Lappeenranta-Lahti University of Technology
School of Engineering Science

Antti Sinkkonen

Evaluating the performance of a merger through synergy capture: evidence from Finland

Master's thesis

Examiners: Professor Timo Kärri and Post-doctoral researcher Miia Pirttilä

ABSTRACT

Author: Antti Sinkkonen

Subject: Evaluating the performance of a merger through synergy capture: evidence from Finland

Year: 2019 **Place:** Helsinki, Finland

Master's thesis. Lappeenranta-Lahti University of Technology, Industrial Engineering and Management

111 pages, 36 figures and 8 tables

Examiners: Professor Timo Kärri and Post-doctoral researcher Miia Pirttilä

Keywords: M&A, synergy, transaction, value creation, valuation

Companies engage into transactions for various reasons with potential synergy benefits being a fundamental driver in many deals. Synergy capture plays a key role in unlocking the full post-merger value but also presents a major challenge to the acquiring company. In general, most acquisitions do not deliver the value the management projects it to hold, hence emphasizing the importance of the research topic of this study.

The objective for this research was to investigate how companies find and value potential synergy benefits and how the planned synergies have realized. The research bases on M&A and corporate finance theory and aims at contributing to the research on synergies from acquirer's perspective. This research has two parts: a comprehensive literature review that builds the theoretical framework of M&A, synergies and acquisition performance, and a qualitative analysis on the results of a management survey conducted on Finnish-based companies that had acquired another company in period of 2012-2018.

The study strengthened the assumption that companies utilize different methods to identify, validate and value synergies. Typically synergies are found in pre-transaction due diligence processes. Deploying a systematic approach for identifying and validating synergies should result in more accurate view on the synergy potential. In addition, study reveals that identified synergy potential seems to be important for the go-ahead decision of the transaction and may also have a significant impact on the buyer valuation of the target company. Cost synergies are more straightforward to model, quantify and capture and hence easier to realize, but revenue synergies have not been achieved with the same precision. Synergy realization is seen a solid performance measurement of the merger. Findings of the management survey are supported by previous academic research as well as similar empirical studies conducted on the topic.

TIIVISTELMÄ

Tekijä: Antti Sinkkonen

Työn nimi: Yrityskaupan onnistuneisuuden arvioiminen saavutettujen synergiahyötyjen kautta: havaintoja Suomesta

Vuosi: 2019 **Paikka:** Helsinki, Suomi

Diplomityö. Lappeenrannan-Lahden teknillinen yliopisto, LUT School of Engineering Science. Tuotantotalouden koulutusohjelma

111 sivua, 36 kuvaa ja 8 taulukkoa

Tarkastajat: Professori Timo Kärri ja tutkijatohtori Miia Pirttilä

Hakusanat: M&A, synergia, yrityskauppa, arvonluonti, arvonmääritys

Yritykset tekevät yritysjärjestelyitä lukuisista syistä. Useissa transaktioissa mahdolliset synergistiset hyödyt ovat yksi merkittävimmistä ajureista. Koko yrityskaupan arvopotentiaalissa synergioilla on tärkeä rooli, mutta synergioiden saavuttaminen muodostaa ostavalle yritykselle huomattavan haasteen. Yleisesti ottaen suurin osa yrityskaupoista ei tuota yrityksen johdon siltä olettamaa lisäarvoa, mikä korostaa tämän tutkimusaiheen tärkeyttä ja ajankohtaisuutta.

Tämän diplomityön tarkoitus on tarkastella, millä tavoin yrityksen tunnistavat ja arvottavat synergiahyötyjä sekä millä tavoin tavoitellut synergiahyödyt ovat realisoituneet. Tutkielma koostuu kahdesta osasta: kattavasta kirjallisuuskatsauksesta, joka luo yritysjärjestelyistä, synergioista ja yrityskaupan suorituskyvystä koostuvan teoriapohjan, sekä laadullisesta analyysistä, jonka pohjana toimii suomalaisille yrityksille tehty kyselytutkimus.

Tehty tutkimus vahvistaa aiempia olettamuksia, joiden mukaan yritykset käyttävät erilaisia tapoja synergioiden tunnistamiseen, validointiin ja arvottamiseen. Tyypillisesti synergiahyödyt tunnistetaan ennen transaktiota tapahtuvassa due diligence -selvitystyössä. Lisäksi tutkimus osoittaa, että tunnistetulla synergiapotentiaali on huomattava vaikutus siihen, edetäänkö transaktiossa eteenpäin sitovien tarjousten jättämiseen, ja että synergiapotentiaali vaikuttaa merkittävästi ostajan kohteesta tekemään valuaatioon. Kustannussynergiat ovat suoraviivaisempia määrittää, mallintaa ja realisoida kun taas liikevaihto-pohjaisia synergioita ei ole pystytty saavuttamaan vastaavalla tarkkuudella. Synergiahyötyjen saavuttaminen osoittautuu kelvolliseksi yrityskaupan onnistuneisuuden mittariksi. Kyselytutkimuksen havainnot saavat vahvaa tukea aikaisemmalta aiheesta tehdyllä akateemiselta ja empiiriseltä tutkimukselta.

ACKNOWLEDGEMENTS

With this master's thesis my five-year journey in Lappeenranta comes to an end. This period represents the best years of my life, and I am more than grateful to all my great friends and teachers that I have had chance to meet during these years in LUT. I hope that we can share moments of fun and laughter in the future too. The university has offered me a chance to express myself, try out new things and learn a lot about myself and the changing world around me. Life isn't always a bed of roses but with continuous support from my friends and loved ones I have been able to pull through the challenging times.

Regarding this thesis, I would like to thank my team and my supervisor Risto Lummaa who has supported my throughout the process and trusted me on this rather independent mission. Without the flexibility that you and the company have offered, this thesis would have taken a lot longer to be complete. Furthermore, I must say thank you to my professor Timo Kärri, who oversaw this project and gave excellent advise that helped me to bring structure and further analysis to this thesis.

Finally, the biggest thanks goes to my girlfriend Katri. She has been my bedrock and spring of joy throughout the many years we have been together. I must admit that without her I would not have been able to manage with all the stress and long hours that the extracurricular activities and work have caused. You have encouraged me to work ambitiously and pursue my goals even though this has sometimes meant less time spent together. Thanks for always being there for me!

Helsinki, 7.6.2019

Antti Sinkkonen

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ABBREVIATIONS

CAPEX	Capital expenditure
CEO	Chief executive officer
CFO	Chief financial officer
DD	Due diligence
EVA	Economic value added
HR	Human resources
IPO	Initial public offering
IT	Information technology
M&A	Mergers & acquisitions
P&L	Profit & loss statement
R&D	Research & development
ROE	Return on equity
ROA	Return on assets
SG&A	Selling, general & administrative
TMT	Technology, media and telecom

1 INTRODUCTION

This introductory chapter presents the background of the study and lays the groundwork for the research problems to which the presented research questions aim to provide answers. In addition, research objectives and limitations of the study are presented. The research methodology is presented in brief and lastly the structure of the report is described before proceeding further into the actual research.

1.1 Background

Companies formulate, choose and implement different type of strategies in pursuit of growth and to counteract tendencies created by market forces. An acquisitive growth strategy aims, in general, at maximizing a company’s value through successful acquisitions and integrations. During the last decade the acceleration of mergers and acquisitions has been rising steadily and for the moment we are living a boom of corporate mergers being a popular strategic option to grow the company (Koerniadi et al., 2015; Vithala et al., 2016; Andriuškevicius, 2015). Despite seismic political events and persistent uncertainty, in 2018 the global merger activity was valued at nearly 3,5 trillion dollars and especially cross-border deals have become more and more common (Mergermarket, 2019). On Nordic-level the trend is similar and in particular private equity investors have been active in engaging into transactions.

Transactions can create value in various ways (Rabier, 2017; Langford & Brown, 2004) and one way to add value is to create efficiency through synergies, the additional value and opportunities generated by combining two firms that would not have been available if these two entities operated independently (Harrison et al., 1991; Damodaran, 2005; Capron, 1999). Together with rapid inorganic growth, diversification and market entry, synergy benefits show up often as of the key rationale behind corporate mergers and acquisitions (Mukherjee et al., 2004; Damodaran, 2005; Avinadav et al., 2016; Gupta & Gerchak, 2002).

However, companies pursuing these synergies cannot take them for granted. Integrating businesses to capture synergies is a tough challenge especially for the management and numerous studies together with countless real life cases point out that synergies don’t tend to materialize the way the company management projects them (Shaver, 2006; Tichy, 2001). Whether it is that companies overestimate the value of synergies that they can capture (Christofferson et al., 2004; Miles et al., 2014) or synergies are incorrectly valued and capturing them is inadequately planned, synergies are actually seldom fully achieved in acquisitions (Damodaran, 2005; Friedman et al., 2017).

The resilience of the global M&A market has in recent years reflected in record-high valuation levels which have implications for synergies, too (Kengelbach et al., 2018). A sound promise of considerable synergies justify the immense acquisition premiums that acquirers are willing to pay to target's shareholders and hope that these synergies of two merging entities realize (Ficery et al., 2007; Sirower et al., 1998; Eccles et al., 1999). Forecasting future cost and revenue synergies is difficult, not to mention measuring how the planned synergies realize over time. Due to the complexity of deals and integration process, in many cases synergies are only taken into consideration during the valuation and neglected after closing the deal. Also, if gaining revenue enhancements or achieving cost efficiency is not the main driver of the acquisition, the acquiring company is not likely to have a pragmatic and disciplined approach of measuring the potential post-deal synergies (Friedman et al., 2017; Ficery et al., 2007).

Not only companies have been active in the field of M&A. There has been an abundance of academic research focusing on mergers and acquisitions, their rationales, success and value creation (Zollo & Meier, 2008; Harrison et al. 1991). These studies have employed several different types of research methods with event studies being the most common method in recent years (Krishnakumar et al., 2012; Zollo & Meier, 2008). Despite of the large amount of prior research, there is little consensus on whether mergers create or destroy value and how the performance of the merger should be measured (Rashid & Naeem, 2017; Sirower et al., 1998; Eccles et al., 1999). When it comes to studies on acquisition performance, most empirical research has focused on abnormal stock returns of the announcement dates and other measurements of added value for the shareholders of either the target or the acquirer company (Agrawal et al., 1992; Gupta & Gerchak, 2002). Only little research has assessed synergies as a valid performance measurement for acquisitions (Sirower et al., 1998; Bradley et al., 1988).

Thus, companies as well as their advisors across industries are facing the same challenge: how to find and validate the synergy items, value them and make sure that realization of the planned synergies takes place, is measured and tracked adequately? It is also very important to understand what is the view of the management of the company on synergies – are they just another value driver among the others and at what point the synergy benefits become interesting enough that the management starts taking them properly into account? These questions form the basis of this thesis and lay the groundwork on presented research questions on the topic.

This study aims to contribute to the existing research on mergers and acquisition and the performance of the transactions. The topic is addressed through a management survey which seeks to find what is the management's view on synergies and have the projected synergies realized over time. In addition, by identifying how corporations do pre-transaction synergy assessments and how the synergy realization is measured, this study provides a reasonable baseline for future research and helps in recognizing whether there are explicit differences between different types of transactions, industry sectors and companies. The survey results are afterwards composed into a benchmark which in turn will be delivered to the survey respondents allowing to compare their own position against peer companies.

The research will cover the theoretical concepts of mergers, acquisitions and synergy benefits, as well as provide an overview on how synergies can be used as a performance measurement in transactions. Moreover, the report addresses how synergies are captured and realized, and how does the maturity of M&A organization and its capabilities affect value creation. Some light is also shed on describing a "best-practice" operating model and characteristics of high-performing M&A organization.

1.2 Research objectives and scope

The aim of this study is to explore how corporations find and value potential synergy benefits and how the planned benefits have realized. In addition, the objective of the research is to assess how companies validate the identified synergies and how much does the synergy assessment contribute to the buyer valuation of the target company. The findings of the research are used to understand the behavior of corporations and their management in transactions as well as to evaluate the use of realized synergy benefits as a performance measurement of an acquisition. Overall this study aims to contribute to the existing research on synergies in corporate transactions as well as provide new insight in terms of synergy measurement principles and other findings on national level, which can later be leveraged in future research and expand the research scope to Nordic-level observation. As the performance of mergers and acquisitions is often evaluated through shareholder returns like short and long term stock value increase, this study approaches the topic from another angle and thus hopefully provides some new knowledge on performance of M&As, at least regarding Finnish-based companies.

Three research questions were formed in order to reach the set targets, and they are presented in **Table 1** with their respective objectives. The *first* research question aims at identifying the procedures and models that corporations use to find potential synergy items. The *second* research question intends to provide knowledge on how the projected synergy benefits have realized and how the initially identified synergy items are validated. The *third* research question aims at evaluating on how much does a pre-merger synergy assessment add up to buyer's valuation of the target.

Table 1. Research questions and objectives

Research question	Objective
1. How do corporations find potential synergies and conduct synergy analyses before transactions?	Identify the procedures and models corporations use to find potential synergy items
2. How are the identified synergies validated and how the projected synergy benefits have realized compared to the planned?	Examine how synergy validation is conducted and how planned synergies have realized
3. How much does the pre-merger synergy assessment contribute to the buyer valuation of the target company?	Evaluate how much a synergy assessment contributes to the deal value

In a way the scope of this study narrows down throughout the thesis. At first, the M&A activity is observed on a global level across regions, and then narrowed down to consider only the Nordics. However, the management survey and the actual empirical study is limited to concern only Finnish transactions that have taken place between 2012-2018. By limiting the study into one country doesn't allow country comparison, but on the other hand the management survey is considerably easier to conduct with this country limitation. Limitation also reduces the addressable dataset to more reasonable size and helps in segmenting the transactions by industry and size for comparison. The timeframe and selected population of the companies was chosen in a way that there is a good chance of receiving good quality and reliable answers from highly distinguished companies.

With respect to time, the scope of the research is six years from 2012 to 2018. This means that the transactions are included in the study only if they were announced or completed within this time period. This timeframe was chosen so that there would be enough data to analyze thus increasing the reliability and validity of the study. Because the study focuses on post-deal synergy gains it is reasonable to have a time period long enough as some synergy items may take significant amount of time to realize. Also by having this six year period the conducted survey stays relevant and provides up-to-date knowledge on the topic.

In addition, it shall be noted that the research focuses on mergers and acquisitions only. Other corporate transactions such as initial public offerings (IPO), joint ventures, demergers, management buy-outs, capital increases or such are left out so considering this the results of the research cannot be taken as perceptions regarding the performance of other deal types in terms of synergy benefits.

1.3 Methodology and data

In terms of research methodology, this research can be divided into two parts and seen as a combination of both quantitative and qualitative research. First part of the study consists of a literature review which aims to provide reader with adequate knowledge of used concepts, and to shed some light on the past research on mergers and acquisitions as well as on the performance of mergers. Even though mergers and acquisitions are widely researched topic and most readers might be acquainted with the whole M&A world, quite often terms are misunderstood and people lack some fundamental knowledge on this topic. This highlights the importance of a thorough literature review. In addition to traditional literature review, a quantitative analysis on Nordic mergers and acquisitions is conducted. Transaction data is retrieved from Bureau van Dijk's Zephyr-database which gathers data of all deals announced, completed and rumored globally. This data analysis aims at describing the volumes, differences and trends in Nordic transactions in the past years as well as act as a base for the subsequent analysis of the results of the management survey.

The second half of the study is the empirical part. An uniform management survey was sent to selected Finnish companies which have been involved in a merger or acquisition in the last six years, and the data of this survey is used to validate findings of the literature review and address the research questions of this study. Survey consists of general deal specific questions but also questions that focus on synergies. Not only the questionnaire provides a moderate amount of data for further analysis and comparison, but it also allows the respondent to describe the current state of the M&A organization and its maturity thus providing some important qualitative data that can be used to gain deeper insight on topic. The research process is depicted in **Figure 1** below.

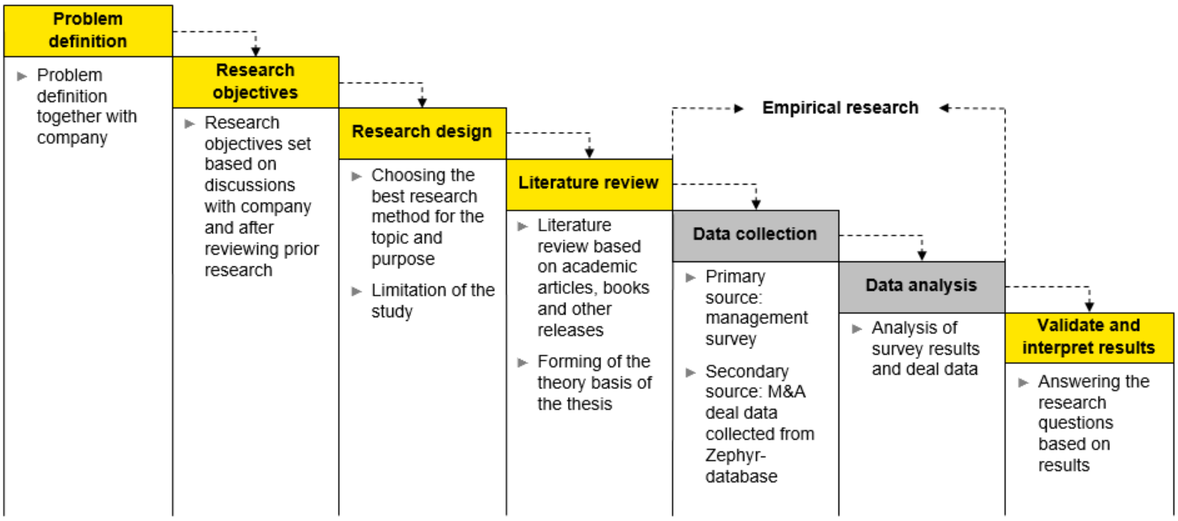

Figure 1. Research process of the thesis

By nature, the research method of the empirical study can be described as qualitative survey research, a rarely used term in academic research. Typically survey is seen as a quantitative research method as it uses a sample of members to measure population characteristics and is a systematic method for gathering relevant information of the selected population. In addition, survey's primary objective is to describe the numerical distribution of variables in the population (Jansen, 2010). However, surveys can also be seen as a qualitative research method as certain surveys do not aim in at presenting frequencies, variance or other parameters but rather at "determining the diversity of some topic of interest within a given population" like Jansen (2010) puts it. As in this study the statistical representativeness or reliability of the sample is not the determining factor of the quality and most likely would not drastically affect the key findings of the study, the management survey conducted as part of this thesis can be seen to have qualitative characteristics.

Chosen research methods do cause some limitations. As the survey is structured based on the theoretical framework of the thesis and contains closed-ended questions, the research method restricts the respondents to freely express their viewpoints and opinions, although this was a deliberate choice to make answering the survey as convenient as possible. In addition, survey respondents may not be fully aware of their reasons for any given answer because of lack of memory on the subject or may not feel comfortable providing answers that present themselves or the company they present in a unfavorable light. This is especially valid point when it comes to evaluating the success of transactions and asking the respondents to memorize reasons for not being able to achieve projected synergies.

1.4 Structure of the report

This thesis consists of five main chapters. Chapter one presents the background of the thesis together with research objectives and scoping. Chapters two and three construct the literature review of the study. The main objective of the chapter two is to introduce the concepts of mergers and acquisitions as well as describe the main steps of a generic M&A process. In addition, different type of synergies are presented in chapter two. The global and Nordic-level M&A activity in recent years is also reviewed in chapter two. In chapter three the link between the maturity of M&A organization and synergy capture is established and evaluated. Chapter three introduces the reader to M&A performance by addressing the past research on the topic as well as evaluating the use of the synergies as a performance measurement. Chapter four presents the structure and execution of the management survey on synergies and transactions, as well as the results of the survey. The last chapter concludes the findings as well as provides answers to the research questions.

The objective of the first chapter is to introduce the reader into the world of M&A and describe the problems surrounding the research topic. In chapter one the background of the thesis is presented both in terms of academic research and empirical evidence from M&A market. Also, the research questions with respective objectives, and limitations of the study are presented. The chosen research methodology of the thesis is introduced and justified.

Chapter two aims to introduce the reader to the world of mergers and acquisitions by presenting the basic fundamental definitions. In addition, chapter two also presents the typical M&A process and specific characteristics of those process steps. After reading chapter two, the reader should more easily understand the concepts of mergers and acquisitions as well as be able to name the main motives and rationales behind these corporate transactions. Also, the global and regional deal activity is presented in chapter two to emphasize the magnitude of corporate transactions both on global and regional level. Moreover, Nordic-level transaction activity and its development in selected timeframe is presented to provide a basic understanding of the volumes between different industries and countries in general. The widely researched topic of merger waves is briefly introduced to the reader in chapter two, too.

In chapter three, the scope of the study is narrowed by addressing synergy capture and M&A capabilities of the organization on more practical level. Chapter focuses on assessing the link between the maturity of M&A capabilities and synergy capture in corporate transactions. The assessment is built on a simple four-staged framework as well as on a high level best-practice operating model of an M&A organization, which are partly adapted from literature. Chapter three also aims in providing knowledge on the previous research on the performance of mergers and deepening the understanding of the use of synergies as a performance measurement in corporate transactions. In general, the aim of chapter three is to evaluate the use and suitability of realized synergies as a performance measurement in corporate transactions.

In chapter four, the results of the study are presented. The survey data is analyzed in distinct, though interdependent modules which are based on the theoretical framework of this research. This ensures that the analysis of the results is more in-depth and is also aligned with the theoretical part of the thesis. Survey results are compared against selected findings from other studies as well as against findings of the literature review. Also the employed research method and execution of the survey is described in this chapter.

Finally, chapter five summarizes the key findings of the study. Answers to the research questions are presented in this chapter. In addition, relativeness and implications of the research are discussed together with possible future research topics and suggestions. The structure of the study is presented in **Figure 2** below. Figure 2 shows the theories forming the basis and background as well as the desired outcomes of the study.

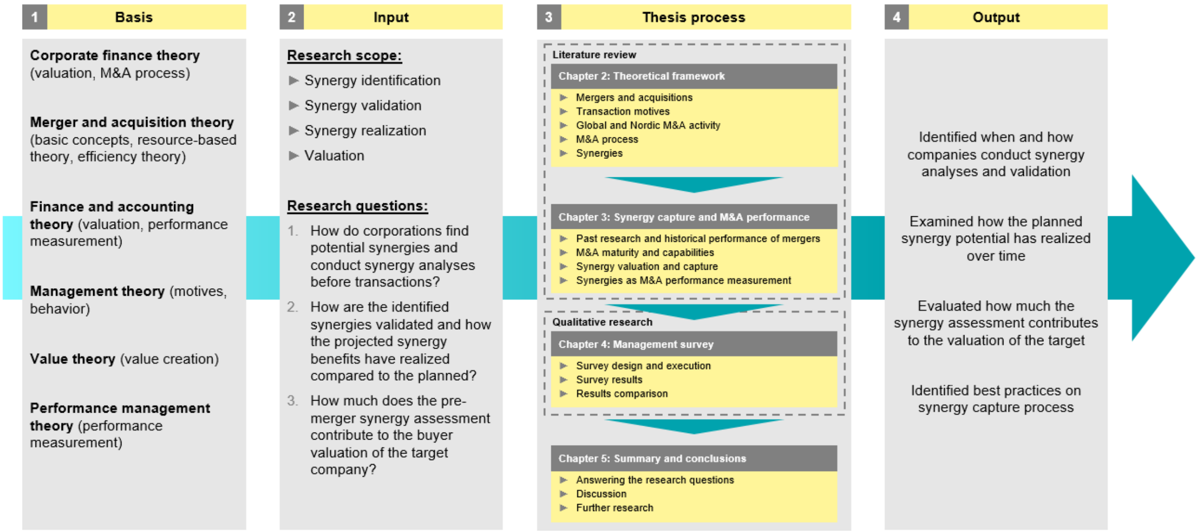

Figure 2. Paradigm of the study

Overall, the storyline of this thesis is built on interlinked themes: the basic concepts of mergers and acquisitions lays the base for more in-depth research, and transaction motives and especially synergistic motives have a clear bridge to chapter three which discuss the synergy capture and transaction performance from the viewpoint of M&A maturity and capabilities. The study is structured in a way that there is an logical story and the reader can easily follow the text.

One final note is that this report also holds of a large number of figures and tables in order to visualize the otherwise theoretic and high-level topics such as transactions and value creation. Using figures is a deliberate choice as I firmly believe that it makes the storyline of the thesis more vibrant and of course reading this study much more pleasant.

2 THEORETICAL FRAMEWORK OF M&A AND SYNERGIES

This chapter presents the theory on mergers and acquisitions. In addition, typical merger motives and the lifecycle of a generic M&A process are introduced. The deal activity on global and Nordic-level is presented briefly in this chapter, too. The first part of the chapter focuses on corporate transactions as well as highlights the different rationales driving these transactions. The latter part concentrates on defining and categorizing synergies for a clearer understanding.

2.1 Mergers and acquisitions

Embodying corporate restructuring and finance, mergers and acquisitions play an integral part in shaping both individual companies but also the corporate landscape as a whole (Avinadav et al., 2016; Copeland & Weston, 1988, pp. 676-677). Mergers and acquisitions represent a dramatic change in the ownership and resources of the companies involved (Kiymaz & Baker, 2008) which naturally has drawn the interest of academics and companies to study the causes and effects of the transactions. These transactions have been in the focal point for decades but especially during the last twenty years, much thanks to globalization and changes in technology and competitive business environment, mergers and acquisitions have become more and more important throughout the world (Rashid & Naeem, 2017; DeYoung et al., 2009).

In a typical transaction, two companies align their operations and management to achieve efficiency, competitive advantage, to enter new markets or access new technologies, just to name a few common motives (Alhenawi & Stilwell, 2017). However, M&A is a broad, often misunderstood concept that includes everything from a pure merger to strategic joint ventures and even divestitures. Also words *merger* and *acquisition* are often used interchangeably (Sherman & Hart, 2005, p. 11; Bösecke, 2009, p. 7). Perhaps due to the fact that there are several types of mergers and numerous reasons for companies to engage in such transactions, all these events are clustered under the same term. In general, mergers and acquisitions are quite comprehensively and unambiguously defined but often these concepts are seen as a bit too broad.

As Nakamura (2005) points out, “M&A” as a word is very widely used in the literature. In a broad sense, mergers and acquisitions, business cooperation as well as asset cooperation can be set under the same term. Narrowing down the concept, mergers and acquisitions can be seen as business combinations in which the economic autonomy of one or more of the involved companies is fully eliminated (Bösecke, 2009, p. 6; Ross et al., 2013, p. 885). On even more general level, a merger refers to transaction that forms one economic and financial unit from two previous units (Copeland & Weston, 1988, p. 677). However, merger and acquisition are actually two different concepts, but as Kusstatscher and Cooper (2005, p. 2) point out, very few mergers and acquisitions are actually so-called textbook transactions according to the real definition of "merger" or "acquisition".

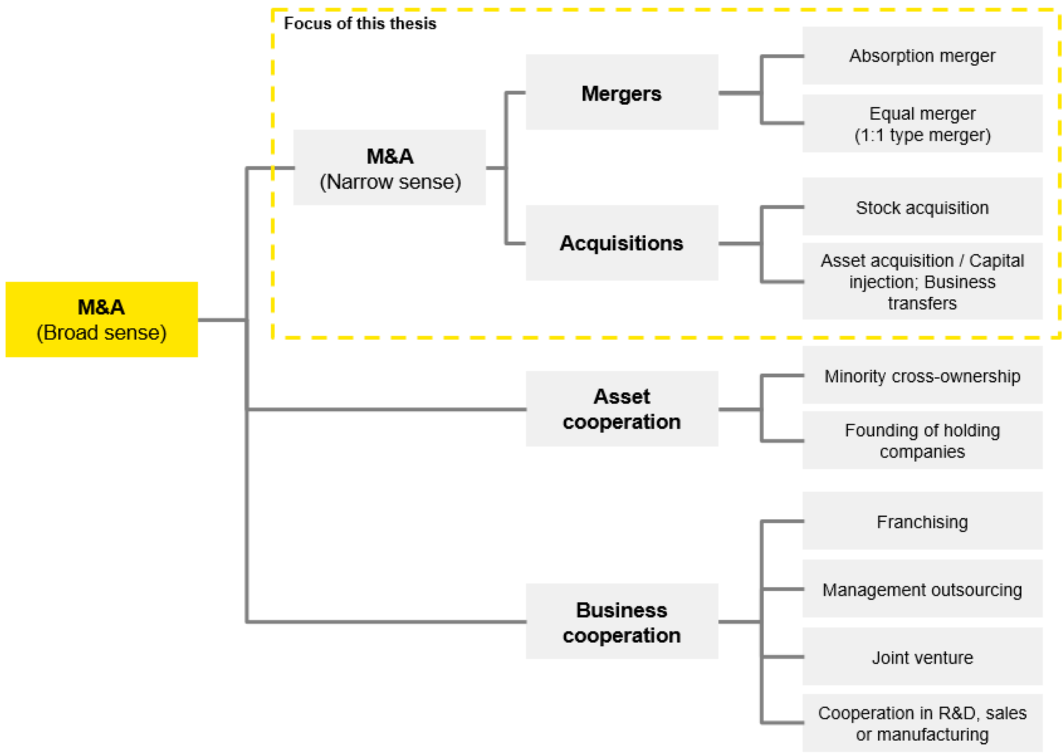

Figure 3. Visualization of the M&A terminology

The terms that are usually related to M&A are shown in **Figure 3** above. This thesis solely focuses on mergers and acquisitions meaning that asset or business co-operation are not discussed. This is a deliberate choice on scoping the thesis.

Typically a merger refers to an absorption of one company by another (Ross et al., 2013, p. 885). Sherman and Hart (2005, p. 11) define merger as "a combination of two or more companies in which the assets and liabilities of the selling firm(s) are absorbed by the buying firm". By nature, mergers can be divided in two. A previously independent company transfers its assets to the buyer and is integrated to be a part of the acquiring company, hereby losing its economic and legal autonomy. This is called an absorption merger. Another option is a consolidation or a so-called 1:1 type merger in which the two merging organizations form a new entity to which all the assets of both companies are transferred and both of the formerly autonomous companies are terminated (Bösecke, 2009, pp. 6-7; Ross et al., 2013, p. 885).

Where a merger can be seen as a voluntary transaction in which two legal entities agree to merge their operations, an acquisition on the other hand can be seen to have a more hostile nature, as for example the negotiations have different spirit to it. In a traditional merger, one party may have initiated the discussion regarding the transaction, but there is no buyer or seller and sharing of the information of the entities is two-way (Sherman & Hart, 2005, p. 17). The extreme of acquisition is called a hostile takeover which in practice refers to an acquisition of the target company by the acquirer without the approval from the target company's management (Ross et al., 2013, p. 903).

In an acquisition the acquirer takes control of the assets of the acquired company, the target (Bösecke, 2009, p. 6). Apart from acquiring a complete company, an acquisition can also refer to a purchase of different type of assets such as a factory or a business division (Sherman & Hart, 2005, p. 11; Nakamura, 2005). Technically payment of acquisition can be done in several ways like cash payment, issuing new shares of the company, swapping the stocks of the involved companies or a combination of latter.

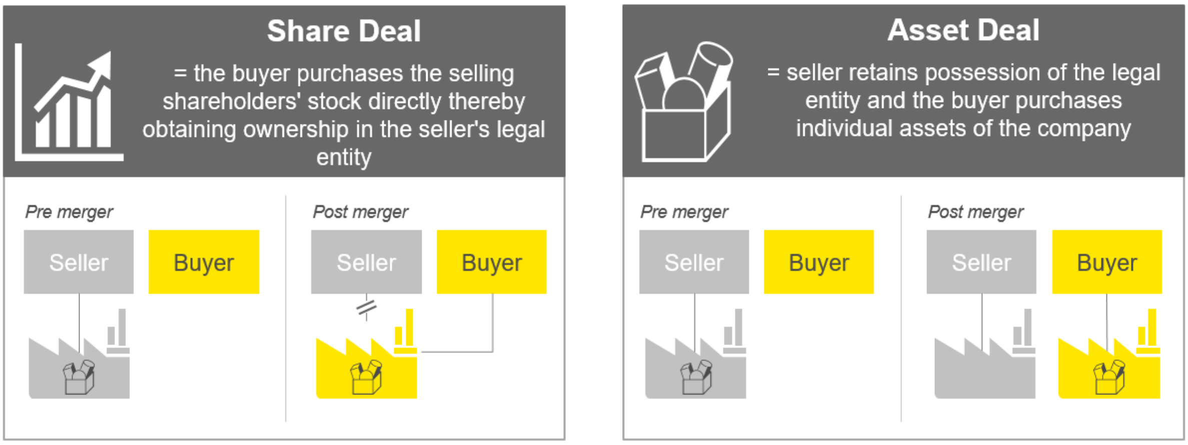

Figure 4. The difference between a share and an asset deal

Ross et al. (2013, p. 887) categorize mergers and acquisitions into three different types: i) merger or consolidation, ii) acquisition of stock or iii) acquisition of assets. Stock acquisition refers to a situation where the acquiring company acquires the target by purchasing stocks off other shareholders. On the other hand, an asset acquisition means the purchase of the target company by buying its assets instead of its stocks (Ross et al., 2013, pp. 886-887). The fundamental difference between a share and an asset deal is depicted in **Figure 4** above.

As mergers and acquisitions take place either between companies of similar industries or in completely different industries, mergers and acquisitions are typically divided into categories: horizontal mergers, vertical mergers or conglomerate mergers (Weston & Weaver, 2011; Ross et al., 2013, p. 887; Avinadav et al., 2016; Copeland & Weston, 1988, p. 678). This taxonomy is shown in **Figure 5** below.

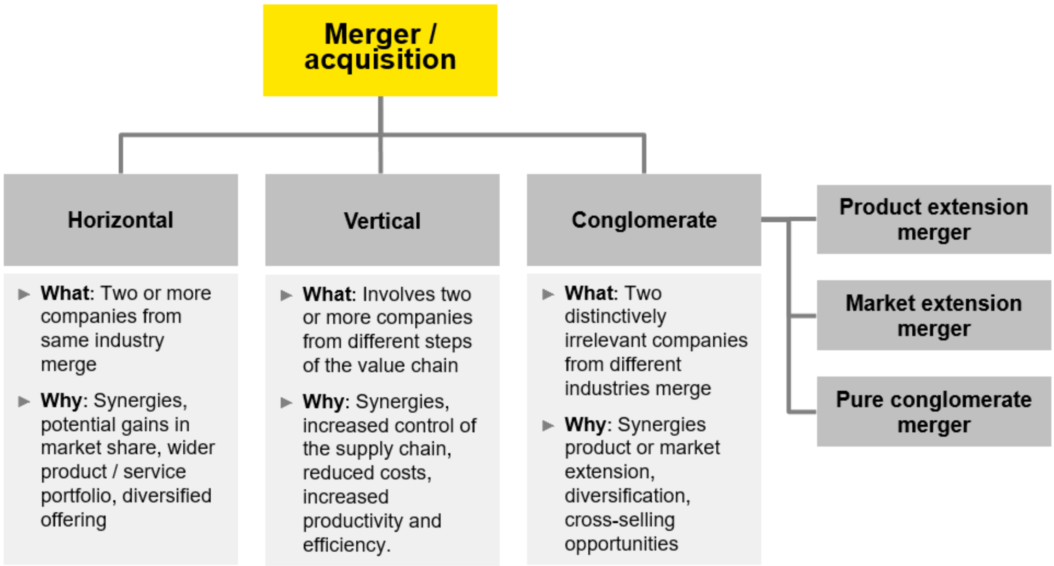

Figure 5. Merger taxonomy (Ross et al., 2013, p. 887; Copeland & Weston, 1988, p. 678; Capron, 1999)

In a horizontal merger, two or more companies from the same industry combine their operations to form a larger entity. Typically this type of merger occurs as companies of considerable size attempt to achieve economies of scale in an industry in which the competition tends to be high. Other drivers of horizontal mergers are significant synergy gains in terms of market share, cost saving and exploring new market opportunities (Capron, 1999). In addition, a horizontal merger is an efficient way for a company to diversify its offering through new products or services that the other merging entity might possess (Bösecke, 2009, p. 9; Ross et al., 2013, pp. 886-887).

Sometimes increasing control of the production or supply chain is necessary for a company to maintain its competitive advantage and market position. Vertical merger involves companies from different steps of the value chain (Bösecke, 2009, p. 8). Typically a vertical M&A involves two parties that used to buy or sell from each other combined under one entity (Avinadav et al., 2016). Often a vertical integration often results in significant reduction in costs and provides an increase in productivity and overall efficiency.

The third type of mergers is a conglomerate merger. In horizontal and vertical merger, involved companies operate in the same industry either with the same offering or in a different parts of the value chain. However, in a conglomerate merger, the combining companies are often involved in distinctively different industries (Bösecke, 2009, p. 8; Sherman & Hart, 2005, p. 11; Copeland & Weston, 1988, p. 678). In other words, in conglomerate mergers companies do not produce same kind of products and neither of the companies is an actual or potential supplier of the other. Through the rationale of the conglomerate merger, they can be categorized into three sub-categories: product extension, market extension or pure conglomerate merger.

According to Copeland and Weston (1988, pp. 678), a merger involving two companies whose operations are located in non-overlapping geographic areas can be categorized as a market extension merger. Expanding business through acquiring other company's product lines is called a product extension merger. If a merger cannot be categorized neither as product or market extension market, it is a pure conglomerate merger. Conglomerate mergers used to popular in 1960's and -70's but are nowadays quite uncommon due to high risks and limited benefits. However, despite their rarity, this type of mergers do have their advantages. Conglomerate merger allows companies to diversify their offering and operations, expand the current customer base to a new pool of potential customers and increase efficiency. In addition, conglomerate merger allows the combined firm to increase revenues through cross-selling new products.

2.2 Transaction motives

As described above, mergers and acquisitions are in many ways very similar transactions. They both combine at least two previously independent business entities into a single company potentially resulting in significant operational and strategic advantages and thus increasing the company's performance and shareholders' value over both short and long term. Yet, the rationales for mergers and acquisitions are often substantially different, and therefore are addressed separately in this chapter.

Many say that there are as many motives for mergers and acquisitions as there are acquirers and targets. Reasons for merging or acquiring can be both internal and external (Kiymaz & Baker, 2008). Internal motives include ownership structure, pursuit to expand into new market areas or adjusting group structure. At the same time competitive environment, financial markets, taxation and regulation as external factors can be the drivers of a merger or acquisition. Either way, often the motivation to pursue a merger or a takeover of a company is strategic and significant; combined company can achieve notable economies of scale, increase its revenues and market share either in current or new market and diversify its offering by acquiring a firm from completely distinct industry (Avinadav et al., 2016).

Even though the focus of research has been on the consequences rather than the motives of mergers (Trautwein, 1990), motives of M&A transactions can be grouped into different categories for better understanding of the motivations behind these business combinations. Researchers over time have categorized M&A motives with different factors but so far the empirical studies have been inconclusive due to the difficulty of distinctively distinguishing among different M&A motives (Kiymaz & Baker, 2008).

Bower (2001) sees five reasons behind acquisitions. First of all, acquisitions are a way to deal with overcapacity in mature industries. Also, they allow rolling-up against competitors in fragmented industries and for the company to expand into new markets and product segments (McCarthy & Weitzel, 2013). In addition, in Bower's mind acquisitions can be seen as a substitute for R&D as acquiring companies with significant knowledge, patents or other information the acquirer can access cutting edge technology with a cost-effective and speedy way. Mergers and acquisitions allow companies to overcome the traditional problem of limitation of efficient use of scarce resources (Rashid & Naeem, 2017) which is common especially in industries involving heavy R&D. Finally, according to Bower acquisitions can give life to a new industry through exploiting eroding industry boundaries. (Bower, 2001)

Berkovitch and Narayanan (1993) conducted a comprehensive study focusing on acquisition rationales and they suggest that there are three major motives for acquisitions: synergy, agency and hubris. Synergistic motive is based on the assumption that acquisitions happen because of economic gains that are created when two companies merge their resources.

It has been acknowledged that many takeovers do happen because of the self-interest of the management (Berkovitch & Narayanan, 1993). Especially in large corporation, the ownership is widely dispersed and the management owns only a fraction of the shares. This often raises agency problems and according to Copeland and Weston (1988, p. 687), rather than being a solution, mergers and acquisitions may be a manifest of the problem. This brings us to the agency motive, sometimes called managerialism, which suggests that corporate acquisitions take place because the acquiring company's management wants to increase their own wealth at the cost of the shareholders (Kiymaz & Baker, 2008; Broutherus et al., 1998). Acquiring a company allows the management to diversify their own personal portfolio as well as increase the company's dependence on the management.

Finally, the hubris hypothesis posits that the management makes mistakes in assessing and evaluating target companies which result in engagements with no positive gains thus destroying shareholder value (Kiymaz & Baker, 2008). In general synergy gains stand out as the driving rationale for majority of the acquisitions (Berkovitch & Narayanan, 1993; Mukherjee et al., 2014; Alhenawi & Krishnaswami, 2014). Yet, the agency and hubris motives promote a notable number of takeovers (Berkovitch & Narayanan, 1993) but often damage shareholder interests and value as managers tend to overestimate own managerial capabilities and pay excessive premiums in deals (Kiymaz & Baker, 2008).

Trautwein (1990) took efforts to summarize and categorize different merger rationale theories that the academic field had come up with. According to him, there are three main groups of merger motives: merger as a rational choice, merger as process outcome and merger as macroeconomic phenomenon. These groups consists of seven distinct theories of merger motives. Trautwein's view on M&A rationales is depicted in **Figure 6** below.

M&A as rational choice	Focus on shareholders' interests	Net gains through synergies	Efficiency theory
		Wealth transfers from customers	Monopoly theory
		Wealth transfers from target's shareholders	Raider theory
		Net gains through private information	Valuation theory
	Focus on managers' interests		Empire-building theory
M&A as process outcome			Process theory
M&A as macroeconomic phenomenon			Disturbance theory

Figure 6. Trautwein's view on M&A motives (Trautwein, 1990)

Very often, according to Copeland and Weston (1988, p. 684), executives engaging in M&A activities justify their actions with potential real gains and increased efficiency from combining two formerly independent companies. According to efficiency theory, transactions are planned and executed in order to achieve financial, operational or managerial synergy benefits (Bösecke, 2009, p. 26-27). The theory offers a basis for mergers and acquisitions for companies battling in rapidly changing business environments to reach the strategic goals (Copeland & Weston, 1988, p. 683-684) especially when it comes to larger corporations operating globally. Synergy motive gets strong support from studies of Berkovitch and Narayanan (1993) and Mukherjee, Kiymaz & Baker (2004). Berkovitch and Narayanan studied transactions which had took place in the period of 1963-1988. They came into conclusion that synergy motive is the dominant driver in large M&As. Findings of a study conducted by Mukherjee et al. (2004) a decade later are consistent with Berkovitch and Narayanan's results showing that large scale mergers and acquisitions in 1990-2001 were motivated mainly by synergy benefits.

Monopoly theory is based on the fact that quite often mergers and acquisitions are executed to achieve market power (Copeland & Weston, 1988, p. 688-689). Especially horizontal and conglomerate mergers allow companies to for example cross-subsidize products, deter potential competitors from entering the market and address new markets through limiting competition. In vertical transactions, a company can increase market entry barrier and reduce supply options by acquiring a key company in the value chain (Bösecke, 2009, p. 29). In a way monopoly theory can be seen as a continuum of valuation theory which argues that managers who possess unique information of the market and potential advantages of the transaction are the driving force of the merger (Bösecke, 2009, pp. 30-31; Trautwein, 1990). The so-called empire-building theory is similar to Berkovitch and Narayanan's agency theory meaning that a merger or takeover is justified by the self-interest of acquirer management. (Trautwein, 1990; Berkovitch & Naraynan, 1993)

In corporate world, a raider or "activist investor" as they are called nowadays, is an individual investor or a private equity company that especially is interested in undervalued and troubled companies. A raider company acquires a majority stake of the shares thus giving them a mandate to restructure the business and try to increase shareholder value through major turnarounds. Mergers motivated by above-mentioned reasons can be explained by raider theory. (Jensen, 1984; Trautwein, 1990).

In most cases, a merger or takeover can be the result or an episode in company's strategic journey (Broutherus et al., 1998). The process theory, a portrayal of acquisitive growth strategy suggests that M&As are an outcome of strategic decision making processes of a corporation. However, the evidence of the theory is somewhat disordered (Trautwein, 1990) as some studies report that takeovers lack comprehensive, rational decision making and planning but at the same time there are large amounts of supportive evidence of procedural M&A behavior.

There is a strong evidence that mergers do occur in waves (Kusstatscher & Cooper, 2005, p. 11) and those waves have had distinct strategic rationales reflecting the time period (Bösecke, 2009, p. 79). Macro-level changes in global economic and political environment together with changing consumer expectations increase the general uncertainty in the markets and cause mergers and acquisitions to occur in distinct waves (Trautwein, 1990) that can be explained by the disturbance theory. The forementioned merger waves will be more thoroughly described in chapter 2.3.

Sherman and Hart (2005, p. 18) take a bit more concrete view on the merger rationales and in addition sorts out acquisition motives for both buyer and seller. Their list of motives can be seen in **Table 2** below.

Table 2. Merger and acquisition motives according to Sherman and Hart (Sherman & Hart, 2005, p. 18)

Merger	
- Restructure the industry value chain - Respond to competitive cost pressures through economies of scale and scope - Improve process engineering, technology and innovation - Increase the scale of production in existing product lines - Find additional uses for existing management talent - Redeploy excess capital in more profitable uses - Obtain tax benefits	
Acquisition	
Motivation for seller	*Motivation for buyer*
- Ownership nearing retirement or ready for an exit - Inability to compete as an independent concern - The need to obtain cost savings through economies of scale - Access to greater resources	- Revenue enhancement - Cost reduction - Vertical and/or horizontal operational synergies - Growth pressures from investors - Underutilized resources - Increase market share and reduce price competition - A need to gain foothold in new geographic market - A desire to diversify into new product lines and services

All in all, there are countless motives for mergers and acquisitions. To sum up the major M&A motives, I refer to McCarthy's and Weitzel's (2013) grouping of motives. Forementioned authors have grouped motives under four distinct themes: *strengthening existing operations*, *product diversification*, *geographic expansion* and *cost-cutting*.

Indeed, mergers and takeovers can be executed in order to move to new market sectors and new product or service offering in addition to ramping up existing market operations. These sort of "explorative mergers" are much more risky and have less certain results, typically destroying shareholder value (Mukherjee et al., 2004). By contrast, "exploitative mergers" which means exploiting company's existing competencies tend to strengthen company's market position. According to McCarthy & Weitzel (2013), product diversification deal i.e. transactions which widen the acquiring company's product or service portfolio are negatively related with acquisition performance meaning that there is a large number of diversifying mergers that have for example caused bargaining problems, bureaucratic, information asymmetries as well as production inefficiencies.

Expanding into new geographical regions through a merger, often called a geographic expansion, is often justified with increase in company's sales or cost reduction. These cross-border mergers and acquisitions do improve the competitive advantage as geographically diverse operations benefit greatly from local knowledge and specialization together with increase capacity utilization (Dos et al., 2008). However, like product diversification transactions, mergers driven by geographical expansion are full of challenges and have a quite significant change of destroying value rather than creating it (McCarthy & Weitzel, 2013). The fourth theme, cost reduction, covers mergers and acquisitions that are executed in order to reach cost-based synergies by reducing the company's operating costs. Cost synergies are a very prominent motivation for transactions and several studies suggest that they are easier to capture than revenue-based synergies (Chartier et al., 2018; McCarthy & Weitzel, 2013). Often in mergers cost-cutting refers to removing duplication and redundancy in operations and streamlining costs, for example by reducing the overhead costs.

2.3 Global and Nordic M&A activity in recent years

Generally speaking, there are two ways that a company can grow and increase its revenues: organically or inorganically by acquiring other firms (Petitt & Ferris, 2013, p. 3). Corporate transactions, if completed and integrated successfully with rigorous management, can be the fastest and most efficient way to grow the company by entering new markets, expanding customer base or diversifying offering (Sherman & Hart, 2005, pp. 17-18). Also in the current globalized world, mergers and acquisitions play a key role when it comes to investors who are placing their money and repositioning themselves in the markets (Achim, 2005). These are the basic principles both on a global scale as well as on more local markets such as in the Nordics. The theory presented in this chapter presents the factors driving mergers and acquisitions on a general level at any given time, but it is a known fact that on more global macro level transactions seem to cluster into distinct groups over time (Andriuškevicius, 2015).

Table 3. Merger waves and the major strategic objective of M&As in given time period (Martynova & Renneboog, 2008; Petitt & Ferris, 2013, pp. 4-6; Caiazza & Volpe, 2014; Harford, 2005; McCarthy & Dolfsma, 2013, pp. 11-29; Kengelbach et al., 2018)

Period	Wave	Strategic rationales
Early 1900s	1st	Avoidance of overcapacity and price decrease by horizontal mergers, trusts
1920s	2nd	Vertical integration; attempts to reach a dominate market position and cover all segments in the value chain
1960s	3rd	Expansion of portfolios and diversification which lead to major conglomerates in the U.S. markets
1980s	4th	Concentration on core business and realization of synergies
1990s - 2001	5th	Globalization, international expansion, value-based corporate leadership
2003 - 2008	6th	Low interest rates and thus cheap credit, rising of private equity investors
2010s	7^{th}	Digitalization, technological disruption, shareholder activism

The M&A market is cyclical and there are periods of time in which there has been a substantially increased M&A activity (Uzelac et al., 2016; Martynova & Renneboog, 2008; Kim & Zheng, 2014). These time periods of are called “merger waves” and those waves reflect the number and total value of the completed deals over time (Martynova & Renneboog, 2008; Langford & Brown, 2004). According to Langford and Brown (2004) the deal activity experiences a peak when there is a major discontinuity in the surrounding business environment and also a new source of financing enters the market. So far the academic literature has identified five complete merger waves: early 1900s, the 1920s, the 1960s, the 1980s and the 1990s, with each wave having higher M&A volume and value (Kim & Zheng, 2014). The underlying drivers of the waves lie in both industrial and technological disruption which has forced companies to adopt to change and make drastic strategic moves i.e. mergers and takeovers (Harford, 2005; Andriuškevicius, 2015). There are numerous shared characteristics between the waves. All waves seem to spring from economic recovery and end in a market crash or economic depression which is caused for example by a war or resource crisis. Also what is important to notice is that all of the waves have ended with a stock market collapse. In addition to common characteristics, there are distinct strategic rationales driving transactions reflecting the global economic and political situation at the present time. These rationales are listed in the **Table 3** above. (Andriuškevicius, 2015; Martynova & Renneboog, 2008; Bruner, 2004, pp. 75-82)

Taking a more closer look at the key trends and drivers behind M&A activity in recent years, mergers and takeovers are often being driven by a trend within a specific industry. Sherman and Hart (2005, p. 13) has listed a few examples of the underlying industry specific drivers. In telecommunications and banking industries, intense competition and mature markets typically have driven many transactions whereas in high technology industries where the core business lies on new technological innovations and products and where rapidly changing technology and customer preferences can force companies into transactions and even destroy entire markets in overnight (Sherman & Hart, 2005, p. 13).

During the last two decades, the number of mergers and acquisitions has increased significantly as can be seen in **Figure 7** below. Especially activity in the Asia-Pacific region has dramatically increased in the past 20 years, mostly due to economic growth and overall development of the region. Another important observation is that the market disruptions like the financial crisis in 2007-2008 and the bursting of the dot-com bubble in 2002-2002 show in major decrease in M&A activity. Looking at the figures, the impact of these market shocks has been much more dramatic on the Western markets of North America and Europe.

Corporate transactions have become more strategically motivated (Sherman & Hart, 2005, p. 13) according to Achim (2005) and an important “instrument for internationalization” which reflects in the increasing amount of cross-border deals (Caizza & Volpe, 2014; McCarthy & Dolfsma, 2013, p. 29). The overall M&A activity has been accelerated by globalization and global economic growth which in turn has resulted in changes in competitive landscape and maturation of emerging markets. A recent trend in the past decade has been the evolving role of private equity investors: in the 2000s the amount of private equity investors and deals has dramatically increased from 4% all the way to 30% in 2013 (Caizza & Volpe, 2014; Petitt & Ferris, 2013, p. 6).

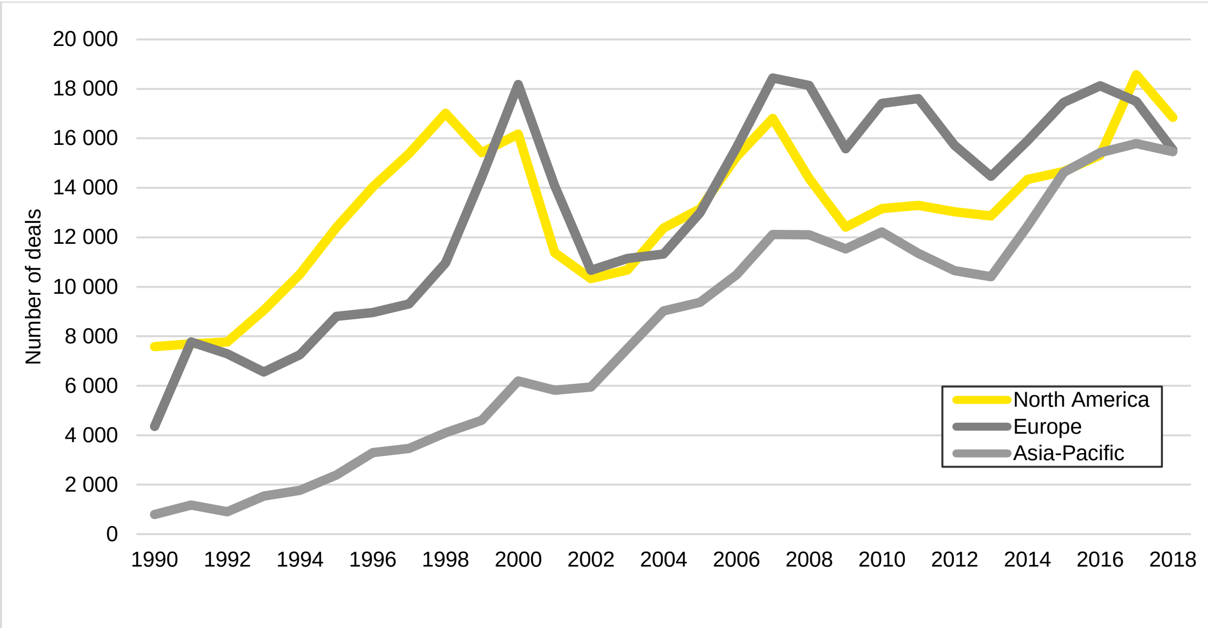

Figure 7. Number of mergers and acquisitions in North America, Europe and Asia-Pacific region completed in 1990-2018 (Institute of Mergers and Acquisitions, 2019)

Globally the amount of deals has been steadily rising since 2010 with a slight decline in 2018 which can be partly explained by intensified trade tensions between U.S and China together with major political instability (Andriuškevicius, 2015). Especially information, technology and telecommunications sectors together with life sciences sector has experienced major restructuring and increased M&A activity (McCarthy & Dolfsma, 2013, p. 29). Mergermarket, a company focused on analyzing and delivering M&A intelligence on global and regional level, ranked year 2018 as the third-largest year in terms of total deal value. Some 3.53 trillion dollars' worth of transaction were completed during last year, out of which 1.35 trillion (~38%) contributed from cross-border deals. The North America's share of the global M&A market was nearly half (46.5%) but Europe as a whole presented the largest growth, up by 17.1% from year 2017. The global M&A market and regional market shares have been visualized in **Figure 8** below. Mergermarket's data is based on transactions over 5 million U.S. dollars meaning that all minor deals have not been included in the data. (Mergermarket, 2019). This however doesn't have an impact on the bigger picture and the market itself.

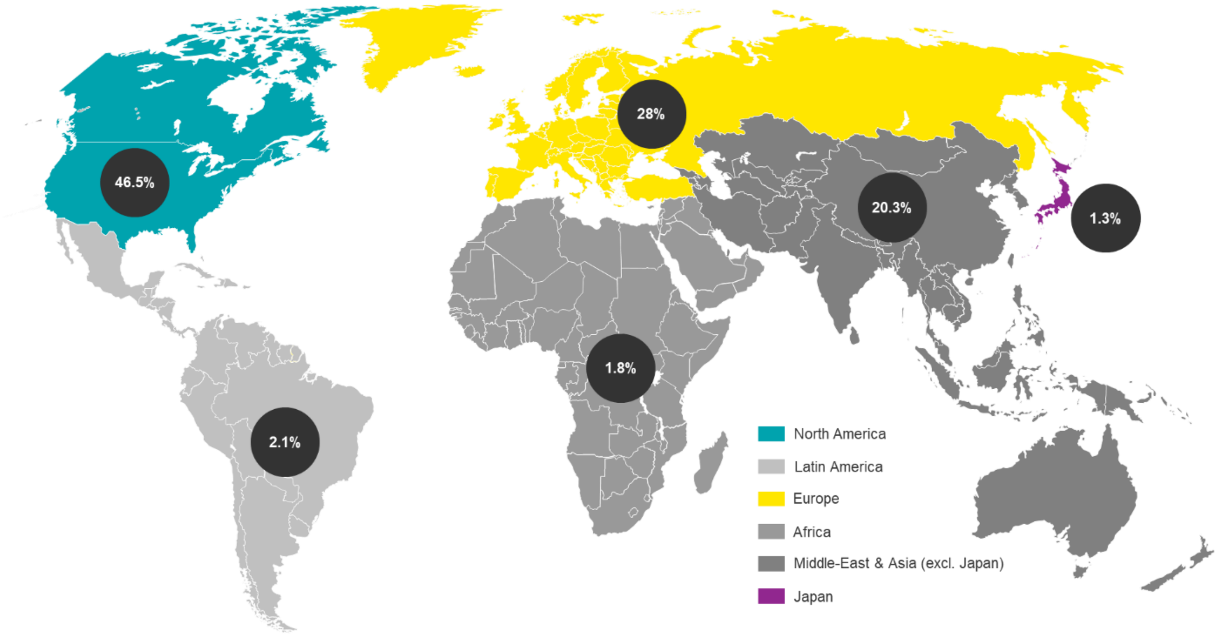

Figure 8. Visualization of global M&A overview and regional market shares in 2018 (Mergermarket, 2019)

Nordic-level M&A-data presented next is retrieved from Bureau Van Dijk's Zephyr-database which is one of the most comprehensive M&A databases containing detailed information on M&As, IPOs, private equity investments and venture capital deals all around the world. The following search strategy was used to query the data:

1) **Country:** Finland, Sweden, Norway, Denmark (Acquirer OR Target)
2) **Current deal status:** Announced OR Completed
3) **Time period:** 1/1/2012 – 31/12/2018
4) **Deal type:** Acquisition OR Merger
5) **Deal value:** min. €5m (including estimates)

Figure 9 below depicts the deal volumes and values in Nordics between 2012-2018. During this time period some 8 087 deals with value over 5 million euros were either completed or announced in Nordic countries. This total amount includes also for example group's internal transactions and other deals that are either filtered out or otherwise not relevant for this thesis. Out of these 8 087 transactions 2 520 were either acquisitions or mergers with acquisition being considerably more popular deal type than a traditional merger. These 2 520 deals were selected for more detailed analysis. During the six year period the total number of deals has fluctuated but not absolutely increased as in 2012 there were in total 388 deals and six years later in 2018 the respective number was 354. However, the total value of mergers and acquisitions with deal value over €5m has significantly increased, reaching almost 40 billion euros last year. The yearly values of mergers and acquisitions in Finland, Sweden, Norway and Denmark between 2012-2018 is listed in appendices' **Table A1**. Out of the Nordic countries, Sweden represents the largest M&A market in terms of both value and number of deals.

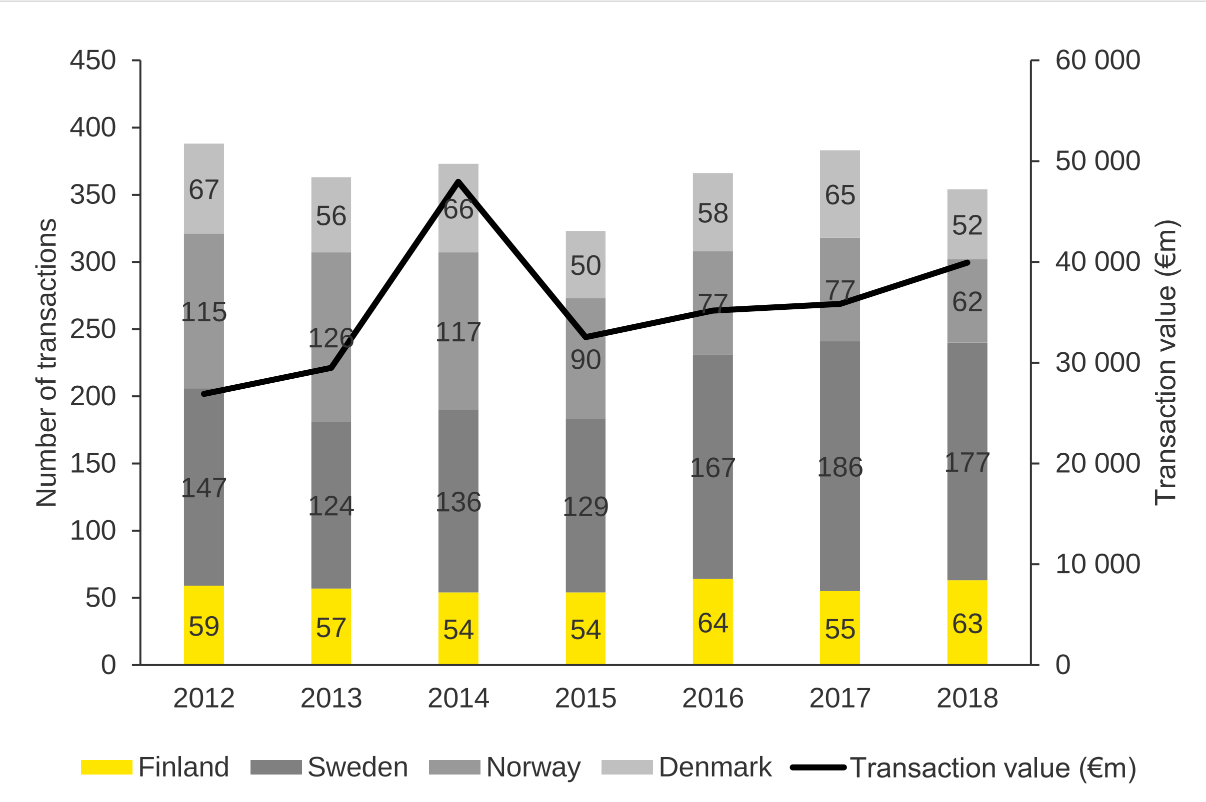

Figure 9. Number of mergers and acquisitions with value over €5m completed or announced between 2012-2018 in Nordic countries (Zephyr, 2019)

As seen in **Figure 10** below, in each of the four countries for two thirds of all the deals the acquirer and target were from the same industry. Out of the sectors, technology, media & telecom (TMT) together with Consumer products -sector were clearly the most active: TMT sector experienced 492 deals and 482 transactions involved a company from consumer products sector. Also engineering and industrial products companies as well as firms operating in real estate, hospitality and construction were active. Complete sector breakdown can be found in **Table A2** in the appendices.

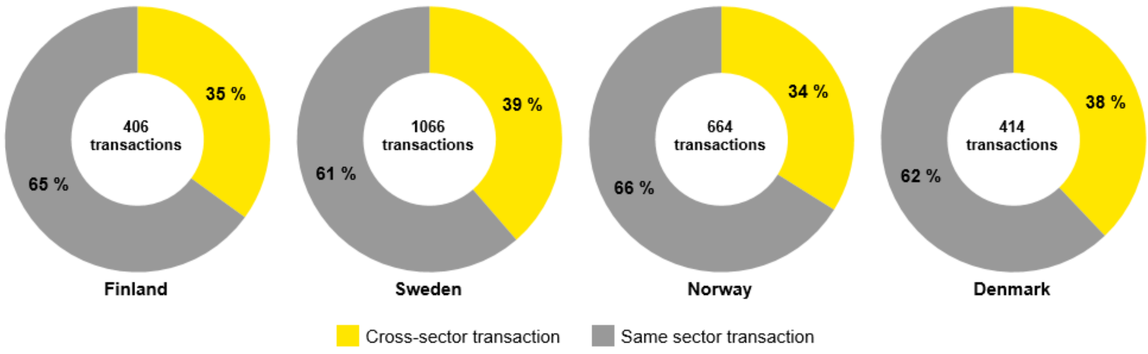

Figure 10. Cross-sector vs. same sector analysis in the Nordics 2012-2018 (Zephyr, 2019)

Overall, the regional transaction activity in the Nordics has grown on the swelling back of global economy. During the high season Nordic companies have been repositioning themselves for future growth as well as adjusting their portfolios to keep the operations sustainable in order to meet the changing customer demand that digitalization is disrupting. In addition, Nordic companies have been interesting targets for global companies seeking to achieve competitive advantage and move into the Nordic markets by acquiring companies. Also, private equity investors have been active as the Nordic companies have been valuated cheaper than their peer companies in the rest of Europe. Regional Baltic sea area is not affected as much by such events as Brexit and thus provides a platform of lucrative growth opportunities and a more stable market for various industries.

Now having described the motivations driving mergers and acquisitions as well as having taken a look at the regional and national deal activity, the next part of this chapter focuses on the generic framework describing M&A process.

2.4 M&A process

So far based on the presented theory it should be evident that mergers and acquisitions are highly complex business combinations typically impacting the entire organization of the merging companies. Typically such strategic move take years before it sees daylight and it consists of extensive planning and decision making (Kusstatscher & Cooper, 2005, p. 15). One of the key observations from the extensive research on mergers and acquisitions is that the M&A process is complicated (Trichterborn et al., 2016) and often a stumbling block even for mature and distinguished organizations. Screening, buying and integrating a target company consists of distinct subsequent steps that can easily be described using a process model to which I refer as the M&A process. The M&A process itself can be divided in many ways into smaller sub-processes or steps. A classic way of presenting the transaction process is to divide it into three stages: pre-transaction stage, transaction-stage and post-transaction –stage (McCarthy & Dolfsma, 2013, p. 200). These stages with their corresponding high level objectives, activities and outputs can be seen in **Figure 11** below.

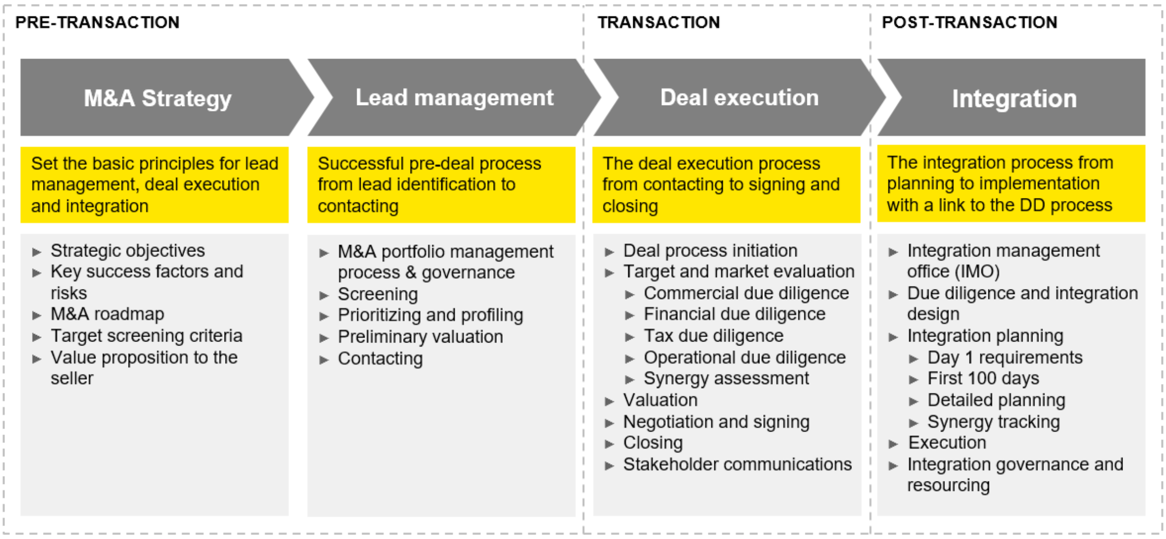

Figure 11. Visualization of the M&A process (Kusstatscher & Cooper, 2005, pp. 15-17; McCarthy & Dolfsma, 2013, pp. 200-201)

I have divided the three transaction stages into four distinct sub-steps which are inherent to most of transactions. These four steps are *M&A strategy*, *lead management*, *deal execution* and *integration*. As described in previous chapter, there are numerous reasons for a company to grow through merger or acquisition. Especially in larger companies, a M&A strategy which is aligned with the whole corporate strategy sets the guidelines for the transaction activity. In intendent transactions the precondition is that the deal is strategically relevant and directed towards the high level objectives of the company (Bösecke, 2009, p. 12). The M&A strategy dictates the target screening criteria, key success factors as well as the M&A roadmap describing the contemplated transactions for example as a part of a larger market entry program or other transformational program of the group, as well as the sub-processes, tasks and helps in managing the transaction process. In addition to creating and following a M&A strategy, the so-called lead management is an integral part of pre-transaction phase. Suitable merger candidates are often screened for quite some time in order to meet the set criteria. Lead management also considers the preselection and initial valuation of the possible candidates, and eventually contacting of the selected target company. (Kusstatscher & Cooper, 2005, pp. 15-17; Bösecke, 2009, p. 12; McCarthy & Dolfsma, 2013, pp. 200-201)

The transaction process itself starts in deal execution phase which lasts all the way from contacting the target to the actual signing and closing of the deal. Naturally, both the acquirer and target want to be fully aware of the underlying market conditions and future outlook as well as know all the business entities involved in transaction inside out. Also as Christofferson et al. (2004) point out, the acquiring company's management often has very little knowledge about the target at the time of transaction. This is why the target and sometimes also the business environment are scrutinized in detail in a due diligence processes which especially focuses on the legal, financial and operational health and strength of the target company (Kusstatscher & Cooper, 2005, pp. 15-17). A thorough due diligence is necessary as both the acquirer and the target want to reduce any information asymmetries (Bösecke, 2009, pp. 12-13) regarding the companies, market and transaction in general. In addition to target and market evaluation, the forthcoming integration is also planned already before closing the deal (McCarthy & Dolfsma, 2013, p. 200). Integration planning consists for example of definition of must-have requirements and priorities, setting of medium and long term integration objectives and guidelines as well as detailed planning of the integration of the functional areas (e.g. production, back-office, sales) in the scope of the integration.

The transaction process doesn't stop in signing the papers: after closing the deal, the acquired entity has to be implemented to be a part of a functioning organization. In post-transaction phase, the focus is on successfully integrating and implementing the planned operations as well as realizing the projected value of the deal (Bösecke, 2009, pp. 13; Gates & Very, 2003) through integration of the strategic capabilities and potential synergies (Kusstatscher & Cooper, 2005, p. 16). In practice this means setting up the organizations and implementing the processes which allow the forecasted cash flows and cost reductions to realize (Gates & Very, 2003). Integration is a highly complex and delicate process which in many way is the key to the success or failure of the transaction (Arden & Nappi, 2013; Uzelac et al., 2016). One way to address integration is to divide it in two: the "first hundred days" and what Gates and Very (2003) call the "capability transfer" stage. The first hundred days starts after closing the deal and during that time the focus is on maintaining the operations and momentum at both companies as well as creating a friendly atmosphere. Angwin (2004) notes that it is a generally accepted view that the first 100 days are critical for the success of the post-merger performance of the company, but later concludes the findings of his study by saying that there is “little overall support for this [first 100 days] being a particularly good indicator of acquisition success”. Nevertheless, once there is a certainty that the business will keep on running without major interruptions and atmosphere is suitable for synergy exploitation, the management can focus on actions that should deliver the expected added value of the deal (Gates & Very, 2003).

2.5 Synergies

As described in chapter 2.2, those planning and executing mergers and acquisitions often cite synergy arguments to justify their actions. Synergy, which can be thought to be the outcome of when the profits of the new business entity exceed the profits of the two formerly independent companies through cost reduction or revenue enhancement (Shaver, 2006), is an often-argued M&A driver that is defined and described more thoroughly in this chapter.

In theory, the concept of synergy can be seen to have a bit of a background in the resource-based theory. The resource-based view has over the last 20 years become one of the most cited and influential management theories (Barney et al., 2011; Wan et al., 2011). This view suggests that valuable, rare and non-substitutable resources give the company the best position for long-term success and competitive advantage (Kraaijenbrink et al., 2010). Like stated earlier, a merger or acquisition is, if executed successfully, an efficient way to gain access to these valuable resources, whether they are physical assets, knowledge or even managerial skills allowing the firm to find strategic advantage that is sustainable. **Figure 12** below describes a simplified model of resource-based theory.

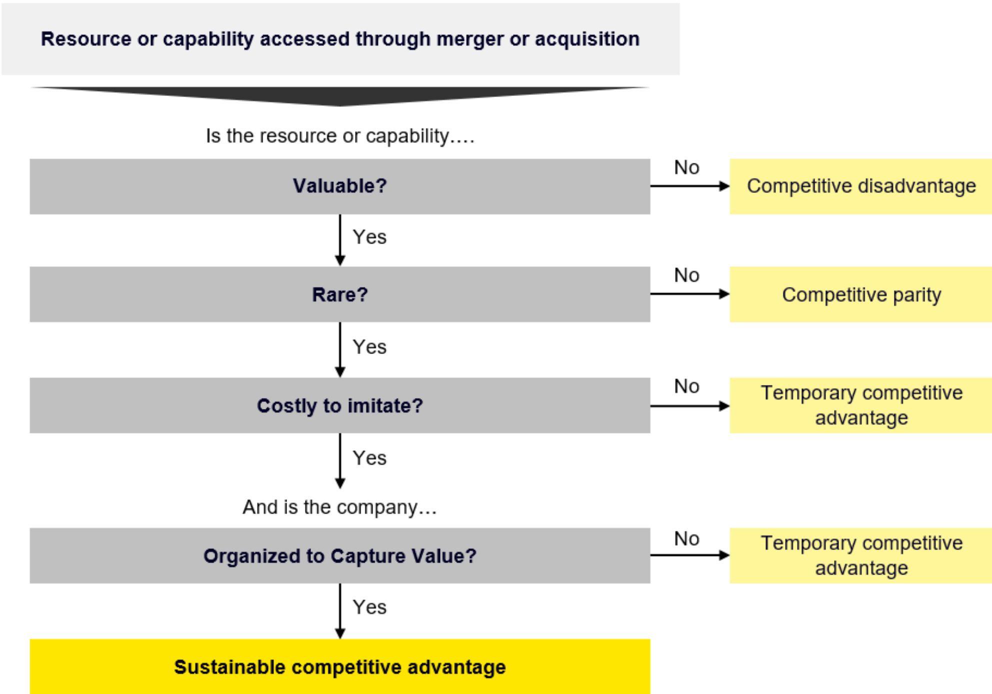

Figure 12. Simplified model of resource-based theory

The word *synergy* derives from the Greek word *synergos* which translates to "working together" (Goold & Campbell, 1999). In business environment, synergies can be seen as an increase in combined company's competitive advantage which result in positive cash flows exceeding the cash flows that the two companies were expected to accomplish on their own (Ross et al., 2013, pp. 888-889). Synergistic gains can be realized from numerous sources. A combined company can achieve synergistic benefits by generating economies of scale and scope through asset consolidation, combining sales and manufacturing operations of the merging companies, sharing information, distribution channels, trademarks and eliminating redundant operations sources. (Alhenawi & Krishnaswami, 2004; Capron, 1999)

Based on their nature and source, synergies can be categorized in different ways. Although synergies have been under intense interest and study for decades, there is still no common ground on what is the appropriate way of for categorizing synergy items. Trautwein's (1990) efficiency theory distinguishes three main categories of synergies: financial, managerial and operational.

The combined company can achieve financial synergies in various ways. Financial benefits can be gained by decreasing systematic risk by diversification, increasing firm's size to gain access to cheaper capital and establishing an internal capital market which allows more efficient capital allocation (Bösecke, 2009, p. 27; Trautwein, 1990). In addition, financial synergies can be the result of combined financial structure i.e. tax savings, diversification of cash slows (Rabier, 2017; Huyghebaert & Luypaert, 2013) and use of excess cash (Damodaran, 2005).

Managerial synergies refer to gains that the bidder can achieve in a situation in which the acquiring company's management has superior knowledge and planning capabilities (Bösecke, 2009, p. 27; Trautwein, 1990). These knowledge and skills, often existing only tacitly and not in written format, can be hugely advantageous regarding the future of the combined business. Overall, shared know-how is a major factor in business transactions and especially in conglomerate and vertical integrations sharing key information regarding new markets, products or industries is vital for the acquirer management (Goold & Campbell, 1999).

Typically with synergies people refer to operating synergies which are achieved mostly through economies of scale and scope (Bösecke, 2009, p. 28; Damodaran, 2005) and by combining the resources of the acquirer and target companies resulting in revenue growth or cost savings (Rabier, 2017). Also, by improving cash collection i.e. lowering accounts receivable or by reducing inventories, the combined company can reduce its net working capital. Moreover, the combined firm often possesses a better bargaining power against supplies which may result in larger accounts payable (Huyghebaert & Luypaert, 2013).

Many academics argue that acquisitions motivated by operating synergies experience higher performance compared to those of financial synergies. Rabier (2017) points out that one argument supporting this hypothesis is that where operating synergies are a result of reconfiguration of organizational structures and functions such as IT and production, financial synergies often stem only from a combination of two financial organizations, sometimes with a very light structure.

Cost and revenue synergies have typically been seen as two distinctively different, and according to Capron (1999) "to some degree mutually exclusive" synergy items. In this thesis I have selected to use a framework in which synergies are grouped into cost-based synergies and revenue-based synergies, because acquirers typically project these two types of synergies as they are measurable: assessing and putting a price tag on managerial synergies is close to impossible.

2.5.1 Revenue synergies

Revenue-based synergies, also called revenue enhancing synergies, refer to increase in net sales when the operations of the acquirer and target firms are integrated (Huyghebaert & Luypaert, 2013). These sort of synergies can be achieved by sharing resources and knowledge like gaining access to a larger supplier and distribution network and thus increasing the effectiveness of the sales force of the company (Capron, 1999). On the other hand, a combined company can also generate more revenues by re-branding target's products with acquirer's brand or vice versa (Damodaran, 2005).

Capron (1999) sees that there are two practices for the merged company to increase its revenues. Firstly, the company can access a larger market coverage and thus increase its sales. In a transaction, the market coverage may increase when the acquirer gets access to target's locations and sales network, but also through a concentrated marketing efforts and new brand (Damodaran, 2005; Rahman et al., 2016). Also, especially in horizontal acquisitions the market coverage can be expanded through geographical or product line extension. When the company has increased its market coverage, it can sell its products and services to a larger customer base resulting in increased sales (Capron, 1999; Rahman et al., 2016).

In addition to increasing the market coverage, revenue-based synergies can be gained by enhancing the innovation capability. If either the acquirer or the target involved in transaction possesses superior technology, know-how or patents, this innovation capability can be leveraged for product innovation and also for improving the effectiveness of the organization, thus resulting in an increase in price or volume and eventually in greater sales (Capron, 1999).

Overall, the revenue-based synergies are achieved by redeploying resources i.e. using the target's or acquirer's resources in a more efficient way (Rahman et al., 2016; Capron, 1999). However, revenue synergies are often seen as a controversial synergy item as compared to cost synergies, they are more difficult to identify, measure and capture (Ficery et al., 2007; Chartier et al., 2018) as they are highly dependent on third parties like end customers (Kengelbach et al., 2013). Also, it is tremendously difficult to differentiate which part of the revenue growth is a result of the transaction and which by normal sales efforts.

2.5.2 Cost synergies

One fundament behind mergers and acquisitions is that a combined company has the potential to operate more efficiently than the two entities could have separately (Ross et al., 2013, pp. 889-891). This is often achieved through economies of scale meaning that by sharing tangible resources the cost of producing one unit decreases as the volume of the production increases and thus fixed costs are spread over a higher production output (Goold & Campbell, 1999; Huyghebaert & Luypaert, 2013; Bruner, 2004, p. 328). Cost reductions often are realized from a wide front of different business functions such as HR, procurement and distribution (Huyghebaert & Lyupaert, 2013) or on the other hand through asset divestiture (Capron, 1999). Generally speaking, cost synergies can strengthen the competitive position of the new entity through cost reduction of core operations such as purchasing, manufacturing and distribution (Aiden & Nappi, 2013).

Cost-based synergies are rather straightforward to model and quantify making them easier to address (Kengelbach et al., 2013; Zollo & Meier, 2008). Value of the combined company can be increased by one-time cost savings which will increase the cash flow for the period. However, a much more long-standing and substantial impact on the financial performance and overall value of the merged entity is achieved through continuing cost savings as it affects the operating margins over a longer period of time (Damodaran, 2005). For example, closing redundant production lines or entire factories and centralizing core business functions result in cost reduction (Kengelbach et al., 2013).

Table 4 below summarizes the basics of both revenue and cost synergies. The table shows that whereas cost synergies are seen as a fundamental driver in most transactions, revenue-based synergies are often regarded as more ‘add-on’ type of synergies (Kengelbach et al., 2018). Acquirer also have better control of the achievement of cost synergies compared to revenue synergies: realizing revenue-based gains is more complicated and less certain. Also the timeframe for achieving synergies varies and depends on many factors. Revenue synergies typically take longer to achieve while cost-based synergies can be realized relatively fast. The time to realization is discussed more thoroughly in chapter 3.2.

Table 4. Summary of revenue and cost synergies (based on Capron, 1999; Kengelbach et al., 2013; Kengelbach et al., 2018; Damodaran, 2005, Zollo & Meier, 2008)

	Revenue synergies	**Cost synergies**
Definition	Recurring synergies from incremental increases in revenues compared to standalone figures	Recurring synergies from realized cost savings across corporate functions
Importance in deal decision	Typically seen as an 'add-on' to cost-based synergy benefits	Fundamental driver in many transactions
Source of synergy	• Cross-selling • Pricing • Geographic expansion • Channel expansion • Rebranding • Brand extensions • New products and services • Market coverage optimization • Salesforce effectiveness • Revenue management	• General and administrative costs • Procurement and cost of goods sold • Sales and marketing costs • IT costs • R&D costs • Other operating costs
Ability to control realization		
Time to achieve		

3 SYNERGY CAPTURE AND M&A PERFORMANCE

This third chapter focuses on describing the link between synergy capture, organization's M&A function, its capabilities and the overall M&A performance. In the first part, some theory is introduced to describe the M&A function's role in the acquisition process. Also, the organization's M&A maturity is evaluated through a four stage model. The latter part focuses on the synergy valuation and capture in transactions, and sheds light on the past research and historical performance of mergers. Prior research on the performance of mergers and takeovers is presented in order to familiarize the reader with commonly used research methods with their strengths and weaknesses. Historical performance of corporate transactions is also reviewed as there is a significant amount of studies focusing on the performance of merger in different time periods. Lastly the chapter investigates how synergies can be used as a measurement of M&A performance.

3.1 M&A maturity and capabilities of the organization

Mergers and acquisitions are often seen as a strategic tool allowing the company to pursue new highs (Chatterjee, 2009). However, according to Ferrer et al. (2013), in many companies the corporate strategy does not explicitly tell or guide where and when to use M&A, and only few have succeeded in creating an organization wide M&A capability that truly creates shareholder value and differentiates the company from its peers. In this study I refer to these type of companies as *best-in-class acquirers*. Langford and Brown (2004) in their own research note that these exemplary organizations have three common characteristics:

- **Disciplined management processes:** Routine processes that are easily used to extract value from transactions
- **Disciplined link to strategy and company strengths:** Company's core competencies and strategic assets at highest and best use
- **Exceptional, industry specific M&A capabilities:** Differentiating, highly developed M&A capabilities creating sustainable competitive advantage

These three characteristics highlight the fact that support for the deal-making should be organization-wide. The internal organization, the M&A function, that manages the company's transaction processes is a key contributor to the success of the deals (Doherty et al., 2016). In practice, nowadays the M&A function is found either at the corporate level, strategic business unit level or at both levels (Trichterborn et al., 2011). This stationing depends on such variables as the organization's size, operating model and geographical footprint. A dedicated and experienced M&A function is peculiar to a best-in-class acquirer as it enables the organization to develop and integrate M&A process into other core business operations and build required management know-how on transactions, which is a lifeline of a successful M&A transaction. The M&A function is in key role in building up the entire organization's M&A capabilities which in turn influence the outcome of the acquisition process and the M&A performance (Doherty et al., 2016; Zollo & Singh, 2004). The activities of a well-functioning M&A unit typically affect the entire organization and at its best encourage other strategic business units to take a proactive approach on mergers and acquisitions (Trichterborn et al., 2011). In their thorough study on M&A performance and the role of M&A function Trichterborn et al. (2011) demonstrate that having such dedicated business unit responsible of the transactions and all related M&A processes has a positive impact on the overall M&A performance. This direct link is described in **Figure 13** below.

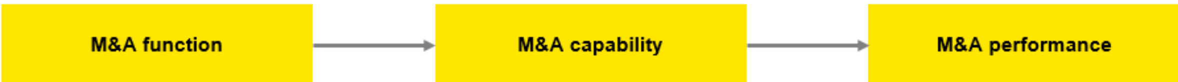

Figure 13. Link between the M&A function, organization's M&A capabilities and M&A performance (based on Trichterborn et al., 2011)

Success in corporate transactions is firmly built on previous professional experience and leading know-how (Zollo & Singh, 2004). As every deal from screening to integration follow-up is individual, though plenty of similar characteristics and activities are shared, having differentiating M&A capabilities allow maximum value creation. Applying the same focus and consistency to transactions as to other business operations sounds logical but is rarely the case. Ferrer et al. (2013) as well as Engert (2018) point out that companies taking this pragmatic approach on deals are much more successful and create value compared to its peers.

An efficient and impactful M&A unit functions on an advanced operating model. The best-in-class operating model of an M&A unit is displayed in **appendix A3.** The model consist of four key areas: *vision & mission*, *organization & talent*, *processes & KPIs* and *technology & enablers*. I will now present some of the key considerations of each area. First and foremost, all the M&A activities and organizational setup of the M&A function needs to be united and aligned with the overall vision and mission of the company. This means that operating model of the fit-for-purpose M&A function needs to meet the organization's requirements and strategic objectives (Doherty et al., 2016). Also, a common understanding of M&A-related processes and objectives need to be communicated to all relevant stakeholders within the company which ensures that all key personnel and functions are aware of core M&A processes (e.g. pre-deal and post-deal activities like screening, integration, valuation etc.) and their roles and responsibilities regarding them. To ensure efficient M&A activities, the organizational setup of M&A function must reflect and facilitate the company's approach towards its M&A activities - the ideal structure depends on variables like the number of transactions and geographical spread of the deals. Whether the M&A function is centralized or decentralized, company seeking to achieve M&A mastery needs to ensure that it has the right talent with relevant expertise for its internal M&A activities. (Langford & Brown, 2004)

When building an efficient M&A operating model, one common characteristics among best-in-class acquirers is that they have pragmatically broken down and simplified the otherwise highly complex interplay of numerous business functions and units. In other words this means that there are clearly defined roles and responsibilities and strong coordination to ensure best possible decision-making at all stages. To guide the M&A process along all steps there should also be a detailed description of processes in place. When talking about synergies, appropriate measurements and KPIs for performance tracking need to be determined and implemented. Best-in-class acquirers typically have established a very strong link between the profit and loss statement and synergy tracking, ensuring a tangible impact of all initiatives and synergy realization and active monitoring of the progress. (Doherty et al., 2016; Trichterborn et al., 2011)

Despite the fact that these best practices of high-performing M&A function are well-known and seem logical, only few companies are able to put these into use. The management often lacks a holistic view of what is the current state of their M&A function and what is the fit-for-purpose model for them. All in all, the operating model of the M&A function needs to be adaptive and dynamic as the integration approach should be tailored to each individual deal (Engert, 2018).

The required M&A capabilities and level of maturity of the M&A function are strongly linked with the organization's level of ambition on strategic value creation through acquisitions. Maturity in this case describes for example the degree of formality and dedication of the transaction-related processes and systems in the organization. The company needs to define and set the appropriate ambition level regarding M&As as part of their strategy as it dictates what are the minimum required skills, tools and processes that should be in place in order to succeed in transactions. I have divided the M&A capabilities by maturity into four distinct stages from basic to differentiating, and the stages are visualized in **Figure 14** below. Stages 1-3 provide supporting M&A capabilities whereas the best-in-class acquirers can be seen to have stage 4 capabilities and typically, but not necessarily, a high ambition level.

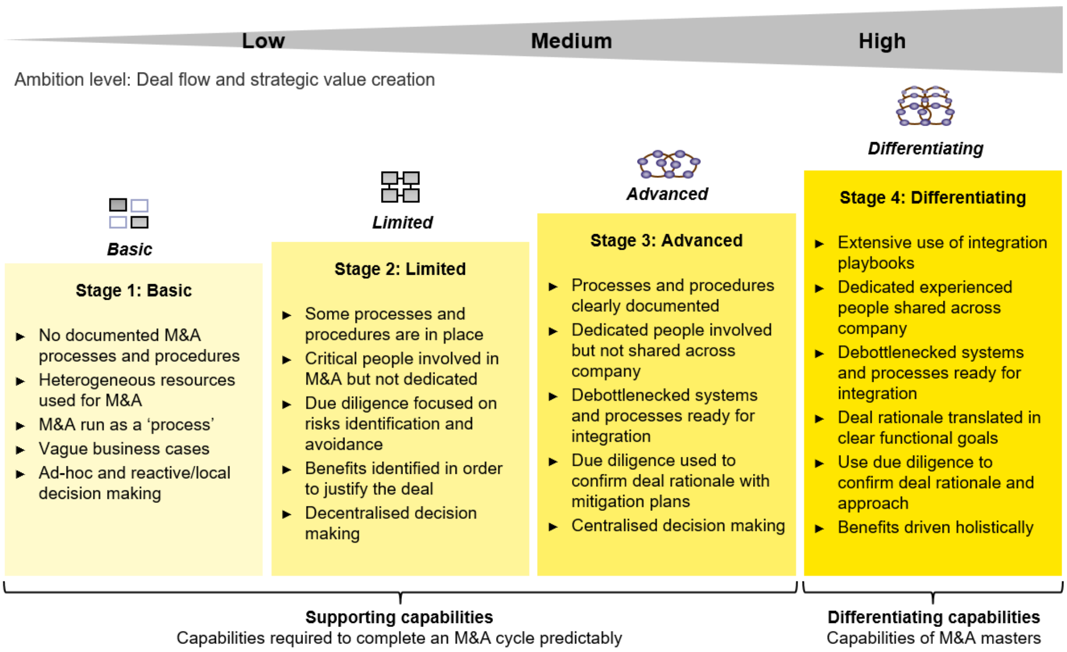

Figure 14. M&A maturity stages and the M&A capabilities of the organization

In the lower stages the M&A processes and procedures are either poorly or not documented at all, and the acquisitions are run as a process. Also the decision-making is more reactive and there are no dedicated people running the acquisition and integration projects. On levels 3 and 4 there are clearly defined and implemented processes in place and the overall deal rationale as well as the integration approach is validated and tailored based on the target and acquisition type. What is common among best-in-class acquirers is that they have a very strong dedicated M&A function and people across the organization are involved into the acquisition process. In general, their approach is holistic and the entire process is broken down into more manageable pieces with clear goals. (Chatterjee, 2009; Langford & Brown, 2004)

An exemplary approach used in strategically important or large deals by companies with advanced M&A capabilities and experience is the clean team. As deals involve highly confidential competitive information and the merging companies are prohibited from sharing internal information or collaborating closely with the other party, the companies do not have full access to all necessary data required for doing accurate calculations and conclusions, but rather operate on assumptions and limited knowledge about each other. To counter this, companies with advanced M&A capabilities and a solid track record of successful acquisitions establish a 'clean team' to get a head start on the synergy capture.

A clean team composes of third-party personnel and serves as a link between the two merging companies, collecting and analyzing sensitive data from both companies and sharing sanitized results to the decision makers of each side. The analyses and results of the clean team's work lay the groundwork for the synergy capture and accelerates the ability to make business critical business decisions on time. A simplified view on the clean team approach is presented in **Figure 15** below.

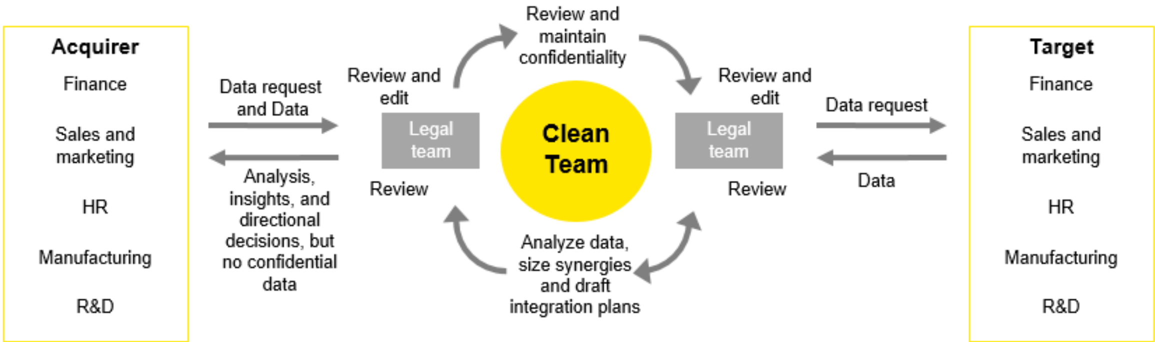

Figure 15. Clean team approach

In this study I claim that successful synergy capture is tightly linked to the M&A maturity and capabilities of the organization. Empirical data received from the management survey is used to validate this hypothesis. To summarize, in a high-performing M&A organization there should be clear processes, tools and systems in place for synergy capture, tracking and measuring resulting in high value creation and thus in high M&A performance. Next part of this chapter will describe how synergies are valued and captured in transactions.

3.2 Valuing and capturing synergies in corporate transactions

Even though the M&A activity holds major potential gains, mergers and acquisitions are prone to failure and often anticipated synergies are not realized (Vithala et al., 2016). Realizing the value that combining business entities is estimated to provide is a highly complex task and it can take up to many years to successfully realize all the potential (Weaver et al., 2001, p. 90; Larsson & Finkelstein, 1999). In general most of the value that the transaction holds is up for grabs only after closing the deal, in the post-transaction phase (Larsson & Finkelstein, 1999), which according to Weaver et al. (2011) is the "key challenge in doing M&As" even though companies and their managers have become better at identifying and capturing the value (Ficery et al., 2007). However, the projected synergies don't come easily and for free (Loukianova et al., 2017) – some synergies may be easily captured but others may end up being even impossible to identify, locate and realize (Ficery et al., 2007; Gates & Very, 2003). In addition, as all acquisitions are unique in one way or another, there is no best way of doing this even though numerous frameworks and models have been developed either by researchers or management consultants on whose desks these type of tasks usually fall (Gates & Very, 2003). Realizing the value that the deal is projected to deliver requires enhanced capabilities, knowledge and resources that the new company might not possess or doesn't have the strength to mobilize (Chartier et al., 2018).

Often one of the first tasks is to determine the appropriate level and speed of integration to be able to fully realize value from the transaction (Zaheer et al., 2011; Zollo & Singh, 2004). The level of integration is dependent on the strategic rationale of the transaction, and it determines both the synergy potential and the level of complexity (see **Figure 16** below), and also the required amount of coordination and co-operation between M&A function and the organizational units (Zollo & Singh, 2004). In other words, the realization of synergistic benefits is dependent on the available potential and the depth of integration (Larsson & Finkelstein, 1999). This in turn reflects to what way the synergy capturing takes place and how it is measured (Gates & Very, 2003). If the two business entities only combine the legal entity and address solely the regulatory and other mandatory requirements, there is not much synergies to be realized. In partial integration there are some certain cost-based synergies to be achieved, but often companies are unable to realize full extent of the synergies. Fully integrating the firms allows to realize all possible synergies. Full integration requires rigorous management and strong integration of highly interdependent operations (Zaheer et al., 2011). However on the flip side, this interdependency of two merging entities increases significantly during the integration and possible negative shocks from the surrounding business environment impacts the entire newly combined firm much stronger than it would have if the two organization would have operated independently (Shaver, 2006).

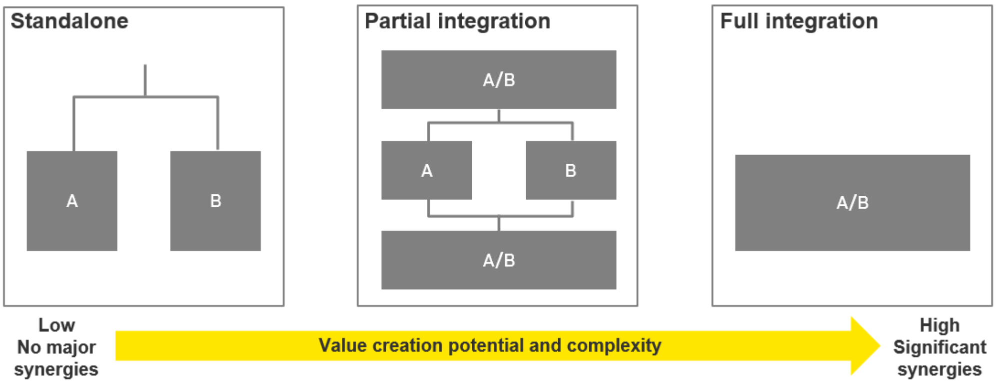

Figure 16. Visualization of the value creation potential and deal complexity by level of integration (based on Zollo & Singh, 2004; Capron, 1999)

Synergy capture can broadly be divided into four phases: *identification*, *validation*, *planning* and *delivery & tracking*, and a simple four-step framework for synergy realization is described in **Figure 17** below. Synergy item identification and validation typically takes, and should take, place in pre-transaction phase part of the due diligence process. This assessment of synergies, or so-called “synergy case”, is developed by conducting detailed commercial and operational value driver analyses across all key functional areas of the merging entities. Most transparent and self-evident synergy items are easily identified and defined but often there are undiscovered areas of potential synergies that according to Ficery et al. (2007) are a minefield for the acquiring company’s management. Identified synergy items should also be validated, reviewed and prioritized with the management. Validation can be based for example on industry deal data or previous experience. In addition, an integral part of pre-transaction phase is the development of integration strategy which dictates the objectives, processes, responsibilities and required resources for the successful integration. Synergy identification and validation are in key role in almost every transaction as when the identified synergies are valued, they also contribute directly to the overall acquisition price.

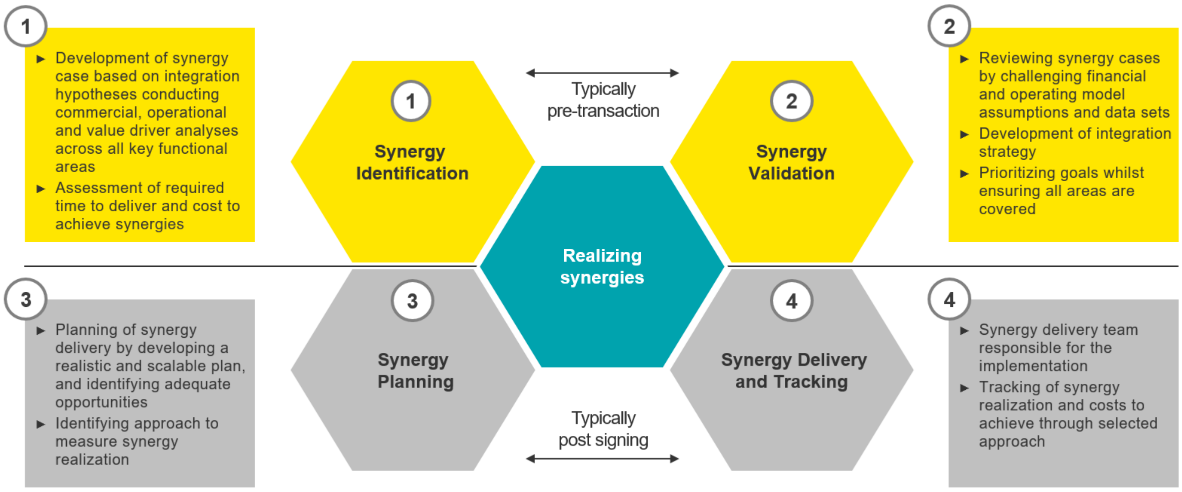

Figure 17. A four-step synergy realization framework (based on Aiden & Nappi, 2005; Engert & Rosiello, 2010 and Damodaran, 2005)

Planning of the synergy delivery typically takes place after signing the deal. In addition to creating an adequate roadmap consisting of milestones, the synergy items should also be segmented and prioritized. Shareholders typically want quick results meaning that prioritizing and focusing on quick wins, or “low hanging fruits” allows rapid value delivery. The approach to measuring the synergy achievement also takes place in the planning-step together with the development of detailed financial model that links the synergy realization to the profit and loss (P&L) statement of the company or business unit.

Like stated, some synergies are easier to value than others and valuing them always requires making some assumptions about future cash flows and potential growth. Damodaran (2005) says that one of the key question regarding synergies and their capture is *how* the synergies are valued, not whether they *can* be valued. Some researchers and practitioners suggests that any systematic attempt to value all synergies is pointless as it requires making too many assumptions about the future. On the other hand, others think that before deciding how much the target is worth, the acquirer has do make its best estimate on how much additional value will the identified synergies create (Damodaran, 2005; Loukianova et al., 2017). According to Damodaran, there are two fundamental questions that are crucial when assessing and valuing synergies: *what form is the synergy expected take* (i.e. cost reductions, future growth) and *when will the synergies start affecting the operating cash flows?*

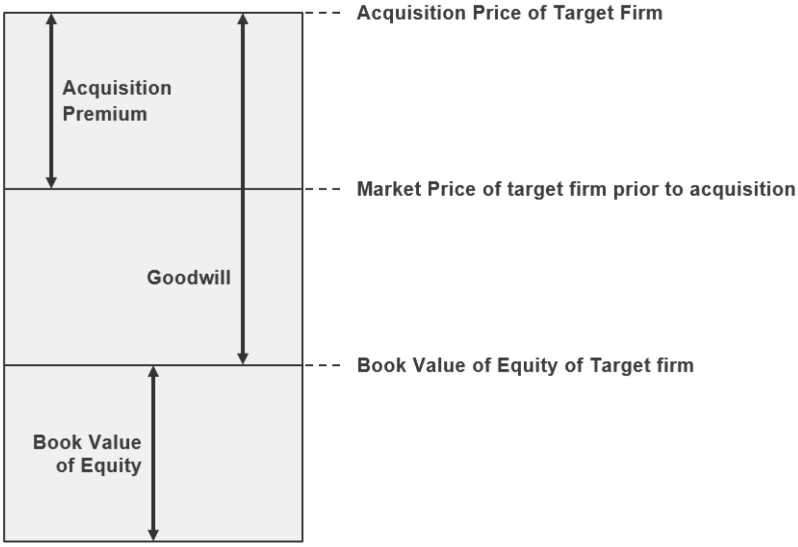

Figure 18. Breakdown of the acquisition price (Damodaran, 2005)

For the acquirer it is vital to assess the possible synergy areas of the transaction before engaging into it. This way the buyer can reduce the risks and more easily justify the acquisition price to all of the shareholders (Loukianova et al., 2017). Acquisition price is broken down into distinct components in **Figure 18** above. Goodwill is an accounting term associated with transactions and also an intangible asset, that tells the difference on the market value and the book value of the company. Damodaran in his thorough study of synergy valuation in 2005 concluded the synergy elements of the transaction into one basic formula (formula (1) below) for assessing the total value of the target (Damodaran, 2005).

$$\text{Value}_{\text{target}} = \text{Value}_{\text{target, stand-alone}} + \text{Value}_{\text{synergies}} + \text{ControlPremium} \quad (1)$$

Control premium represents the value of the company if optimally managed which in practice means changes in investing, financing or dividend policy. For example if pre-transaction company has had low return on equity, an increase in value can be achieve through more efficient use of resources and assets. Bruner (2004, p. 326-328) has similar approach on synergistic target valuation, but instead of control premium he proposes the use of real options in acquisition. According to him, real options in acquisitions can be grouped under five categories: growth options, exit options, options to postpone investment, option to change the scale of operations (flexibility option) and option to change operation processes (switch option). Bruner's approach is presented in formulated format (formula (2)) below:

$$\text{Value}_{\text{target}} = \text{Value}_{\text{target, stand-alone}} + \text{Value}_{\text{synergies, in place}} + \text{Value}_{\text{synergies, real option}} \quad (2)$$

Assessment of target value and synergies is an ever-continuing topic of argue in management and corporate finance literature. Still there is no common view on how synergies should be assessed and to what extent do they contribute to the final acquisition price. At least already in transaction partner (or target) selection the management and other parties responsible for the upcoming transaction pay a great deal of attention to assessing which pair of companies has the highest synergy potential (Vithala et al., 2016). Potential synergies are typically identified and assessed in the pre-merger due diligence processes. However, Engert and Rosiello (2010) point out that often the due diligence process fails in providing an adequate plan for synergy capture. Also the inability to appropriately assess and express measurable synergies speaks volumes of future challenges (Bruner, 2004, p. 325). According to Bruner (2004, pp. 326-327) the synergy assessment should be in key role in the entire transaction as identifying potential synergy areas can help in the overall transaction process and strategy by revealing interdependencies and value creation potential. Also if the assessment shows that there are major synergies to be realized, the initial synergy assessment provides a foundation for the post-merger integration strategy and roadmap (Bruner, 2004, p. 327).

After signing the deal, true realization of synergies can take place. The synergy capture and delivery is one of the key value levers of the transaction (Gates & Very, 2003) meaning that planning the process is vital for the performance of the merger. According to study conducted by Larsson and Finkelstein in 1999, organizational integration is the most crucial factor for synergy realization (Larsson & Finkelstein, 1999). If the newly formed organization fails to integrate, the potential synergies cannot be realized (Shaver, 2006). Another key issue is the measurement of synergies, especially when it comes to revenue synergies. Designing and building a measurement system which tracks the realization of synergies is challenging and often requires support across the organization (Engert & Rosiello, 2010).

The last phase is the delivery and tracking of synergies. In best case scenario, especially in larger transactions, there is a dedicated synergy delivery teams responsible for the coordination and implementation of selected synergy items (Lohman, 2013) . The method and approach through which the synergies are tracked and measured varies between the transaction, industry and deal size (Larsson & Finkelstein, 1999), and according to Bower (2001) performance measures should include and be aligned with the strategic objectives of the acquiring company. Though according to study conducted in 2000, over half of the respondents said that they did not measure the success of integration nor use a detailed plan or process for performance tracking (Gates & Very, 2003). This thesis aims to provide insight on the same issue from the Finnish market.

Capturing synergies is a major part in unlocking the full post-merger value but it doesn't come without challenges. One common mistake is that because the acquiring company relies on the target management's knowledge and support (Zaheer et al., 2013), they do not have as accurate information regarding the company and market as it should have, and the management has set the expectations of the merger too high (Ficery et al., 2007; Christofferson et al., 2004). This can be avoided by an effective synergy identification and planning during the due diligence processes prior signing which allow the buyer uncover these potential problem areas (Aiden & Nappi, 2013), but according to Engert and Rosiello (2010) hasty pre-deal due diligence typically fails to deliver an appropriate synergy capture plan. Another typical issue regarding synergy capture is that the created synergy plan is never implemented or made into an integral part of the integration. In addition, Aiden and Nappi (2013) mention that the tracking process may lack accuracy if the measurement system or tool is not specified or implemented thoroughly. If the integration process and synergy realization is not tracked and properly managed, the acquiring company's management will face major difficulties as they are trying to reach the set objectives (Gates & Very, 2013).

Adding to the already difficult world of integration and value capture, time and required speed adds another level of complexity. As the integration may take up to years in time, there needs to be a clear decision on over what time the synergies are tracked and measured, thus also indicating over what time the M&A performance is addressed. Choosing this point in time is challenging but necessary because it will directly reflect into the perceived results as the time required for realization between different synergy items varies greatly. Based on Kengelbach et al. (2018) data set a majority of companies estimated that it will take two to three years to achieve the full synergy potential. For example typically complex synergy items such as IT-systems and cross-selling potential can take up to years to realize due to contractual issues and major implementation projects. The time span also depends on the nature of goals, industry and size of the companies – the integration process of two major sized companies can take years. **Figure 19** below visualizes this time-to-realize and complexity relation that guides the performance measurement in transactions.

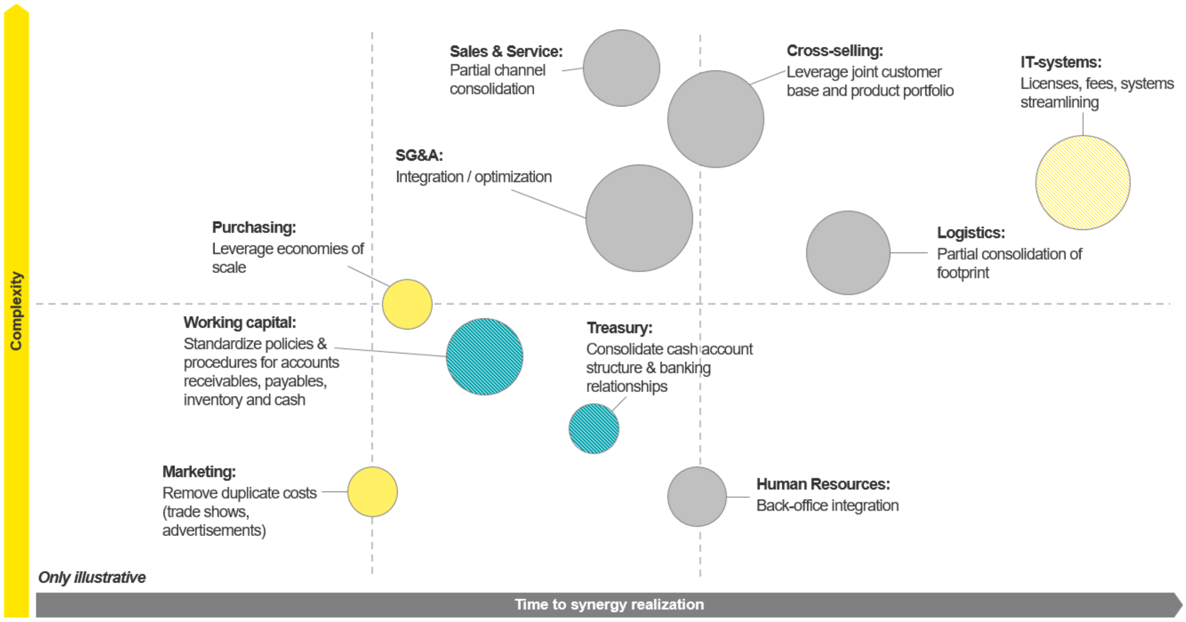

Figure 19. Illustration of synergy items by realization complexity and the required time to realization

As described in this chapter, synergy capture should be a well-planned, structured and coordinated effort with clear accountability. Employing a systematic approach with distinct key activities and deliverables is a key to minimizing value leakage and maximizing the synergy capture. Through iteration and unbiased challenging of the synergy cases the best-in-class acquirers holistically identify and quantify the synergy potential, evaluate the defined synergy cases through leveraging due diligence work and against the future operating model, as well as consolidate the individual synergy items into a master synergy case that the c-suite executives and the board can review and give an approval. After signing and closing the deal, synergies are categorized based on whether they can be achieved with ease and low costs during the first 100 days (quick wins or 'low-hanging fruits') and individual plans realizing for short, medium and long term synergy item are designed and implemented as part of the integration process. Based on the presented theory and previous experience of yours truly, I have created a structured approach for synergy capture.

Figure 20 below presents an exemplary approach for structured synergy capture through the whole transaction life cycle. The approach starts by establishing the baseline of synergy potential and evaluating the key synergy opportunities the transaction holds. After extensive analysis, modelling and reviewing, the master synergy case gets approved and in many cases may be communicated to the investors at the time of signing when the acquirer is a publicly traded company. After signing the deal, more detailed synergy-related planning can take place as parties can more freely share sensitive information and plan the upcoming integration together. Synergy potential and individual synergy items are then being validated and respective targets for cost and revenue synergies can be set. In integration phase, the approach focuses on measuring the synergy realization against target and ensuring that the integration project puts enough emphasize on synergies, too.

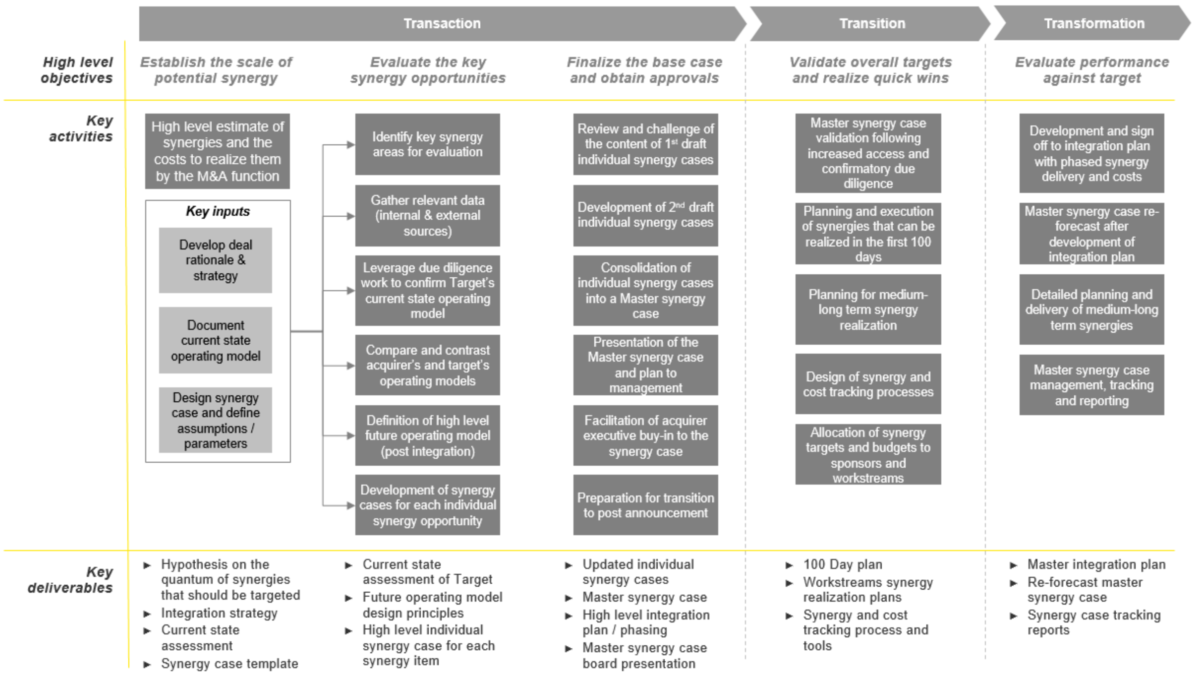

Figure 20. Approach for structured synergy capture process

To sum it up, it is safety to say that realizing the synergies is an effort that requires punctual management, new organizational muscles and significant amount of knowledge. Thoroughly identifying, validating and valuing the potential synergy items is vital, and reflects into the purchase price of the asset. However, there is no single way of doing this and valuation can be done in using different approaches. In addition, planning and establishing an appropriate measurement tool is essential if the acquirer wants to ensure a successful value creation process as well as keep track on the realizing synergies over time. Next the study takes a deep dive in the past research and historical performance of the mergers.

3.3 Past research and historical performance of mergers

Like mentioned in introduction, there is a substantial amount of empirical research on mergers and acquisitions. There is no single reason for the popularity of M&A-related research in the field of finance and management. Sirower and O'Byrne (2005) together with Cartwright and Schoenberg (2006) give a perspective on this saying that it is perhaps due to the unique nature of mergers and acquisitions that has drawn the attention of both researchers and practitioners on this topic. Looking back, a great amount of resources and time has been consumed in order to conclude whether M&As create value with a special emphasis on the value creation processes and underlying value drivers of transaction (Kiymaz & Baker, 2008; Ross et al., 2013, pp. 908-911). The general motivation has according to Krishnakumar and Sethi (2012) been "to under whether benefits from the [M&A] strategy have accrued or not". So far there is no consensus on this as some argue that transactions are value-adding and allocate resources into more optimal use. On the other hand, many think that mergers destroy shareholder value and rarely lead to any gains in company performance (Kiymaz & Baker, 2008; Krishnakumar & Sethi, 2012). This may be explained by the fact that researchers across all fields apply different methods and frameworks to drive their hypothesis and investigate value creation in transactions (Bösecke, 2009, p. 33). However, recent empirical research has shown that on average the acquired company's shareholders are the winners in the transaction i.e. gain most of the available value of the deal (Andrade et al., 2011; Sirower & O'Byrne, 2005; Agrawal & Jaffe, 1999).

Despite the vast amount of research, there is no consensus on what really is M&A performance (Uzelac et al., 2016; Gates & Very, 2003) and are mergers and acquisition in fact related to company performance (Rahman et al., 2016; Larsson & Finkelstein, 1999). This can be partly explained by the common problem surrounding M&A performance measurement. When thinking about a traditional acquisition, a considerable premium is paid in hope that the acquirer makes strategic endeavours and improvements that enhances the future performance of the company as well as realizes the project synergies. Only when the new company has achieved gains that exceed the stand-alone performance and has realized synergies to recap the paid premium, the firm can start generating new value for its shareholders. In addition to premium, there are always some one-time integration costs like costs of external advisory services and possible shut down costs of facilities and systems, not to mention possible dis-synergies and costs caused by business interruption of the two entities.

Synergies as a part of M&A performance has been studied through several topics (Fiorentino & Garzella, 2015). Fiorentino and Garzella (2015) categorize M&A synergy studies under three themes: pre-transaction synergy item identification, synergy realization in the M&A process and overall assessment of M&A value creation. However only a few studies have focused on developing a method to determine the correct synergies in transactions (Sirower & O'Byrne, 2005) and there is no consistent view on value and underlying synergies (Alhenawi & Krisnashwami, 2014). Although, researchers and practitioners cannot be fully blamed for this as finding a proper benchmark against which the post-merger performance can be compared is a tremendous challenge. According to Sirower and O'Byrne (2005), this is due to the uniqueness of corporate takeovers. First of all, when buying a company or asset the acquirer pays for it up front meaning that any changes cannot be implemented before the transaction between two parties is completed. Second, when considering transactions of publicly listed companies, paying a hefty premium creates an additional performance challenge as some of the potential gains are already reflected in the share prices of the independent companies (Sirower & O'Byrne, 2005; Broutherus et al., 1998).

Indeed, there are several different research methods used to measure M&A performance. In most studies the success of the transaction is measured by its financial impact (Kusstatscher & Cooper, 2005, pp. 4-6). To this date, most research have employed stock market –based event study methods in their quest to address the performance issues of mergers and acquisitions (Agrawal & Jaffe, 1999). Globally event study is the most often-used method for studying acquisition performance (Krishnakumar & Sethi, 2012; Larsson & Finkelstein, 1999; Sirower & O'Byrne, 2005).

Event studies refer to the methodology originating all the way to 1930's which assesses the performance of the merger through stock market's short or long term share price movements (Alhenawi & Krishnaswami, 2014; Sirower & O'Byrne, 2005; Krishnakumar & Sethi, 2012). Typically event studies are based on short-term abnormal returns at the time of announcing the transaction publicly (Agrawal et al., 1992; Das & Kapil, 2012). In practice this means calculating the normal returns of the firm using regression analysis and then using a market model to determine cumulative abnormal returns for a company on a chosen time period (Krishnakumar & Sethi, 2012). Event studies are based on the theoretical assumption that markets work efficiently and investors are unaware of the upcoming merger announcement at the time of release (Huyghebaert & Luypaert, 2013). Even though event studies have been the most popular method for evaluating M&A performance, the methodology has received loads of criticism and according to Larsson and Finkelstein (1999), is “subject to significant error” and most importantly don’t provide basis for comparing the stand-alone performance for pre- and post-merger performance evaluation (Sirower & O’Byrne, 2005). In addition, these studies pay only little attention to other important factors affecting M&A success such as the integration phase which on average contributes to most of the total value creation of the transaction (Larsson & Finkelstein, 1999). Moreover, market-based event studies rely on major assumptions about the functioning of global stock markets (Bruner, 2004, p. 35).

Another popular research method focuses on the accounting performance of the newly formed entity. Accounting-based studies compare the financial performance of the merged company typically over two to three year time period, and addresses industry-wide effects by comparing the results with selected peer companies (Krishnakumar & Sethi, 2012; Rahman et al., 2016). Accounting studies can be seen rather credible as they are based on verified financial statements, but on the other hand they don’t address the value of intangible assets and only provide historical information (Bruner, 2004, p. 35). In addition to more traditional account-based studies, the success of the transaction may be evaluated in terms of Economic Value Added (EVA). Sirower and O’Byrne used the EVA methodology to determine the future operating performance of the combined entity which is required to meet the paid premium (Sirower & O’Byrne, 2005).

Das and Kapil (2012) have conducted a thorough review of the empirical research on M&A performance. In general the studies include subjective and objectives measurements, and based on their study the measures can be categorized into four major groups: *accounting measures*, *market measures*, *other measures* and *subjective assessments on M&A performance*. Accounting measures include measures like asset growth, return on assets (ROA), sales growth, return on equity (ROE) and so forth. On the other hand, market measures have focus on shareholder’s wealth and assess it by cumulative abnormal returns and long-term market return. Other objective measures such as age of firm, deal value, market share and CAPEX (capital expenditure) rate include variables with involve both accounting and market returns as well as other operational measurements of the transaction companies. The last category, subjective measures, consists of measures like learning, innovation quantity and satisfaction. Subjective measures were found mostly in survey-based studies. (Das & Kapil, 2012)

The M&A performance can be measured through two dimensions: the chosen time horizon and the level of analysis. Zollo and Meier (2008) reviewed 88 articles considering M&A research between 1970 and 2006. The time horizon of the study may vary from days to years. The majority, 41% of all papers employed a short-term event study method. In addition to analyzing performance on a different time period, M&A performance can be studied by choosing an appropriate level of analysis all the way from a single task to the entire company. Zollo's and Meier's view on classifying performance measures is depicted in **Table 5** below. (Zollo & Meier, 2008)

Table 5. Classification of merger performance measures (subjective measures in regular typing, objective measures in italics) according to Zollo and Meier (Zollo & Meier, 2008)

Level of analysis	Time Horizon	
	Short-Term	**Long-Term**
Task	► Integration process performance ► Knowledge transfer ► Systems conversion	► Customer retention ► Employee retention
Acquisition	► *Short-term financial performance (event study)*	► Overall acquisition performance ► *Acquisition survival*
Company	► *Short-term financial performance (event study)*	► *Accounting performance* ► *Long-term financial performance* ► *Innovation performance* ► *Variation in market share*

When it comes to historical performance of mergers and acquisitions, there is a substantial amount of prior research focusing on evaluating the success of mergers. The performance has been evaluated by the forementioned methods, with event studies being the most popular choice. Generally speaking, regardless of the time period and used method, mergers and takeovers have not been successful and so-called failure rates have been between 40-70 % (Cartwright & Schoenberg, 2006; Eccles et al., 1999; Bower, 2001). According to Sirower (2000), some 65% of all acquisitions are unsuccessful and are unable to generate value for the acquiring company. Child et al. (2001) find that some 50% of all acquisitions fail whereas a study by Hunt et al. (1998) a few years earlier discover that roughly 45% of all takeovers are not value-adding. According to Agrawal et al. (1992) study, the wealth loss and value destruction seems to be significant both in terms of absolute loss and time – after completing the merger shareholders of the acquiring company suffer up to five years.

Decades of research literature on M&A success can be concluded by saying that in most cases mergers or takeovers fail to deliver value and are detrimental to acquiring company's shareholders' wealth. When it comes to more practical studies and evaluating M&A performance through synergies, global management consulting company McKinsey & Company studied the topic in 2002. Using client surveys and case studies the company assessed whether companies met the projected revenue and cost synergies. The results of the study were in line with the empirical research on synergies: in most cases mergers were able to deliver the cost-based synergies, but there was a great dispersion on the revenue side, mostly due to estimation error. The quantitative results of the study are shown in the **Figure 21** below. (Christofferson et al., 2004)

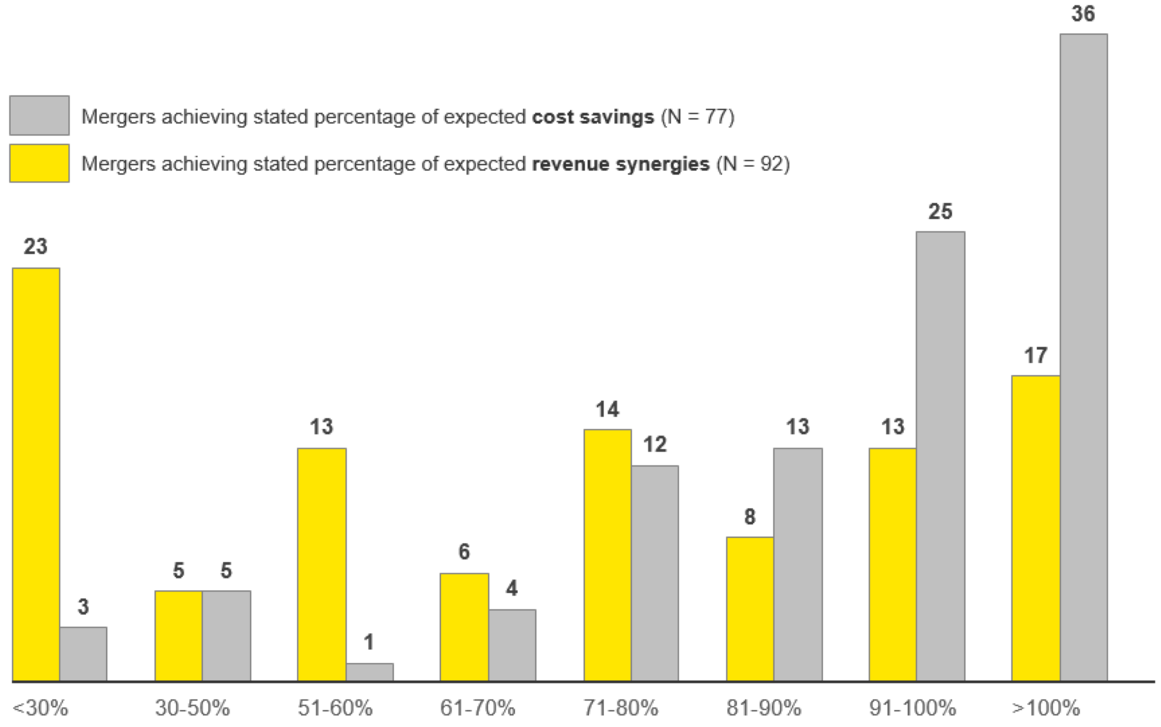

Figure 21. Results of McKinsey & Company Postmerger Management Practice client survey from 2002 (Christofferson et al., 2004)

Now having laid the foundations of M&A performance by taking a look at the past research on the topic, the next part of this chapter moves us closer to the actual research scope by assessing the use of synergies a performance measurement in transactions.

3.4 Using synergies as a measurement for M&A performance and success

Global professional services company Ernst & Young (EY) in their Global Corporate Development Study in 2015 discovered that according to the interviewed senior executives, value of synergies delivered versus planned and synergy delivery against timetable were the second and third most important metrics for monitoring and reporting the integration efforts (Ernst & Young, 2015). This highlights the importance of this sort of study on synergy measurement and their use as performance measurement as there clearly are major challenges regarding the synergy capture and its measurement.

To put it bluntly, closing the deal is not a true measure of success when it comes to mergers and acquisitions. Even though it requires considerable amount of time, money and effort to close the deal, capitalizing on the identified synergies while minimizing the value leakage is the key to success (Arden & Nappi, 2005). Thus post-transaction activities and performance has received more attention both in academic research and empirical studies. In general, the post-merger performance of a transaction can be defined as the total amount of value which is created by integrating two previously independent entities and is the ultimate result of a merger or takeover (Rahman et al., 2016). To be more precise, Zollo and Meier (2008) have defined the M&A performance as “the amount of value, in cost efficiencies and revenue growth, generated by the complete transaction process”. Even though each transaction and integration process is unique, in the end the deal is only successful if it reaches the set transaction objectives and the value created through exploitation of synergies exceeds the pre-deal value of the company plus the acquisition premium paid (Arden & Nappi, 2005). The key question is whether the newly combined company is capable of generating the value (Rahman & Lambkin, 2015) and how the performance gains achieved through synergies is measured and validated. In order to have effect on value creation, according to Damodaran (2005) synergies need to have influence on at least one of the fundamental value creation processes: higher cash flows from existing assets, higher expected growth, a longer period of growth or lower cost of capital.

There are many frameworks and methods that utilize realized synergies as the determinant of M&A success (e.g. Larsson & Finkelstein, 1999; Capron, 1999). According to Fiorentino and

Garzella (2015) the past research on synergies can be categorized into three major streams: *identification of the role of synergy in growth strategies and as a M&A motive*, *analysis of synergy realization in the transaction process* and *the overall assessment of value creation in mergers and acquisitions*. This thesis falls into the second category. As the performance of an acquisition has been typically assessed using event-studies or accounting-based methods, now in the past two decades the value difference between realized synergies and projected synergies has been used in increasing amount to address the performance and success of a transaction (Fiorentino & Garzella, 2015). Larsson and Finkelstein (1999) shed some light on this topic by stating that "viewing M&A performance in terms of synergy realization avoids the problem of event studies capturing only anticipated performance because the emphasis is on benefits that are actually realized after the deal is completed". It is a commonly known issue that by using accounting-based methods and measures the difference in performance between the combined entity and the stand-alone operations of the companies cannot distinguish what part of the increase is a result of the transaction and what amount of the gains would have accrued even if the companies would have remained independent. As synergy realization is solely based on the value creation of the merged entity and how efficiently the acquirer and target are able to combine the operations (Ghosh, 2001), using synergies as a determinant for M&A performance may be able to provide a more accurate measure than the more commonly used measures (Larsson & Finkelstein, 1999).

Before actually using synergies as a performance measurement, a significant amount of planning and designing needs to take place. First of all, the appropriate metrics of M&A performance need to be determined and built. The persons responsible for integration and synergy realization need to validate that which metrics can be relied upon and how the findings can be used and compared against the overall progress of the ongoing integration. Secondly, in addition to choosing the time frame and appropriate metrics, one needs to be clear of whose performance is measured: the acquirer's or the target's? The two parties involved in the merger may have totally different expectations and objectives regarding the transaction, and the sought performance targets can have a different impact on the two sides.

In their in-depth study of M&A performance measurement Gates and Very (2013) base their research on the hypothesis that integration either creates or destroys value through two scenarios: value creation scenario or value leakage scenario. In short, value creation scenario consists of the company's ability to exploit revenue- and cost-based synergies in addition to being able to preserve the intrinsic value of the two companies now consolidating into one. On the other hand the value leakage scenario suggests that if the company is incapable of delivering synergies in time or delivering them becomes too costly, there is no value creation or value may even be destroyed. The authors have built a framework, depicted in **Figure 22** below, which can be used at high level to identify the appropriate measures of integration performance. The appropriate and adequate measures for controlling both value creation and leakage depend upon the strategy, synergies and the integration design, which is detailed in the integration plan. (Gates & Very, 2003)

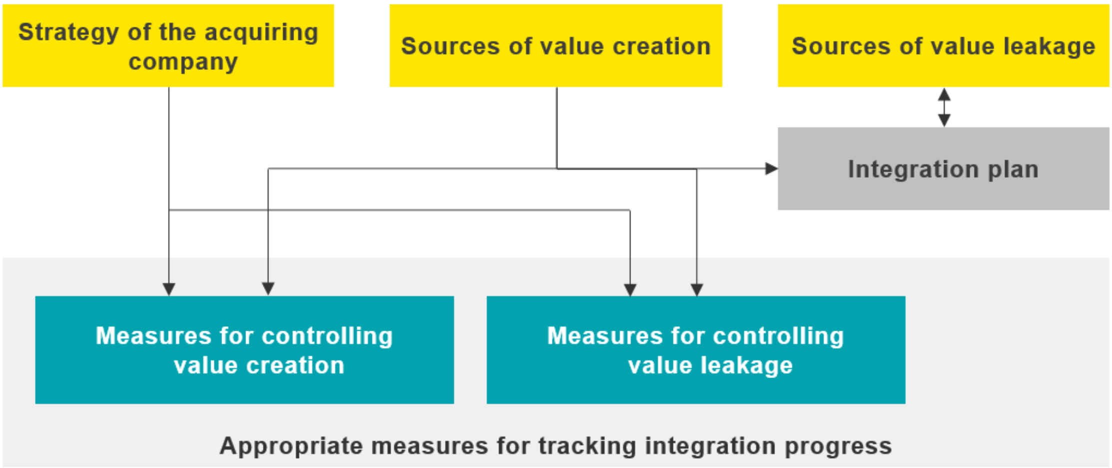

Figure 22. High-level framework for identifying measures of integration performance by Gates and Very (Gates & Very, 2003)

Different synergy items (e.g. back-office integration or cost reduction through asset divestiture) have different impact on the overall value creation and thus on acquisition performance. Overall, according to Arden and Nappi (2005), a successful acquisition should result in significant and measurable cost savings through for example reduction in overhead. Capron (1999) has investigated the performance of horizontal transactions and concludes that the elimination of redundant activities and assets have a positive impact on the performance. He also takes revenue-based synergies into account by saying that "…performance is also influenced by the ability to enhance revenues by accessing complementary resources" (Capron, 1999). In his study in 1999, Capron used a simple theoretical model which based on synergies to assess the performance of horizontal acquisition. The model is visualized in **Figure 23** below. The model is based on the assumption that acquisition performance is based on either cost- or revenue-based synergies and exploiting either acquirer's or target's assets or other resources has negative or positive effect on the post-merger performance. (Capron, 1999)

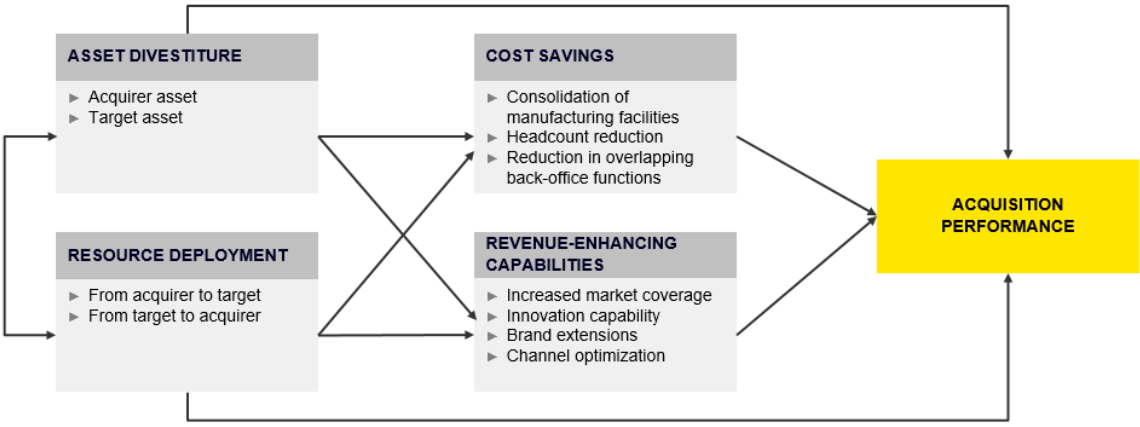

Figure 23. Capron's theoretical model of synergy-based acquisition performance (Capron, 1999)

Typically cost-based synergies are relatively easy to identify and capture, as reductions in overhead or redundant assets can be straightforwardly valued using for example cash flows. For revenue-based synergies, increase in revenue through e.g. cross-selling is a common metric. Also increased market share can be a measurement of success as having a larger market penetration allows the company to have better pricing flexibility which results in increased sales and ultimately reflects to shareholder's wealth gains (Arden & Nappi, 2005).

When evaluating the post-acquisition gains in operating performance of the company, synergies provide a good approach to assess the possible changes in performance. Despite a vast amount of research there is still no consensus whether transaction create any improvements in operating performance (Powell & Stark, 2005). Several studies (e.g. Ghosh, 2001) have been investigating companies' industry-adjusted operating cash flows both pre- and post-transaction. Using operating cash flows provides a somewhat reliable benchmark as they cannot be manipulated such as other measures like earnings (Powell & Stark, 2005), but the improvements may be related to payment method of the acquisition based on theoretical and market-based studies (Ghosh, 2001).

One of the major issues regarding synergy-based performance measurement is how to address the non-financial gains related to the merger. In successful mergers, retaining the key employees from both of the companies can increase the performance of the new company and result for example in increased revenues or innovation capability (Arden & Nappi, 2005). Identifying, capturing and measuring intangible operating synergies which eventually lead to increase in growth opportunities is utmost challenging but not impossible.

Figure 24 below illustrates the pre- and post-integration present values of the company. The value of the company after integration is typically lower than the pre-acquisition value as there are always some integration costs involved in the process. Thus, in order to reach the required and targeted value gains and justify the paid premium, the company needs to realize cost- and revenue-based synergies. This kind of thinking lays the base for using synergies as M&A success measurement: *if the new combined company is able to create enough value by exploiting cost and revenue synergies that it exceeds the pre-acquisition value plus acquisition premium, from synergies' point of view the acquisition can be seen as successful.*

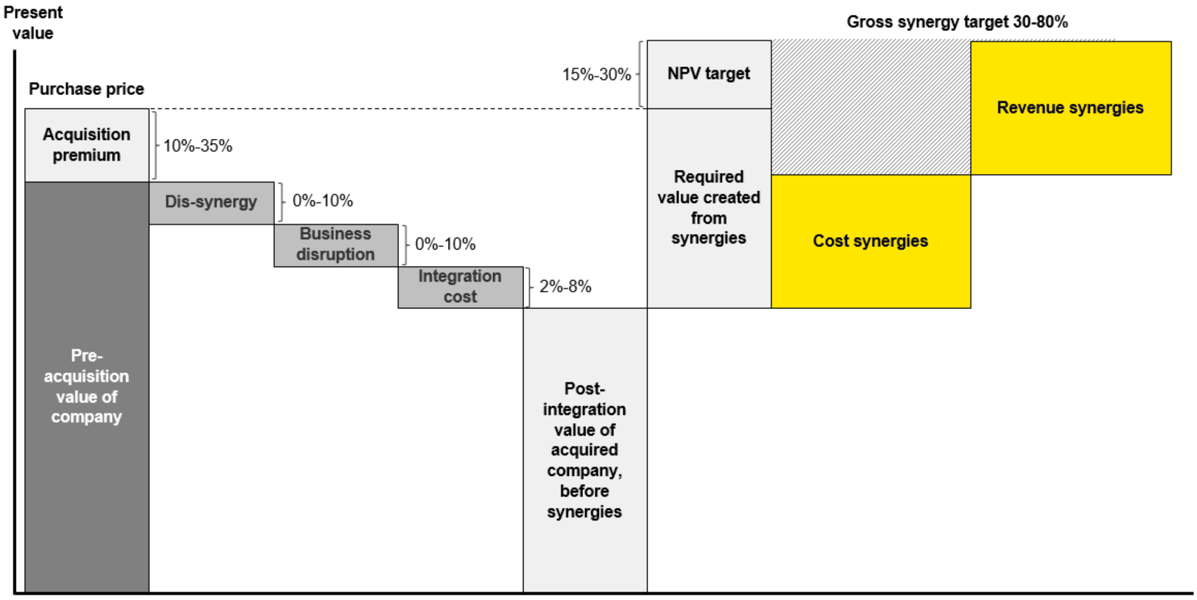

Figure 24. Visualization of value analysis and synergy requirements in a transaction

To conclude chapter three, based on the presented theory one can say that identifying, validating, modelling and capturing synergies is not unambiguous. Synergies seem to be a good alternative for measuring the performance of the merger by providing a holistic view on the value creation. M&A performance in general is linked to organizational capabilities and previous experience of the organization and its individuals: having a dedicated M&A function has positive impact on the success of the transaction.

4 MANAGEMENT SURVEY ON SYNERGIES AND TRANSACTIONS

In this fourth chapter the primary research method, qualitative management survey and its design is presented. The aim of the chapter is to give reasons why survey is the most suitable research method on the topic of the thesis and also bridge the presented theory to the empirical part of the study. Majority of the chapter focuses on describing the results of the survey.

4.1 Survey as a research method

The empirical part of this thesis is built on the management survey which took place in March 2019. Survey was selected to be the primary research method of this thesis due to its strong advantages in investigating M&A topics and issues. In general, the essence of survey as a research method can be seen as way to collect relevant information about a population of special interest. By using a survey as a research method and method of primary data collection I am able to answer to the raised research questions, establish a baseline for comparison and all in all examine the overall attitude towards synergies and transactions (Isaac & Michael, 1997, pp. 136-137). Limitations of the selected research method are described in chapter 1.3.

Survey as a research method has several advantages which are especially useful when studying M&A-related topics. First of all, members (or respondents in general) of the selected sample group can be treated as anonymous. This is important and almost a prerequisite when trying to find out people's perception regarding sensitive topics like which acquisitions are a perfect example. Transactions involve highly confidential information like for example target's financials and operating model, pricing and IT-infrastructure that the general public should not be aware of. Second, using a survey allows obtaining information from a large sample of population thus making the results and comparison statistically significant. Lastly, survey is an adequate tool for obtaining information about attitudes and other topics that are otherwise hard or even impossible to measure using different techniques. On the other hand it is important to bear in mind that these sort of questionnaires do not allow in creating more in-depth research itself. This problem however has been tackled by offering the respondents a possibility to participate in more detailed face-to-face interview and case study. This case study in not included in the scope of this thesis. (McIntyre, 1999, pp. 83-84)

4.2 Survey design and execution

In general, survey design can be divided into two distinct steps. First of all, a so-called sampling plan must be created. This plan is used to select the wanted sample of a given population and it also describes the approach, adequate sample size in addition to choice of media through which the survey will take place. Survey media includes both telephone and mailed surveys as well as face-to-face interviews. (Salant & Dillman, 1994, pp. 3-4). This sample group of this survey is reached by electronic mail as it has proven to be the most efficient and easy-to-use solution for masses, and also a convenient way to reach busy executives. The next step is to establish procedures for estimating the reliability of the results and population estimates. This also includes identifying the adequate response rate and level of accuracy (Salant & Dillman, 1994, p. 3).

The target population of this study is the executives of Finnish-based companies who are responsible for M&A activities and/or business development of the company or its division. This means in practice means that the survey is sent to a selected group of CEOs, CFOs, M&A directors, vice presidents of business development and strategy et cetera. The long list of the target companies contains over 200 companies, most of which are publicly listed. The list was created by reviewing which Finnish companies had been in an acquiring role in transactions in 2012-2018 and have relevant size in terms of annual revenue.

As this study is sent to busy executives, closed-ended questions was the choice of question format. Closed-ended questions mean that survey respondents has to choose the answer from a given set of responses (McIntyre, 1999, p. 75). By using closed-ended questions, the survey can be completed in shorter time and also the comparing and analyzing the results is much easier than if survey consisted of open-ended questions where the respondent can write down their answers freely.

The survey was structured in a way that it allows a comparison between companies and industry sectors. Survey consists of three modules which are then later used to build a simple benchmark for the respondent companies. The survey questionnaire can be found in the **appendices A2**.

In April 2019 the survey was sent to the selected group of people via email which contained a link to Webropol -survey tool containing the questions and description of the survey and its use. Webropol allows easy gathering and exporting of answers for further analysis.

Next I will go through the results of the survey. The results are also reflected on the theory presented in earlier chapters to see whether they are in line with prior research and common assumptions on synergies.

4.3 Survey results

The management survey was open for eight days between Tuesday 2nd April and Wednesday 10th April. During that time, 9 respondents answered to the survey. The response rate was slightly lower than initially expected, but taken that the survey was sent to the very top management of large Finnish-based corporations who either have an executive assistant handling their daily email and meeting scheduling, and that these kind of executives are very busy in general, I cannot be disappointed with the response rate. Luckily the survey was built so that all the questions need to be answered and the questions were detailed enough to provide insight to this thesis, some kind of comparison and analysis can be made on the results. However as the sample is relatively small, the findings and other implications should be viewed with caution. All in all, due to the nature of the topic and vast amount of previous research, the low response rate should still not have any drastic effects on the key findings and relevance of the study.

4.3.1 Respondent characteristics

Four out of nine respondents were C-level executives i.e. chief executive officer, chief financial officer etc. Five respondents worked in the acquiring company either as a senior vice president, vice president or director. All respondents had some sort of M&A experience meaning that they had involved at least in a few transactions. Five respondents stated that they had significant M&A experience and been involved in numerous transactions with a major leadership role and being accountable for the results. The respondent characteristics are depicted in **Figure 22** below.

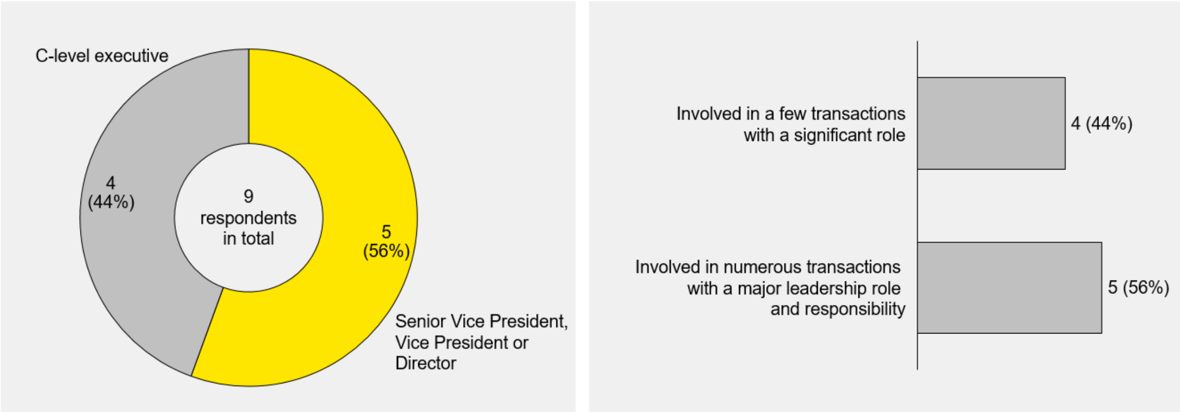

Figure 25. Survey responses regarding respondent characteristics and their M&A experience

Every respondent has a major position in the company which is in a way important when it comes to the reliability of the survey results. Also as the respondents possess a high rank in the organization, they typically are in the leading role in the transactions and are accountable for the progress and in the end the success of the transaction, meaning that they should also have a good view on the pursued synergies.

4.3.2 Transaction characteristics

The respondents were asked to describe the characteristics of both their own company (the acquirer) and the target company. The acquiring companies operate in several different sectors: business professional services, consumer products, engineering & industrial products, power & utilities, real estate, hospitality & construction as well as in the TMT-sector (technology, media & telecom). The results are fully in line with the overall Nordic M&A activity in recent years as engineering & industrial products and TMT -sectors have in general been the most active sectors in terms of merger and acquisition activity, as can be seen in **Table A2** in the appendices. These two sectors have experienced some consolidation both in local and global scale, and major companies operating in these sectors are doing so-called ‘bolt-on acquisitions’ to acquire new knowledge, capabilities and to increase their market position in general.

Only one company’s revenue was below 100 million threshold with 3 companies’ annual revenues being over 1 billion euros in 2018. 8 out of 9 companies were either publicly listed or privately owned which is very much in line with the expected results as the initial long list of the companies reached in this survey comprised of companies which are either listed in Nasdaq Helsinki stock exchange or a privately owned either by an private equity company. These type of companies typically are much more active in terms of M&A than for example a family-owned or government-owned companies, as the demand for growth and required return on equity is often considerably higher and acquisitions are seen as one of the most powerful ways to reach this. Two thirds of the acquiring companies' were highly active in terms of M&A activity, meaning that they have acquired more than five companies during the past 6 years, and all of these companies are publicly listed. Generally speaking most publicly listed companies state in their strategies that the company is ready to do acquisitions so it isn't a surprise that the most active companies in this survey are publicly listed companies. The characteristics of the acquiring company are shown in **Figure 26** below.

Figure 26. Survey responses regarding acquiring company characteristics

The respondents were also asked to describe the characteristics of the target company. Based on the results one clear observation is that all the deals were same sector deals (horizontal mergers) i.e. the acquirer and the target were both operating in the same sector. This also reflects when the respondents were asked to describe the target company's relativity to the acquiring company: 5 out of 9 companies sold similar products and/or services to similar customers as the acquirer. Also the target companies were considerably smaller than the acquirer when measured by company's annual revenues: four targets had revenues less than 50 million euros indicating that companies prefer to acquire smaller companies as the integration of smaller, mid-sized companies is often more successful and not that complex to perform.

Primary motives for the transactions differed between the respondents. Revenue enhancement was the most common motive with cost reduction, increasing market share, business diversification and overall economies of scale also being listed. In general, synergies were seen as an important factor for the deal and in four transactions synergies were a fundamental driver for the deal (see **Figure 27** below). In other words, the identified and validated synergy benefits ended up being important for the go-ahead decision of the transaction. This finding is aligned with the theory presented in earlier chapters which show that synergies are in general seen as an important deal driver and an integral part in most transactions. For these transactions, the synergies identified and validated in the pre-signing due diligence processes seem to have had a major effect on one the fundamental decisions of the transaction: whether to proceed into signing and actually closed to closing the deal, or whether to back off and not to acquire the target company.

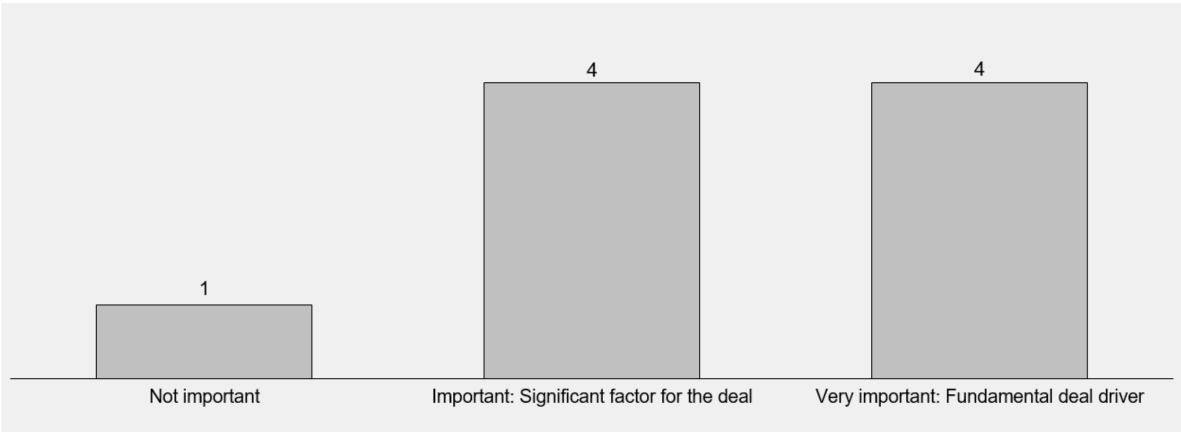

Figure 27. Survey responses regarding synergies importance in relation to the go-ahead decision of the transaction

4.3.3 Synergy identification, calculation and validation

Majority of the survey focused on synergies and several questions regarding the identification, calculation and validation of the synergies were presented to the respondents. Based on the results the synergies were identified either by an assigned group (external party i.e. M&A advisor, bank and/or consultants or by an assigned synergy team) in the due diligence process or by using a systematic approach to check the potential synergy areas along the value chain.

The used practices for synergy identification are presented in **Figure 28** below. Using external experts such as M&A advisors in transactions is very common and often the synergy identification and calculation is part of the advisors' work. Advisors most definitely use a systematic approach, do multiple iterations and have assigned people to work on the synergy-related topics, but that is something that the survey results do not explicitly point out.

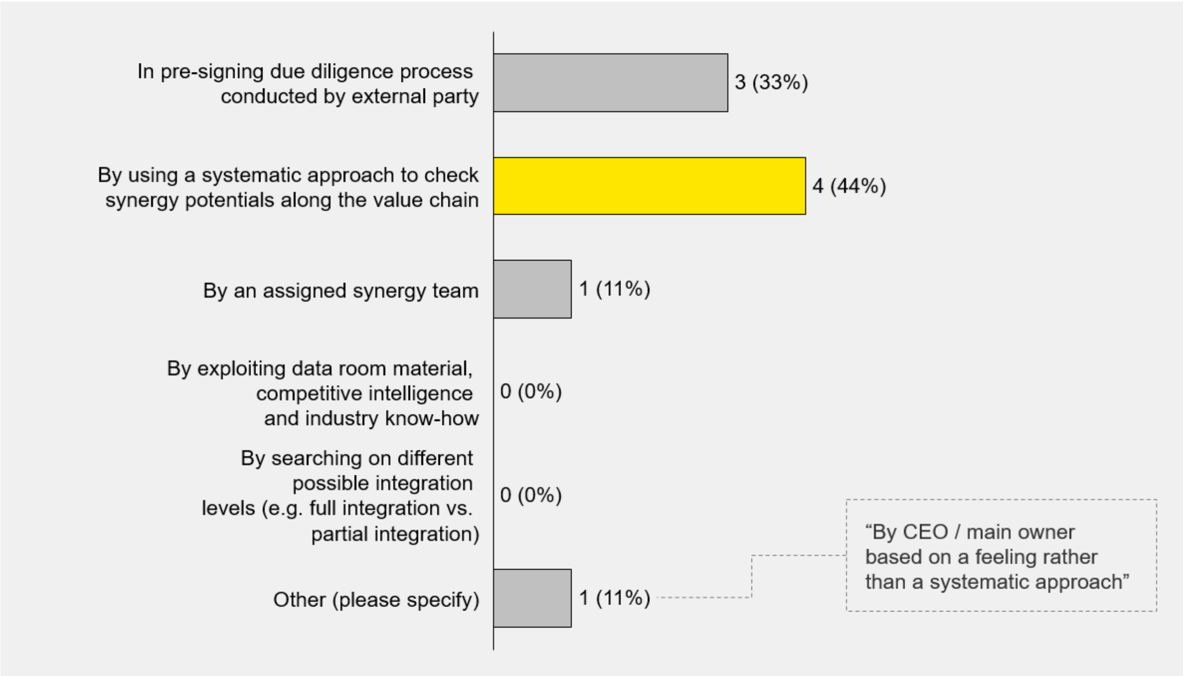

Figure 28. Survey responses regarding synergy identification practices

In the transaction in which the synergies were identified by the CEO based on a feeling, both the acquirer and the target were below 50M€ in revenue and the acquiring company was not active in the field of M&A. This finding is rather consistent with the general assumption that smaller companies with little M&A experience and activity do not use systematic approaches and processes not only when it comes to synergies but to the transaction in general. This is due to the fact the smaller companies do not have the resources or previous transaction experience like larger corporations do typically have.

All respondents said that the synergies were identified in pre-signing phase, which is very much in line with the presented theory that indicates that synergies are often identified, and also validated, before signing the deal as in many cases the synergies have a major role in the transaction and as the results of the survey show, are an important factor in regards to the go-ahead decision of the deal. According to the survey results, the synergies targeted to achieve from transaction were calculated either relying on previous deal experience (44%) or by building a detailed bottom-up model for calculating and quantifying the potential synergy items (56%). No respondent said that they primarily relied only on third-party inputs, when it comes to calculating synergies.

According to the survey results, in those transactions where the found synergies play an important role, the synergy assessment has an impact on the valuation of the acquisition target (see **Figure 29** below). Five respondents out of eight said that the synergy assessment had a significant impact (>10% of the final valuation) on the valuation of the target. This finding supports the theory presented in chapter 3.2 by e.g. Damodaran (2005) and Loukianova et al. (2017) which state that the estimates on the additional value that the identified synergies are projected to create is a fundamental part of the valuation of the target.

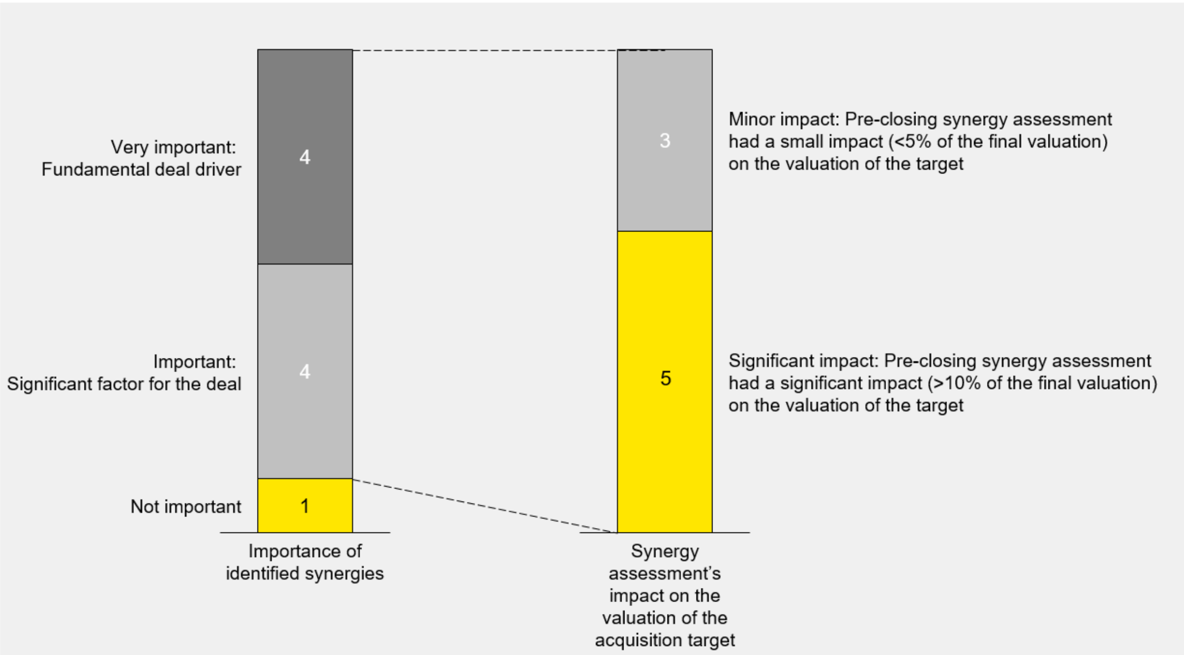

Figure 29. Survey responses regarding synergy assessment's impact on the valuation of the acquisition target

Figure 30 below describes the survey responses regarding the synergy validation and validation practices. In 6 out of 9 transactions queried in the survey the identified synergies were validated based on fact based investigations before signing the deal. In those 6 cases the validation was done either by reviewing synergy cases by challenging financial and operating model assumptions (n = 2) or by conducting management and/or expert interviews (n = 4). In practice, typically the identified synergies are often validated with the senior management of the company for example in workshops or other working sessions, or in more in-depth interviews with external industry experts that have profound knowledge and insights on the industry. In larger transactions, challenging the financial and operating model assumptions and larger data sets becomes more accurate way of validation, and through more intense iteration and pivoting can provide findings that in the end can result in synergies valued in millions.

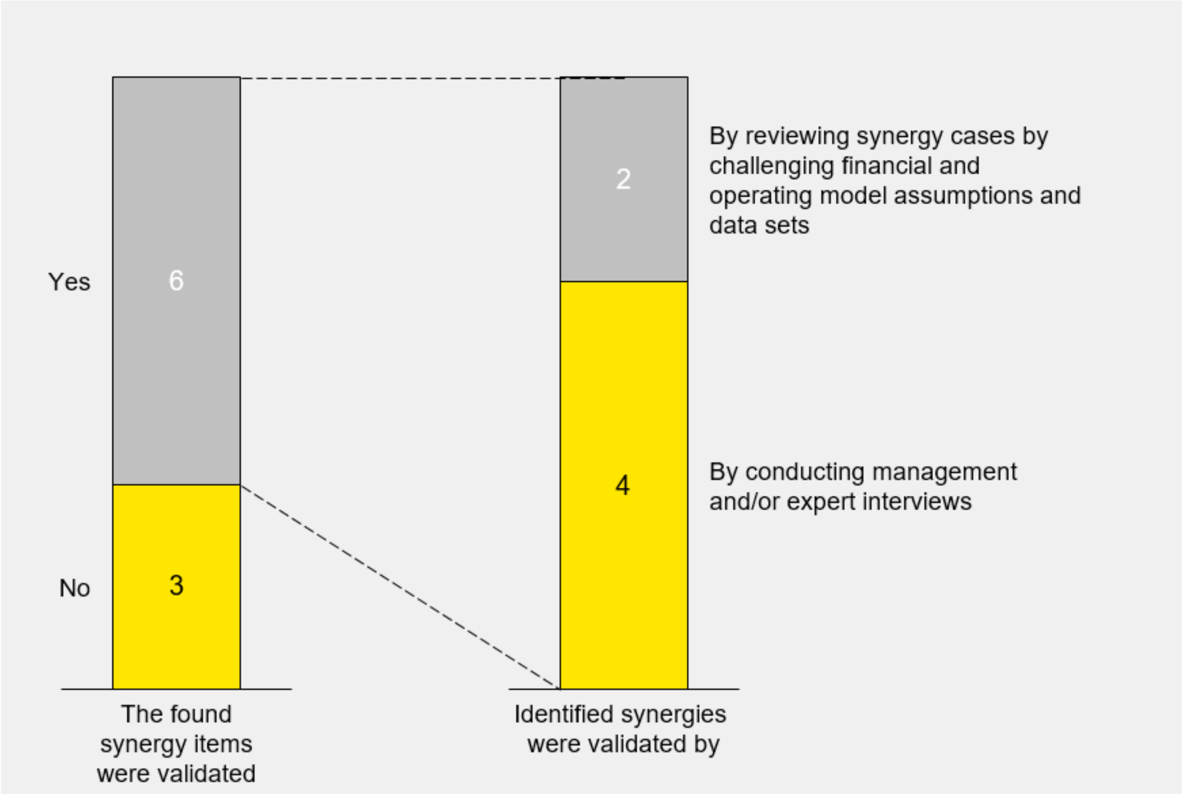

Figure 30. Survey responses regarding synergy validation and validation practices

In those transactions that the found synergy items were not validated based on fact based investigations, the synergies were either not important (n = 1) or important (n = 2) factor for the deal. Vice versa, in the acquisitions in which the synergies played a major role i.e. were a fundamental driver for the deal, the synergy items were validated, and the synergy assessment had a significant impact (>10%) on the target valuation. These findings are logic and can partly be explained by common sense: in those acquisitions in which the synergies are an integral part and one of the key motives driving the transactions, the acquiring company and its management wants to be certain on the identified synergies and validate the numbers, for example to be able to provide a holistic view on the contemplated acquisition to the board of the company and be able to communicate the acquisition to the investors who are typically interested in the in the benefits, reasons and consequences of the transactions especially in terms of financial impacts.

4.3.4 Pursued synergies and synergy realization

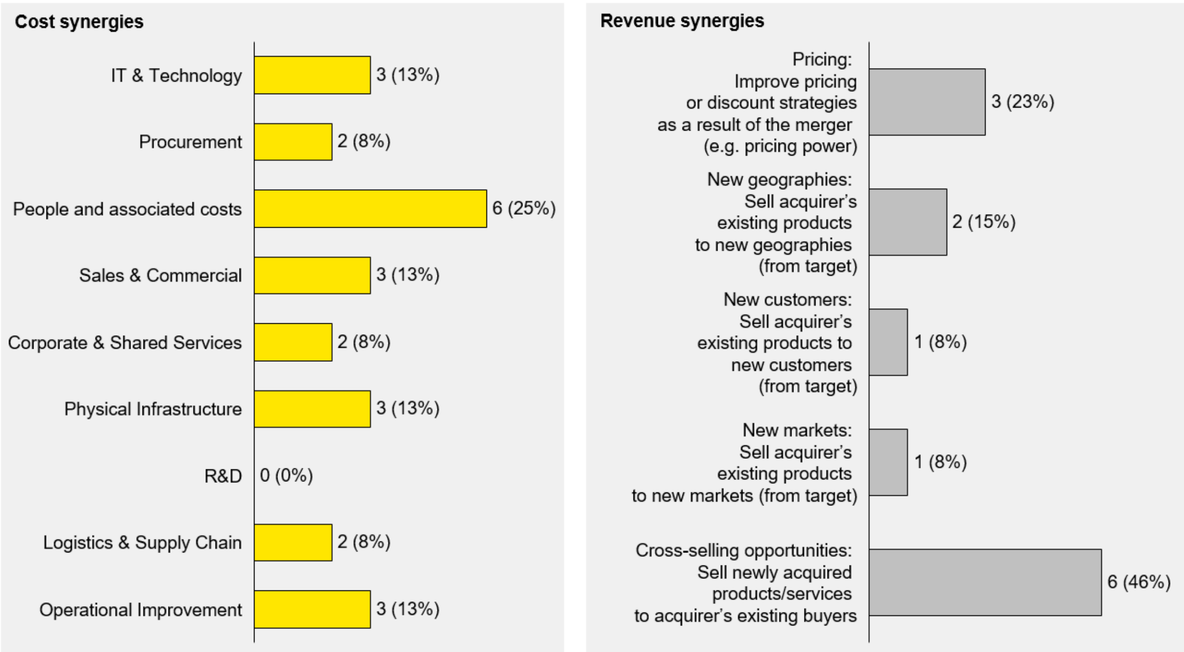

Figure 31. Survey responses regarding the pursued cost and revenue synergies

Figure 31 above shows the cost and revenue synergy items that the acquirers targeted from the transactions. Overhead reductions (i.e. people and associated costs) together with costs related to IT & technology and operations (sales & commercial, physical infrastructure and operational improvement) appear to be the synergies most sought after. These answers are aligned with the findings from literature review as well as with the experiences from past transactions as these synergy items are typically the ones that have the most overlap between the companies and cause the largest costs for the firm. Co-operation negotiations followed by employee layoffs are perhaps the 'easiest' and most straightforward ways of reducing costs of the newly combined companies, especially in the shared group and support functions such as HR, IT and such, and thus the people and associated costs -category shows as the primary cost synergy item in the survey. When it comes to IT and technology-related synergies, in the long term it is beneficial for the combined company to be operating in a single IT operating model and take advantage of the economies of scale in IT-operations and not to balance between two so-called ‘legacy’ systems of the previously independent companies.

Based on the survey responses, the acquirers seem to be pursue cross-selling opportunities i.e. to sell the newly acquired products and/or services to the existing customers of the company over other revenue-based synergy items. This can partly be explained by the transactions characteristics: all deals did take place within the same sector indicating that the acquired company’s product/service portfolio probably matches rather well with the acquiring company and allows selling to already existing clients. In addition, cross-selling opportunities are among the most common revenue-based synergy benefits that companies seek to target from acquisitions – selling expanded offering to existing customer base is a simple way to increase the company’s revenues and doesn’t typically require any major changes to the operating model or sales processes of the acquiring company. Acquirers also targeted benefits related to pricing: acquiring competitors and thus increasing the pricing power of the company can result in larger revenues both on short and long term.

Like for any other even slightly important objective, process, decision or other business related topic in the company, there is someone ultimately responsible for synergies and their realization in the transaction, too. This was also surveyed from the respondents. According to the responses, either the head of the business unit / department (n = 5) or the chief executive officer (n = 4) was ultimately responsible for the synergies. Acquiring a company is often a strategic decision for the firm and requires major efforts from them the whole organization, especially from the top management who typically are responsible for the progress of the actual deal and integration processes. In larger transactions it is very common that the chief executive officer of the company sits on top of the whole transaction and is responsible for making important decisions and addressing most pressing topics, as in many cases the acquisition may set a new direction for the company or in other way affect the entire organization and its daily operations of which the CEO is responsible of. The M&A leader or chief strategy officer are typically responsible for the transaction processes, screening, timing, negotiations and valuation of the target as well as coordinate the M&A-related work in the organization and report the progress to the executive management, but as their role is more focused on the business development and strategy instead of actually running the business, it is no surprise that that these options did not receive any answers in the survey. Also in larger corporations or in groups which consists of multiple business units / areas, the head of the business of which the contemplated acquisition is planned to be part of is typically the responsible for the transaction. Those who is responsible for the transaction as a whole is typically the one responsible for the synergies and their realization, too.

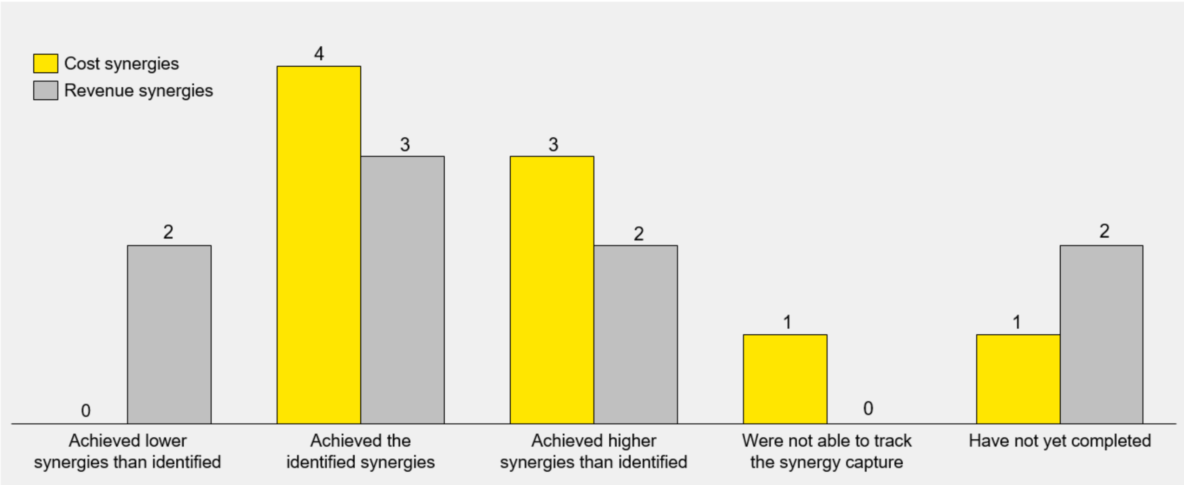

Figure 32. Survey responses regarding cost and revenue synergy realization

Figure 32 above shows how the acquiring companies have achieved the cost and revenue synergies. The answer show that generally speaking the companies have been able to realize the identified cost and revenue synergies. Even though there is some dispersion in the responses, they show the similar trend as McKinsey's study (see **Figure 19** in chapter 3.3) from 2002: majority of the companies were able to achieve the target cost synergies whereas the revenue synergies were not achieved with same precision. In one transaction the company was not able to track the synergy capture in terms of cost synergies. In that acquisition the synergies were, according to the survey response, not important and the synergy items were not validated. In addition, there was no specific tool or measuring system for tracking and measuring the synergy realization, which to large extent might explain why the company was not able to track the synergy capture.

According to the survey responses, in two transactions in which the company achieved lower revenue synergies than initially identified the other company pursued pricing power, cross-selling opportunities and revenue synergies related to selling to new customers. One probable explanation for this is that the company had set the bar and expectations a bit too high and tried to pursue revenue-related benefits on multiple fronts. Overestimating the synergy targets and the organization's capabilities to achieve the synergies is a common problem in many transactions. Also generally speaking, companies have low ability to control the achievement of revenue synergies if compared to cost synergies.

Most respondents (n = 6) said that it took 1 to 2 years to realize all targeted synergies, and only one respondent expected the synergy realization to take from 2 to 4 years. In general it typically takes more time to achieve revenue synergies meanwhile certain cost synergy items like general and administrative cost reductions can be achieved in less than a year from closing the deal.

In six of the nine acquisitions the main reason for not being able to realize all expected synergies was that there was a mismatch in the identified and actual potential synergy items (see **Figure 33** below). A common characteristics in these six transactions was that the validation of the identified synergies was done by conducting management or expert interviews, rather than exploiting any benchmarks or data from previous transactions, or by challenging financial and operating model assumptions. Because the management and experts may often lack details required to fully validate synergy estimates, validating the synergies only through interviews is not the most effective and reliable way. Also what can be observed from the responses is that in all transactions, the synergy realization was measured and tracked in one way or another, and almost every company (n = 8) had some kind of plan in place for synergy capture, although most probably the depth and level of detailed between these synergy capture plans differs greatly between the respondent companies.

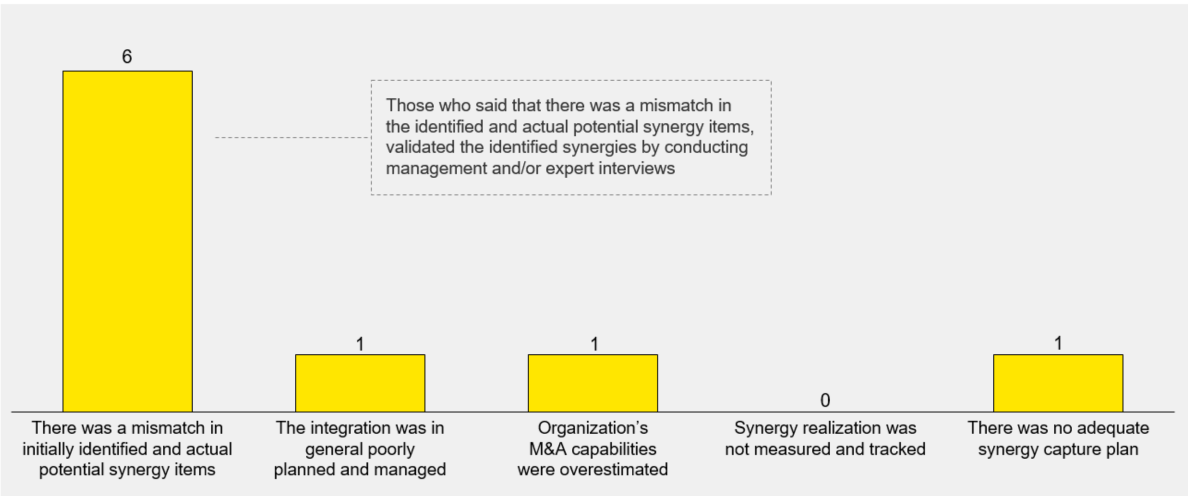

Figure 33. Survey responses regarding the reasons for not being able to realize projected synergy benefits

Like described in the earlier chapters, acquisitions and integrations are full of stumbling blocks and challenges for the acquiring company, and many claim that the integration is the hardest part of the entire transaction process. According to management survey responses (**Figure**

34), enabling the culture cohesion between the personnel of two companies and integration of IT and other core operations represent the main challenge for the acquirer in the integration process. Cultural differences arise also in domestic transactions, and for example can stem from factors such as different ownership, different maturities and size or different histories between the companies. Aligning the future company culture is one of the most hardest tasks that the management faces and a 'must-have' if the newly formed company wants to achieve the set targets and thrive in the long term.

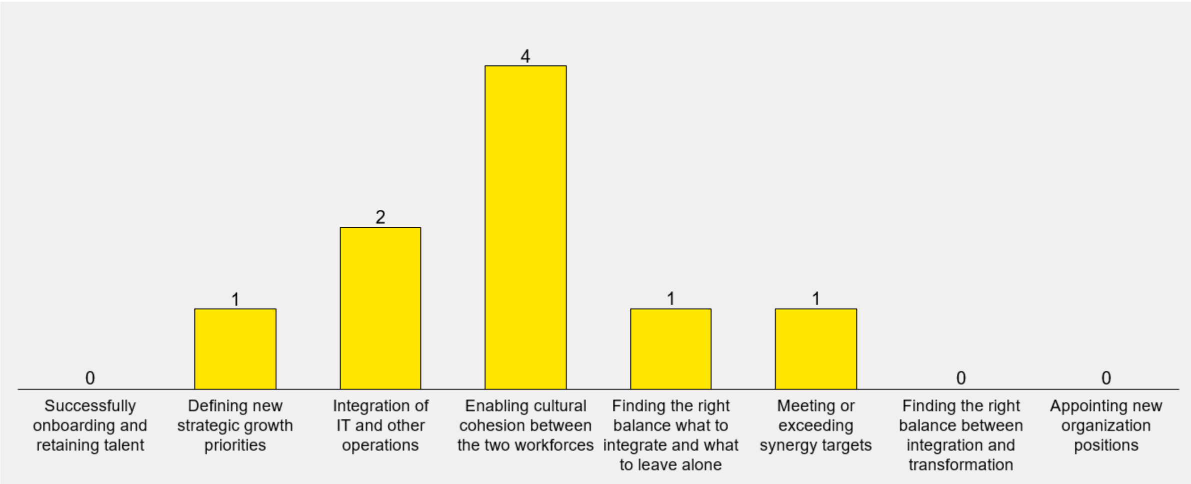

Figure 34. Survey responses regarding the integration challenges

In chapter 3.1. the relation between M&A capabilities and M&A performance was introduced. The respondents of the survey were asked to describe the M&A capabilities of their company using the same four staged model (see **Figure 14** in chapter 3.1.) that was presented in the theory. Based on the survey responses (see **Figure 35** below), 5 out of 9 respondents described their company to have 'advanced M&A capabilities' and 4 to have 'limited M&A capabilities'. For 3 companies out of 4 with limited M&A capabilities had no specific tool or measurement system in place for tracking and measuring the realization of synergies and also relied primarily on previous deal experience when doing the synergy calculations. In addition, those companies with limited M&A capabilities did not have such high M&A activity. Vice versa, the acquirers with advanced M&A capabilities described the magnitude of their M&A activity as 'highly active' indicating that they have done more than 5 acquisitions during the selected time period of 6 years. One probable explanation for this difference is that respondent companies who have actively acquired other companies in the past year have gained more experience on transactions and developed their internal processes and capabilities to be able to drive the acquisition and integration processes more effectively and successfully. These results are also aligned with the theory presented (e.g. by Zollo & Singh, 2004 and Ferrer et al., 2013) in chapter 3.1.

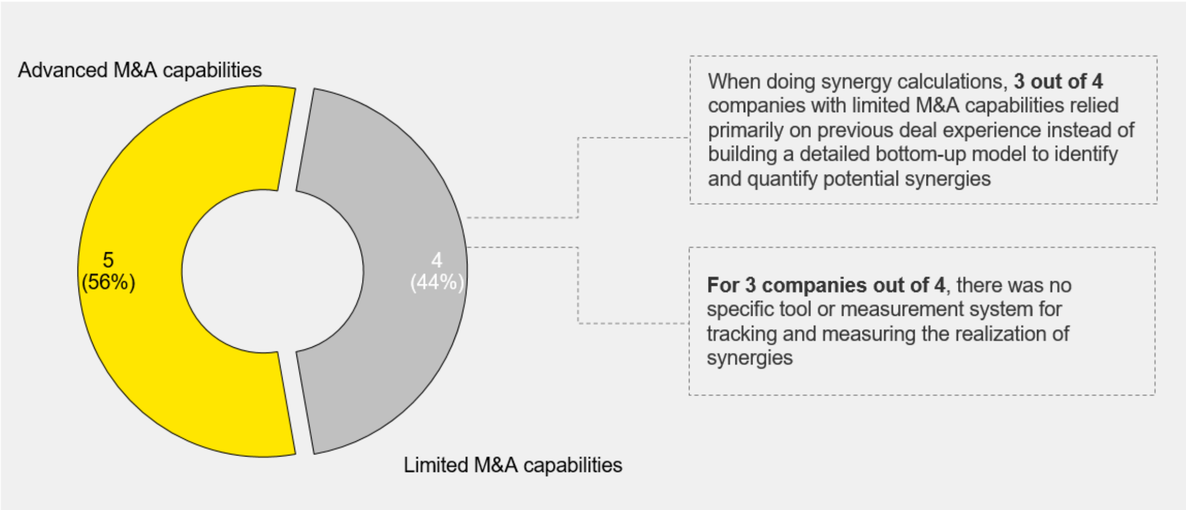

Figure 35. Survey responses regarding the acquiring company's M&A capabilities

Lastly, the respondents were asked whether they see synergies as a valid performance measurement in acquisitions. All nine respondents emphasized that synergies can be used to measure the performance of the transaction which is strongly supported by the theory presented in chapter 3.4.

4.4 Results comparison

Even though the survey experienced a low response rate, comparison between the survey responses, theory presented in the literature review as well as between some part of the study conducted by Katja Antikainen in 2002 can be made. Antikainen in her thesis '*Evaluation of success of mergers and acquisitions – case Finnish forest companies'* studied what kind of factors affect the success of mergers and what kind of methods there are to measure the success. Antikainen conducted 7 interviews of people responsible for the strategic management in forest industry companies. Her framework for the interviews consisted for example of transaction motives, target selection, acquisition profitability evaluation, post-acquisition success measurement and key factors affecting the success of mergers and acquisitions in forest industry companies. The findings of Antikainen's study are compared to the results of the management survey conducted as part of this thesis as applicable.

Table 6. Summary of findings related to transactions of Antikainen's study and the conducted management survey

	Topic	Findings of qualitative interviews[1]	Support by the management survey findings
1.	Transaction motives	Consolidation of the industry seen as the most significant driver	No
2.		Increasing market share seen important driver for transactions	Yes
3.		Transaction motives do not differ that much between industries	Yes
4.	M&A success	Success of transaction is estimated in advance mostly with synergy analysis	N/A
5.		Measuring the success of transactions is considered important but difficult	N/A
6.		Achieving synergy benefits may take a few years	Yes
7.		Achieving the synergy targets is seen difficult	N/A
8.	Value creation	Synergies seen as important source of value increase	Yes
9.	Due diligence	Due diligence process important for ensuring strategic compatibility	N/A
10.	Integration	Organizational culture may affect the merger success strongly	Yes

[1] (Antikainen, 2002). The thesis of Mrs. Antikainen only addressed the forest industry and thus the findings are not fully comparable. 7 person in total were interviewed in May and June 2002.

Table 6 above presents the summary of relevant and comparable findings regarding transaction motives, synergies, performance measurement and factors affecting the success of merger / acquisition between this study and Antikainen's study in 2002. The table summarizes whether the interview findings of Antikainen's thesis are supported by the findings of the management survey. ‘N/A’ indicates that the management survey did not include a question regarding the topic.

As seen from the Table 6, the findings of Antikainen’s qualitative interviews and the management survey of this thesis are, where applicable, very similar in many ways. This indicates that M&A-related topics and challenges are universal, although industry-specific implications exists. There are differences, but on the other hand also the data and objectives of the study are different. One key difference between the results is regarding the transaction motives: in the forest industry consolidation is seen as the most significant deal driver. This is mainly due to the fact that at the time of the forest industry was rather fragmented worldwide and major consolidation game aimed at making the highly competitive industry more profitable and reducing the cyclical nature of the industry. The measurement of post-merger success was done by comparing the pre and post-merger cost structure, measuring how the set objectives have been achieved and how the company’s stock price has developed. (Antikainen, 2002).

The respondents of Antikainen’s qualitative interview emphasized that one of key factors to successful mergers was the target’s strategic fit. To ensure this compatibility, a well done and thorough exploratory study and due diligence together with detailed plans were considered to be extremely important. In general, for a so-called industrial buyer (i.e. operating in the same industry as the target) the strategic fit of the target is one of the most important factor affecting the acquisition process and whether the acquirer will proceed in the bidding process (Antikainen, 2002). For a private equity company seeking to expand its company portfolio through acquisition, more emphasis is put on the valuation and future growth prospects of the target.

In addition to comparing the results of the survey with the findings of Antikainen’s thesis, the results of the management survey can also be compared with a study conducted in 2017 by KPMG Global Strategy Group Finland. KPMG conducted an interview-based study on post-merger integration and interviewed 60 Finnish-based companies on acquisition goals and success, implementation and communication. The summary of comparison of some mutual key topics are presented in **Table 7** below. As the study focused on Finnish companies and is recent, KPMG’s research provides a good benchmark for comparing the results.

Table 7. Summary of findings of KPMG's study and the conducted management survey

	Topic	Findings of PMI research[1]	Support by the management survey findings
1.	Integration	Cultural alignment and integration of IT are the most pressing topics in integrations	Yes
2.	M&A capabilities	Companies rate their own M&A capabilities mainly as good	Yes
3.	Acquisition target	Companies primarily acquire considerably smaller companies	Yes
4.	Transaction motive	Top-line growth (i.e. increasing revenues) seen as the primary goal of the acquisition	Yes
5.	Synergies	Cost savings achieved through personnel reductions is inherent to most transactions	Yes
6.		Achievement of synergies compared to planned is seen as a very relevant target in integrations	Yes
7.	M&A activity	M&A activity might be positively correlated with company's M&A capabilities and M&A success	Yes

[1] (KPMG, 2017).

As the last column of Table 7 shows, the results of the management survey of this thesis are to large extent supported by the findings of the KPMG PMI (post-merger integration) study. Looking at the results of the KPMG study and the answers of the survey, synergies are at the center stage in the transaction, having become a sort of 'make or break' element for the acquirer. To generalize, Finnish companies pursue top-line growth by acquiring smaller companies that are easier to integrate and meanwhile seek cost savings through personnel reductions. However, integration represents a major challenge for all companies across industries and the alignment of two companies' cultures and integrating the IT systems are the most troublesome areas of the merger.

Lastly, findings of the survey can be compared with corresponding findings of the literature review. This summary is presented in **Table 8** below. Like partly described in parallel to survey results in subchapter 5.3, findings of the management survey are strongly supported by the findings of the literature review. This has two implications. First of all, this emphasizes that M&A as a whole is a popular research area and has drawn attention of both researches and companies for many decades now. A great amount of research has been conducted on different, though interdependent topics related to transactions and hence common frameworks, processes and key implications have been cemented firmly in the academic literature. Secondly, strong support by the literature review shows that Finnish-based companies are no differ from the rest of the world and the same principles apply, and are applied, by the companies throughout the world.

Table 8. Summary of findings of the management survey and literature review.

	Topic	Findings of the management survey	Support by literature review findings
1.		Horizontal mergers aim in gaining market share, economies of scale and revenue enhancement	Yes
3.	Transaction motives	Revenue enhancement, cost reduction, increasing market share and business diversification are major transactions in buyer's perspective	Yes
4.		It takes 1-2 years on average to achieve the full run-rate synergies	No*
5.		Available synergy potential seen important in regards to the go-decision of the transaction	Yes
6.	Synergies	Synergies are identified in pre-signing phase	Yes
7.		Synergy assessment contributes to the buyer valuation of the target	Yes
8.		Cost synergies are achieved with more precision than revenue synergies	Yes
9.	M&A maturity	Previous M&A experience and activity is linked to company's M&A capabilities and M&A success	Yes
10.	Integration	Culture alignment and IT integration seen as main challenges in integration	N/A

5 SUMMARY & CONCLUSIONS

The research is built of two distinct part. First, a literature review was conducted. The literature review is divided into two chapters: *theoretical framework of M&A and synergies*, *synergy capture and M&A performance*. The first chapter of the literature review focuses on introducing the reader to the topic by presenting basic definitions and describing the magnitude of the global and Nordic M&A activity. After describing the basics, the literature review deepens and draws links between the organization's M&A capabilities, synergy capture and overall M&A performance. The theory is used as a framework for the management survey and to validate the findings of the survey.

Second part of the research comprises of the management survey with strong qualitative characteristics. An uniform study aiming to identify how companies approach synergies in transactions was sent to executives of Finnish-based companies. The results of the survey are analysed in chapter 4 with comprehensive comparison of results against the findings of the literature review and academic and empiric research on the topic.

This chapter includes the summary of the thesis and relevant conclusions that can be drawn based on the conducted literature review and qualitative empirical study. First the presented research questions are answered with respect to the limitations of the study. Secondly, some discussion including potential solutions for synergy validation and capture as well as for overall acquisition success are presented. Finally, suggestions for future research are given.

5.1 Answering the research questions

This study aimed to identify how companies find potential synergies and conduct synergy analyses, as well as how the projected synergy benefits have been achieved. Also, the research aimed to increase understanding on how much a synergy assessment contributes to the buyer valuation of the target company. In order to reach the set research objectives, three research questions were formed. Answers to the research questions, based on the literature review and the findings from the empirical management survey, are presented next.

1. *How do corporations find potential synergies and conduct synergy analyses before transactions?*

Acquirer companies utilize multiple different methods to find the potential synergy items to be pursued in the transaction. Typically the synergy items are found in the pre-transaction due diligence processes by conducting detailed value driver analysis across functional areas of the company. In addition, synergies are often identified with the help of an external party (i.e. M&A advisor, investment bank or other financial advisor) who are responsible of running the due diligence process and often deploy a systematic approach for identifying potential synergies along the value chain and operations. In larger or more strategically important transactions which holds significant synergistic opportunities, an assigned synergy team can be established while in smaller deals the synergy identification may be more feeling based. Exploiting industry know-how, competitive intelligence and other data sources such as industry benchmarks is one way to ensure that all stones have been turned and all noteworthy synergy items are taken into account.

The most transparent and self-evident synergy items like overlapping group functions such as HR are typically easily identified but some more undiscovered areas of potential synergies present a major challenge for the acquirer. Synergy potential in general is dependent on the level of integration, and thus without thoroughly and searching on different levels of integration, major synergies or dis-synergies may go unnoticed causing value leakage or additional stress on the integration process itself.

2. *How are the identified synergies validated and how the projected synergy benefits have realized compared to the planned?*

As the potential synergy items have been identified and quantified, they should also be validated in order to guarantee that appropriate and adequate implications take place. According to the findings of the literature review and responses of the survey, validated synergies are important for the go-ahead decision of the transaction and also have an impact on the design of the integration strategy: if pursued synergies are a fundamental deal driver, a special emphasis needs to be put on the overall synergy capture process to be able to deliver all projected synergies. Synergies may also have a significant impact on the buyer valuation of the target, and thus validating the synergy items ensures that the right price is paid.

Depending for example on the available resources, M&A experience and the significance of the deal and synergies, validation can be done in many ways. Synergy validation can, and should be based on fact based investigations such as exploiting industry deal data or reviewing possible synergy cases by challenging financial and operating model assumptions and other data sets. Companies also validate the identified synergies solely based on previous experience and by conducting management or expert interviews. Synergy validation should employ an iterative, fact based approach for more accurate synergy estimates and targets. Creating a holistic view on synergies and challenging current and future operating models potentially allows the acquirer to identify areas for improvement, reveal interdependencies and help in the overall transaction process.

Based on the literature review and management survey responses, companies have generally speaking been able to realize a majority of the pursued cost and revenue synergies. Acquirers using a specific tool or measurement system for synergies are able to track the synergy realization progress more precisely. Cost synergies are more straightforward to model, quantify and capture and hence easier to realize, but revenue synergies have not been achieved with the same precision: revenue-based synergy items are more difficult to identify, measure and capture as they are highly dependent on third parties and overall market development. Also, differentiating which part of the revenue growth is a result of the transaction and which by normal sales efforts is considerably difficult.

3. *How much does the pre-merger synergy assessment contribute to the buyer valuation of the target company?*

Valuation the target company and the acquisition price is multifaceted matter comprising of numerous interlinked parts. Even though there is no common view on to what extent does the synergy assessment contribute to the final acquisition price of the target, the pre-transaction synergy assessment has a significant impact of the buyer valuation of the target company. Survey findings indicate that in transactions in which the synergies were an important deal driver, the assessment contributed more than 5 or even over 10 percent to the final buyer valuation. The relative amount of contribution is dependent on factors like deal size, deal type, industry and state in which the target and the acquirer company is. For example in merger of equals with considerable overlapping assets and operations the pre-transaction synergy assessment has larger contribution to the valuation compared to smaller bolt-on acquisitions.

5.2 Discussion

In general, this study embarked to understand the role and importance of synergies in acquisitions as well as how do companies approach synergies. Findings of the literature review and the qualitative research emphasize the significance of synergies as part of transactions, and present an excellent opportunity for additional discussion on the topic. This subchapter presents the implications based on the analysis of the survey results and other key observations from the literature review.

Like stated, synergistic gains are a major driver in transactions and in many cases determine whether the acquirer should proceed in the transaction process or not. Identifying, calculating and validating the different synergy items is a difficult task, but if conducted with precision and according to planned, the pre-transaction synergy evaluation can help in the overall transaction process and in creation of the integration strategy by revealing key interdependencies and undiscovered value creation potential (Bruner, 2004, pp. 326-327). In order to achieve the targeted synergies without any major value leakage and disruptions, companies and their executives should follow a set of 'leading practices' which the best-in-class acquirers described in chapter 3 exploit to great extent. A common characteristic among best-in-class acquirers is that they follow a rigorous synergy capture approach in order to unlock the full post-merger value and achieve targeted synergies. However this is easier said than done, because as Engert and Rosiello (2010) point out, pre-merger due diligence processes often fail to provide a sufficient synergy capture plan, and the management and integration team being overwhelmed with other more pressing activities, the creation of synergy capture plan may get less attention.

Practices presented in **Figure 36** below aim to conclude some concrete actions to tackle some of the typical problems presented in earlier chapters, and next I will go through the most important practices and approaches and try to provide interesting observations for the reader. The practices have been formed so that they emphasize the following key areas: *synergy potential, operating model, measurement, accountability* and *communication*. By observing these key areas a holistic view on leading synergy capture practices can be built.

Firstly, given the importance of synergies in supporting the overall economics of an contemplated acquisition, the management needs to be able to rapidly determine whether the synergy estimates are plausible and the present value of synergies is sufficient to justify the acquisition premium paid in the transaction. Purely relying on the management's preliminary view and setting the expectation of the merger and involved synergies too high may have detrimental effects for the integration process and on both short and long term performance of the newly combined company. As concluded in the previous chapters, using benchmarks, external advisors with leading industry knowledge and most importantly leveraging the pre-transaction due diligence processes to address synergies (e.g. dedicating a separate workstream to focus on solely on synergies) allow the decision makers to compare the expected synergies and ensure that the transaction does not destroy value (Aiden & Nappi, 2013). Examining both positive and negative synergies (dis-synergies) and clearly distinguishing between one-time and recurring synergies is critical as the full synergy potential may be skewed due to major one-time synergies or negative synergies which are typically neglected.

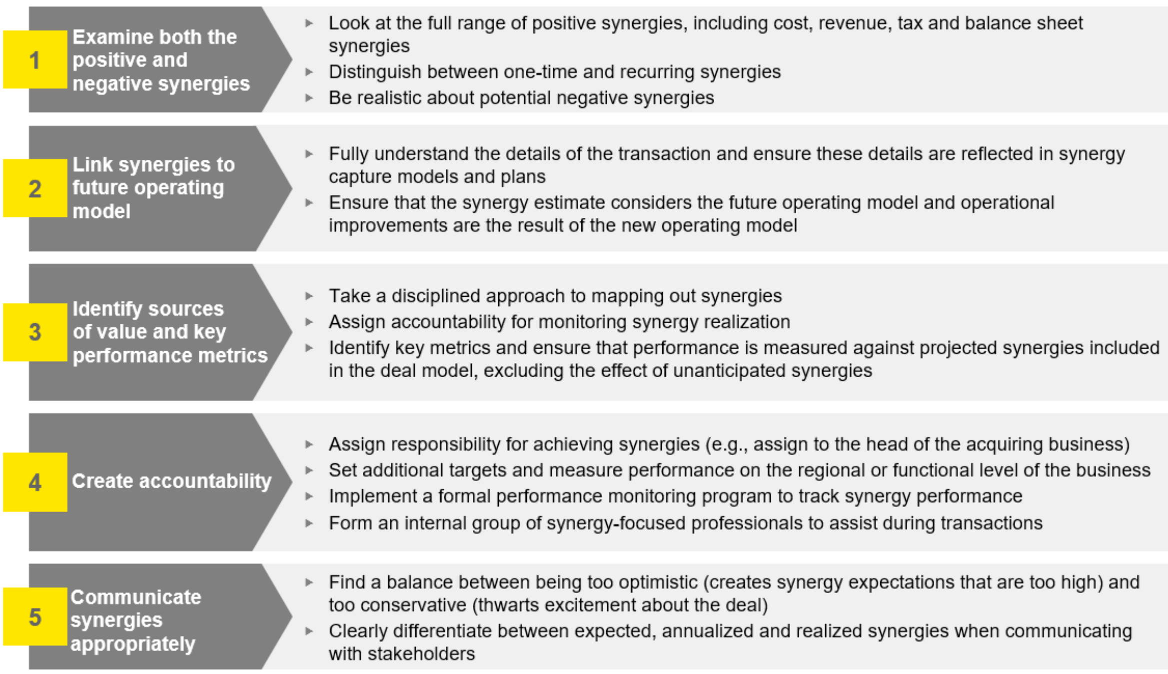

Figure 36. Leading practices for value capture and synergy realization

Secondly, the synergy estimates must consider the future operating model of the combined company. Inexperienced acquirers or companies with limited M&A capabilities may often disregard the interlinkage between operational improvements and synergy gains and end up 'double counting' the synergies. Best-in-class acquirers typically validate the estimates for example by benchmarking the expected and standalone (i.e. separate) figures to a group of comparable companies to find out whether the initial synergy estimates are unrealistic.

In order to identify all synergy items and create a holistic view on the full synergy potential, the acquirer must deploy a disciplined approach in mapping the synergies. This means that the synergy items and value drivers should be evaluated and valued iteratively. In addition, it is crucial to identify and link key metrics to each synergy case to be able to measure the performance and realization of the synergy case against target. Creating the right metrics is especially important for tracking the realization of recurring run-rate synergies.

The fourth leading practice among best-in-class acquirers with solid M&A capabilities is that they establish a clear accountability by assigning people responsible for achieving the synergies. Having an individual responsible for a major synergy case is at the utmost importance as without someone being accountable for the synergy realization, the required decision making and work towards synergy capture may be vague and lack leadership. In larger transactions, it is recommended in establishing a group of selected individuals to assist in the synergy capture process, including monitoring and reporting of the realization.

Last but certainly not least, I would like to emphasize the importance of communication-related matters. Especially for publicly listed companies who need to follow certain rules and obligations of the security markets law and other regulations, communicating the synergies together with other financial information when announcing the transaction is one of the most crucial moments. One may claim that given the fact that companies are not able to reach all the projected synergies, the amount of announced and publicly communicated synergies may be overestimated. As discussed in chapter 2.2, the management of the acquirer might overestimate their own managerial capabilities to create synergies between the two merging companies (e.g. Kiymaz & Baker, 2008). Therefore it is safe to say that there are at least some level of bias in the management's synergy estimates which reflect to the announced synergies that are higher than the company is actually able to achieve. Also, another possibility is that the executives deliberately announce higher synergies in order to "sell the deal" better to the investors and other public. The management may try to justify the high acquisition premium by announcing higher synergy potential and get acceptance especially from the shareholders of the company. Thus, the acquirer must find the right balance between announcing overestimated synergies and also being too conservative in the communication as announcing too low synergies might scare the investors and water down the deal. Best-in-class acquirers clearly distinguish different sources of synergy as part of deal announcement communications.

It should be noted that the described 'leading practices' do not guarantee any easy wins or full value capture, but most certainly will provide structure for the synergy realization. Clean team (presented in chapter 3.1) and systematic synergy capture approach (presented in chapter 3.2) are just a part of the integration process of which success is more dependent on the overall M&A maturity and the capabilities of the organization, like claimed in the beginning of the study. Doherty et al. (2016) state that the M&A function is a key contributor to the success of the transactions, and a dedicated M&A function is inherent to best-in-class acquirers. According to Trichterborn et al. (2011), M&A function's efforts in building the organization's M&A capabilities have a positive impact on the overall transaction performance. Some support for this literature review finding from synergies' point of view was also received from the management survey results which indicated that companies with more advanced M&A capabilities utilized specific tools / measurement systems for synergy tracking and built a detailed bottom-up model for identifying and quantifying synergy potential. As Zollo and Singh (2004) in their research point out, success in transactions is built on the previous experience. The management survey conducted as part of this thesis revealed that companies with higher M&A activity had better M&A capabilities.

As discussed in chapter 2, the type of acquisition and the deal rationale heavily effect on what are the most significant synergy areas involved in the acquisition (e.g. Capron, 1999; Ross et al., 2013; Copeland & Weston, 1988). This was not surveyed in the empirical study, but to elaborate this a bit more, some additional discussion on the topic seems relevant. In a merger of equals there are typically major overlaps in business areas, regions or product/service offering, and in such transactions the focus is on achieving cost-based synergies, typically to improve profitability of the company. These overlaps often offer various opportunities to achieve relatively high cost synergies. Reducing the overall cost base or structure of the company through an acquisition is common for industries or companies experiencing declining revenues. In contrast, mergers taking place in growing markets or in acquisitions related to complementary business lines aim typically have more focus on revenue-based synergies.

Findings of the literature review (e.g. Larsson & Finkelstein, 1999; Capron, 1999) and management survey support the presumption of synergies being used to evaluate the success of a corporate transaction. Synergies provide an alternative and holistic view on the performance on mergers. At best, synergistic performance metrics reflect the company's strategic rationale and objectives for the transaction as well as provide an accurate tool for evaluating the amount of value added. Taken together, synergies should be elevated to the top of the board’s and executive management’s agenda in companies contemplating an acquisition. Executives responsible for the business development, acquisition and integration must have a clear understanding of whether these anticipated synergies are realistic, what is the time span and approach to realize them and how all this is taken into account as part not only in the valuation but in the post-merger integration process as well.

5.3 Future research

This research aimed to contribute to the existing research on synergies as well as provide new insight on the topic on national level. Future research should expand the scope and consider synergy realization, acquisition performance measurement and M&A capabilities on Nordic-level. This way findings could be compared between Nordic countries and possibly allow drawing further conclusions on how companies in this region approach synergy-related topics as part of transactions. Moreover, the use of synergies as measurement of success in acquisitions should be studied more on a practical level. Conducting an in-depth study regarding synergy realization measures as well as tracking and reporting practices on a selected case company or a small group of case companies could at best provide valuable findings on how synergy capture is integrated into the overall integration process and its design and what kind of practices are used in different kind of companies and acquisitions.

Considering synergy items and their achievement, better understanding would be needed regarding the realization of different synergy items and how they link on short, medium and long term on the overall financial and operational performance of the acquirer. A thorough analysis on distinct synergy items over time could provide insights to both academics and case companies.

Companies are currently encountering record-high valuations (Kengelbach et al., 2018) in which synergies play a major part like Damodaran (2005) in his research explicitly addresses. Hence another interesting area for further research could be examining which synergy items contribute most to the buyer valuation of the company across different industries in order to provide valuable insights to industrial buyers as well as to private equity companies expanding their portfolios.

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APPENDICES

Appendix A1: Tables and figures

Table A1. Value of mergers and acquisitions in Nordics in 2012-2018 (millions of euros) (Zephyr, 2019)

Sector	2012	2013	2014	2015	2016	2017	2018
Finland	1 776	7 593	9 689	5 483	3 573	2 479	2 425
Sweden	11 771	10 383	17 437	14 303	19 111	10 673	15 174
Norway	6 441	6 432	14 546	8 445	4 169	7 555	10 230
Denmark	6 912	5 064	6 272	4 301	8 299	15 121	12 113
Total value	**26 900**	**29 472**	**47 945**	**32 532**	**35 151**	**35 828**	**39 942**

Table A2. Nordic M&A activity in 2012-2018 by sector (Zephyr, 2019)

Sector	Finland	Sweden	Norway	Denmark	Total
Activities of head office	6	6	4	4	**20**
Automotive & Transportation	12	28	61	23	**124**
Business professional services	27	94	63	30	**214**
Consumer products	91	200	108	83	**482**
Engineering & industrial products	66	152	67	52	**337**
Financial services	25	60	54	46	**185**
Government & Public Sector	11	27	6	8	**52**
Life sciences	2	28	7	12	**49**
Power & utilities	30	47	74	42	**193**
Real Estate, Hospitality & Construction	24	106	83	13	**226**
Retail	14	57	23	25	**119**
Technology, Media & Telecom	89	224	111	68	**492**
Travel, Leisure & Tourism	9	37	3	8	**57**
Total number of deals	**406**	**1 066**	**664**	**414**	**2 550**

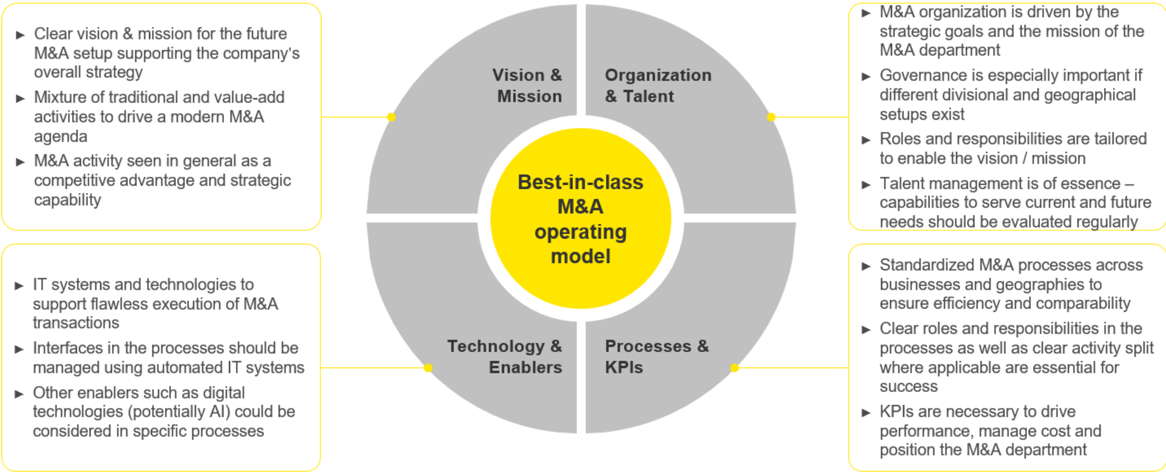

Figure A3. Visualization of "best practice" M&A operating model.

Appendix A2: Management survey on synergies and transactions

MANAGEMENT SURVEY ON SYNERGIES AND TRANSACTIONS

- This document has been prepared by Ernst & Young. It may not be disclosed to any third party or referred to publicly without the prior written consent of Ernst & Young.
- The document presents the structure and the questions of the management survey sent to selected group of clients in spring 2019.
- <u>All the answers of the survey are treated as confidential</u>.

Purpose of the survey:

- The objective of the survey is to find out the management's view on synergies and synergy realization in mergers and acquisitions.
- The results of the survey are used in Master's Thesis to create an overview of synergies role in corporate transactions and assess how companies approach synergies.

Structure of the survey:

- Overall, the survey is built in such way that it is easy to follow and answer, meaning that it should not take the respondent too long to complete the survey.
- The framework of the survey was made on the basis of literature concerning mergers and acquisitions as well as synergies in order to establish a clear link between the theory and the survey. Using the same themes and topics throughout the thesis helps in following the story.
- In practice, the survey consists of **three major modules**:
    - Acquiring company's characteristics (respondent's company)
    - Target company's characteristics
    - Synergies in transaction

Target group:

- The survey is sent to a selected group of Finnish companies who have acquired a company through a corporate transaction between years 2012-2018.
- The long list of companies was created based on Zephyr -database deal data.
    - Out of these companies, the surveyed people are senior executives who are responsible or in other way heavily involved in transactions, meaning that the survey is sent to C-level executives, M&A directors or other executives responsible for M&A activities and/or business development in the companies.

Execution of the survey:

- The survey is sent to the selected group of people via email.
- The actual survey takes place in Webropol -survey tool which allows easy gathering and exporting of results for further analysis.
- The survey is open for 2 weeks to ensure that all surveyed people have enough time to answer and as large as possible respondent group is created.

SURVEY ON TRANSACTIONS AND SYNERGIES

Dear respondent,

this is a management survey on transactions and synergies conducted by EY. You have been chosen as a recipient of this questionnaire because your company has been in an acquiring role in one or several transactions in the past 6 years. The purpose of the survey is to find out the management's view on synergies and synergy realization in mergers and acquisitions.

The questionnaire should not take more than 5 to 10 minutes to complete. The results of the survey will be presented as a part of a master's thesis and in addition a hygienized benchmark of the sector in which your company operates will be built in case there is large enough population of recipients. This benchmark and overall results of the study will be shared with you later in this spring.

We would like to thank you for taking part in this study, investing your valuable time and providing profound insight on the topic.

Please note that the information you provide will be used only for the purpose of research and will remain strictly confidential

Section 1: Respondent's and acquirer's characteristics

1. Please write the name of the company you are employed by:

2. Please specify in which sector your company is operating:

- Automotive & Transportation
- Business Professional Services
- Consumer Products
- Engineering & Industrial Products
- Financial Services
- Government & Public Sector
- Life Sciences
- Power & Utilities
- Real Estate, Hospitality & Construction
- Retail
- Technology, Media & Telecom
- Travel, Leisure & Tourism
- Private Equity

3. What are your company's annual revenues (millions of euros)?

- <50
- 50-100
- 100-200
- 200-500
- 500-1000
- >1000

4. **What is your position in the organization?**
    - Senior VP, VP, Director
    - C-level executive
    - Head of business unit/dept.
    - Board member
    - Partner
    - Other (please specify)

5. **What best describes your company ownership?**
    - Publicly listed
    - Privately owned
    - Family owned
    - Government-/state-owned enterprise

6. **How would you describe the nature and maturity of your company's M&A capabilities?**
    - Basic:
        - No documented M&A processes and procedures, heterogeneous resources used for M&A, vague business cases, ad-hoc decision making
    - Limited:
        - Some processes and procedures are in place, limited amount of key people involved in M&A but not dedicated, due diligence focused on risks identification and avoidance, decentralized decision making
    - Advanced:
        - Processes and procedures clearly documented, dedicated people involved but not shared across company, debottlenecked systems and processes ready for integration, due diligence used to confirm deal rationale with mitigation plans, centralized decision making
    - Differentiating:
        - Extensive use of M&A playbooks, dedicated experienced people shared across company, debottlenecked systems and processes ready for integration, deal rational translated in clear functional goals, due diligence used to confirm deal rationale and approach

7. **Please describe the magnitude of the M&A activity at your company:**
    - Low activity:
        - 1 to 2 acquisitions during the past 6 years
    - Active:
        - 2 to 5 acquisitions during the past 6 years
    - Highly active:
        - More than 5 acquisitions during the past 6 years

8. Please describe the nature of your own M&A experience:

- I have only little experience:
  - Not involved or only remotely involved in a transaction process in a minor role
- I am experienced:
  - Involved in a few transactions with a significant role
- I have significant experience:
  - Involved in numerous transactions with a major leadership role and responsibility

Section 2: Acquisition target's characteristics

9. Please specify in which sector the acquisition target was operating:

- Automotive & Transportation
- Business Professional Services
- Consumer Products
- Engineering & Industrial Products
- Financial Services
- Government & Public Sector
- Life Sciences
- Power & Utilities
- Real Estate, Hospitality & Construction
- Retail
- Technology, Media & Telecom
- Travel, Leisure & Tourism
- Private Equity

10. What was the acquisition target's annual revenues (millions of euros)? (dropdown menu)

- <50
- 50-100
- 100-200
- 200-500
- 500-1000
- >1000

11. Please describe the nature of relatedness of the acquisition target:

- Similar products/services to similar customers
- Similar products/services to different customers
- Different products/services to similar customers
- Different products/services to different customers

Section 3: Transaction and synergies

12. What was the primary motive of the transaction?

- Revenue enhancement
- Cost reduction
- Other operational synergies
- Growth pressures from investors
- Increase market share
- Geographical expansion
- Business diversification
- Increase control of the value chain
- Overall economies of scale
- Taxation
- Defensive motive (we were forced to acquire the target)
- Other (free text)

13. Were the synergy items identified in pre-signing phase?

- Yes
- No

14. How were the potential synergy items (e.g. cost cutting through reduction of overlapping assets) identified?

- In pre-signing due diligence process conducted by external party
- By using a systematic approach to check synergy potentials along the value chain
- By an assigned synergy team
- By exploiting data room material, competitive intelligence and industry know-how
- By searching on different possible integration levels (e.g. full integration vs. partial integration)
- Other (free text)

15. How did you calculate the synergies you targeted to achieve from transaction?

- Rely primarily on third-party benchmarks, consultants or banker inputs
- Rely primarily on previous deal experience
- Build a detailed bottom-up model to identify and quantify potential synergies

16. Were the found synergy items validated based on fact based investigations before signing the deal?

- Yes
- No

17. How were the identified synergy items validated?

- By reviewing synergy cases by challenging financial and operating model assumptions and data sets
- By conducting management and/or expert interviews
- By exploiting internal benchmarks and data from previous transactions
- By using industry deal data

18. Who was ultimately responsible for the synergies and their control and realization?

- Chief Executive Officer
- Chief Financial Officer
- Executive officer responsible for corporate development and/or strategy
- M&A leader
- Head of the business unit / department
- Other (please specify)

19. How important were the identified and validated synergies for the go-ahead decision of the transaction?

- Not important
- Important
    - Significant factor for the deal
- Very Important
    - Fundamental deal driver

20. Please describe the synergy assessment's impact on the valuation of the acquisition target:

- No impact:
    - Pre-closing synergy assessment did not affect the valuation of the target
- Minor impact:
    - Pre-closing synergy assessment had a small impact (<5% of the final valuation) on the valuation of the target
- Significant impact:
    - Pre-closing synergy assessment had a significant impact (>10% of the final valuation) on the valuation of the target

21. In the integration process, was there a specific tool or measurement system for tracking and measuring realizing synergies?

- Yes
- No

22. **<u>Cost synergies:</u> What cost synergies did you pursue?**
- IT & Technology
- Procurement
- People and associated costs
- Sales & Commercial
- Corporate & Shared Services
- Physical Infrastructure
- R&D
- Logistics & Supply Chain
- Operational Improvement

23. **<u>Cost synergies:</u> What were the achieved cost synergies compared to the initial value of cost synergies identified at the time of the deal?**
- We achieved lower cost synergies than we identified
- We achieved the cost synergies we identified
- We achieved higher cost synergies than we identified
- We were not able to track the amount of captured synergies
- We have not yet completed

24. **<u>Revenue synergies:</u> What revenue synergies did you pursue?**
- Pricing
  - Improve pricing or discount strategies as a result of the merger (e.g. pricing power)
- New geographies
  - Sell acquirer's existing products to new geographies (from target)
- New customers
  - Sell acquirer's existing products to new customers (from target)
- New markets
  - Sell acquirer's existing products to new markets (from target)
- Cross-selling opportunities
  - Sell newly acquired products/services to acquirer's existing buyers

25. **<u>Revenue synergies:</u> What were the achieved revenue synergies compared to the initial value of revenue synergies identified at the time of the deal?**
- We achieved lower revenue synergies than we identified
- We achieved the revenue synergies we identified
- We achieved higher revenue synergies than we identified
- We have not yet completed

26. **How did it take to realize all the projected synergies or if not completed yet, how long do you expect it to take?**
- Less than a year
- 1-2 years
- 2-4 years
- Over 5 years

27. What were the main challenges you faced when integrating the acquired company?

- Successfully onboarding and retaining talent
- Defining new strategic growth priorities
- Integration of IT and other operations
- Enabling cultural cohesion between the two workforces
- Finding the right balance what to integrate and what to leave alone
- Meeting or exceeding synergy targets
- Finding the right balance between integration and transformation
- Appointing new organization positions
- Other (please specify)

28. To your mind, what were the main reasons for not being able to realize all expected synergies?

- There was a mismatch in initially identified and actual potential synergy items
- The integration was in general poorly planned and managed
- Organization’s M&A capabilities were overestimated
- Synergy realization was not measured and tracked
- There was no adequate synergy capture plan

29. In general, do you see that synergies could be used as a valid performance measurement in acquisitions?

- Yes
- No