premiums, while the target companies are willing to accept lower bid premiums, in order to enter new market segments.

The results are to a certain extent coinciding with the theories. The economic review supports the aspect that mergers & acquisitions do not create value, which is true in the case for the acquirer/bidder companies in related industries in our study. However, in all remaining results for both related and unrelated deals, there was an increase in share prices for both targets and acquirer/bidder. These results support the financial view that mergers & acquisitions increase share prices. Acquirer/bidder companies show a positive CAR in unrelated deals, while negative in related deals.

These results can be compared to the study done by Cybo-Ottone and Murgia on banking mergers, who came to the same conclusion that bidding companies show a negative market reaction in deals within related industries.

**Hypothesis 2**

After analysing the results for mergers & acquisitions and their impact on share prices, the null-hypothesis was tested in this case, as well.

$H_0$: Mergers and acquisitions do not increase shareholder value.

$H_1$: Mergers and acquisitions increase shareholder value.

The total results for all mergers & acquisitions in our event study indicate that shareholder value increased for target companies and decreased for acquirer/bidder companies. The null-hypothesis is falsified in the case for target companies, but supported for the acquirer/bidder companies.

For the criterion geography, the null-hypothesis is falsified for the target companies in both domestic and cross border deals, as share prices increased at the time of the announcements. The acquirer/bidder companies involved in domestic deals experienced increased share prices in the short event window. The result in the long event window is not significant and is therefore not reliable. The share prices decreased at the time of the announcements of cross border deals for the acquirer/bidder firms. The null-hypothesis is falsified, in the case for domestic deals for acquirer/bidder companies during the short event window, and supported for cross border deals.

For the criterion, industry, the target companies earned positive CAR in the deals for both related and unrelated industries. Thus, the null hypothesis is falsified. For the acquirer/bidder companies, the share prices decreased for the
deals between related industries, while the share prices increased for the firms in the unrelated industries during the short event window. The result in the long event window is positive but not significant and is therefore unreliable. The null-hypothesis is supported in the case for related industries, unlike the case for unrelated deals during the short event window, where the result for the short event window is falsified.

6.3 Comparison between strategic alliances and mergers & acquisitions

The purpose of this thesis, as mentioned in chapter one, is to compare strategic alliances and mergers & acquisitions. The criteria analysed in each strategic approach above have contributed to a deeper knowledge about how the results can differ from the main results when breaking down the observations into different criteria within these two approaches. To compare the results of the two approaches, we chose to compare the CAR for the target companies and acquirer/bidder companies with that of strategic alliances. In the cases, where there have occurred non-significant results, the event windows have not been included in the comparison analysis.

<table>
<thead>
<tr>
<th>Total sample of strategic alliances and merger &amp; acquisitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic alliances</td>
</tr>
<tr>
<td>CAR (-5, 10)</td>
</tr>
<tr>
<td>Ho: $\mu = 0$</td>
</tr>
<tr>
<td>CAR (-2, 5)</td>
</tr>
<tr>
<td>Ho: $\mu = 0$</td>
</tr>
</tbody>
</table>

The results gained from our studies show that target firms in mergers & acquisitions gained a higher positive CAR of 11.68 percent compared to strategic alliances’ CAR of 1.22 percent.

When comparing strategic alliances to acquirer/bidder companies, the results indicate that strategic alliances, with a CAR of 1.22 percent, increase shareholder value more than acquirer/bidder companies’ CAR-value of -0.66 percent.
6.3.1 The comparison of strategic alliances and mergers & acquisitions, with regards to the criteria

This section will present the results for the comparison of strategic alliances and mergers & acquisitions, when dividing them into the criteria geography and industry.

Table 12.

<table>
<thead>
<tr>
<th>Domestic and Cross border deals</th>
<th>Strategic alliances</th>
<th>Target</th>
<th>Acquirer/Bidder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domestic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAR (-5, 10)</td>
<td>1.74</td>
<td>13.53</td>
<td>-0.39</td>
</tr>
<tr>
<td>Ho: µ = 0</td>
<td>Not rejected</td>
<td>Rejected</td>
<td>Not rejected</td>
</tr>
<tr>
<td>CAR (-2, 5)</td>
<td>0.10</td>
<td>12.18</td>
<td>0.11</td>
</tr>
<tr>
<td>Ho: µ = 0</td>
<td>Not rejected</td>
<td>Rejected</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>Cross Border</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAR (-5, 10)</td>
<td>0.95</td>
<td>10.84</td>
<td>-3.67</td>
</tr>
<tr>
<td>Ho: µ = 0</td>
<td>Rejected</td>
<td>Rejected</td>
<td>Rejected</td>
</tr>
<tr>
<td>CAR (-2, 5)</td>
<td>1.96</td>
<td>10.20</td>
<td>-2.96</td>
</tr>
<tr>
<td>Ho: µ = 0</td>
<td>Rejected</td>
<td>Rejected</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

The results for strategic alliances in the domestic deals showed non-significance and were therefore not useful in the comparison procedure.

For the cross border deals the target companies created more shareholder value than strategic alliances. On the other hand, strategic alliances created shareholder value, unlike acquirer/bidder companies, which destroyed shareholder value.

Table 13.

<table>
<thead>
<tr>
<th>Related and Unrelated deals</th>
<th>Strategic alliances</th>
<th>Target</th>
<th>Acquirer/Bidder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Related</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAR (-5, 10)</td>
<td>-0.8</td>
<td>14.03</td>
<td>-1.92</td>
</tr>
<tr>
<td>Ho: µ = 0</td>
<td>Rejected</td>
<td>Rejected</td>
<td>Rejected</td>
</tr>
<tr>
<td>CAR (-2, 5)</td>
<td>-0.93</td>
<td>13.92</td>
<td>-1.08</td>
</tr>
<tr>
<td>Ho: µ = 0</td>
<td>Rejected</td>
<td>Rejected</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>Unrelated</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAR (-5, 10)</td>
<td>5.49</td>
<td>10.53</td>
<td>0.22</td>
</tr>
<tr>
<td>Ho: µ = 0</td>
<td>Rejected</td>
<td>Rejected</td>
<td>Not rejected</td>
</tr>
<tr>
<td>CAR (-2, 5)</td>
<td>5.29</td>
<td>7.21</td>
<td>0.20</td>
</tr>
<tr>
<td>Ho: µ = 0</td>
<td>Rejected</td>
<td>Rejected</td>
<td>Rejected</td>
</tr>
</tbody>
</table>
Regarding the criterion industry, our results showed that the announcements of mergers & acquisitions affected share prices most favourably for target companies within related industry deals compared to strategic alliances, which in this case destroyed value. Although, the CAR was negative for strategic alliances, they did not destroy as much shareholder value as did the acquirer/bidder companies. These results are consistent with both event windows.

For the deals in unrelated industries, the target companies were once again those companies earning most shareholder value compared to strategic alliances. However, the margin was not considerably high as in all the other cases. Strategic alliances created more shareholder value than acquirer/bidder companies.

**Hypothesis 3**

$H_0$: Strategic alliances do not affect shareholder value more favourably than mergers & acquisitions.

$H_1$: Strategic alliances affect shareholder value more favourably than mergers & acquisitions.

In the total sample of observations, that compared strategic alliances and mergers & acquisitions, shareholder value increased more for target companies rather than strategic alliances. The result suggests that the null-hypothesis is supported in this case. In the comparison of strategic alliances and acquirer/bidder companies, strategic alliances created more shareholder value than did the acquirer/bidder companies, which imply that the null-hypothesis is falsified.

When dividing the comparison into the criteria geography and industry, the target companies earned higher CAR in both domestic and cross border deals and related and unrelated industries compared to strategic alliances. Thus, the null-hypothesis is supported with regards to both criteria. Strategic alliances, where once again, superior in creating value compared to acquirer/bidder companies. Thus, the null-hypothesis is falsified in this case.

## 6.4 Discussion of the results derived from the comparison between strategic alliances and mergers & acquisitions

As the market has responded differently to these strategic approaches, it is interesting to understand why the market reacted the way it did in the event study conducted on strategic alliances and mergers & acquisitions.
The results that were derived from our empirical study show that the target companies created more value during the announcements than did strategic alliance announcements. However, strategic alliances created more shareholder value, or destroyed less shareholder value, compared to the acquirer/bidder companies, which destroyed shareholder value in most of the cases at the time of the announcements. The results derived from the analysis of the different criteria coincide with the total sample of observations. The conclusions drawn for the criteria are the same as for the total results and are therefore not included separately in the discussion.

6.4.1 A comparison between target companies and strategic alliances

One main reason why target companies create more shareholder value than strategic alliances is most probably because target companies earn a premium when being merged or acquired with another company, unlike any of the partners in a strategic alliance. The target companies can either accept or reject the bid premium offered and will therefore only accept a premium offered in their best interest.

A major merger or acquisition attracts attention, as it gains more awareness among investors, and there is more demand for that company’s shares. One reason why the market rewarded target firms more than strategic alliances could be that target firms may have been acquired by larger firms, resulting in increased attention for the target companies compared to strategic alliances.

The market expectations might have been higher for the target companies because the shareholders had high expectations about the formation of mergers & acquisitions to generate synergies in the long run. The expectations might further, have been high for the companies to exploit more economies of scale and benefits from diversification in the product mix or in the geographic market extension more than strategic alliances depending on the companies’ specific situation.

Deals where the activities of the involved parties have a larger geographical overlap are more likely to bring to improvements in productive efficiency. By reducing duplicated business activities mergers & acquisitions can create substantial benefits for the companies. The countries within the Euro-zone have been going through a process of integration within business sectors the past few years and have most certainly been trying to seize the opportunity to collaborate and increase the possibilities for economies of scale. The companies in the Euro-zone can take advantage of the single currency and the geographical aspects by a merger or acquisition within this area, as the region is striving for a single market. The completion of the financial integration will, further, offer opportunities for businesses and a reason for why target companies in mergers & acquisitions are being more favoured than strategic alliances. The target companies are more preferred in the Euro-zone over strategic alliances. A reason for preferring target companies before strategic
alliances might be that the introduction of the single currency increases competition within the Euro-zone, therefore the companies strive to grow and expand in order to increase their competitiveness. Strategic alliances might not be considered a preferable option from the market perspective.

Firms might engage in merger & acquisition activity to increase their market power in different markets, thus reducing competition and improving their position on the market. Despite the fact that the European Commission after the formation can refuse the approval of a merger or acquisition that might threaten competition, potential abnormal return, at the time of the announcements, can still be obtained. This could be seen as a possibility why the target companies have created more value than strategic alliances at the time of the announcements. The shareholders of the target companies could have reacted more positively to the announcements of these firms because of the potential benefits the mergers & acquisitions can create if they increase their market power by reducing competition and improving their positions. In the banking industry there is some evidence found by Cybo-Ottone and Murgia that merger & acquisition deals are designed to increase market power.

6.4.2 A comparison between acquirer companies and strategic alliances

By comparing strategic alliances, that increase shareholder value, or destroy less shareholder value, to the acquirer/bidder companies that destroy shareholder value in most of the cases, it is important to gain a deeper understanding why the shareholders reacted differently to these announcements.

There is overwhelming evidence among earlier research that indicates that the vast majority of merger & acquisition deals actually destroy shareholder value for the acquirer/bidder companies. The acquirer/bidder companies’ share prices might have been affected negatively to the announcements of the merger or acquisition because shareholders might have perceived that the approach would fail and the new companies would not be able to create value. On the other hand, the shareholders of the strategic alliances may have expected the strategic alliances to gain synergies and that is why they rewarded the strategic alliance announcements.

A major disadvantage for the acquirer/bidder companies is that they most often overpay the bid premium for the target companies. As mentioned earlier, the target companies might not accept too low premiums. Another reason for high bid premiums might be that the acquirer/bidder company might want to buy the target company before its competitors do. The increasing competition within the Euro-zone is apparent after the introduction of the single currency and might make it more difficult for acquirer/bidder companies to reduce their bid premiums. Strategic alliances are not affected by the disadvantages of bid premiums and are therefore not hurt in the same way compared to acquirer/bidder companies.
Another possible reason why investors favour alliances over acquirer/bidder companies could be that the expectations for risk reductions of strategic alliances might have been high, unlike acquirer/bidder companies. When both partners in a strategic alliance create a new business, the strategic alliance permits them to share risk rather than taking on all the risk alone. Instead of taking on the risk and expense that an international expansion can demand for the company penetrating a foreign market on its own, it can enter international markets by finding an appropriate strategic alliance partner with a business operating in the marketplace it desire to enter. A strategic alliance formation is more oriented to reduce costs by co-operating, than increasing risks for their overall operations. On the other hand, the acquirer/bidder companies do most often take on higher risks when acquiring a firm, as they additionally take on the risks associated with the target firm, as well. In many cases, the costs increase for the acquirer/bidder companies as they may merge or acquire with financially weak target companies.

It is easier to terminate a strategic alliance than it is to terminate a merger or an acquisition, if the strategic alliance does not create synergies, the co-operation can be annulled relatively easy. But it is more difficult to depart from a merger or an acquisition and the acquirer will end up bearing the cost created by merging or acquiring a company.

6.4.3 Comparison of results with empirical study

The theoretical framework comparing these two approaches is, as mentioned earlier, rather scarce. Our results were consistent with the results gained from the earlier study done by Ernst and Halevy in "When to think alliance" in the comparison of strategic alliances and acquirer/bidder companies, on the global market. They found that the market rewarded strategic alliances more than acquirer/bidder companies in mergers & acquisitions, which is consistent with the results derived in this study, as well. The results on target companies, which were derived from the Euro-zone, can not be compared with similar results from the global study, as it did not consider target companies within mergers & acquisitions.

Cybo-Ottone's and Murgia's study on the European banking market compared to the US market, showed an increase in shareholder value for mergers & acquisitions in the European market. Their findings on the European market contradicted with the empirical studies conducted on the US banking market, as the US market did generally not show any value creation effects for mergers & acquisitions on that market. The differences were explained by the regulation and structural differences in Europe and US. The results from this study, does not strengthen the argument about differences in regulations in the Euro-zone, as there are no differences in the results in the comparison of strategic alliances and acquiring companies on the global market compared to the Euro-zone. On the other hand, it is impossible to derive any conclusions about whether regulations and other barriers have any implications for target
companies and strategic alliances in the Euro-zone, as there are no studies found that have compared these two groups of companies, not in Europe and on the global level either.
7. SUMMARY AND CONCLUSIONS OF THE EMPIRICAL ANALYSIS

This chapter will focus on the summary of the empirical results derived from the event study done on the comparison of shareholder valuation at the announcements of strategic alliances and mergers & acquisitions.

7.1 Do strategic alliances create value?

When analysing strategic alliances and their impact on share prices, it can be concluded that shareholder value increases at the time of the announcements of these formations. Strategic alliances studied in the event study of this thesis earned positive returns in the short event period. Although, it was a small positive increase, the market reacted positively to the news of these strategic alliances. The results of shareholder value creation at the announcements of strategic alliances coincide with most earlier research on strategic alliances, which suggest that strategic alliances create value.

When dividing the strategic alliances into the criterion geography, the results indicate that shareholder value is created in cross border deals. Due to insignificant results for domestic deals, a conclusion can not be drawn whether the market reacted more favourable to cross border strategic alliances or more to domestic strategic alliances. Empirical studies indicate that cross border strategic alliances have a positive impact on shareholder value.

In the criterion industry, the stock market reacted negatively to the news of the formation of strategic alliances within the same industry and it reacted favourably to the news of unrelated industry alliances. These results contradict to empirical findings, which imply that related industry alliances are more preferred than strategic alliances formed among unrelated industries.

7.2 Do mergers & acquisitions create value?

The results for the total sample of observations on mergers & acquisitions indicate that target companies experience positive shareholder value, while the acquirer/bidder companies destroy shareholder value in most of the cases.

When analysing mergers & acquisitions in the criterion geography, the significant results for both target companies and acquirer/bidder companies, indicated the creation of more shareholder value for domestic deals than cross border deals.
In the criterion industry, the target companies created shareholder value, while acquirer/bidder companies once again destroyed shareholder value. In the deals for unrelated industries, both the target and acquirer/bidder companies showed a positive shareholder creation, but the target companies created more than the acquirer companies.

There exist two opposing reviews about whether mergers & acquisitions create shareholder value at the formation or not. The concluding remark is that the results for target companies coincide with the financial review that mergers & acquisitions create value and the acquirer/bidder companies’ results coincide with the economic view that suggests that shareholder value is not created at the formation of mergers & acquisitions.

7.3 A comparison between strategic alliances and mergers & acquisitions

The results gained after the comparison of the approaches, is that the target companies earned more positive abnormal return during the announcements of mergers & acquisitions than did strategic alliances. However, when comparing strategic alliances announcements with that of the acquirer/bidder companies, we found that the strategic alliances created shareholder value during the short event window while the acquirer/bidder destroyed shareholder value. The results derived by analysing the criteria geography and industry were consistent with the results derived from the total sample of observations.

Why did our results show that on one hand the target companies create more value than strategic alliances, and on the other hand, strategic alliances create more shareholder value compared to the acquirer/bidder companies? A possible reason could be that during merger & acquisition announcements the shareholders of the target companies usually gains, as the acquirer/bidder companies often overpays and thus lose shareholder value. This is the main reason why strategic alliances are stuck in the middle i.e. the target companies create more value than strategic alliances do and the acquirer/bidder companies end up destroying shareholder value.

Our results were consistent with the earlier empirical research that compared strategic alliances with the acquirer/bidder companies. There has not been conducted any empirical studies, to our knowledge, which compare target companies impact on share prices to strategic alliances at the time of the announcements.
7.4 Conclusion

It is impossible to draw the conclusion, which of the two strategic approaches has the most favourable impact on shareholder value, as the results for target companies differ from that of acquirer/bidder companies, compared to strategic alliances. All the results indicate the same conclusion that target companies increase shareholder value more than strategic alliances and acquirer/bidder companies are not more favourable compared to strategic alliances.

One main reason for the outcome of the results, is the high bid premium that the acquirer/bidder companies have to pay to the target companies, which depress their creation of shareholder value at the time of the announcements of a merger or acquisition. The bid premium is further, one main reason why target companies create more shareholder value than strategic alliances.

The theories regarding each strategic approach are diverse and contradictory, as mentioned earlier, which can be seen to be more obvious now that it is proven that all research done for this thesis obtains different results when dividing the approaches into different criteria such as geography and industry.

Regulations and barriers do not have any implications on differences in results in the comparison of acquirer/bidder companies and strategic alliances. As the results derived in this event study, conducted on the Euro-zone, obtained the same results as the study conducted on the global level, e.i. strategic alliances create more, or destroy less shareholder value than acquirer/bidder companies in mergers & acquisitions. The results for the comparison of target companies and strategic alliances have not been possible to compare to earlier research and the impact on different regulations and barriers can therefore not be assessed.
PART 4

BIBLIOGRAPHY AND APPENDICES
Bibliography

Literature


A Comparison of Strategic Alliances and Mergers & Acquisitions and their Impact on Shareholder Value


Magazines & Journals


A Comparison of Strategic Alliances and Mergers & Acquisitions and their Impact on Shareholder Value


A Comparison of Strategic Alliances and Mergers & Acquisitions and their Impact on Shareholder Value


Internet sources

http://amue.if.net