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Stock Market Reactions and Synergy Realization from M&A's

- A Comparison between Event Study and Case Survey Results

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Abstract

- Title:** Stock Market Reactions and Synergy Realization from M&A's
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- Key Words:** Stock market reactions, Synergy realization, Mergers and acquisitions (M&A's), Event Study, Case Survey
- Purpose:** By using a set of firms engaged in merger activities, the aim of this thesis is to evaluate whether the stock markets were able to foresee synergy realization correctly in our specific companies. If markets show a tendency to over-/ underestimate synergies, we find it interesting to investigate further why that is.
- Theory:** Different merger and acquisition characteristics are presented. The motives behind, and what stimulates firms, to conduct mergers is outlined as well as the efficient market hypothesis. Additionally, prior research from event studies on merger and acquisitions are brought forward.
- Methodology:** A triangulation methodology, where the authors use more than one methodological approach, will be utilized in this thesis. Triangulation is defined as the combination of methodologies to studying the same

phenomenon. We elaborate around a subsample from the case survey by Larsson and Finkelstein (1999) and apply both qualitative- and quantitative like approaches.

Empirical Foundation: Prior research results from the case survey conducted by Larsson and Finkelstein will be used as an empirical foundation for synergy realization results. The deals included in our subsample from their study are defined as either successful or unsuccessful deals in terms of synergy realization. Additionally a short-term event study is undertaken in order to investigate if these deals experienced any abnormal returns deals using the market model.

Conclusion: Our study found that all the acquiring companies in our sample gained abnormal returns in various event windows. This differ from the work by Bruner (2001) where he summarized the result from 130 different studies. He found that shareholders of the acquiring firms generally gained zero return. Seemingly, the stock markets failed to correctly anticipate the outcome for the companies classified as unsuccessful in terms of synergy realization. The reasons why stock markets may have overestimated the successfulness of these deals vary but could, for instance, be due to failure of foreseeing integration problems.

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1. Introduction

In the first chapter of the thesis we will introduce our research subject. The chapter will firstly present the background of the subject. The background will be followed by an outline of the research problem which will lead to the purpose of the thesis.

1.1 Background

*"Together, they (AOL and Time Warner) represent an unprecedented powerhouse... If their mantra is content, this alliance is unbeatable. Now they have this great platform they can cross-fertilize with content and redistribute."*¹

- Scott Ehrens, media analyst with Bear Stearns

The quote above was given in relation to the merger-announcement between AOL and Time Warner in January 2000. The bid from AOL valued Time Warner to \$163 billion, which was almost a 100% premium of the pre-bid share price.² The offer gives an indication of what huge synergy potential AOL saw in combining the firms. The expected value coming from the deal would materialize from *"the deal's ability to accelerate the combined company's revenue stream while generating significant efficiencies on the advertising and marketing end"*.³

Today, about a decade later, it still counts as one of the largest M&A-deals in history. However, the prosperous future of the combined company, often spelled out as in the quotation above, was never quite realized. In fact, looking at the deal in retrospect, some commentators label it as one of the largest M&A-failures in history.^{4,5} Synergies failed to realize and when the dot-com bubble did burst shortly after the deal, the share values of many Internet companies were depressed. As a

¹ http://money.cnn.com/2000/01/10/deals/aol_warner/

² Retrieved from Thomson Reuters Datastream

³ http://money.cnn.com/2000/01/10/deals/aol_warner/

⁴ <http://www.investopedia.com/articles/financial-theory/08/merger-acquisition-disasters.asp>

⁵ http://news.cnet.com/8301-1023_3-10250944-93.html

result, the combined company saw its balance sheet oppressed by major write-downs in goodwill. In 2009, Time Warner announced it would spinoff AOL, putting an end to the troubled merger.⁶

To foresee and accurately anticipate the size of expected synergies has proved to be a difficult task. Yet M&A-deals remain popular. It has been suggested that M&A's are not only conducted due to reasons of synergy realization but could, for instance, also be explained by agency and hubris motives.⁷ Regardless of the motives behind M&A's, it has been debated whether mergers are value creating or not for buying companies.⁸

1.2 Problem Discussion

Financial economists often believe that the acquiring company engaged in an M&A deal will normally not offer a bid with a value exceeding that of the target company and anticipated synergies added together, as it would then be value destroying for the existing shareholders.⁹ Consequently, depending on whether a merger is believed to be value creating or not, the stock markets will react accordingly. If the markets believe that the anticipated synergies will not be fully realized, the share value of the acquirer should drop. The reverse also applies, if investors consider the projected synergies to be correct, the share value of the acquiring firm should increase (given that no overprice was paid).¹⁰

The abovementioned reasoning is based on the stock market's ability to anticipate synergies. But are investors really capable of properly evaluating synergies arising from mergers in advance? Bankers and others within the financial area surely would answer yes to this question, as that is what they are trying to achieve time after time. Others may argue that it is only in retrospect one can fully see the synergies gained from a deal. This is a question of great importance. If investors fail to correctly anticipate what synergy realization can be achieved through the undertaking of

⁶ <http://www.timewarner.com/corp/newsroom/pr/0,20812,1946835,00.html>

⁷ Berkovitch & Narayanan (1993) - Motives for Takeovers: An Empirical Investigation

⁸ Brouthers et al. (1998) - If Most Mergers Fail Why Are They so Popular?

⁹ Black (1989) - Bidder Overpayment in Takeovers

¹⁰ Black (1989) - Bidder Overpayment in Takeovers

any given merger, it would result in the acquiring firm's stock being mispriced in the market. We therefore find it interesting and highly relevant to further investigate to what extent the market can correctly foresee potential synergy realization in M&A.

There are various approaches when studying the relative successfulness of mergers and acquisitions. For instance, participants within the financial area focus on gauging performance using stock market-related measures and, as mentioned above, often try to anticipate future performance in order to price equities.¹¹ Economics scholars on the other hand, tend to focus on the combination potential and motives for mergers (such as economies of scale and bargaining power) as well as measuring performance following M&A-activity by using accounting measures in retrospect. Researchers from the strategic field has also studied the combination potential i.e. motives for mergers and the level of relatedness between merging firms and its effects on company performance.¹² Another example is organizational theorists who emphasize the level of organizational integration between companies as well as the employee reactions to M&A, particularly cultural clashes and conflict resolution. Also scholars within the human resource field focus on the integration process when analyzing M&A's but with more attention to communication issues and careers implications following deals. Larsson and Finkelstein presented in 1999 a conceptual framework that takes the different approaches into account in an integrative model by using a case survey method.¹³ Much of this thesis will have its roots in their work as we work with a subsample of their case survey.

Many studies in the past have focused on the discussion on how M&A deals affect the bidding- and target companies.¹⁴ In those studies, researchers have often conducted short-window event studies, where the abnormal stock reaction at the announcement day is interpreted as a measure of whether the deal is perceived to be value creating or value destroying.¹⁵ This thesis approaches this subject from a slightly new angle. We want to utilize the same foundation as those studies just mentioned, but also take them one step further by carrying out an investigation of abnormal

¹¹ Larsson & Finkelstein (1999) – Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization

¹² Ibid

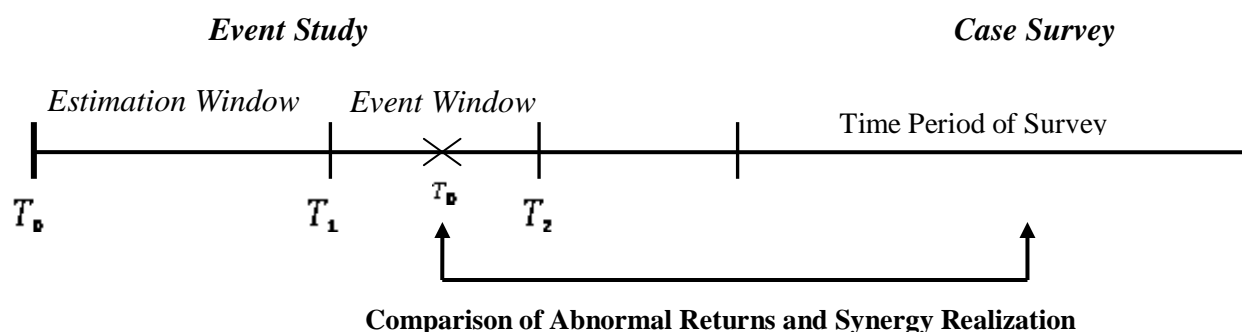
¹³ Ibid

¹⁴ Asquith (1982), Dodd (1980) & Andrade et al (2001)

¹⁵ See for instance Andrade et al (2001) - New Evidence and Perspectives on Mergers

returns in an event study and then compare it with the case survey-study already performed by Larsson and Finkelstein.¹⁶ In the case survey, Larsson and Finkelstein have taken into account several different factors when in retrospect analyzing and coding a number of mergers. In doing so, the authors have been able to classify the deals into levels of successfulness, in terms of synergy realization. From their work, we have picked a sample constituting of a total of six companies, of which three has been labeled as successful and three as unsuccessful. We will conduct an event study on the chosen companies and compare any abnormal returns during the announcement period with the findings of Larsson and Finkelstein's study. Assuming that buyers do not pay overprice for the target firms, deals that the authors have found successful synergy realization should have appreciating stock prices of the acquirer. The opposite should apply for companies labeled unsuccessful. From this we will evaluate if the stock markets were able to incorporate the synergy realization and consequently if the stock market reaction was correct indication compared to the outcomes in Larsson and Finkelstein's case survey on synergy realization. Below we have outlined a time-line in figure 1.1 which depicts the comparison we want to do. The first part of the time-line is the parts of the event study. Following the event study there is a time-gap until the case survey on synergy realization is carried out.

Figure 1.1. *Time-Line of Comparison*



¹⁶ Larsson & Finkelstein (1999) – Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization

1.3 Problem Formulation

This thesis addresses the following two questions:

- To what extent and in which ways have stock markets been able to predict the success of a specific merger or acquisition?
- What could the influencing factors be, making the prediction correct/incorrect?

1.4 Purpose

By using a set of firms engaged in merger activities, the aim of this thesis is to evaluate whether the stock markets were able to foresee synergy realization correctly in our specific companies. This question is relevant as if the markets are not capable of this it implies that companies would be mispriced until synergies are being realized. Also, if markets show a tendency to over-/underestimate synergies, it is obviously of interest to further investigate why that is, and hence we aim to look into that as well.

1.5 Demarcations

There are more than one way of calculating abnormal returns and the thesis will be limited to the one that the authors find the most inclusive and that has gained most recognition in previous, similar studies. We have calculated the abnormal returns using the market model instead of the constant mean model, as the market model is considered more practical.¹⁷

We have also chosen only to use a short-term event study as long-term event studies are considered more difficult to handle and statistically less reliable.¹⁸ The long-term studies measure the impact from an event three to five years following the announcement day and has challenged the typical results in short-term studies. The supporters of this method argue that the capital

¹⁷ MacKinlay (1997) - Event Studies in Economics and Finance

¹⁸ Andrade et al (2001) - New Evidence and Perspectives on Mergers

markets do not fully incorporate the entire impact in a short-term window, and hence that markets are inefficient in the short-run.¹⁹ Loughran and Vijh (1997) found that, in the long-term, the combined firms show significant negative return.²⁰ We will not perform a long-term event-study as these studies have been strongly opposed. Andrade et al. argues that such studies are attached with problems such as how statistical significance is achieved. Fama (1998) claims that these studies are rejecting the efficient market hypothesis, and that the studies are assuming the markets are inefficient in incorporating information in the short-term.²¹

Furthermore there are other models that could have been used to compare the stock market reactions and actual synergy realization. For example, operating performance studies could have been an alternative approach to compare the stock market reaction and actual synergy realization. These studies focus on asset productivity and improved operating cash flow returns by using post-merger accounting data.²² Post-Merger results from such a study could have potentially complemented the thesis or been an alternative approach. However due to time and information constraints we have disregarded that alternative. Additionally we believe that the case survey results found by Larsson and Finkelstein yield more comprehensive results, as they integrate different theoretical lenses, compared to other alternatives. Readers interested in operating performance studies can beneficially see Healy et al (1992).²³

1.6 Structure of the Thesis

Chapter two contains a discussion of the methodological aspects that has been taken into consideration. Following that, an outline of relevant theories for this thesis will be provided in chapter three. This chapter also includes a discussion of previous studies and their findings. After that, chapter four provide the empirics and data collected on synergy realization and a description of the cases included in our subsample. Additionally the results from our event study will be

¹⁹ Andrade et al (2001) - New Evidence and Perspectives on Mergers

²⁰ Loughran & Vijh (1997) - Do Long-Term Shareholders Benefit From Corporate Acquisitions?

²¹ Andrade et al (2001) - New Evidence and Perspectives on Mergers

²² Healy et al. (1992) - Does Corporate Performance Improve After Mergers?

²³ Ibid

presented. Chapter five will include a thorough analysis and comparison between the event study and case survey results. Lastly, in chapter six we will present our conclusions and also bring forward suggestions for future studies.

2. Methodology

The second chapter presents a discussion around our methodological considerations. Also, it includes a description of case survey-methodology and our considerations when determining the most appropriate way of calculating abnormal returns.

2.1 Deductive Method

In this thesis, we will use a deductive methodological approach where we utilize a set of existing theories and measures and apply them to our subjects of study. In other words, we travel “from theory to empiricism”.²⁴ We will, for instance, use existing measures as to decide whether an abnormal return can be confirmed or not. We are aware of the shortcomings of this approach in terms of subjectivity but it is still the most suitable for the purpose of the study as we are not aiming to generate new theory within the field.^{25,26} Also for the second problem of this thesis, we will use a deductive approach, as we will compare our findings with existing literature and scientific journals to try to find an explanation. However, we will keep in mind the recommendations brought forward by Jacobsen, in applying what he calls an “analytical viewpoint” throughout this work, meaning that we will explicitly clarify, to the largest extent possible, our preconceived assumptions and expectations when deciding on what data to use.

2.1.1 Triangulation Methodology - Quantitative and Qualitative Approach

A triangulation methodology, where the authors use more than one methodological approach, is a suitable way to proceed with this thesis.²⁷ Triangulation is defined as a combination of methodologies when studying a phenomenon.²⁸ We will use a type of triangulation that is referred to as between-, or across-method, that use both quantitative and qualitative methods in

²⁴ Jacobsen (2005), pages 34,43

²⁵ Bryman & Bell (2005), pages 23-24

²⁶ Jacobsen (2005), page 42

²⁷ Bryman & Bell (2005), page 310

²⁸ Jick (1979) - Mixing Qualitative and Quantitative Methods: Triangulation in Action

the same study.²⁹ The across-method is a way of cross validating two different methods for congruence.³⁰ Triangulation methodology can potentially expose unique differences and meaningful information that one approach could have ignored. According to Jick (1979) triangulation can be used to study the same phenomenon from multiple perspectives and thus allow for deeper understanding and discovery of new dimensions.³¹

In our thesis this we will try to cross validate if the results from the event study and the case survey have any link in their findings. We elaborate around a subsample from the case survey by Larsson and Finkelstein and apply both qualitative- and quantitative like approaches.³² As outlined above, the first objective of this thesis is to investigate whether a specified set of acquiring companies experience an abnormal return upon announcement of their respective M&A plans using an event study. This will be answered by carrying out quantifiable measurements of the share price of the acquirer and hence a quantitative approach is more logic in this particular instance. Working with a subsample of the case survey carried out by Larsson and Finkelstein, we will have access to thorough descriptions of the M&A process of each single company that we have chosen to include in our study. By analysing this information in a qualitative way and compare with existing M&A literature, the aim is to be able to draw conclusions as to answer the second question of this thesis. Here, a qualitative approach is more logic as we explore this question with a greater span of openness.³³

2.1.2 Explanatory Study

Descriptive studies aim to illustrate how a phenomenon is while explanatory studies address questions as why certain things are the way they are. The first aim of this thesis is to evaluate whether markets can correctly anticipate what synergies can be realized. This analysis will result

²⁹ Thurmond (2001) - The Point of Triangulation

³⁰ Jick (1979) - Mixing Qualitative and Quantitative Methods: Triangulation in Action

³¹ Ibid

³² Larsson & Finkelstein (1999) - Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization

³³ Jacobsen (2005), pages 103,143

in a discussion of why markets can/cannot foresee this properly. Given the nature and purpose of this study an explanatory approach is logical.³⁴

2.2 Data

This work is based on secondary data collected from various founts. Secondary data is existing information already collected, and differs from primary data where investigators gather information on their own for their specific purpose.³⁵ As much of this study relies upon the work of Larsson and Finkelstein (1999), taking part of their sources is highly relevant, especially when describing the cases included in our sample (which is a subsample from their study). The abnormal return-calculations are made possible through the use of share price information retrieved from financial data provider Thomson Reuters Datastream and SIX Telekurs. Other relevant information, theories and models are extracted from assorted literature, scientific articles and financial press – often on recommendation by our advisor Rikard Larsson and made available in the University's databases such as ELIN@LUND and LOVISA. As this thesis is based solely on secondary data, it is of utmost importance to consider where the data derive from and by whom it is collected. The data may have been gathered for another purpose than that of this thesis and hence not be very suitable to use for our intentions³⁶. However, we do not see a mismatch in the usefulness of our secondary data and the aim of our thesis. As already mentioned, the data comes mainly from well-known publishers and journals, however with the exception of utilizing one MBA thesis and two doctoral dissertations. These exceptions have also been included in Larsson and Finkelstein's study. Considering the high credibility and respectability of our sources, we believe that the data provided are collected, measured and evaluated in an appropriate manner.

³⁴ Jacobsen (2005), pages 73-75

³⁵ Lundahl & Skärvad (1999), pages 52

³⁶ Jacobsen (2005), page 186

2.3 Validity

According to Bryman and Bell (2005) there are various types of validity.³⁷ Eriksson & Wiedersheim-Paul (2001) discuss internal validity which is concerned with whether a study succeeds in measuring what it really intends to measure.³⁸ Jacobsen (2005) means that there are two important steps in assuring the validity of a study. These are to thoroughly consider results with a critical eye as well as comparing the research and conclusions to previous studies.³⁹ The existing prior research within the field of M&A is quite extensive. We will evaluate our results in conjunction with the results from the case survey by Larsson and Finkelstein. Additionally we will compare the results from our abnormal return calculation with similar studies.

If a study is referred to as having high levels of external validity, that means that its findings generally can be transferred to other contexts and situations.⁴⁰ We have limited our paper to only look at the share price movements among six of the buying companies included in Larsson's and Finkelstein's study. The size of this subsample is because we experienced difficulties in finding share price data of many of the buyers or that they were not publicly traded. Another obstructing circumstance is that many of the involved companies has either gone out of business or transformed into new companies, hence making it harder to find the necessary stock information. Considering the fact that this study is rather intense and has a limited sample, questions of whether any findings can be generalized may be raised. Although we do not intend to come up with a "generic best answer" that can be transferable to all companies in all situations, it is our belief that any results this thesis may come up with can make a valuable contribution. To some extent, it can give an indication of the stock markets predicting-ability on synergy realization.

³⁷ Bryman (2005), page 49

³⁸ Eriksson & Wiedersheim-Paul (2001)

³⁹ Jacobsen (2005), pages 256-257

⁴⁰ Jacobsen (2005), page 266

2.4 Reliability

By presenting our research process thoroughly and conducting the collection and evaluation of data in a correct manner, we wish to achieve high levels of reliability. The reliability is to satisfactory if the results are replicable, meaning that the same results would be found again if the study was to be carried out once more by someone else.⁴¹ To assure that our calculation and measurement of abnormal returns in the event study is executed in an appropriate manner, we will get our results evaluated and confirmed by a statistician provided by the University. Also, existing theory and various literature underpinning our reasoning and conclusions will, to the largest extent possible, be declared for.

2.5 Event Studies

Event studies are used when measuring the effects from an event that may change the value of a firm.⁴² In our study we have chosen to measure the impact from the merger announcement of six different mergers. As mentioned earlier three of the mergers were considered successful in term of realized synergies and three as unsuccessful. We have mainly used the event framework developed by Brown and Warner⁴³ and the modified framework developed by MacKinlay.⁴⁴

Usually the impact from an event is measured on the price of a firm's securities. Event studies are based on the assumption that the Efficient Market Hypothesis holds and that specific events will be reflected instantly in security prices. Consequently the economic impact can be measured using a short timeframe. Event studies are applicable to many types of events and are frequently used when measuring the economic impact from announcement of mergers and acquisitions.⁴⁵

⁴¹ Thurén (2004), pages 26-27

⁴² MacKinlay (1997) - Event Studies in Economics and Finance

⁴³ Brown & Warner (1985) - Using Daily Stock Returns: The Case of Event Studies

⁴⁴ MacKinlay (1997) - Event Studies in Economics and Finance

⁴⁵ Ibid

2.5.1 Event Window

When performing an event study, the initial task is to determine the period to measure - the so called event window.⁴⁶ A relative short-term horizon is chosen as the results from such a time span are considered more accurate and unproblematic, which will increase the validness.⁴⁷ We have tested a number of different windows, ranging from twenty days in advance ($t = -20$) of the announcement day ($t = 0$) to twenty days after ($t = 20$) in order to capture eventual price effects appearing before and after the announcement day. The market may have anticipated the event, or have had information about the event, prior to the announcement and hence testing for various days before the event window is also of interest.⁴⁸ The time-line of the event window has been outlined below, where T represents different time points and the cross, under the event window, the announcement day of the merger.

Figure 2.1 Time-line of Event Window



2.5.2 Normal Return

Before the abnormal return can be measured for the event window, the predicted normal return must be estimated. The expected normal return is calculated as if the firm specific event did never occur - in our case disregarding a merger or acquisition announcement.⁴⁹

By using an estimation window including 120 days prior to the event, the beta-value and alpha value of a stock can be calculated and then utilized to estimate the expected normal returns. A common length of estimation periods is 120 days prior to the event which is in accordance with

⁴⁶ MacKinlay (1997) - Event Studies in Economics and Finance

⁴⁷ Kothari & Warner (2004) - Econometrics of Event Studies

⁴⁸ MacKinlay (1997) - Event Studies in Economics and Finance

⁴⁹ Kothari & Warner (2004) - Econometrics of Event Studies

MacKinlay⁵⁰, and hence the time frame we will use in our work. The estimation window must not include or overlap with the event window in order to avoid wrongfully including the event returns in the normal returns.

The expected normal return can be calculated using the market model which assumes that the mean of the return has a stable linear relation between the market return and the firm's security, which in this study equals the stock of the acquiring company.⁵¹

The market model is defined by MacKinley as a statistical model which relates the return from a security to the return of the market portfolio.⁵² The actual daily returns from the shares included in our sample, as well as for the market indices, are first calculated. The Market model is then used to estimate the expected normal returns and is defined as:

Equation 2.1 Market Model

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}$$
$$E(\varepsilon_{it}) = 0 \qquad \text{Var}(\varepsilon_{it}) = \sigma_\varepsilon^2$$

Where R_{it} is the periods return of the stock i , and R_{mt} is the corresponding returns from the market portfolio. ε_{it} is the zero mean disturbance term, α_i , β_i and σ_ε^2 are used as parameters.⁵³ We have used Affärsvärldens General Index (AFGX), New York Stock Exchange (NYSE) composite and the Toronto Stock Exchange (TSE) composite when calculating the market portfolio return. The time-line of the estimation window has been outlined below:

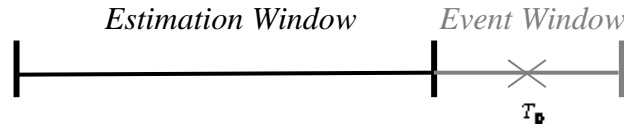
⁵⁰ MacKinlay (1997) - Event Studies in Economics and Finance

⁵¹ Ibid

⁵² MacKinlay (1997) - Event Studies in Economics and Finance

⁵³ Ibid

Figure 2.2 Time-line of Estimation Window



2.5.3 Abnormal Return

The abnormal return is calculated in order to measure the actual impact of an event. The abnormal return is the difference between the actual return including the event, and the predicted normal return excluding the event as outlined in equation 2.2 below. The abnormal return is hence a direct measure of the impact from the event.⁵⁴ MacKinlay defines abnormal returns as:

Equation 2.2 *Abnormal Returns*

$$AR_{it} = R_{it} - E(R_{it} | X_t)$$

Where AR_{it} represents the abnormal return, R_{it} is the actual return and $E(R_{it} | X_t)$ the normal return for the time period t . To be able to formulate conclusions of the entire event window ($T_1 - T_2$) the sum of the abnormal returns is aggregated. To calculate the average daily abnormal returns the equation 2.3 is used.

Equation 2.3 *Average Abnormal Returns*

$$AAR_{\tau} = \frac{\sum^{AR} it}{N}$$

To illustrate the impact of the event, the abnormal returns are aggregated by using the following formula:

Equation 2.4 *Cumulative Abnormal Returns*

$$CAR_i(\tau_1, \tau_2) = \sum_{t=\tau_1}^{\tau_2} AR_{it}$$

⁵⁴ Kothari & Warner (2004) - Econometrics of Event Studies

2.6 Student's T-test

In order to test if there is a statistically significant difference between the mean of cumulative abnormal returns of our two subgroups, we control for our findings by carrying out a Student's T-test.⁵⁵ Here we assume that the variance for the two sample are the same, but as Mitchell and Jolley points out, even if the variances actually were different it would usually not have any serious implications.⁵⁶ The calculation is outlined in equation 2.5 below.

Equation 2.5 *Student's T-test*

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{U_1}{n_1} + \frac{U_2}{n_2}}}$$

Where \bar{X}_1 is the mean of the sample i , U_1 the variance of sample i , and n_1 is the size of sample i .⁵⁷ The calculated value is then inserted in a t-test table as to see whether the hypothesis holds true and if it does, to which significance limit.

2.7 Case Survey

As mentioned in the first chapter we will use the results from a prior case survey conducted by Larsson and Finkelstein.⁵⁸ In their research they address the problem of the scattered research conducted by different theoretical lenses and the lack of integrative research. Research has mainly been analyzed through the perspectives of strategic management, economics, finance, organization and human resource management with little integration between them.⁵⁹ Larsson and Finkelstein use a conceptual framework to integrate the different theoretical lenses. The integrative model differs from other common approaches used when studying mergers and

⁵⁵ Mitchell & Jolley (2009) - Research Design Learning, page 368

⁵⁶ Mitchell & Jolley (2009) - Research Design Learning, page 375

⁵⁷ Delong (2001) - Stockholder Gains from Focusing versus Diversifying Bank Mergers

⁵⁸ Larsson & Finkelstein (1999) - Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization

⁵⁹ Ibid

acquisitions in three distinct ways. Firstly, the success of a merger or acquisition is measured by synergy realization. Secondly, combination potential is conceptualized in similarities across businesses as well as in production and marketing complementarities between merging firms. The third way in which their study differed was that they utilized a case survey method.

The integration model was applied using a case survey for identifying and testing patterns across studies. Case surveys are considered a powerful method that studies many issues to some depth across many cases.⁶⁰ The method gives nomothetic researches the benefit of also incorporating idiographic specific information into the large generalizable statistical data analyses. They utilized case-survey as they consider the combination of idiographic and nomothetic suitable when conducting studies of M&A processes.⁶¹

The process when conducting a case survey is firstly to select a sample of relevant case studies, before developing a coding scheme for the translation of the qualitative case studies into quantified variables. Thirdly one use multiple synergy sources as raters in order to code the cases before finally performing a statistic analysis of the coded data.⁶²

The strength of this process is that case surveys attain the richness from complex data in case studies. When using case surveys, quantitative and qualitative research complements each other. Case surveys pools relevant cases into larger samples, compared to single-case studies, which increases the ability to investigate cross-sectional patterns and generalization of larger samples. The use of coding schemes and cases allows a greater ability for replication. Case surveys can also control and analyze how case studies change over time and thereby increase the ability to learn from prior cases that previously have been considered dated.⁶³

After a detailed screening of various cases Larsson and Finkelstein had a final sample of 61 coded cases. After various supporting tests it was concluded that the integrative model provided

⁶⁰ Larsson (1993) - Case Survey Methodology: Quantitative Analysis of Patterns Across Case Studies

⁶¹ Larsson & Finkelstein (1999) - Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization

⁶² Ibid

⁶³ Larsson & Finkelstein (1999) - Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization

support for integration of the strategic, organizational, and human resource management.⁶⁴ The results from these coding will be presented in chapter four.

⁶⁴ Larsson & Finkelstein (1999) - Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization

3. Theoretical Frame of Reference

We will in this chapter present relevant theories and prior research. Firstly we will outline the definition of M&A's and characteristics of different types of mergers. Secondly we will present the motives behind engaging in M&A activities. Thirdly, prior research on similar and larger event studies is presented. Finally the efficient market hypothesis is outlined as it constitutes the foundation of the theory about information reflection in the capital markets.

3.1 Definition of Merger and Acquisition

The term merger and acquisition is often broadly referred to as some type of ownership transaction. However there is a distinction between the two, a merger is when two firms are combining where one of the firms survives and the other one ceases to exist. In a merger the surviving company obtains all the assets and liabilities of the merged firms. An acquisition is when one firm acquires some or all the assets or stock of the selling firm.^{65,66} M&A's are usually categorized into being horizontal, vertical or conglomerate in character. A horizontal merger is when two competing companies unite into one. Horizontal M&A's are often subject to anti-merger complaints, especially if the market power of the combined company will increase significantly. Vertical mergers occur when two companies combine that has a buyer-seller connection. Conglomerate merger arises when two companies that do not compete, has no buyer-seller connection and no other overlapping activities combine into one.⁶⁷ All three merger-categories are represented in our chosen M&A deals.

3.2 Merger motives

The most cited and common motive for M&A's are to be able to grow faster and to realize synergies. Essentially the motives for M&A's can be categorized into growth, synergy motives,

⁶⁵ Guaghan (2007), page 12

⁶⁶ Arzac (2008), page 153

⁶⁷ Guaghan (2007), page 13

agency motives and hubris.^{68,69} Enthusiasts of M&A deals will often stress the ability to grow or to gain synergies to motivate why a certain deal should go through. Firms that want to expand their business can either do so by organic growth or by M&A's. Organic growth can be hard and slow to achieve. Business managers are constantly under pressure to achieve lucrative growth and if the demand for their products slows, M&A's may be a solution for growth. However this growth is also attached with uncertainties. Firms that desire to expand within their industry may realize that internal growth is not an acceptable option. Weak internal growth may lead to competitor's increasing their market share faster and in order to sustain market share M&A could be an option. Acquiring another company can also be a way of acquiring new techniques, attaining material resources, accessing new geographical business areas etc.⁷⁰

Synergies can be divided into operational and financial synergies. Operational synergies are defined as revenue enhancement and cost reductions. Revenue enhancing synergies are often difficult to realize and hard to estimate. Revenue synergies can derive from; one company lending its brand reputation to the other company, improved distribution network, access to new markets, cross-selling opportunities and increased market power etc.^{71,72}

Cost synergies are in most cases the main source of synergy when M&A's are estimated. The synergies are often expected to realize in economies of scale and scope as an increase in the firm size or scale can potentially lower the per-unit cost. Specific cost synergies could be consolidated- purchasing, production and marketing activities. Additionally spreading overhead costs, increased specialization in labor and management and more efficient use of assets etc. are valid cost synergy motives.⁷³ Overlapping activities between the combining companies are essential for operational synergies to be achieved.⁷⁴

⁶⁸ Berkovitch & Narayanan (1993) - Motives for Takeovers: An Empirical Investigation

⁶⁹ Guaghan (2007), pages 117-118

⁷⁰ Ibid

⁷¹ Arzac (2008), page 153

⁷² Guaghan (2007), pages 117-136

⁷³ Ibid

⁷⁴ Sudarsanam et al. (1996) - Shareholder Wealth Gains In Mergers: Effect of Synergy and Ownership Structure

Even though synergy and value creation can arise from M&A's many mergers tend to fail. The operational synergies are often in focus when conducting M&A's and organizational issues are consequently neglected. Cultural clashes are often one reason to failure and there has been a lack of a suitable framework for handling cultural and organizational problems systematically.⁷⁵

Financial synergies can sometimes be a motive for M&A transaction. The synergies expected are lowered costs of capital for the merged company.⁷⁶ Many corporate finance theorists are disputing if financial synergies really can be achieved. Despite this, it still serves as a motive in some transactions. Diversification and conglomerates has also been a well cited motive in M&A's, especially during third merger wave in the late 60s where conglomeration was common.⁷⁷ The motive behind diversification was to grow by acquiring other companies instead of internal growth. The value creation from these deals was often based on various financial procedures to in the short term change the value of the acquired company. These diversification activities was later on followed by many divestures as the real value creation from these activities was doubted.⁷⁸

M&A's with an agency motive are described as the manager wanting to expand the business due to self-interest. These self-interest activities commonly are activities that will increase the dependency of the current management. The hubris hypothesis of takeovers stipulates that the pride of managers in the acquiring firm may serve as a motive in some M&A deals. The theory is that the manager's motive is necessarily not solely economic gains and that hubris might explain why managers pays a premium for a firm that is correctly valued by the market. Roll (1986) claims that managers believe that their own valuation is better than the markets.⁷⁹

⁷⁵ Cartwright & Cooper (1993) - The role of culture compatibility in successful organizational marriage

⁷⁶ Guaghan (2007), pages 117 - 130

⁷⁷ Sørensen (2000) - Characteristics of merging firms

⁷⁸ Guaghan (2007), pages 133 -136

⁷⁹ Roll (1986) - The Hubris Hypothesis of Corporate Takeovers

3.3 Prior Research on M&A Effects on Stock Price

Short-term event study research conducted on the effects on the acquirers stock is disputed as the research results are ambiguous. Bruner (2002) summarized the findings of 130 different studies were the outcome of these was widely dispersed. A vast amount of the studies depicted negative returns for the acquirer while other studies showed small abnormal returns or close to zero. Bruner concluded that from his research of the 130 studies that the acquirers return was around zero.⁸⁰ The results from studies presented below are just a small fraction of all the event studies that have been conducted, however they have been extensively cited.

Dodd's study from 1980, with a sample of 71 completed M&A's, concluded that the acquirers stock had negative abnormal returns of -7.22 percent in the event window of 10 days before and after the announcement day. Asquith study from 1982 had a contradicting outcome for the acquirer as his research with 211 completed M&A's showed an increase of 2.2 percent around the announcement day.⁸¹ Andrade et al. study from 2001, with a sample consisting of 4,000 completed mergers between 1973 to 1998, had a average three day abnormal return for the acquiring company of -0.7 percent and in a twenty day event window the abnormal return was -3.8 percent, however neither was significant at conventional levels. In their study they also found that the payment method is of considerable importance. In the cases where the target is paid with cash a three-day average abnormal return of 0.4 percent can be observed. When the financing consist of some stock finance, the result becomes different. When the acquiring firm performs a stock-finance bid on the target, the acquiring firm is actually conducting two different activities - namely an acquisition and an equity issue. Equity issues are consistently related to negative abnormal return as managers are more likely to issue equity when they perceive the firm to be overvalued or at least not undervalued. Consequently the three-day abnormal return with stock-finance is -1.5 percent.⁸²

⁸⁰ Bruner (2002) – Does M&A Pay? A Survey of Evidence for the Decision Maker

⁸¹ Asquith (1982) - Merger Bids, Uncertainty and Stockholder Returns

⁸² Andrade et al (2001) - New Evidence and Perspectives on Mergers

Additionally, Moeller et al. study from 2003 consisting of 12,023 M&A's between 1980 to 2001 outlined firm size to have an effect on the acquisition announcement returns. The average abnormal return for the acquiring company in their study was -1.18 percent. With firm size taken into account, the authors concluded that the abnormal return for small acquirers are about 2 percent higher than for larger acquirers, regardless of how the deal is financed. Moeller et al. concluded that larger firms have less internal growth opportunities than smaller firms, and hence are more willing to a larger premium for growth opportunities. In their sample small companies tend to make small acquisition with small absolute gains whilst large companies tend to make large acquisitions with large losses.⁸³

3.4 Efficient Market Hypothesis

In a capital market that is efficient, the stock prices at an M&A announcement should quickly respond to new public information. The stock price should include the expected changes in value due to the announced deal terms. The entire future effect of the deal should be incorporated in the price upon completion of the merger.⁸⁴ Fama argues that the primary role of the capital markets is allocation of ownership of the economy's capital. The ideal market is when prices of securities function as an accurate signal for resource allocation. Under that assumption investors can make an investment at any time expecting that all information available is incorporated into the price of the security. Fama states that an efficient market is when prices always is "fully reflecting" the information available.⁸⁵ The ideal market with fully reflecting prices became known as the Efficient Market Hypothesis (EMH)⁸⁶. Fama divided EMH into three different states of efficiency. Weak-form of efficiency is when the capital markets reflect all the historical information, for example past stock movements. Semi-Strong efficiency reflects all historical information and all the public information available. Additionally, new information is quickly and accurately incorporated into stock prices. Abnormal returns cannot be made in weak and semi efficiency using technical and fundamental analysis from past stock movements and public

⁸³ Moeller et al.(2003) - Firm size and the gains from acquisitions

⁸⁴ Andrade et al (2001) - New Evidence and Perspectives on Mergers

⁸⁵ Fama (1970) - Efficient Capital Markets: A Review of Theory and Empirical Work

⁸⁶ Ibid

information. In strong efficiency all information, whether it is public or not, is reflected in the stock price. No one can make abnormal returns in a strong efficient market, although capital markets cannot be said to be strong as inside dealers have historically earned abnormal profits by insider dealing.⁸⁷ EMH is also connected with the concept of random walk, where the flow of information is unconstrained and that information is instantly reflected in stock prices. Hence tomorrow's stock prices will only reflect tomorrow's news and will thus be independent of the price fluctuations today. Consequently all diversified investors will receive the same rate of return regardless of expertise.⁸⁸

If capital markets in fact are always efficient is a question that has been discussed and researched extensively. The discussion and skepticism led to, in the beginning of 2000, that financial economist and statisticians began to believe that stock prices in fact partially can be predicted in which was labeled behavioral finance. Behavioral economists do believe that the capital market to a larger extent is efficient. However, they argue that the market occasionally makes enormous mistakes (for example the dotcom-bubble), and that psychological factors may influence the price of securities. However the psychological factors will eventually be beaten by true value in the end.⁸⁹

⁸⁷ Watson & Head (2007) Corporate Finance Principles and Practice.

⁸⁸ Malkiel (2003) The Efficient Market Hypothesis and Its Critics

⁸⁹ Ibid

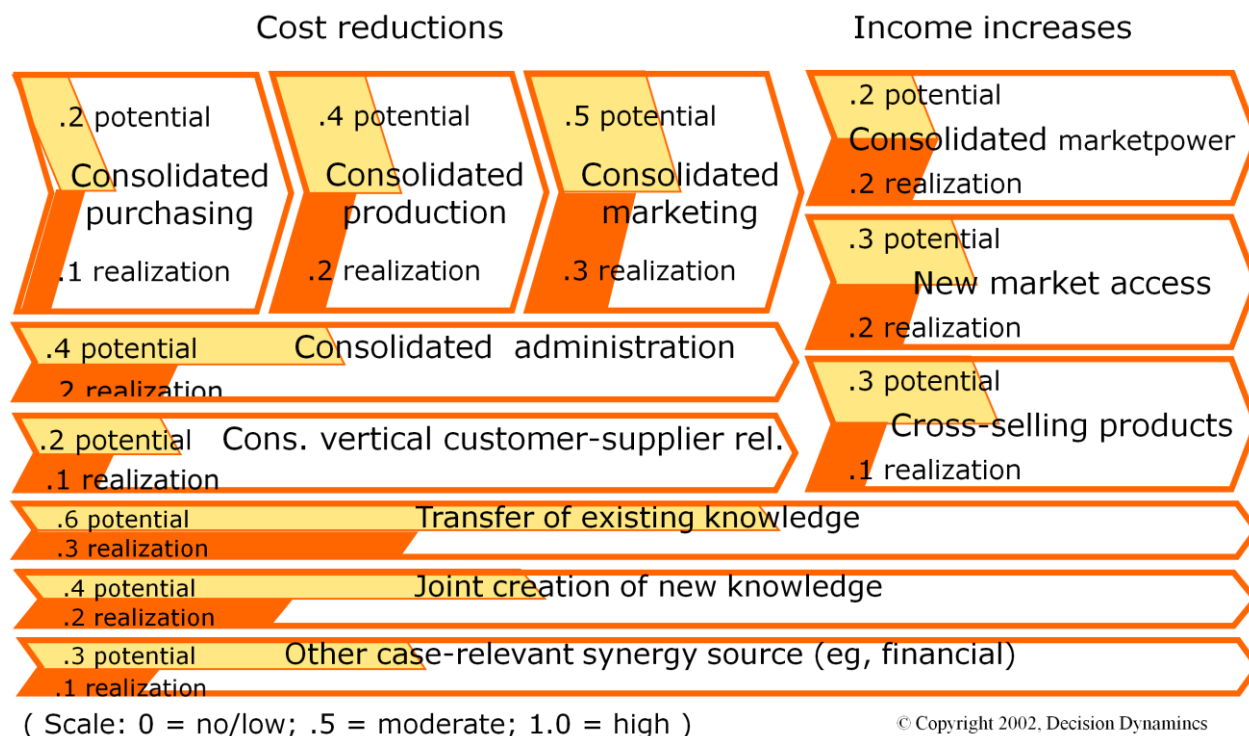
4. Empirical Results

This chapter will give a brief background of the companies included in our event study, including details and the rationale behind each of the M&A-deals. Potential and realized synergies for the different deals will be outlined in a schematic way. Also, the result from the abnormal return-calculation for each company (or the parent company if part of a group) will be presented here.

4.1 Total Sample Average

The six cases included in this thesis will be presented in more detail below. They make out a subsample from a larger sample constituting of 55 cases coded by Larsson (1989). For each of these cases, potential- and realized synergies arising from cost reductions and from income increases respectively were analyzed. By using a model set up by *Decision Dynamics*, the potential synergies and the de facto realized synergies can be contrasted in a visual way that is easy to understand. Cost reductions can arise from consolidation of purchasing-, production- and/or marketing functions while income increases can be achieved if consolidation leads to increased market power, access to new markets and/or the possibility of cross-selling. The bottom boxes: transfer of existing knowledge, joint creation of new knowledge and other case relevant synergy source, represents both cost and revenue synergies. Each box in the model represents one source of synergies. For a more detailed description of each synergy source please see appendix 1. The upper half of each box, marked in “light orange”, represents the synergy potential of that particular source while the lower part, highlighted in “dark orange” form the realized synergies. In the following sections there will be similar illustration for each case company in order to facilitate comprehension of the potential and realized synergies. Table 4.1 below shows the average from the 55 cases, which will be used for comparison in the analysis chapter.

Table 4.1 Sample Average from 55 cases



4.2 Description of Successful Case Companies

4.2.1 Casco's Acquisition of Nordsjö

Casco, which was owned by KemaNobel, acquired Nordsjö from Bayer AG on the 1st of January 1983. Casco was founded in Sweden in the late 1920's and was at the time of the acquisition the leading producer of adhesives. Casco was by 1977 fully owned by KemaNobel and became a separate business area in 1981.⁹⁰

In the 1980's Casco experienced a saturated market, due to high market share, within adhesives and sealing segments and consequently acquired the paint companies Höganäs Färg and Acroma

⁹⁰ Larsson, Rikard (1989) - Organizational Integration of Mergers and Acquisitions: A Case Survey of Realization of Synergy Potentials

to extend their product line. These acquisitions of paint companies made Casco compete with much larger players in the segment, such as Nordsjö. However these acquisitions were only the beginning as the management of Casco had larger plans. These plans included not to expand their traditional business segment adhesives but to expand the “do it yourself” area (*focus on private customers instead of professional users of their products*). The expansion into the larger paint market came naturally as the paint industry shared many characteristics with the adhesive industry. Thus the acquisition of Nordsjö was a large step forward in Casco’s expansion plans.

Nordsjö was founded in the early 20th century in southern Sweden, and was at the time of the acquisition a well known paint company in Sweden. Nordsjö also wanted to expand their business but the owner Bayer AG had no interest in an expansion as this would make Nordsjö compete with important customers to Bayer AG. The management at Nordsjö took action and started to discuss with Bayer AG to either expand their paint business or sell off its shareholding. At that time Bayer had financial problems and Nordsjö was an expendable asset. Bayer succumbed to letting the management finding a new suitable owner. The managers of Nordsjö and Casco quickly realized that they were operating in closely related areas, but still not competing, and could complement each other well. Consequently the acquisition process went smoothly and fast.⁹¹

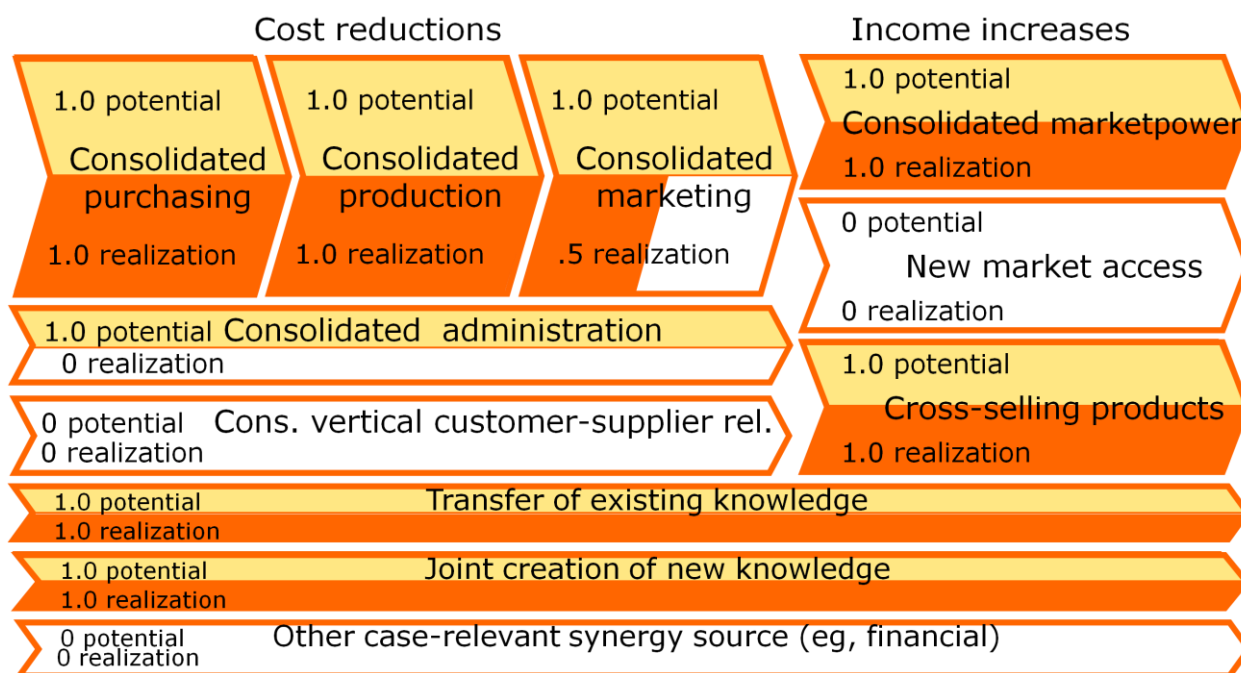
The synergies realized from the acquisitions were mainly due to synchronization of actions between the companies. Additionally Casco got access to Nordsjö’s brand name, production facilities, etc. Also, the industry competence in Nordsjö would have been hard for Casco to develop as a standalone company. Economies of scale were also achieved when the purchasing power of the combined firm increased the bargain power towards suppliers. Other savings came from lowered per-unit cost, shared marketing costs, and increase in volumes as the combination of paint and adhesive lowered the number different products used. Cross-selling opportunities also developed as paint and glue often were sold at the same hardware stores. Besides the benefits of the combination they encountered resistance in the integration process of Nordsjö. This was handled by including Nordsjö into Casco’s more lucrative compensation program.

⁹¹ Larsson (1990) - Coordination of Action in Mergers and Acquisitions, pages 129 - 164

The unofficial market price was low and would have been considered a good investment considering the expected cash flows, even without taking into account any synergies arising from the merger. Based on the unconfirmed sales price, Casco's payback-time was less than three years. The synergies were estimated by Larsson to amount to around 150 MSEK (1987 price level) for the first five years. Bayer apparently sold Nordsjö too cheap and was not able to project the potential synergies in a combined company.⁹²

Table 4.2 below shows the potential- and realized synergies arising from Casco's acquisition of Nordsjö. As can be seen the potential synergies were great within almost all the measured areas and the level of realization was also high which classified Casco-Nordsjö as one of the most successful mergers in Larsson and Finkelstein's survey and consequently also in our chosen subsample.

Table 4.2 Synergy Chart Casco-Nordsjö



(Scale: 0 = no/low; .5 = moderate; 1.0 = high)

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⁹² Larsson (1990) - Coordination of Action in Mergers and Acquisitions, pages 129 - 164

4.2.2 Electrolux Acquisition of Zanussi

On December 14th, 1984, Electrolux announced its acquisition of Zanussi, the Italian home appliance firm. At this time, Zanussi was the second largest privately-held company in Italia, employing some 30 000 people. Founded in 1916, it was not until the 50's and 60's that the Italian company experienced most of its growth. This was largely achieved due to a series of mergers and acquisitions which gave Zanussi a high level of vertical integration.

Electrolux was founded in the early 20th century. The firm experienced difficulties commencing in the 1960's with falling profitability and the lack of a strong in-house research and development function. This was taking place at the same time as when Zanussi grew and prospered. However, when Hans Werthén was appointed CEO in 1967, it became the starting point to a great turn-around of Electrolux. Also this transformation was made possible through an aggressive M&A strategy. From around 1970 and fifteen years onwards, Zanussi experienced a tough time when it lost focus and started diversifying into various unrelated businesses.⁹³ As a result, the core-business did not get the necessary investments while the new businesses carried heavy losses.

By 1982, the accumulated losses amounted to 1300 billion Italian Lire (Lit) while the operations resulted in a loss of 100 billion Lit annually. Zanussi started to sell off some of its non-core businesses but the great need for a capital injection remained. Zanussi representatives approached Electrolux, investigating whether the Swedes would be interested in investing in the Italian company. Not only did Electrolux invest, but instead they ended up acquiring the whole company.⁹⁴

Before the deal went through, Electrolux had failed to acquire the AEG's appliance unit in Germany as well as the planned takeover of the TI group in the UK. Electrolux wanted to expand in continental Europe, and so the deal with Zanussi was a great match in many aspects. The two companies complemented each other well in terms of products and markets. Also, the high degree of vertical integration found in Zanussi, with spare capacity in component production,

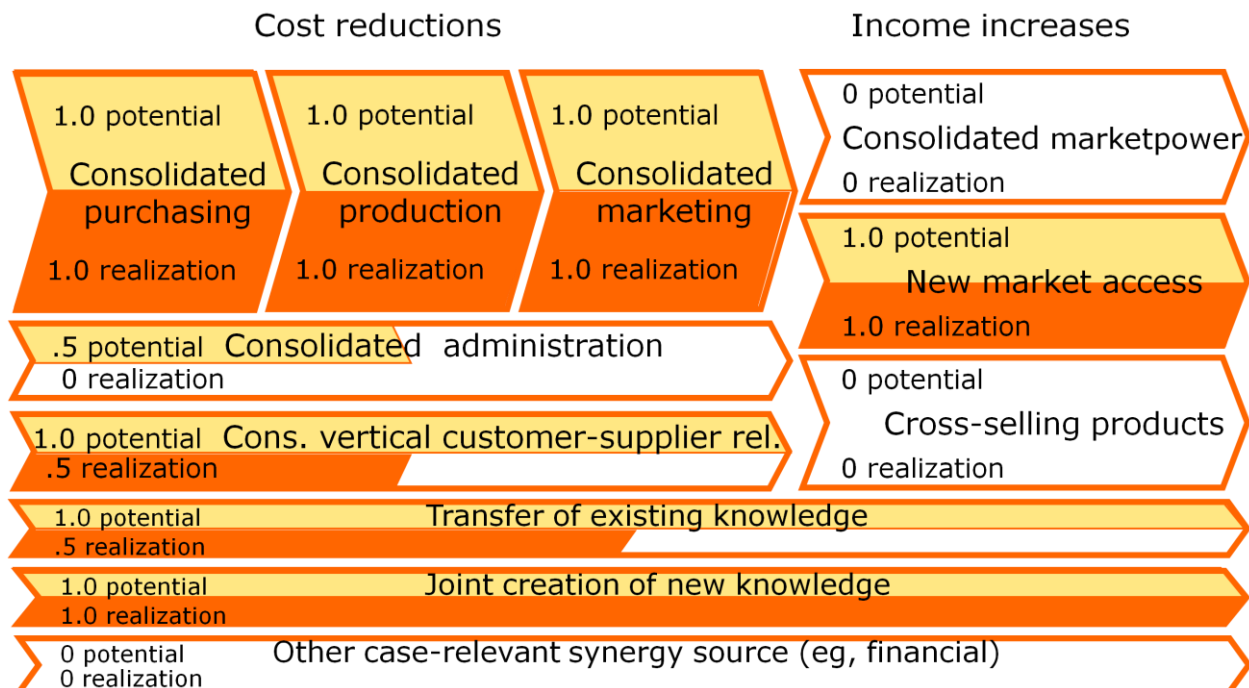
⁹³ Ghosal & Haspeslagh. (1990) - Electrolux: The Acquisition and Integration of Zanussi

⁹⁴ Ibid

could be used by Electrolux who had a history of sourcing much of its components from external suppliers.⁹⁵

After the deal went through, synergies began to realize in various areas. Targets had been set up stating that Electrolux would source 500 000 units from Zanussi. One year after completion of the deal, 70% of this target was accomplished. Also, as 70% of production costs were made up of raw materials and purchased components, attempts to reduce vendor prices began immediately. Over the years, savings of about 17% in real terms were realized for both Electrolux and Zanussi.⁹⁶ As can be seen in table 4.3 below, also this deal showed high levels of both anticipated and realized synergies.

Table 4.3 Synergy Chart Electrolux-Zanussi



(Scale: 0 = no/low; .5 = moderate; 1.0 = high)

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⁹⁵ Ghosal & Haspeslagh. (1990) - Electrolux: The Acquisition and Integration of Zanussi

⁹⁶ Ibid

4.2.3 Bilspedition's Acquisition of Scandspedition

Bilspedition made their initial large stock purchase of Scandspedition on December 2nd 1985. Swedish Bilspedition had at the time operations within transportation by sea, land and aviation.

Bilspedition's target market was transports mainly to large and medium sized companies. In 1984 the management of Bilspedition outlined an expansive strategy intended to provide international transport solutions to large parts of the world by sea, land and aviation. Scandspedition was supposed to contribute to that plan.⁹⁷

Scandspedition was founded in 1970 as the parent company for three family owned companies. However, over time, the family ownerships became more dispersed as Scandspedition was introduced on the Swedish stock exchange. Scandspedition was at the time mainly focused on international transportation and their target market was transports to small and medium sized companies. Their international operations were also less profitable than their domestic operations. Scandspedition's profits suddenly dropped in 1984 whilst Bilspedition at the time was more profitable and generated greater earnings than Scandspedition. Consequently Scandspedition was a suitable target for Bilspedition as they had more extensive international operations and thus fitted with their plans to expand abroad.⁹⁸

Before acquiring Scandspedition, Bilspedition undertook no detailed analysis of the potential synergies as the acquisition process was conducted quite swiftly. However after the announcement of the deal, Bilspedition stated in more detail the potential synergies that were identified as:

- Better use of capacity of loading docks and the cargo space in the trucks
- More intense transport possibilities and more destinations (instead of weekly transports to destinations they could now operate daily),
- Cover more areas, both geographically and customer wise.

⁹⁷ Klintman, & Modell (1992) - Synergy Considerations in Acquisition of Service Firms

⁹⁸ Ibid

- Combining the two entities, their combined purchasing power towards suppliers was believed to increase.

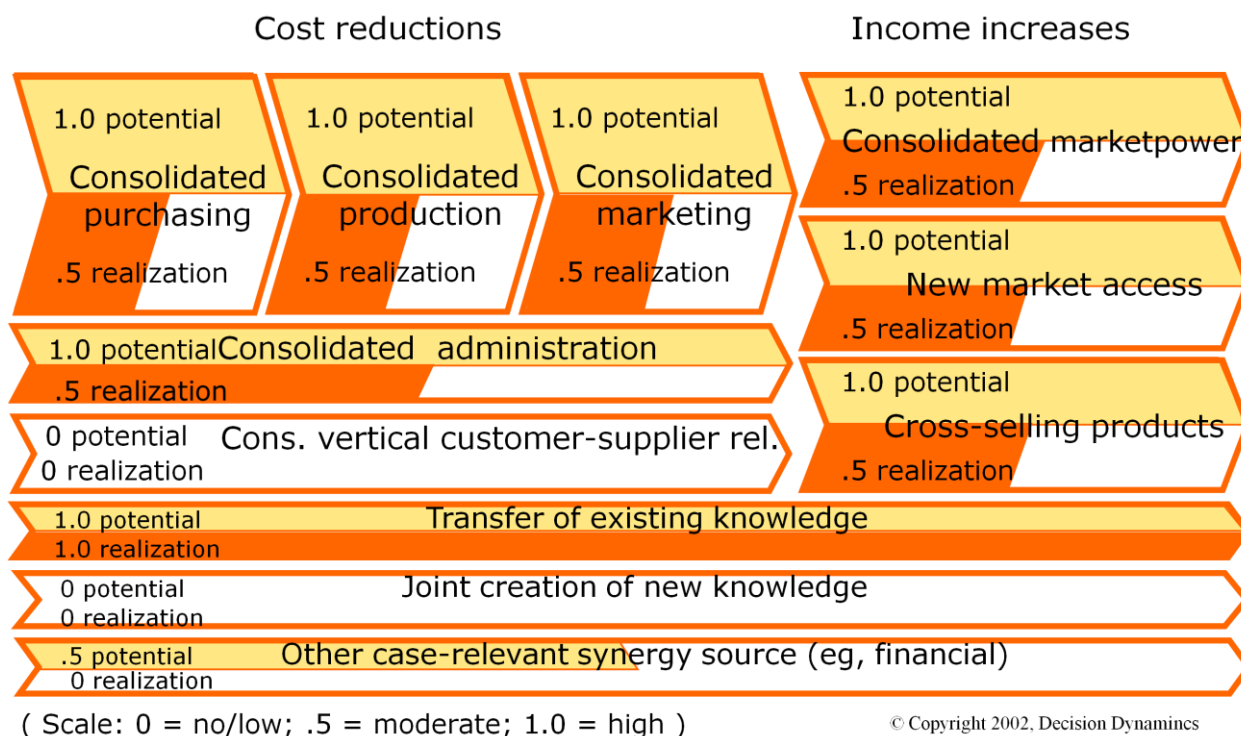
The management team of the two companies gradually outlined plans on how to realize these strategies and integrate the companies. The management team in Scandspedition was given a lot of freedom and power to influence as Bilspedition wanted to avoid conflicts with the management and employees. The first integration process was to coordinate the different operations. Initially this coordination was conducted only on the Swedish market while the international coordination process was intentionally implemented more slowly. In late 1987 the international coordination process began with a focus on integrating different subsidiaries as they to some extent were competing with each other. The international integration resulted in the establishment of Scansped Europa and Scansped Group which increased the synergy realization by better capacity use of administration, better service to customers and stronger market position. Further integration was conducted over time by dividing the different ways of transportation into separate entities, thereby improving the coordination between them which resulted in more efficient operations.⁹⁹

The combination of Bilspedition and Scandspedition was successful in the sense that a lot of synergies were realized, however perhaps not as fast as anticipated.¹⁰⁰ The relatively large synergy realization can be seen in table 4.4 below. The table also outlines the great potential that was estimated in almost all areas.

⁹⁹ Klintman, & Modell (1992) - Synergy Considerations in Acquisition of Service Firms

¹⁰⁰ Ibid

Table 4.4 Synergy Chart Bilspedition-Scandspedition



4.3 Description of Unsuccessful Case Companies

4.3.1 Ericsson Acquisition of Datasaab

Ericsson announced their letter of intent of acquiring Datasaab on December 23rd 1980. One week later, 50 % of Datasaab was acquired from Saab Scania and about three months later an additional 40,5% was acquired from the Swedish government.¹⁰¹

Ericsson is a well known Swedish company specialized in telecommunication and data communication. Ericsson's history dates back as far as 1896 and has survived both World Wars and the great depression in the 1930's. Datasaab was founded in 1978 as a result from a merger

¹⁰¹ Dahlgren & Witt. (1988) - Management of the Merger Process, pages 237-337

between Stansaab and Datasaab. Organizational and strategic disagreements existed both in Stansaab and Datasaab prior to the merger and combining them only increased the tension.¹⁰²

However the conflicts eased when it became clear that Datasaab eventually would get a new owner, which increased the belief in turnaround. Ericsson's motives behind acquiring Datasaab were to gain knowledge and market shares in the sector of computer and operating systems. Datasaab was highly specialized in these areas and was at the time of the acquisition Sweden's largest producer of computers. In the initial process, Ericsson was only interested of some parts of Datasaab. Shortly after analyzing Datasaab this was reconsidered as acquiring all parts of Datasaab and then modify some parts appeared more appealing. Ericsson had been interested in developing into this fast growing area for quite some time before the acquisition of Datasaab. The amount paid for Datasaab equaled 299 MSEK, which was lower than the nominal value of the shares. The acquisition was the largest placement ever made in the Swedish computer industry and placed Ericsson as the second largest computer company in Sweden after IBM. Datasaab was integrated into Ericsson and the business area Ericsson Information Systems was created. The acquisition was later described as more of a coincidence than a well executed strategic acquisition. The merger between the two was considered by both parties to be positive. Datasaab got a new owner that operated in a similar area and was willing to invest and Ericsson got the know-how and experience of the computer industry they wanted. The synergies Ericsson wanted to realize was knowledge expansion into a new business area and improve Datasaab business by combined logistics and technological competence. Ericsson viewed Datasaab as a first step to entering the area of "business information" as well as a foundation for the new business line Ericsson Information Systems (EIS). The business idea of EIS was to become the provider to the business office of the future by combining telecommunication and data communication. Ericsson projected substantial revenue enhancements and believed that EIS would double their revenues between 1982 and 1987 by an increasing demand and product extension.¹⁰³

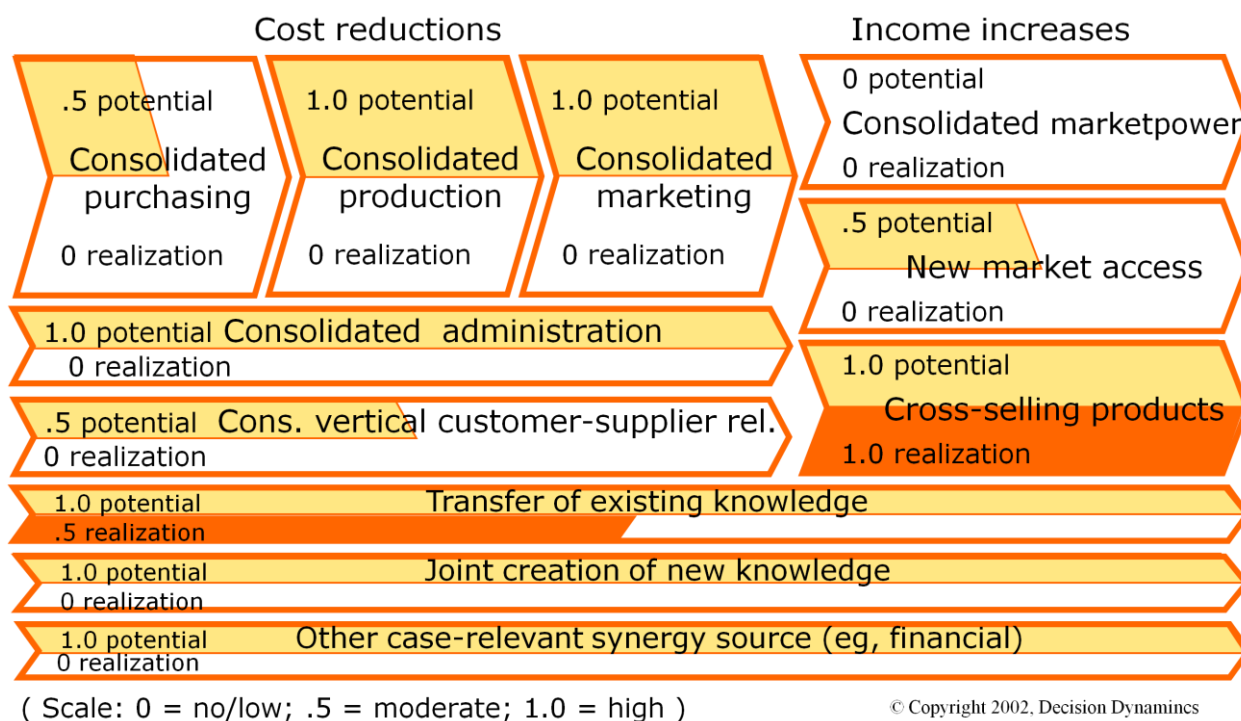
Besides the large investment into Datasaab and the large expansion plans, few integration processes was developed prior or after the acquisition. No short-term integration process was

¹⁰² Dahlgren & Witt. (1988) - Management of the Merger Process, pages 237 - 337

¹⁰³ Ibid

conducted and the leading managers were more focused on developing their own business areas than on integrating the units into one. EIS lacked a distinct management team and the business area became more of an umbrella of different companies than one unit.¹⁰⁴ Additionally, EIS lacked a clear business idea and execution plan for both the integration process and growth plan. This led to an unstructured business with considerable operating freedom. The appointed President for EIS was also the vice President for Ericsson and thus had limited time for EIS. The acquisition of Datasab never developed to be successful and the original Datasab part of EIS was sold to the competitor Nokia in 1988.¹⁰⁵ As visualized in table 4.5, there were high synergy-potential in most areas while there were hardly any realized synergies.

Table 4.5 Synergy Chart Ericsson-Datasab



¹⁰⁴ Dahlgren & Witt. (1988) - Management of the Merger Process, pages 237 - 337

¹⁰⁵ Ibid

4.3.2 INCO Acquisition of ESB

On July 17th 1974, International Nickel Company of Canada (INCO) presented a tender offer on Electric Storage Battery (ESB)¹⁰⁶. INCO was at that time the world's largest producer of nickel. Prior to the takeover attempt on ESB, INCO had tried (and failed) acquiring Chloride, a leading battery producer in the UK. The eagerness to acquire a battery producer was in order to diversify and to balance out some of the cyclical effects found in the nickel industry. Back then some batteries were based on nickel electrodes which caused INCO to believe that ESB was a suitable candidate to diversify into. However, ESB resisted strongly and rejected all the offers from INCO as hostile bids and encouraged another company, United Technologies, to step in as their "White Knight". INCO's management was persistent and its bidding raised ESB's stock price from \$19.50 (pre-bid) to a takeover price of \$41 per share. When the final price was set, common consensus was that INCO had clearly paid too high of a price for ESB compared to its fundamental value.¹⁰⁷

After the deal an anti-merger lawsuit prevented INCO from integrating ESB until settlement of the lawsuit. The settlement was reached about four years after the winning bid on ESB. During these years ESB had continued to operate as a separate company, with no management from INCO involved, but with vast financial and policy controls. During this time of separated management, several mistakes were conducted by ESB. When competitors started to develop a new generation of automotive batteries, ESB took another technological direction that turned out to be a mistake. When ESB realized this mistake, steering into the same direction as the competitors was concluded to be too costly. Furthermore ESB failed to foresee the new market of long-life alkaline batteries and consequently failed to enjoy first-mover advantage into this lucrative market.¹⁰⁸

When the process of integrating ESB into INCO finally was initiated after the long legal dispute, the president of ESB had become severely ill. He could only have brief contacts with the new president appointed by INCO, and also other managers at ESB suffered from health problems.

¹⁰⁶ Retrived from Thomson Reuters Datastream

¹⁰⁷ Ravenscraft & Scherer (1987), pages 249 - 253

¹⁰⁸ Ibid

During the same time the industry experienced a decline in demand due to the longer life of batteries and increased imports. INCO further suffered as nickel prices fell quickly and thus had no financial resources that could support the struggling ESB. In December 1981, INCO initiated a process of selling off ESB piece by piece and thereby essentially losing more than their initial investment.¹⁰⁹ Table 4.6 offers an overview of what synergy potential there was in the deal. As can be seen, no synergy realization was experienced.

Table 4.6 Synergy Chart INCO-ESB

Cost reductions			Income increases	
0 potential Consolidated purchasing 0 realization	0 potential Consolidated production 0 realization	0 potential Consolidated marketing 0 realization	0 potential Consolidated marketpower 0 realization	
0 potential Consolidated administration 0 realization			0 potential New market access 0 realization	
.5 potential Cons. vertical customer-supplier rel. 0 realization			0 potential Cross-selling products 0 realization	
.5 potential Transfer of existing knowledge 0 realization				
.5 potential Joint creation of new knowledge 0 realization				
.5 potential Other case-relevant synergy source (eg, financial) 0 realization				

(Scale: 0 = no/low; .5 = moderate; 1.0 = high)

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¹⁰⁹ Ravenscraft & Scherer (1987), pages 249 - 253

4.3.3 Beatrice Foods Acquisition of Harman International

After prior unsuccessful attempts, Beatrice Foods acquired Harman International in the 2nd of August 1977.¹¹⁰ At the time the US conglomerate Beatrice Foods exercised a strategy of diversification. They had, prior to the acquisition of Harman International, conducted hundreds of acquisitions of different character. These acquisitions were either expansions into new areas or additions to already newly entered markets. Beatrice Foods was one of the leading conglomerates at the time and had undertaken an astonishing 290 acquisitions during the 3rd merger wave.¹¹¹

Harman International was established in the US in 1953 and developed AM-FM tuner amplifiers. Harman International had prior to the acquisition fended off Beatrice Foods acquiring attempts. However, when the cofounder and chairman Sydney Harman was asked to become Deputy Secretary of Commerce he decided to sell his shares to Beatrice Foods for \$103 million. By the time of the acquisition, Harman International was specialized in producing high fidelity equipment. The senior executives at Beatrice considered the high fidelity industry to be very attractive and suitable for them to diversify and expand into. Beatrice praxis when acquiring companies was to keep the present management and did not replace any executives in Harman.¹¹²

After the acquisition the flourishing high fidelity industry soon began to suffer from a decline. Prior to Beatrice's acquisition, the industry had been growing at a stable high rate but it appeared as if Beatrice had bought Harman at the peak. Consequently it was considered in retrospect that Beatrice had paid an overprice for Harman. Prior to the acquisition, Beatrice knew that some parts of their business were unprofitable. This was ignored as it was believed that those operations were necessary for offering a broad product line. These problems were clearly underestimated and Harman had fallen behind in product design and as a result losses started to escalate. Before the merger an expansion had been made in JBL loudspeakers and the sudden drop in demand led to overcapacity which also contributed to the losses. On top of this, prices on important input parts four-folded which lowered profits even further. Beatrice ordinary reaction

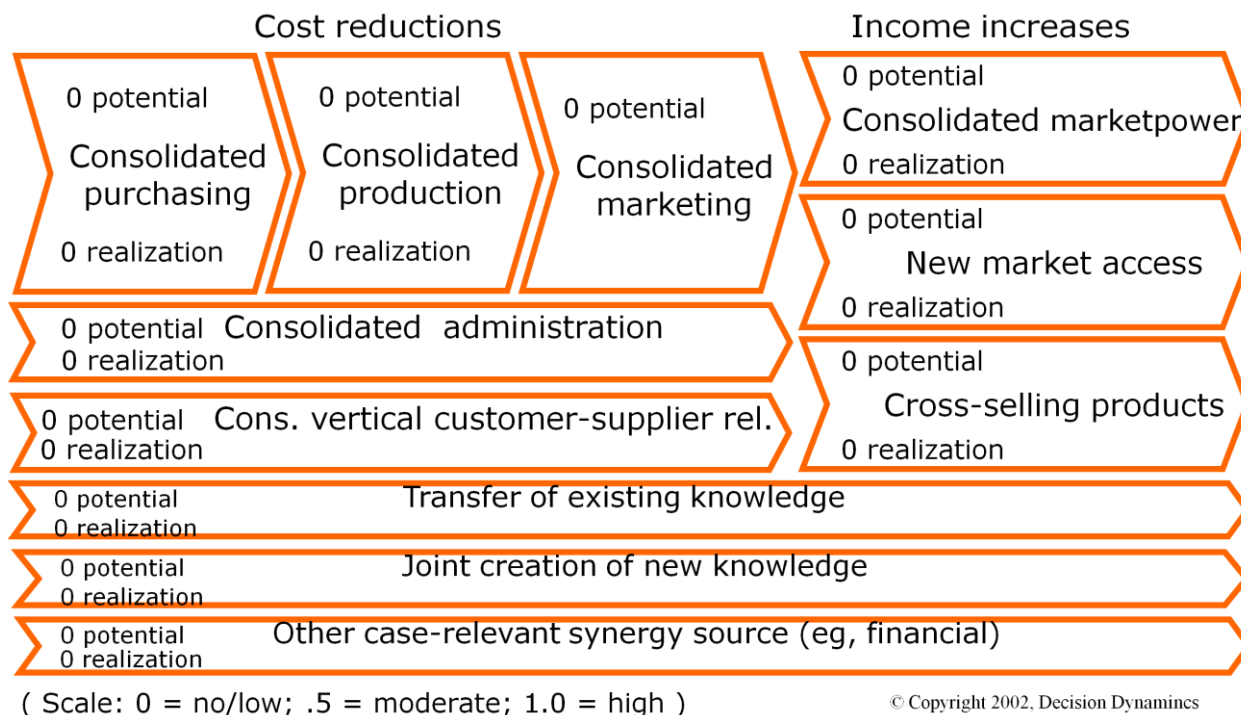
¹¹⁰ [http://pqasb.pqarchiver.com/wsj/access/110528706.html?FMT=CITE&FMTS=CITE:AI&date=Aug+2%2C+1977&author=&pub=Wall+Street+Journal+\(1923++Current+file\)&edition=&startpage=34&type=historic&desc=Beatrice+Foods+Acquires+Harman](http://pqasb.pqarchiver.com/wsj/access/110528706.html?FMT=CITE&FMTS=CITE:AI&date=Aug+2%2C+1977&author=&pub=Wall+Street+Journal+(1923++Current+file)&edition=&startpage=34&type=historic&desc=Beatrice+Foods+Acquires+Harman)

¹¹¹ Ravenscraft, & Scherer (1987), pages 259 - 263

¹¹² Ibid

to failed acquisitions was to either sell of the acquired company or shut down specific units due to time restraints of Beatrice's management. Harman International was no exception as some units were sold and other units closed down.¹¹³ As is apparent in table 4.7, the deal between Beatrice and Harman International saw no, or very low, levels of synergy potential and realization.

Table 4.7 Synergy Chart Beatrice-Harman International



4.4 Event Study Results for Total- and Subsamples

Below we will introduce the cumulative abnormal return (CAR) from the event study of our total sample. Also, the cumulative abnormal returns for two different subsamples will be presented, of which one consists of the three successful companies and the other one constitutes of the three unsuccessful companies presented above. In each table, the length of the event window is listed on the left hand side, and the cumulative abnormal return for each grouping is marked in grey. The P-value indicates the level of significance of the abnormal returns upon M&A-

¹¹³ Ravenscraft, & Scherer. (1987), pages 259 - 263

announcement. P-values that show a significance at 10%, 5% and 1% are marked *, **, *** respectively. The results are outlined in the table 4.8 below. They will be interpreted and thoroughly analyzed in the next chapter.

Table 4.8 Event Study Results for Total sample, Successful Companies and Unsuccessful Companies

Event Windows:	Total Sample:		Successful Companies:		Unsuccessful Companies:	
	CAR	P-value	CAR	P-value	CAR	P-value
[-1;+1]	1,91%	0,0027***	1,92%	0,0080***	1,91%	0,0736*
[-20;0]	4,49%	0,0578*	6,83%	0,1070	2,15%	0,1690
[-10;0]	3,85%	0,0721*	5,11%	0,1868	2,59%	0,0001***
[-5;0]	2,18%	0,0019***	1,09%	0,1100	3,27%	0,0002***
[-20;+20]	11,07%	0,0134**	16,67%	0,0379**	5,46%	0,0090***
[-10;+10]	10,41%	0,0365**	17,04%	0,0618*	3,78%	0,0048***
[-5;+5]	8,59%	0,0176**	13,58%	0,0352**	3,59%	0,0032***
[0;+5]	7,18%	0,0337**	12,86%	0,0260**	1,49%	0,0405**
[0;+10]	7,33%	0,0183**	12,31%	0,0171**	2,36%	0,0862*
[0;+20]	7,35%	0,0070***	10,22%	0,0115**	4,48%	0,1330

P-values that show a significance at 10%, 5% and 1 % are marked with *, **, *** respectively

4.5 Event Study Results for Individual Case Companies

In this section we will present the individual average abnormal returns from our event study, for each successful case company. In the tables below, the event window is listed to the left and the company-specific average abnormal return (AAR) for the shares of each specific company is highlighted in grey. The P-value indicates the level of significance of the abnormal returns upon M&A-announcement. P-values that show a significance at 10%, 5% and 1% are marked *, **, *** respectively. The results are outlined in the tables 4.9 and 4.10 below. These results will also be further analyzed in the next chapter.

Table 4.9 Event Study Results for the Successful Individual Case Companies

Event Windows:	<i>Casco:</i>		<i>Electrolux:</i>		<i>Bilspedition:</i>	
	AAR	P-value	AAR	P-value	AAR	P-value
[-1;+1]	<u>0,94%</u>	0,2229	<u>0,11%</u>	0,4300	<u>0,86%</u>	0,2069
[-20;0]	<u>0,79%</u>	0,0997*	<u>0,30%</u>	0,0518*	<u>-0,11%</u>	0,6056
[-10;0]	<u>1,44%</u>	0,0765*	<u>0,31%</u>	0,0796*	<u>-0,35%</u>	0,7679
[-5;0]	<u>0,44%</u>	0,3588	<u>-0,07%</u>	0,6132	<u>0,17%</u>	0,4125
[-20;+20]	<u>0,86%</u>	0,0836*	<u>0,24%</u>	0,0290**	<u>0,12%</u>	0,3649
[-10;+10]	<u>1,86%</u>	0,0430**	<u>0,33%</u>	0,0206**	<u>0,24%</u>	0,2712
[-5;+5]	<u>2,52%</u>	0,0935*	<u>0,19%</u>	0,1953	<u>0,99%</u>	0,0462**
[0;+5]	<u>4,06%</u>	0,1092	<u>0,24%</u>	0,2835	<u>2,14%</u>	0,0003***
[0;+10]	<u>2,06%</u>	0,1366	<u>0,23%</u>	0,1994	<u>1,07%</u>	0,0266**
[0;+20]	<u>0,85%</u>	0,2119	<u>0,11%</u>	0,2641	<u>0,49%</u>	0,1934

P-values that show a significance at 10%, 5% and 1 % are marked with *, **, *** respectively

Table 4.10 Event Study Results for the Unsuccessful Individual Case Companies

Event Windows:	<i>Ericsson:</i>		<i>INCO:</i>		<i>Beatrice Foods:</i>	
	AAR	P-value	AAR	P-value	AAR	P-value
[-1;+1]	<u>0,41%</u>	0,2392	<u>1,48%</u>	0,0010***	<u>0,01%</u>	0,4819
[-20;0]	<u>-0,11%</u>	0,5839	<u>0,22%</u>	0,1609	<u>0,20%</u>	0,1042
[-10;0]	<u>0,16%</u>	0,3874	<u>0,28%</u>	0,2406	<u>0,26%</u>	0,1257
[-5;0]	<u>0,51%</u>	0,2177	<u>0,83%</u>	0,0403**	<u>0,30%</u>	0,2071
[-20;+20]	<u>0,22%</u>	0,2587	<u>0,03%</u>	0,4270	<u>0,15%</u>	0,0832*
[-10;+10]	<u>0,32%</u>	0,1787	<u>0,12%</u>	0,3247	<u>0,10%</u>	0,2462
[-5;+5]	<u>0,34%</u>	0,1913	<u>0,53%</u>	0,0470**	<u>0,11%</u>	0,2907
[0;+5]	<u>0,24%</u>	0,2478	<u>0,50%</u>	0,1381	<u>0,01%</u>	0,4820
[0;+10]	<u>0,51%</u>	0,0722*	<u>0,15%</u>	0,3514	<u>-0,02%</u>	0,5457
[0;+20]	<u>0,58%</u>	0,0824*	<u>-0,06%</u>	0,6076	<u>0,12%</u>	0,2004

P-values that show a significance at 10%, 5% and 1 % are marked with *, **, *** respectively

4.6 Student's T-test Results

Table 4.11 below shows the difference between the mean abnormal return in the group of successful M&A's and the group of unsuccessful ones in different event windows. In order to test their significance we conduct a T-test. According to the t-statistic we did not find any significant difference at the 5% level when using a two-tailed test.

Table 4.11 *Student's T-test Results*

<i>Event Windows</i>	<i>Diff. between mean AR</i>	<i>T-value</i>
CAR[-1;+1]	0,01%	0,005
CAR [-20;0]	4,68%	0,788
CAR [-10;0]	2,52%	0,438
CAR [-5;0]	-2,17%	-1,693
CAR[-20;+20]	11,21%	1,159
CAR[-10;+10]	13,26%	1,188
CAR[-5;+5]	9,99%	1,311
CAR [0;+5]	11,38%	1,704
CAR [0;+10]	9,95%	1,642
CAR [0;+20]	5,74%	0,951

5. Analysis

In this chapter we will present our analysis where we apply the theoretical framework on the collected empirics described above. We will analyze each company separately by contrasting the potential and realized synergies with our results from the event study. Any findings will be supported by existing research and theory in order to make potential conclusions more accurate and reliable. We will end the chapter by discussing the findings from our group samples by performing an intra-group study.

5.1 Analysis of the Successful Case Companies

Studying table 4.2, it can be observed that Casco's merger with Nordsjö scored the highest in the case survey conducted by Larsson and Finkelstein as it realized almost all of its potential synergies. Yet *consolidated administration* experienced low/no realization and the *consolidated marketing* experienced moderate realization even though the potential for both categories was high. However Casco-Nordsjö clearly enjoyed high cost synergy realization as the benefits of *consolidated purchasing* and *production* was maximized. Also, all the potential in revenue enhancing synergies were realized, which according to prior research can be hard to actually fulfil.^{114,115} Additionally, *transfer of existing knowledge* and *joint creation of new knowledge* between the firms also scored full points on the scale. The anticipated successful combination of adhesives and paint clearly turned out well, which the positive average abnormal return could be an indication of. Seemingly, the previous owner of Nordsjö (Bayer AG) failed to identify this opportunity, or possibly ignored to analyze any potential synergies for a buyer, as the stock market reaction to the deal was significantly positive.

When comparing the case survey results with the outcome in our event study, the findings are quite interesting. Out of all the companies including in our sample, Casco is enjoying the highest average abnormal return (2,52%) that is statistically significant (although at a 10% level).

¹¹⁴ Arzac (2008), page 153

¹¹⁵ Gaughan (2007), pages 117 - 136

Our average event study indicates that the market could have had some type of information or anticipation of the deal in advance, as the event windows (-20,0) and (-10,0) also depicts significant abnormal returns. When analyzing the windows that includes both days before and after the announcement our findings also indicates that the market appreciated the deal as Casco had significant abnormal returns in these windows as well. The highest average abnormal returns can be found in the most narrow event window out of those that showed significance. This is line with the hypothesis of semi-strong markets which states that all new information is accurately incorporated into stock price and that abnormal returns can be made.¹¹⁶

In this case we believe that the stock market had the ability of predicting a successful synergy realization as the stock market clearly rewarded Casco in terms of abnormal returns for various event windows. To identify exactly what synergies the market anticipated is basically impossible. Considering that Casco-Nordsjö had large synergy potential (of which most was realized) in combination with the high average abnormal return, it can perhaps serve as an indicator that the stock market was semi-strong in accordance with EMH¹¹⁷ and had the ability to identify the cost-, revenue- and knowledge synergies and anticipated them to realize.

When analyzing the acquisition of Zanussi by Electrolux it can be observed in table 4.3 that both the potential- and realized synergies for this merger was high. The promising synergies that failed to maximize was the *consolidation of vertical customer-supplier relations* and the *transfer of existing knowledge*. However the important, and usually main motive for a merger, cost synergies¹¹⁸ were realized in all aspects. The potentially income-increasing source of synergy, *access to new markets*, also realized fully. As stated in the case description in chapter 4 cost savings of about 17% in real terms were realized and the acquisition of Zanussi was a good match as Electrolux wanted to expand internationally.

Despite the large potential synergies and realization of these the average abnormal return for Electrolux was considerably lower than the findings in Casco-Nordsjö. In event windows prior to

¹¹⁶ Watson & Head (2003) – Corporate Finance Principles and practice

¹¹⁷ Ibid

¹¹⁸ Guaghan (2007), pages 126-127

the announcement, (-20,0) and (-10,0), Electrolux experienced statistically secured average abnormal returns of 0.30% and 0.34% respectively. This could be an indication that the stock market anticipated the deal. In the wider windows of (-20,+20) and (-10,+10) significant returns of 0.24% and 0.33% are observed.

For this deal we could not see the same strong link between the average abnormal returns and the case survey results as we could in the case of Casco-Nordsjö. One influencing factor of the weaker link in this case could be due to the fact that this deal was much larger than Casco's deal. As mentioned in chapter 3.3, the size of the acquiring firm could be an explaining factor. A study by Moeller et al. (2003) found that larger firms are often more willing to pay larger premiums for growth opportunities and consequently the abnormal returns for large firms are lower compared to smaller firms. Also, due to the substantial size of Zanussi and its operations, it could possibly have been harder for the stock market to actually reflect all the information in our short-term event windows. Logically, deals including larger firms with more complex operation in various countries would perhaps have a more difficult time to integrate the different units due to cultural differences and so on, which in turn may be difficult for the stock markets to foresee. As studies by Cartwright & Cooper (1993) points out, cultural clashes and integration problems are often a reason why mergers fail. As described in chapter four, Electrolux' intentions when acquiring Zanussi was to achieve cost synergies and to access new markets. The case survey findings concluded that the combination had succeeded well in these areas. Hence it is possible that the stock market failed to predict all the potential synergies and the likelihood of realization of the same. However the stock market rewarded the deal as our event study showed significant average abnormal returns

When analyzing the Bilspedition-Scandspedition merger the main difference between this case and the preceding two cases was that this deal had high levels of synergy potential but less realization than the prior two. As mentioned in the case description, the main motives behind the deal were to access Scandspedition's markets and achieve cost synergies. However, both the cost and income synergy potentials only realized to a moderate degree. The only synergy source that was fully realized was the transfer of existing knowledge between the firms. Despite the lower

realization, compared to the case survey sample average in table 4.1, Bilspedition stands out as successful in the qualitative analysis.

When analyzing the event study for Bilspedition, the average abnormal returns are relatively high. In the event window (-5,+5) there is a significant return of 0.99%. For the windows that only include days after announcement, (0,+5) and (0,+10), the significant average abnormal returns are even higher 2.14% and 1.07% respectively. These high returns after the deal could be due to the fact that deal was conducted quite swiftly. The post-deal market reaction was significantly positive, which perhaps could be interpreted as if the market was semi-strong as this new information was reflected in the stock price as soon it was made available for the public.

For this deal we are inclined to believe that there is a link in outcome between the two different methods included in this thesis. The case survey considered the deal to be successful which our calculated abnormal returns also suggest. Thus it seems as if the stock market could forecast the synergy realization properly. Also in this instance, one possible factor influencing the result could be that the size of the firms in this case were relatively small and hence should show significantly higher returns than larger firms according to the study of Moeller et al (2002).

5.2 Analysis of the Unsuccessful Case Companies

When contrasting the synergy chart of Ericsson-Datasaab with the 55 sample average from the case survey, it can be observed that the deal had a substantially higher synergy potential than average. The deal had great potential in most areas; in cost- and revenue enhancing synergies as well as in the other areas which witness of the great potential in the acquisition. However the only synergies realized were the *cross-selling of products* and *transfer of existing knowledge*.

Our calculation of the significant average abnormal returns for this deal only found two windows with significance; (0,+10) and (0,+20). They showed positive abnormal returns after the deal announcement of 0.51% and 0.58% respectively. Hence the findings between the case survey and the event study show little correspondence as one perhaps would be inclined to believe that the

cases classified as unsuccessful in our sample (with little or no realized synergies) should not experience positive abnormal returns. However, as mentioned, Ericsson-Datasaab experienced little realization, although synergy potential was high in most areas. Probably the stock market saw the same promising potential in new *market access*, *transfer of knowledge* etc that the management of Ericsson did, and therefore the stock gained in value on the market. However it should be noticed that our event study only resulted in two significant results at the unconventional level of 10%. Consequently the prediction ability of the stock market cannot be determined to satisfactory.

As outlined in chapter 4.3.1, Datasaab had unresolved organizational issues before being acquired. Ericsson also lacked an execution plan for the merger and, as stated earlier, Datasaab was finally divested due to the failures of integration. Hence it is not far-fetched to assume that the integration problems may have caused some of the expected synergy-realization to fail. This is also in accordance with previous studies that highlight cultural differences and integration problem as being a source of merger failures.

Both the stock market and Ericsson's management apparently regarded this deal positively and evidently there was a high potential in merging the firms. An interesting point to notice is that in this case, it was not the revenue enhancing synergies that failed to realize but instead none of the potentials in cost saving synergies turned out positive.

Table 4.6 outlines the potential synergies in the case of INCO-ESB. Comparing this to the 55 sample average presented in table 4.1 displays what an unsuccessful deal this was both in terms of potential and realization of synergy. There were only a few moderate synergy potentials of which none were realized. In the more thorough description of the case in chapter 4.3.2 it also becomes clear what a disappointment this deal was.

Despite this qualitative measure of the deal, our event window shows positive average abnormal returns both prior and after the deal. These results are remarkable as the case survey did not identify any synergy realizations and very little potential. In the shortest event window of (-1,+1)

the returns are 1.48 %, in the (-5,0) window the average abnormal return is 0.83% and in the window (-5,+5) the result is 0.53%.

When observing these results there is clearly no relation of outcome in our event study and the case survey results. Advocates of behavioural finance however argue that the markets occasionally make mistakes and that psychological factor may influence stock prices.¹¹⁹ As explained in chapter 4.3.2, in excess of the almost non-existing synergy potential there were circumstances surrounding the deal that made it look even less prosperous. The stock market reaction could in INCO's case be explained by information that we have failed to include in our empirics. Possibly, there can have been other information releases/ announcements during these time-frames that we are not aware of that affected the share price. INCO was at that time the world's largest producer of nickel and perhaps some other company specific event could explain the stock movement, for example a sharp incline in nickel prices or successful findings of nickel

Beatrice's acquisition of Harman International was the final case company in our sample and also the least successful. The case survey results show no potential or realization of synergies in this acquisition. The acquisition was completed during the conglomerate era and the motive behind the acquisition was very vague. Analyzing the deal in retrospect, it is not unlikely that the management of Beatrice were suffering from hubris.¹²⁰ There were no real synergy rationale behind the deal but instead the motive behind the acquisition was that executives at Beatrice considered the high fidelity industry suitable to diversify and expand into.

For this case our event study did not yield any significant abnormal returns at the conventional 5% level. Though we found a small return of 0.15% for the event window (-20,+20) at the 10% significance-level. Once again, considering the relative unsuccessfulness of this deal, if stock markets could accurately foresee synergy realization it is likely that they would depreciate the share value of Beatrice assuming that they were acting rationally. Consequently, stock markets seemingly could not successfully predict the outcome of this deal.

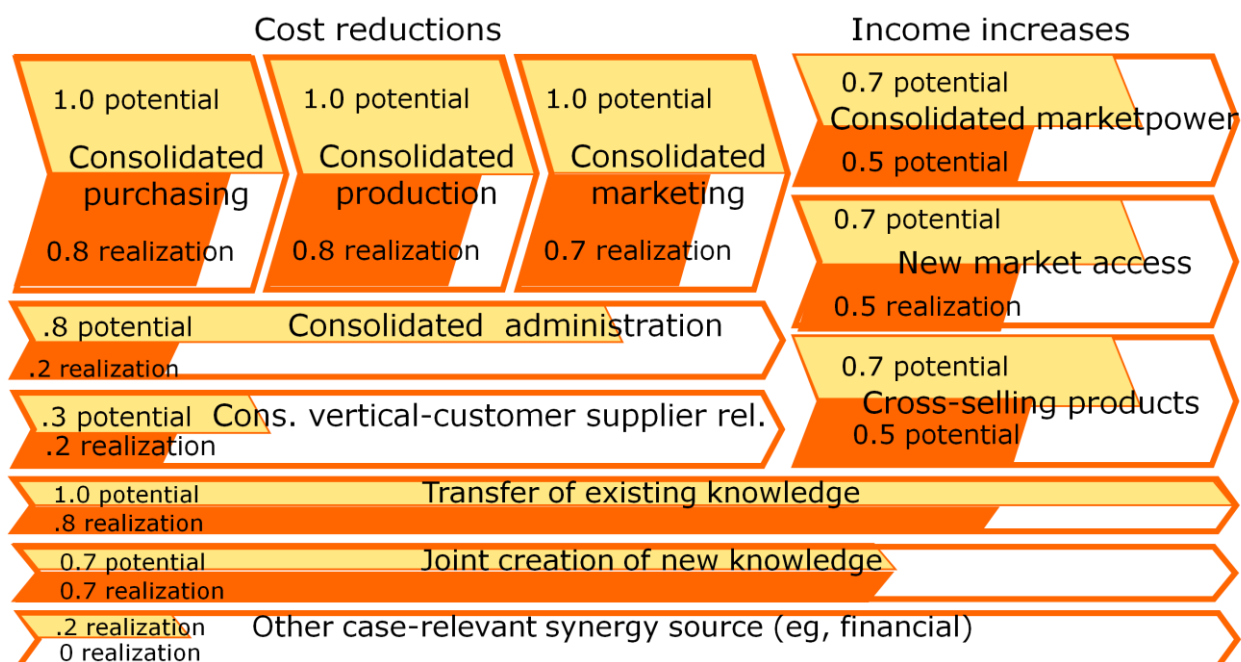
¹¹⁹ Malkiel (2003) - The Efficient Market Hypothesis and Its Critics

¹²⁰ Roll (1986) - The hubris hypothesis of corporate takeovers

5.3 Intra-Group Comparison

Going beyond studying individual companies, we will now analyze the cumulative abnormal returns of the three successful and three unsuccessful companies in our sample to see if we can find any significant differences in abnormal return. As table 4.8 reveals, returns in the subsample containing the successful companies clearly depict a picture of relatively high cumulative abnormal returns. In the event windows before the announcement date there is no significant cumulative abnormal returns. However, in all the other event windows we can statistically confirm that the group of successful companies experienced cumulative abnormal returns. In the event window (-10, +10) the cumulative abnormal returns were 17.04 % at 99% significance level. Comparing this result with the results from prior studies, the return is substantially better. Studies by Dodd (1980) and Andrade et al. (2001), had in their event window (-10, +10) cumulative abnormal returns of -7,22% and -3,8% respectively. In order to facilitate our analysis and to visualize for the reader, we have constructed two synergy tables, which can be found below, outlining the averages of the three successful and three unsuccessful companies.

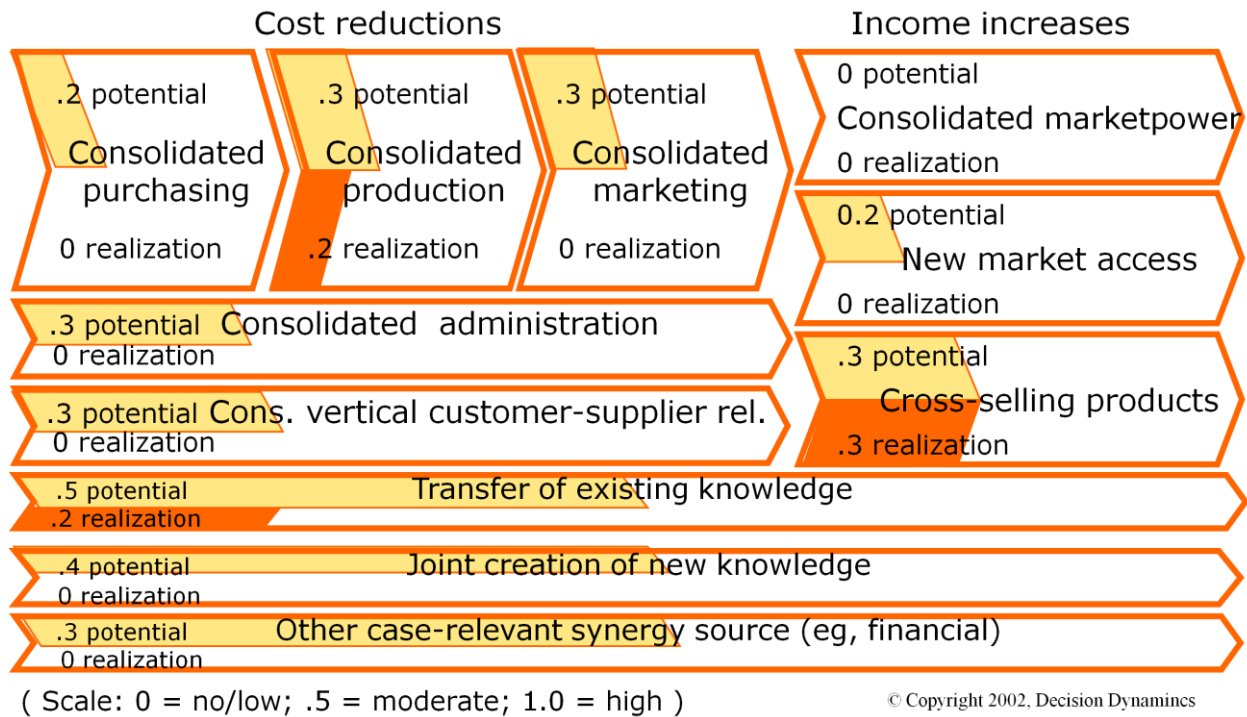
Table 6.1 Sample Average for the Successful Companies



(Scale: 0 = no/low; .5 = moderate; 1.0 = high)

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Table 6.2 Sample Average for the Unsuccessful Companies



From table 6.1, synergy chart of average successful companies, one can see that most anticipated synergies turned out well. Comparing the synergy potential and its realization with the CAR found in our event study (table 4.8), the outcome seems to be in line. Based on this observation and the fact that the abnormal returns found in our event study outperform that of previous studies, it seems as if the stock market had the ability to predict the future realization of the synergies and thus the success of these deals. However, it is interesting to see that the only one source of synergy that had large potential but mainly failed to realize was *consolidated administration*.

When observing the cumulative abnormal return for the subgroup of unsuccessful companies the returns are little more confusing. As can be seen in table 4.8 for this subgroup we found significantly cumulative abnormal returns in many different windows. Comparing these returns with the average synergy chart in table 6.2, sample average for the unsuccessful companies, we find it justifiable to argue that there is no clear link in the outcome of synergy realization for the

unsuccessful deals and their respective cumulative abnormal returns. We cannot present any apparent, general reason for why the market reacted positively to these deals that obviously were unsuccessful, in terms of synergy realization, when analyzed in retrospect. However, one explanation could be that our subsample constitutes of three deals only, and if the CAR calculation was carried out on a larger sample the results could possibly have turned out as negative CAR and thus more in line with prior research.

Also, we wanted to test if the cumulative abnormal returns between the different groups were significantly different and hence we performed a t-test as abovementioned. The t-test failed to prove that there actually was a significant difference between the two subgroups.

6. Conclusion

In this chapter we will present and summarize our main findings from the analysis chapter and evaluate the value of these. Additionally we will apply these findings in an attempt to present an answer to the purpose of the thesis. After that potential limitations of this work are acknowledged and we present topics for future research.

6.1 Main Findings and Conclusion

In order to make a thorough conclusion of our paper, we will firstly revise our purpose. For a number of specific M&A deals, we wanted to investigate how well the stock market could foresee synergies and thereby also their success in correctly pricing the merged companies on the market.

Our cumulative abnormal return calculations for the six-company sample included in our study indicate that the market reacted positively to the M&A announcements. The many previous studies within this area present a rather scattered picture regarding stock market reactions for the acquirer. Often cited studies like Dodd (1980) and Andrade et al. (2001) show that shareholders of acquiring firms do not gain any abnormal returns, which according to Bruner (2001) is a common belief. However, Bruner's summary of 130 event studies show that the acquirers in general earn zero abnormal return.¹²¹ In relation to these studies, our findings stand out, even though there are exceptions in the collected research in Bruner's paper that also shows gain for the acquirer.

When splitting our total sample up to subgroups of successful and unsuccessful companies we can conclude that the stock markets reacted positively to the deals that in Larsson and Finkelstein's study had been labeled as successful. This is perhaps not that unexpected considering the result for our total sample, although it is contradicting to the abovementioned studies. What is more surprising perhaps is that also the deals that in retrospect had been proved

¹²¹ Bruner (2002) – Does M&A Pay? A Survey of Evidence for the Decision Maker

to fail in their synergy realization experienced statistically significant positive cumulative abnormal returns. These results indicate that the markets did manage well in forecasting the synergy realization and thus value for the positive deals but were not very successful in its anticipation of unsuccessful deals as these stocks also experienced positive CAR for various windows.

As can be seen in tables 4.9 and 4.10, the successful companies seem to experience higher abnormal returns and as discussed in the analysis, the relatively smaller deals of Casco-Nordsjö and Bilspedition-Scandspedition were the most prominent. Prior research has shown that shareholders of smaller acquiring companies tend to gain more than larger acquirers.¹²² That can possibly explain the reason why these two deals show highest abnormal returns.

In cases where the event study results and case survey findings show high levels of congruence, one may try to explain them by the fact there was high levels of cost saving synergies that were seen and later also realized which in general are easier to carry through. However, this explanation may be too narrow as these companies, classified as successful ones, also had high potential and realization of other types of synergies and thus the successfulness cannot be derived back to one synergy source solely.

As the stock markets prediction ability was not very accurate in all cases, it is relevant to explore why that is. In the case of Ericsson-Datasaab, it is interesting to see that the stock market reaction was positive even though the deal realized synergies poorly. However, there was high potential and the failure to realize synergies may well be traced back to integration problem of the two companies.

To sum up, we can see that our findings indicate that the stock markets managed well in anticipating the outcome of those M&A in successful cases deals while less good for the unsuccessful ones. However, one should bear in mind that our event study showed abnormal

¹²² Moeller et al. (2002) - Firm size and the gains from acquisitions

returns for all companies in our sample which means that the market may have reacted on other things as well rather than future synergy realization alone.

6.2 Limitations of Results

When evaluating our results we have found limitations of the thesis and the results. Firstly our sample could have been larger. The thesis could have benefited from a larger sample as the reliability and possibility to draw any wider conclusions was limited by the fact that we had a small sample. Secondly short-term event studies may not be suitable to actually compare with the synergy realization, as they do not depict the actual long-term results. The short-term study only shows the returns surrounding the announcement and the information available at that time. Therefore long-term studies on the actual stock market reaction could have yielded a different outcome.

Additionally the M&A's were conducted quite some time ago. This could be a limitation as the capital markets today and in the past may not be equally efficient. Considering the fact that information travels much faster today the impact from an event some years ago and today may not be comparable. Therefore our findings may not be transferable to the capital markets of today as they may react differently. Furthermore our thesis was limited by that we only considered the impact on the acquiring company's stock. This was due to limitations of information of the buyers as stated in chapter 2.3.1.

6.3 Future Research

In the process writing the thesis we have identified future research topics that could be of interest to analyze further. These topics could be to expand the sample and including the acquirer, target and the combined stocks. This research could be founded on another sample and case survey results to identify if there would be a different in outcome. By performing such as study perhaps a more detailed analysis of the synergy realizations and stock market reaction could be made.

Furthermore long-term event studies on our sample could be compared to the outcome of the case survey results. Even though long-terms studies have been criticized, by for example Andrade et al. (2001), a comparison of long-term event studies and case survey results could be of two-folded interest. Firstly to see if this some-what criticized approach yields results that are in line with case survey results. Secondly the reverse also applies, if the case survey results can be linked to the outcome of long-term studies on stock market returns.

Finally subsamples that are divided into small and large firm M&A's could supplement our thesis. Such a study could research if the market was better to predict the outcome of small deals. It would be exciting to see if the stock market reaction and the results from a case survey differ between the sizes of M&A's.

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Dow Jones Data Base

Nasdaq Omx Nordic

Six Edge 3.2

Thomson Reuters Data Stream

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Appendix 1: Definition of Different Synergy Sources:

Cost synergies:

Consolidated Purchasing: Synergies arise when the purchasing process is consolidated between the companies. Input prices become lowered as the price per-unit decreases through for example volume discount

Consolidated Production: Reduced production costs per-unit as, for example, excess capacity can be decreased

Consolidated Marketing: Reduced marketing costs per-unit due to, for example, an integration of sales personal.¹²³

Consolidated Administration: Reduction of administrative overhead

Consolidated of Vertical Customer-Supplier Relations: Reduction of transaction costs per-unit due to consolidation of storage, marketing, and purchasing activities.

Income Increases:

Consolidated Market Power: The combination with a competitor decreases competition and thus increases the market power consequently the possibility of charging higher prices without losing volume.

New Market Access: Access to the other companies established markets in other geographical areas.

Cross-Selling Products: The possibility of selling complementary products to joint customers.¹²⁴

¹²³ Larsson (1989) - Organizational Integration of Mergers and Acquisitions: A Case Survey of Realization of Synergy Potentials, pages 146-148

¹²⁴ Ibid

Other Synergies:

Transfer of Existing Knowledge: The combined firm may possess different knowledge which can be transferred between the companies. The can materialize in for example operational efficiency.

Joint Creation of New Knowledge: The combination of the companies may result in more successful R&D and new knowledge when the companies interact.

Other-Case Relevant Synergy Source: Firm specific synergy source of importance to the total amount of synergies, for example financial synergy.¹²⁵

¹²⁵ Larsson (1989) - Organizational Integration of Mergers and Acquisitions: A Case Survey of Realization of Synergy Potentials, pages 146-148