

TURUN KAUPPAKORKEAKOULUN JULKAISUJA

PUBLICATIONS OF THE TURKU SCHOOL
OF ECONOMICS AND BUSINESS ADMINISTRATION

# Lotta Häkkinen

OPERATIONS INTEGRATION
AND VALUE CREATION IN
HORIZONTAL CROSS-BORDER
ACQUISITIONS

Copyright © Lotta Häkkinen & Turku School of Economics and Business Administration

ISBN 951-564-319-8 (nid.) 951-564-320-1 (PDF)

ISSN 0357-4652 (nid.) 1459-4870 (PDF)

UDK 65.016

658.112.3 65.012.2 658.5 658.64

Esa Print Tampere, Tampere 2005

#### **ACKNOWLEDGEMENTS**

I hope to have learned a great deal from this dualistic process of conducting research. I have learned certain things from the periods of social isolation when being consumed in the lonely process of reading, writing and rewriting. However, I have probably gained more from the spells of social interaction in between, which have involved conversations with different kinds of people in different types of situation. I now wish to take this opportunity to thank the people who have played an important part in this experience as well as the institutions that have made it possible.

First, I should thank the people who set the whole thing in motion, Professor Lauri Ojala, Dr Olli-Pekka Hilmola and Docent Andreas Norrman, who encouraged me in initiating this study. As my supervisor, Lauri helped me get the project up and running and has assisted me in my research in numerous ways during the process, for which I am deeply grateful. I would also like to thank Olli-Pekka for his time, encouragement and overall contribution which have been indispensable.

It has been a great privilege to have Associate Professor Laurence Capron and Professor Mats Abrahamsson as the pre-examiners of my dissertation. I highly appreciate the time and effort they have put into providing comments on my work, drawing both from their individual areas of expertise and overall experience as esteemed researchers.

My work has also benefited from the insights of individual reviewers and colleagues who have contributed comments at various conferences, seminars and other forums at different stages of the research process. Furthermore, I am deeply indebted to all the organisations that have participated in this study, as well as to the group of individual experts who shared their views with me in the final phase of empirical investigation.

I extend my thanks to the academic and administrative personnel of Turku School of Economics and Business Administration with whom I have had the pleasure of working for several years. Warm thanks are due to the numerous people who have shared conversations both short and long linked to among other things the principles and practice of conducting scientific research. Special thanks go to the staff and PhD students of logistics and international business, as well as to my fellow travellers and researchers working along the Rosella corridor at the School. I would also like to express my thanks to the

people who have offered their comments and advice during my visit to the Copenhagen Business School.

For their financial support I am grateful to the Emil Aaltonen Foundation, Finnish Cultural Foundation, Foundation for Economic Education, the Jenny and Antti Wihuri Foundation and Turku School of Economics and Business Administration. This support was especially valuable in finalising the project. I would also like to express my gratitude to Mr Alex Frost, Mrs Auli Rahkala-Toivonen and Ms Anu Hakkarainen for the respective contributions to this work in its final stage.

Finally, I wish to thank my close family and friends for letting me pour my heart out on occasions as well as helping me put my work aside from time to time and enjoy the more important things in life. One person has endured these outbursts and also shared the other parts of my life first hand for which I am forever grateful; my warmest thanks go to Antti who has seen me through this time with his loving support.

Copenhagen, October 2005

Lotta Häkkinen

# TABLE OF CONTENTS

1	INT	RODUCTION	11
	1.1	Motivation for the study	11
	1.2	Research purpose, objectives, and scope	
		1.2.1 Purpose and objectives	
		1.2.2 Scope and delimitations	15
		1.2.3 Positioning of the study	19
	1.3	Research process and methodology	20
		1.3.1 Research process	20
		1.3.2 Applied research methods	22
	1.4	Structure of the study	27
2	PRI	OR RESEARCH ON THE ACQUISITION PROCESS	29
	2.1	Acquisition process	29
	2.2	Rationale behind acquisition	31
		2.2.1 Acquisitions vs. other growth mechanisms	31
		2.2.2 Acquisition motives	33
	2.3	Pre-acquisition combination potential	39
		2.3.1 Strategic fit and the relatedness of resources	39
		2.3.2 Other combination attributes	42
		2.3.3 Managerial considerations	44
	2.4	Post-acquisition integration	46
		2.4.1 Definitions and concepts	46
		2.4.2 Antecedents and consequences of integration	49
		2.4.3 Managerial considerations	53
3	PRI	OR RESEARCH ON ACQUISITION-RELATED VALUE	
		EATION	57
	3.1	Acquisition performance measurement	57
	3.2	Sources of value creation	
4	THE	EORETICAL FRAMEWORK	65
	4.1	Operational aspect to post-acquisition integration	65
	4.2	Adopted theoretical perspectives	
		4.2.1 Industrial organisation and cost efficiency tradition	
		4.2.2 Resource-based view	

		4.2.3	General network theory	73
	4.3	Theo	oretical framework	75
5	SUM	IMAF	RY OF ORIGINAL MANUSCRIPTS	79
	5.1		r 1: Logistics integration in horizontal mergers and isitions	79
	5.2		r 2: Integration and synergies of operations in horizontal	82
	5.3	•	r 3: Impacts of international mergers and acquisitions on the tics operations of manufacturing companies	84
	5.4	•	r 4: Mergers & acquisitions in the logistics service industry: study findings	87
6	DISC	CUSS	ION	91
	6.1 6.2 6.3	Type	e I outcome: Up- and downstream integration	94
7	CON	ICLU	SIONS	99
	7.1 7.2 7.3	Mana	oretical implications	03
REF	EREN	NCES	1	09
APP	ENDI	IX 1	GEOGRAPHICAL AND SECTORAL DISTRIBUTION OF CROSS-BORDER ACQUISITIONS, 1987-2003 1	35
APP	ENDI	X 2	QUESTIONNAIRE USED IN PAPER 11	38
APP	ENDI	X 3	INTERVIEW GUIDE USED IN PAPER 3 1	40
APP	ENDI	X 4	INTERVIEW GUIDE USED IN PAPER 4 1	46
APP	ENDI	IX 5	INTERVIEW STRUCTURE AND TOOL USED IN EXPERT INTERVIEWS	49
APP	ENDI	X 6	LIST OF EXPERT INTERVIEWS 1	54

# LIST OF ATTACHED PUBLICATIONS

- PAPER 1: Häkkinen, Lotta Norrman, Andreas Hilmola, Olli-Pekka Ojala, Lauri (2004) Logistics integration in horizontal mergers and acquisition. *International Journal of Logistics Management*, Vol. 15, No. 1, 27-42.
- PAPER 2: Häkkinen, Lotta Hilmola, Olli-Pekka (2005) Integration and synergies of operations in horizontal M&A. *International Journal of Management and Enterprise Development*, Vol. 2, Nos: 3/4, 288-305.
- PAPER 3: Häkkinen, Lotta (2005) Impacts of international mergers and acquisitions on the logistics operations of manufacturing companies. *International Journal of Technology Management*, Vol. 29, Nos: 3/4, 362-385.
- PAPER 4: Häkkinen, Lotta (2004) Mergers and acquisitions in the logistics service industry: case study findings. In: *Proceedings of the 2nd IASTED International Conference on Alliances, Mergers, and Acquisitions*, MIT, Cambridge, USA, November 8-10, ed. by M. H. Hamza, 158-168.

# **AUTHOR'S CONTRIBUTIONS**

The overall idea for the main research project behind this dissertation originates from the work initiated by Professor Lauri Ojala, Dr Olli-Pekka Hilmola and Docent Andreas Norrman. Paper 1 is directly linked to the work performed by the research team built around these ideas. The author contributed to this paper by conducting the analysis of general acquisition management literature, participating in primary data gathering in terms of the Swedish population, and by formulating and testing the related hypotheses. The author also had an important role in writing the manuscript.

Paper 2 is primarily based on the original work by the author. Co-author Dr Hilmola contributed in partly writing and in the overall structuring of the manuscript. His contribution was valuable in moulding and condensing the paper into a more coherent and publishable form.

Paper 3 can be seen as an empirical extension of the work initiated in connection with Paper 1. The instrument for data gathering was drafted by the author, to which Professor Lauri Ojala provided his comments. Actual data gathering was performed jointly by the author and a small group of MSc students under the author's guidance. The author performed the final analysis of the case study data and prepared the manuscript independently. However, several people provided valuable comments on the manuscript during its different phases.

Credit for the initial idea behind Paper 4 is owed largely to Dr Hilmola. However, beyond external impetus and comments, the manuscript represents the independent research work of the author.

#### 1 INTRODUCTION

### 1.1 Motivation for the study

In the quest for continuous growth and constant corporate renewal, acquisitions have emerged as a common strategic instrument for firms to respond to the relentless pressure from financial markets. Although acquisition activity as such has shaped economies and individual firms for decades, never has it been pursued in such magnitude. At the peak of the latest acquisition wave, which at a global level spanned from 1993 to 2001 (cf. Figure 1), the value of worldwide transactions rose to some \$3,500 billion (M&A in 2000: fast start...fading finale 2001). Even after the substantial decline, the number and value of completed deals still exceed long-term levels, and signs of a revival in acquisition activity have recently been reported. For example, cross-border acquisitions rose by 3% in the first six months of 2004 compared with the same period in 2003 (World investment report 2004, xvii).

Furthermore, acquisitions have become an important tool for implementing strategy in industries and markets which until recently have been left relatively untouched by industry restructuring. For example, the establishment of the single European market has led to a rapid increase in acquisitions with European involvement, and deregulation in industries telecommunications, transportation and energy has caused service sectors to gain in relative importance in acquisition activity alongside the electronics and chemical industries (World investment report 2004, 111-112; cf. Dunning 1998). On the whole, while in the late 1980s services accounted for some 30% of global cross-border acquisitions, their share had risen to over 70% by the year 2000 (World investment report 2004).<sup>1</sup>

Contemporary acquisitions also frequently involve firms with different national origins. According to the OECD, cross-border transactions as a share of all M&A transactions rose to 35% in terms of deal value and to 30% in the number of deals in 1999; in 1991 these transactions represented a quarter of aggregate acquisition activity both in terms of their value and number. Overall, international acquisitions have become the driving force behind globalisation. The value of cross-border acquisitions rose to 92% of the

See Appendix 1 on the geographical and sectoral distribution of cross-border acquisitions.

worldwide flows of foreign direct investment in 1999, up from 52% in 1994. (New patterns of industrial globalisation 2001)

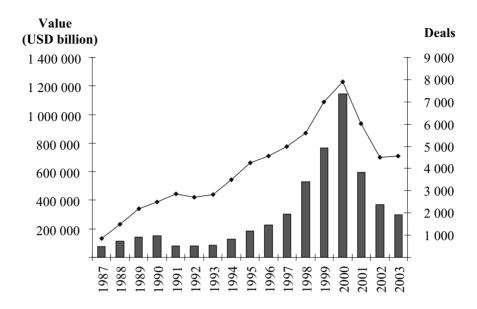


Figure 1 Value and number of cross-border acquisitions 1987-2003 (compiled from World investment report 2004 and UNCTAD, cross-border M&A database [www.unctad.org/fdistatistics]).

Based on aggregate figures, it is difficult to comprehend why acquisitions are seen as such an attractive option for corporate development when high failure rates have continuously been reported by numerous contributors using a variety of different measures and techniques (King et al. 2004). While acquisitions allegedly offer the means to access new resources, markets and knowledge in a relatively rapid manner (e.g. Bower 2001), related acquisitions in particular can also trigger dramatic changes in individual firms. These transactions frequently impact the organisational structures and resource configurations of companies, as well as individual careers and life circumstances (e.g. Buono & Bowditch 1989). Failing to take into account the multi-faceted nature and consequences of acquisitions, both in pre-acquisition planning and negotiations, as well as during post-acquisition integration, can cause deals to fail and actually destroy value rather than enhance it (Fang et al. 2004; Shrivastava 1986). Nevertheless, studies on acquisition performance reveal substantial heterogeneity in acquisition success rates, suggesting that those firms that master the management of acquisitions may truly stand to generate value through successful combination (e.g. King et al. 2004).

While corporate management could be criticised for a lack of understanding of the value creation process behind acquisitions, academic research in this area could also be judged for failing to increase holistic understanding of acquisitions and create knowledge that could improve the probability of acquisition success from the practitioners' point of view (Sirower 1997). Acquisition research seems to be an ever-expanding umbrella comprising contributions from highly diverse disciplinary backgrounds. While there is evidence that no single theory can fully unravel acquisition-related questions, it seems unfortunate that uniform efforts to combine and build on this existing, yet dispersed, knowledge are so scarce (Larsson & Finkelstein 1999; Miczka & Größler 2004; King et al. 2004).

In terms of value creation, acquisition research has largely followed the tradition of diversification studies and attempted to identify antecedents of post-acquisition performance based on secondary data and pre-acquisition attributes. On the whole, probably one of the most interesting results has been the identification of a variety of variables that are insufficient in explaining the heterogeneity of acquisition success (King et al. 2004). Researchers seem to have been obsessed with discovering significant and relevant findings using data which, though widely available, do not as such reflect the relevant issues in the complex process of value creation.

This study aims to add to the knowledge of how the operational resources and capabilities of firms engaging in horizontal cross-border acquisitions are affected in linkage to the value creation process behind the transactions, thus contributing to enhanced understanding of acquisition-related value creation. As such, finding the right balance between the necessary level of integration and related organisational disruptions is a fundamental challenge to acquisition management, which affects both the success of the integration process and the performance of the entire acquisition (Zollo & Singh 2004, 1236). Rather than trying to find results that could be applied universally, the intent here is to produce relevant and interesting results through an holistic approach. The adopted theoretical perspective is not bound to any specific discipline but applies elements from several schools of thought. However, the process school of acquisition research alongside the focus areas of logistics and operations management were adopted as the initial points of departure. The primary research strategy consists of case studies, which was considered an appropriate approach in order to tap in-depth processual and contextual data, while allowing the examination of cross-sectional patterns.

# 1.2 Research purpose, objectives, and scope

### 1.2.1 Purpose and objectives

The overall purpose of this dissertation is to contribute to the understanding of contemporary acquisitions by studying how the operational resources and capabilities of firms engaging in horizontal cross-border acquisitions are affected in linkage to the value creation process behind the transactions. This aim is pursued through three more specific objectives:

- 1. To describe and analyse post-acquisition changes in the upstream and downstream operations of firms.
- 2. To describe and analyse potential synergies realised through the post-acquisition integration of upstream and downstream operations.
- 3. To assess how different theoretical perspectives succeed in explaining these post-acquisition actions and their role in the overall acquisition process.

The individual manuscripts included in this dissertation (Papers 1-4) contribute to different aspects of the individual objectives as illustrated in Table 1.

Table 1 Study objectives in relation to the focus of each paper

	Objective 1	Objective 2	Objective 3
Paper 1	Literature review, Pilot survey, Tentative theoretical framework		
Paper 2		Literature review, Conceptual synthesis	Discussion contrasting theory and secondary data
Paper 3	Multiple case study from manufacturing industries		Discussion contrasting theory and primary data
Paper 4	Single embedded case study from logistics service sector		Discussion contrasting theory and primary data

As can be read from the study objectives, the main focus area is post-acquisition change as an embedded part of the overall acquisition process. In

terms of this research subject, the ambitions of the study are both descriptive and explanatory. As the topic has remained relatively untouched by extant research and the area of operations integration can be viewed as a complex and open-ended set of problems, the main emphasis is placed on providing a description of the phenomenon under examination. However, the study also aims to provide explanations of why the changes described may occur, drawing from both empirical observations and extant theory. Normative implications concerning the relationship between processual and contextual factors, and post-acquisition performance are not discussed as such. However, value creation and related processual and contextual factors are explored and described through their interaction with operational integration. The unit of analysis used in the study is a single acquisition transaction and the related process. Furthermore, in Paper 4, several acquisition processes are examined both individually and, to a certain extent, jointly as part of the overall growth strategy of the case company.

#### 1.2.2 Scope and delimitations

Both academic and business literatures commonly discuss merger and acquisition-type transactions jointly. Thus, from a research point of view, this body of so-called M&A literature can be understood as a single field of scientific inquiry. While it is well acknowledged that in practice these two types of transaction have several distinguishing features, unambiguous distinctions are rare, and authors often choose to cluster both under the joint heading of 'M&A' or 'acquisition'. In practice, the percentage of actual mergers is as low as 3% for cross-border deals, whereas full acquisitions (100% control) account for more than half of cross-border M&A (World investment report 2000, 99).

A merger can be seen as the combination of two or more businesses to achieve common objectives by forming an entirely new firm. Thus, all companies involved in the merger cease to exist and their shareholders become the shareholders of the new company. In contrast, an acquisition typically involves acquiring control of the entire business or part of the other's business by purchasing stocks or assets of the target firm. (e.g. Hall 1986, 27; Hubbard 1999, 6-7; Cartwright & Cooper 1992, 30; New patterns of industrial globalisation 2001; Buckley & Ghauri 2002, 1; Weston et al. 1990, 4-5)

This question regarding unilateral control versus mutual agreement will also have an impact on the subsequent post-acquisition process and the level of integration. As a result, in some cases a particular deal may be communicated

to stakeholders as a merger, although from a legal or financial perspective it may fall into the acquisition category (Buckley & Ghauri 2002, 1).

The distinction between mergers and acquisitions also has a connotation to the relative size of the firms involved. Conceptually, acquisitions are often understood to entail size asymmetry (the acquirer is clearly larger in comparison to the target firm), whereas mergers refer to more symmetric deals (e.g. Vaara 2000, 82).

This study focuses on questions related to acquisitions rather than mergers and therefore the term 'acquisition' is adopted. The perspective throughout the study is that of the acquiring firm. This viewpoint has been chosen due to the value creation aspect of the study. Even though a certain transaction may be built on the mutual consent of the two separate firms, the underlying assumption is that the value creation objectives of the acquiring party will have significant weight in influencing subsequent post-acquisition actions; acquiring firms have a choice whether to integrate their targets and introduce new practices and to what extent (Child et al. 2001, 1). However, this approach does not deny the effect of other factors, for example the role of target company management (see e.g. Graebner 2004).

Furthermore, post-acquisition change and value creation are discussed from the viewpoint of company management rather than its owners. Acquisition activity is viewed as a part of strategic decision-making carried out by company management. Although both parties are assumed to have ultimately the same objective, this distinction is hoped to provide a more long-term and fruitful perspective on studying post-acquisition outcomes and their intrinsic reasons.

The empirical cases presented in this study exemplify acquisitions rather than mergers. This was essential in order to distinguish between respective acquiring and target firms. While from a socio-cultural perspective it may be fruitful to concentrate on mergers in which such integration is the most likely, post-acquisition change that involves reconfiguring operations can occur in various acquisition types and at lower overall integration levels (cf. Child et al. 2001, 96; Shrivastava 1986). However, some of the cases examined also entail merger-type features, and as a whole this study aims to contribute to the overall stream of M&A research.

A number of categorisations of different acquisition types based on the relationship of the firms involved exist, of which the Federal Trade Commission (FTC) classification is probably the most cited (see e.g. Ravenscraft & Scherer 1987, 22-23; Larsson 1990, 34). It divides acquisitions into:

- Horizontal acquisitions concerns firms engaged in a (potential) competing relationship, i.e. both produce one or more of the same products offered in the same market
- Vertical acquisitions concerns firms engaged in a (potential) customer-supplier relationship
- Product extension acquisitions the acquirer and target have noncompeting products but functionally related production and/or distribution
- Market extension acquisitions the acquirer and target manufacture the same products but serve different markets<sup>2</sup>
- Conglomerate acquisitions no relatedness between the acquiring and target firm<sup>3</sup>

The above categorisation has been built from an antitrust rather than a managerial perspective, for which it has received criticism (e.g. Howell 1970; Steiner 1977; Lubatkin 1983; Larsson 1990). Despite its limitations, theoretical frameworks commonly have a similar basis for discussing different pre-acquisition settings and relatedness<sup>4</sup>.

Here the focus is on horizontal acquisitions defined from a managerial standpoint, where the acquirer and target represent the same industry and same industry level (cf. Capron 1999, 994), but do not necessarily need to be direct competitors. This characterisation is adopted because the focus of the study lies at a micro rather than macroeconomic level. Secondly, especially in the case of large international firms, it may be difficult to distinguish between horizontal and market/product extension acquisitions (Howell 1970; Lubatkin 1983; cf. Shimizu et al. 2004). From a theoretical viewpoint, this also allows the examination of both similar and complementary operations rather than limiting evidence to the mere consolidation of identical resources. Horizontal acquisitions have been chosen as the object of research due to the presupposed relatedness of the involved companies at operational levels, too, which would imply a more profound consideration of the need for integrative actions than unrelated or vertical deals.

Horizontal acquisitions are also of special importance from economic and legal perspectives. An increasing number of contemporary transactions need to be notified to competition authorities prior to their completion, and subsequent

<sup>3</sup> Actually, the FTC defined product and market extension acquisitions as sub-types of conglomerate deals, a feature which has been criticised by, for example, Steiner (1977, 19-22) and Howell (1970, 67).

Originally, this refers to markets only in the geographic sense.

<sup>&</sup>lt;sup>4</sup> For example, Seth (1990a, 434) views horizontal, vertical, product extension and market extension acquisitions as related deals. Unrelated acquisitions refer to pure conglomerate deals.

rulings can have a significant impact on actual implementation. Acquisitions which have an impact on the territory of the European Union and/or the European Economic Area are subject to the review of the Merger Task Force of the European Commission (EC) to the extent that the EC Merger Regulation (ECMR) is applicable. When taking effect, the ECMR precedes national merger control laws. The determining criterion is basically the size of the undertakings concerned in the combination, measured in terms of worldwide, European Community-wide, and/or state specific revenues. In problematic cases, total prohibition may be avoided by offering so-called commitments to eliminate competition problems. This includes e.g. sale and divestiture commitments by which subsidiaries or parts of operations are sold to third parties. (Bergmann 2002) Apart from taking actions to preserve competitive market structures, national and EC legislation can also have implications regarding the implementation of acquisitions. For example, employers have to instruct, inform, and consult with employee representatives concerning restructuring measures according to national legislations and possible EC directives. (Picot 2002) Therefore, though not specifically addressed in this dissertation, it is essential also to consider legislative issues early on in the planning phase of related acquisitions.

This study further limits itself to the inspection of cross-border or international acquisitions due to their growing importance in the global market; something with which academic research has not been able to keep pace (Shimizu et al. 2004). Overall, there is limited evidence concerning the value creation aspects and the unique characteristics of these deals (Seth et al. 2002, 921-922). In the context of international acquisitions, research on value creation has mainly concentrated on identifying potential antecedents by building on agency theory and transaction cost economics. Factors relating to the process and outcomes of post-acquisition change have not been carefully examined, though these aspects are crucial in understanding this phenomenon. (Shimizu et al. 2004) Here the common definition is adopted where crossborder acquisitions are seen as involving firms that have their headquarters in different countries (e.g. Shimizu et al. 2004). However, it is important to note that the applied definition covers a variety of different deal types, and, for example, excludes deals where the acquirer and target firm have their headquarters located in the same countries but have overlapping operations in other geographical markets, and thus also touch upon cross-border issues (Child et al. 2001; cf. Anand et al. 2005).

# 1.2.3 Positioning of the study

Acquisitions have raised interest among several scientific disciplines. Although this has brought a richness of perspectives to this field of research, it has also caused fragmentation where studies offer only partial explanations to highly complex phenomena (Chatterjee et al. 1992, 319-321; Haspeslagh & Jemison 1991, 5, 13; Larsson & Finkelstein 1999, 2-3; Schweiger & Walsh 1990). Contributions that have integrated different theoretical perspectives to increase holistic understanding are few<sup>5</sup>.

Several classifications of acquisition literature have been coined<sup>6</sup>. Most identify the streams of strategic management, economics, finance, human resource management and organisational research, and the process perspective, although authors have elected to draw category boundaries in their own distinct fashion. Streams differ in regard to their disciplinary origin, underlying theories, areas of primary interest, and preferred research methods.

Probably the most established paradigms in acquisition research are those of strategic management, finance, and economics. Strategic management adopts the perspective of an individual firm and deals with firm-specific outcomes. Core issues include acquisition impact on competitive advantage, profit, productivity, and performance and their antecedents examined at the strategic level (e.g. Singh & Montgomery 1987).

The finance and economic streams also study performance but from a different standpoint. The finance stream uses stock-based measures to assess performance from a shareholder perspective (e.g. Jensen & Ruback 1983). Economic literature, on the other hand, concentrates on wealth effects, efficiency, and market power issues mainly at a macroeconomic level and applies accounting-based measures<sup>7</sup> (e.g. Ravenscraft & Scherer 1987).

The human resource management and organisational research stream studies the softer issues impacted by acquisitions, namely the role and consequences regarding organisational culture and individual employees. On the one hand, research is interested in the pre-acquisition congruence between the cultures of the target and the acquiring firm (e.g. Datta 1991), and on the other, how to facilitate the human side of integration in the post-acquisition phase (e.g. Larsson et al. 2001).

See e.g. Cording (2004), Larsson & Finkelstein (1999), Parvinen (2003), Haspeslagh & Jemison (1991), and Birkinshaw et al. (2000).

Exceptions include the contributions by e.g. Larsson & Finkelstein (1999), Miczka & Größler (2004), and Schweiger & Walsh (1990).

Parvinen (2003) also incorporates legal issues into this stream to include, for instance, antitrust considerations.

Finally, the process perspective focuses on management actions to guide the acquisition process in a successful manner. The perspective argues that the acquisition process itself is an important factor, in addition to elements of strategic and organisational fit, which affects the outcome (Jemison & Sitkin 1986). Although some early contributions to this stream were already made in the 1960s (e.g. Kitching 1967; Mace & Montgomery 1962), it has only recently received considerable research attention and the amount of post-acquisition literature, in particular, has grown substantially (e.g. Greenwood et al. 1994; Haspeslagh & Jemison 1991; Shrivastava 1986; Lindgren 1982; Pablo 1994; Larsson 1990; Larsson & Finkelstein 1999). This stream is more applied than the others and has more readiness to combine different theoretical perspectives.

This study primarily represents a process perspective on acquisition-related value creation as it builds on prior studies on the post-acquisition integration process. However, as is common for this stream, the study also draws from other streams and multiple theoretical influences. For example, theories from the strategic management and economic streams are applied at an operational level. Although the primarily focus is on the physical side of integration, matters related to human integration are also touched upon due to their interplay (cf. Haspeslagh & Jemison 1991, 12-13).

# 1.3 Research process and methodology

# 1.3.1 Research process

This study reflects research carried out by the author during a four-year period in the form of several sub-projects. As the dissertation itself consists of a set of independent articles built on individual approaches towards the studied object, it is difficult to provide a general methodological description of the study as a whole. However, the respective approaches for each research phase build on common philosophical assumptions of the studied phenomenon and respective methods have been considered in terms of their 'fit' to this setting and the research problem itself (cf. Arbnor & Bjerke 1997, 9).

Overall, the main emphasis has been on producing descriptive results of the studied phenomenon, i.e. the operational outcomes of horizontal cross-border acquisitions. However, the initial steps of the research process can be described as being explorative, and the analyses relating both to the individual papers and this final synthesis include explanatory elements, building on e.g. cross-case comparison (cf. Yin 1981). The study does not hold normative ambitions. Although the outcomes examined are understood as a product of

human, teleological action and are observed from a certain subjective perspective (i.e. that of acquirer company management), as such, these end results can be perceived as part of an objective reality (e.g. changes in the composition of physical assets in the studied organisations).

The emphasis of different methodological aspects has varied during the research process and fundamentally the study can be seen as iterative by nature, where deductive and inductive elements alternate and intertwine (see Figure 2). This kind of dialogue between induction and deduction can be seen as essential for the progression of science (e.g. Babbie 1989, 44) and is used in the present study to provide a deeper understanding of the research object.

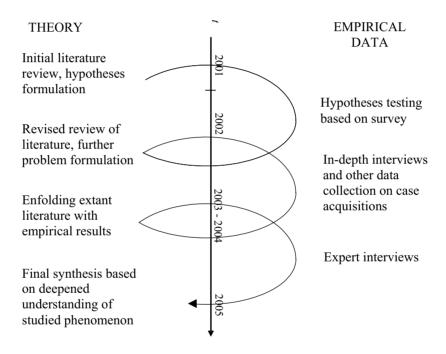


Figure 2 Illustration of the research process (cf. Gummesson 2000, 71)

A pre-understanding of the problem area was formed by familiarisation with extant general acquisition management literature. This gave direction for formulating tentative hypotheses for addressing the operational aspects of post-acquisition integration, and indicated a lack of research in the specific area under interest. The hypotheses built on general acquisition management literature were then tested, based on a questionnaire. Overall, the results confirmed the practical relevance of the research topic, and indicated the research object to be highly complex (Paper 1). In order to achieve a better understanding of the attained results from deductive inquiry, the theoretical

basis of the study was revised (Paper 2) and multiple case studies were conducted (Paper 3 and 4). This entailed the use of inductive elements and primarily qualitative methods, which produced idiographic data on specific acquisitions. In the final data gathering phase in 2004, a number of expert interviews were carried out in order to establish, how the attained results relate to the broader managerial context.

The methods applied in the individual articles are naturally described in each publication. However, the respective methods of data gathering and analysis are also summarised in the following.

#### 1.3.2 Applied research methods

The empirical data for Paper 1 were gathered by means of an explorative questionnaire (Appendix 2). All in all, the empirical investigation of *how* firms manage their acquisitions is substantially more complex compared to traditional relatedness or performance studies due to the lack of process level data. Thus, surveys have been extensively used to gather information on post-acquisition processes and related value creation (e.g. Capron 1999; Very et al. 1997; Morosini et al. 1998; Datta 1991). Such a quantitative approach was considered an appropriate way to attain a pre-understanding of the research object in a broad fashion, while permitting the use of fine-grained measures to address post-acquisition mechanisms at an operative level.

The questionnaire relating to Paper 1 was addressed to the management of 257 acquiring companies referring to 484 horizontal acquisition deals. Inquiry was limited to deals completed during 1995-2001 where at least 90% of the shares were acquired and where either a Swedish or Finnish firm was the acquiring party. A fairly comprehensive list of this population was obtained by combining information from KMPG Sweden and from the website of Talouselämä, a Finnish business weekly. The response rate in terms of deals was 10%, which is congruent with that of similar surveys, and can be considered relatively adequate due to the sensitive nature of acquisition questionnaires (cf. Capron 1999; Morosini et al. 1998). The attained data included both domestic and cross-border acquisitions and deals also differed in terms of relative size. However, due to the relatively small number of domestic (34% of valid response) and 'merger of equals'-type deals (11% of valid responses), and the low absolute number of responses, all answers were analysed jointly. All answers were given on a Likert scale and were subsequently analysed using statistical methods.

Based on these initial results, it was considered that due to the contextbound nature of the studied phenomenon, case studies would be an appropriate strategy for continuing research (cf. Bonoma 1985). Case study research is particularly suitable for addressing problems in which research and theory are still formative (Eisenhardt 1989, 547-548; Benbasat et al. 1987, 369), where 'how' and 'why' questions are addressed concerning a contemporary set of events over which the investigator has little or no control (Yin 1991, 19-20), and the context of action is critical (Benbasat et al. 1987, 369; Yin 1991, 23)<sup>8</sup>.

Due to the established need to develop more comprehensive acquisition theory, which is not bound to e.g. disciplinary restrictions, the use of inductive methods has been encouraged (Hitt et al. 1998; Hunt 1990). Furthermore, contextual boundaries are not easy to identify in the case of acquisitions as the process includes the contexts of two (or more) firms, their respective stakeholders (e.g. employees, customers, and suppliers) as well as stakeholders of the actual acquisition process (e.g. other bidders, financial and legal experts, unions, and government agencies).

According to the classification of Yin (1991), two different case study strategies were used in the course of this research process (Figure 3). Paper 3 presents the results of multiple holistic case studies, while Paper 4 examines a single embedded case with multiple units of analysis.

	Single case designs	Multiple case designs	
Holistic (single unit of analysis)	TYPE 1	Multiple acquirers, individual acquirer- specific acquisition cases (Paper 3)	
Embedded (multiple units of analysis)	Single acquirer, multiple acquisitions within case (Paper 4)	TYPE 4	

Figure 3 Applied case study designs (cf. Yin 1991, 46)

Given the sensitive nature of issues related to post-acquisition restructuring and synergies, the selection of cases was not a straightforward process. In terms of the manufacturing industry cases, several potential candidates were

.

For a more detailed description of the nature and characteristics of case studies as well an overview of case study practices in logistics and operations management, see e.g. Häkkinen & Hilmola (2005).

contacted based on their acquisition history and prior information attained from the compiled database used in Paper 1 and possible questionnaire data. A number of contacted companies rejected the offer, and finally data were gathered on nine acquisition deals.

As no established framework existed on the specific area of interest, cases were contrasted against the framework presented in Paper 1 to include cases with varying backgrounds. Case selection could be described as theoretical sampling where replication logic was applied to produce contrary results due to the diverse and complex backgrounds involved (cf. Eisenhardt 1989, 537; Yin 1991, 53-54). Thus, it was presupposed that the different cases would portray different patterns, though it was not clear in what specific way.

Furthermore, the initial intention was also to apply literal replication (Yin 1991) within certain industries. However, this objective had to be rejected due to limitations set by access and research resources. Six of the cases are reported in Paper 3. The others were excluded because they did not fit the final scope of the study (i.e. were domestic), were considered to be completed so recently that analysing the post-acquisition effects was premature, or insufficient data were available to perform a full-scale case comparison.

The case company in Paper 4 was chosen based on its active acquisition history and overall versatile growth strategy. Thus, it could be considered to portray the qualities of an extreme case (Yin 1991), though its strategy was perhaps not unique. From a theoretical perspective, both the case company and the case industry provided an opportunity to examine the value creation possibilities linked to relatively low levels of post-acquisition integration, an issue that was not considered to have been addressed comprehensively in the previous research stages (cf. critical case study design, Yin 1991).

This examination of multiple acquisitions embedded in the organisational context of one firm enabled the investigation of variable patterns also between separate units of analysis (cf. Hitt et al. 1998). The case firm agreed to participate in the research, but not to the extent initially hoped for by the author. Data were collected on 13 acquisition deals completed by the case company during the past five years. The final analysis and report (see Paper 4) included five individual acquisition deals. The deals were chosen to profile the overall acquisition strategy but also to illustrate the variety of different acquisition types completed by the case firm. Furthermore, the completeness of post-acquisition actions was considered.

In connection with the case studies reported in Papers 3 and 4, both qualitative and quantitative data were gathered covering both the pre- and post-acquisition attributes of each deal. Data were collected from several types of sources in order to enhance understanding by examining the research object

from various perspectives. This enabled data triangulation<sup>9</sup> e.g. in terms of acquisition performance. The main body of data was gained from in-depth interviews with key informants representing senior management in the acquirer firms. Each deal was covered by one informant. Informants were chosen based on their broad knowledge of company actions and the conducted acquisition deal during the period under examination, as well as their ability and willingness to communicate with the research (cf. Cowles et al. 2002; Kumar et al. 1993).

The initial intention was to interview several informants in relation to each deal, or to extend primary data gathering in a few selected deals. However, attaining commitment from the case organisations for long-term research cooperation proved troublesome. Such problems are common in acquisition research (e.g. Birkinshaw et al. 2000, 401-402; Larsson 1990, 324), despite the fact that the topic holds practical relevance, and opening up this black box through managerial insights would significantly benefit both research and practice (Shimizu et al. 2004).

All interviews were semi-structured<sup>10</sup> and they were recorded. The interview write-ups were made based on the interview structures rather than producing readable narratives of the entire interviews, as the purpose was not to analyse the narrative elements as such (cf. Yin 1981, 60). In addition to gathering primary data on the studied cases through interviews, secondary data from financial statements, annual reports, press releases and the popular business press were collected. The produced case descriptions were sent to the respective informants for possible comments.

The emphasis of data analysis presented in Papers 3 & 4 is on cross-case comparison. This included techniques such as pattern-matching (Yin 1991) and cross-tabulating the cases across different dimensions to reveal similarities and differences between individual deals (Eisenhardt 1989). The primary aim is to understand individual cases and their dynamics within the present setting (cf. Eisenhardt 1989, 534). Thus, the purpose is not to produce generalisable results in the traditional positivistic sense, but rather to advance knowledge through theoretical generalisation by identifying the real (causal, teleological

See interview guides in Appendices 3 and 4.

0

Triangulation can take many different forms. For example, Denzin (1978) distinguishes between 1) data triangulation, i.e. the use of a variety of data sources, 2) investigator triangulation, i.e. the use of several researchers or evaluators, 3) theory triangulation, i.e. the use of multiple perspectives to interpret a single set of data, and 4) methodological triangulation, i.e. the use of multiple methods to study a single problem. During the course of this study, data triangulation (e.g. data on acquisition performance in Papers 3 and 4), investigator triangulation (interviews linked to Paper 3), theory triangulation (multifaceted theoretical framework), and methodological triangulation (iterative research process) were employed. Overall, the study uses triangulation in order to develop a rich and holistic understanding of the studied phenomenon rather than to examine the convergent validity of measures and to unravel a single fixed truth (cf. Jick 1979; Scandura & Williams 2000).

or other) mechanisms which function as tendencies in the production of phenomena (Lukka & Kasanen 1995, 77-78) by applying replication logic linked to multiple case studies.<sup>11</sup>

In addition to the use of purely empirical methods, the research process also involved applying a conceptual approach. Paper 2 represents an integrative research review (Cooper 1989, 13), which is used as a method to summarise past research by drawing overall conclusions from separate studies in a qualitative manner. Similarly, the entire research process itself can be seen as a theoretical review, where different theoretical explanations are compared to the studied phenomenon (Cooper 1989, 13). Evidence for this comparison comprises both original and extant research contributions.

The final iterative round of the research process involved two stages: 1) a comparison of the overall results with extant theory as well as 2) performing a reality check of the results through expert interviews. An interview structure (Appendix 5) was formulated based on the overall logic of the developed theoretical framework, but in such a manner that it did not refer to any single acquisition deal as such. The majority of the interview questions were openended. However, by enfolding the attained results with extant literature, a structured list of possible response elements was drafted to assist the interviewer in comparing individual responses with the overall research results in a condense fashion.

In total, 20 Finnish companies or individual experts with an extensive acquisition background were contacted during the autumn of 2004. These contacts led to 16 interviews, of which a complete list is given in Appendix 6. Only one contact gave a direct negative response to participating in the interview round, but would have agreed to an interview at a later point in time. Overall, this response and the individual interviews gave an indication of the practical relevance of the research topic. All the interviews were recorded and subsequently compared to the outlined answer list. The responses were analysed briefly through categorisation. The information attained was of most value in relation to shaping a linkage between the results of earlier research phases and managerial practice<sup>12</sup> and to confirming the relevance and logic behind previously gained results. This final round of data collection also increased the overall understanding of the studied phenomenon beyond the

Overall, the conducted case studies represent an approach close to that of e.g. Eisenhardt (1989) rather than the tradition of so-called classic case studies as explained by Dyer & Wilkins (1991). While the former approach has been criticised e.g. for concentrating on surface data rather than on deeper social dynamics (see Dyer & Wilkins 1991), this approach was considered appropriate considering the study focus and the comparative logic inherent to this method.

See managerial implications in Sub-chapter 7.2 in particular.

initial scope of research, i.e. the operational aspect of post-acquisition integration, to a broader managerial context.

The use of multiple methods and data sources was found to correspond well with the purpose and scope of the study. It was seen to be necessary as prior research concerning the area in focus was limited, and the phenomenon under examination was highly complex. The use of different triangulation methods contributed to improving the rigour, depth, and breadth of results (Denzin & Lincoln 1994, 2), which can be viewed as comparable to validation (Yin 1991, 40-45), but also enhanced the investigator's ability to achieve a more complete understanding of the studied phenomenon (Jick 1979; Scandura & Williams 2000). Nevertheless, in retrospect, the overall reliability and validity of the study could have further been improved by e.g. applying more rigour to statistical analysis, increasing the number of informants, and extending the period of data gathering to encompass multiple points in time rather than providing a retrospective snapshot.

#### 1.4 Structure of the study

Chapters 2 and 3 continue with an overview of acquisition research which today comprises numerous streams with different theoretical foundations and foci. Chapter 2 concentrates on aspects relating to the acquisition process and its management; Chapter 3 discusses the findings of extant research on acquisition-related value creation.

Chapter 4 further elaborates on the specific focus area of this dissertation. Here the operational aspect of acquisitions as well as the principles and characteristics of the different theoretical perspectives adopted are discussed in greater depth. Based on this discussion, a tentative theoretical framework is devised to address the study objectives. In Chapter 5, the four original manuscripts incorporated in the dissertation are summarised and their main findings and contributions to the research process are presented. Individual empirical findings are then enfolded with existing literature to provide synthesis in form of an operational integration typology in Chapter 6. Finally, Chapter 7 outlines the wider implications of the research results as a whole and shapes directions for further research.

# 2 PRIOR RESEARCH ON THE ACQUISITION PROCESS

Acquisitions have been of interest to researchers for decades. While the earliest studies concentrated on the economic consequences of acquisition activity at a macro level (e.g. Dewing 1921; Livermore 1935), research focusing on the concerns of individual organisations was initiated by strategy scholars (e.g. Penrose 1959; Chandler 1987; Rumelt 1986). This discussion viewed acquisitions in the light of diversification theory and aimed at identifying the characteristics of successful deals through e.g. the concept of relatedness.

Later the research focus shifted towards exploring the role of acquisition management and understanding the variables managers can manipulate to foster deal success. This study primarily represents the process school of acquisition research in which these themes are central. However, due to the inherent nature of this stream of literature, contributions from other schools are also of relevance. Therefore, the streams of acquisition research and their main contributions are discussed in the following through the lens of the acquisition process perspective.

# 2.1 Acquisition process

The acquisition process is commonly discussed in terms of different phases<sup>13</sup>. For example, Lindgren (1982) differentiates between the pre-acquisition phase, the actual acquisition phase, and the post-acquisition phase (cf. Marks & Mirvis 1998). The pre-acquisition phase consists of the formulation of overall company strategy in respect to acquisition activity, as well as the general establishment of acquisition policies and guidelines (Lindgren 1982). Research in this area has typically aimed at explaining acquisition behaviour, both through studying company motives from an organisational perspective (e.g. Ansoff et al. 1972) and examining the relationship between various environmental factors and acquisition activity from an economic perspective (e.g. Pfeffer 1972).

<sup>&</sup>lt;sup>13</sup> See e.g. McKiernan & Merali (1997), Marks & Mirvis (1998), Lindgren (1982), Rappaport (1998), and Graves (1981).

The acquisition phase changes the level of focus to an individual acquisition. This phase involves pre-acquisition planning, the delegation of responsibilities, target identification, evaluation and analysis, deal negotiations, and the conclusion of the acquisition agreement (Lindgren 1982; cf. Rappaport 1998, 136-138; Hall 1986).

Finally, the post-acquisition phase consists of actions that are taken to reach the acquisition objectives (Lindgren 1982). This phase is also commonly referred to as the integration or combination stage. The post-acquisition phase consists of various levels of interaction. For example, some authors distinguish between the legal and physical combination of the firms, and the psychological and cultural side of integration (e.g. Buono & Bowditch 1989; Birkinshaw et al. 2000).

Other studies (e.g. Hall 1986) prefer to discuss the development of the acquisition process according to certain managerial tasks or challenges related to different parts of the overall process rather than defining different individual phases. Haspeslagh & Jemison (1991, 12) choose to examine the acquisition process under two main headings, decision-making process problems (i.e. pre-acquisition stage) and integration process problems (i.e. post-acquisition stage), where the pre-acquisition and acquisition phases of Lindgren (1982) are viewed jointly (Figure 4).



Figure 4 Outline of the acquisition process (cf. Haspeslagh & Jemison 1991; Lindgren 1982)

The approach applied by Haspeslagh & Jemison (1991) emphasises that many acquisition-related questions overlap and interact. This would seem to be a pragmatic choice when examining an individual acquisition process from a managerial perspective and this view is also adopted in this study.

Furthermore, the focus of this study primarily lies in the pre- and post-acquisition issues brought up by Haspeslagh & Jemison (1991) rather than in tasks commonly associated with the 'acquisition phase' (i.e. the financial evaluation of a target, negotiations, legal combination).

However, when adopting this approach, it should be acknowledged that an individual deal does not take place in an organisational vacuum but it naturally involves linkages to e.g. general strategic decision-making, which makes it hard to define the actual starting point of a certain acquisition. Similarly, defining generic limits for when the post-acquisition phase actually ends can be almost impossible. Especially when discussing matters of organisational assimilation, two separate cultures may continue to exist years after the legal agreement has been closed (Risberg 2003).

Due to these limitations, this phased view is used merely to outline different strands of research and managerial concern rather than to argue in favour of any model or appropriate boundaries between different phases. The remainder of this chapter is devoted to giving an overview of these different strands, starting from matters of strategic planning and ending with post-acquisition factors.

#### 2.2 Rationale behind acquisition

# 2.2.1 Acquisitions vs. other growth mechanisms

As, for example, Capron et al. (1998) point out, due to the constraints of internal capacity, businesses often turn to external markets to gain access to new resources or to employ existing resources in new uses. Such internal constraints include the irreversibility of investment and the limited range of past operating routines (Nelson & Winter 1982; Teece 1986).

As such, acquisitions represent a mode, which enables companies to obtain valuable resources more quickly than through internal capital expenditure (Finkelstein 1997; Pfeffer 1972) or alliances (Das & Teng 1998), and provides greater control than licensing or alliances. On the other hand, acquisitions entail high resource commitments. (Osland et al. 2001) Other equity-based (e.g. greenfield investment, joint ventures) and non-equity-based modes (e.g. exporting, licensing, alliances) also involve their advantages and drawbacks (e.g. Shimizu et al. 2004).

Much of the existing research on international acquisitions has been conducted within this entry mode stream. Research has been closely connected to studies on foreign direct investment, the tradition of transaction cost economics (e.g. Williamson 1975, 1991), and the ownership-location-

internationalisation framework (e.g. Dunning 2001). The major focus has been on identifying the antecedents of international acquisitions rather than examining related outcomes (Shimizu et al. 2004). Table 2 draws together some of the most commonly examined factors influencing modal choice.

Table 2 Factors affecting the institutional mode of internationalisation identified by prior research

# **Industry and country** Environmental uncertainties and risk (e.g. social, specific factors economical, and political uncertainty) (e.g. Brouthers & Brouthers 2003; Erramilli & Rao 1993) Cultural distance between home and host countries (e.g. Brouthers & Brouthers 2000; Chen & Hu 2002; Kogut & Singh 1988) Host market growth rate (e.g. Brouthers & Brouthers 2000; Hennart & Reddy 1997) Other factors e.g. technological intensity, manufacturing vs. service industry related features, specific cultural aspects (e.g. Anand & Delios 2002; Brouthers & Brouthers 2003; Osland et al. 2001) Firm specific factors Firm size (absolute and relative) (e.g. Brouthers & Brouthers 2000; Erramilli & Rao 1993) Nature of desired/shared resources (e.g. Erramilli & Rao 1993; Hennart & Reddy 1997) Product diversification (e.g. Brouthers & Brouthers 2000; Barkema & Vermeulen 1998) Experimental knowledge (e.g. multinational or host country specific experience) (e.g. Harzing 2002; Barkema & Vermeulen 1998)

Despite substantial research efforts in this area, the reported results are in some respects mixed. Furthermore, relationships between variables are not always direct or linear, which underlines the complexity of modal choice. (Shimizu et al. 2004; Lemoine 2004)

(e.g. Davis et al. 2000)

Other factors e.g. organisational culture

Managerial literature has adopted a more straightforward approach and offers normative guidelines on the appropriate choice (e.g. Garette & Dussauge 2000; Roberts & Liu 2001). For example, Dyer et al. (2004) discuss

alliances and acquisitions as alternative strategies, and suggest that acquisition should be the preferred choice when the aim is to realise reciprocal synergies (rather than e.g. modular synergies) and when the transaction will result in large quantities of redundant resources. Regarding industry- and country-specific factors, acquisition should be favoured when the degree of business uncertainty is relatively low and the competition for resources is fierce.

Although Dyer et al. (2004) bring together the results of academic research in a concrete, although simplified, manner, the approach fails to acknowledge that not all modal possibilities are feasible in real-life situations. <sup>14</sup> Furthermore, whereas managerial literature is keen to point to a certain expansion strategy suitable for a certain type of situation, literature is less likely to recommend the total rejection of a certain business opportunity. However, Dyer et al. (2004, 114-115) highlight an important factor, which has been somewhat overlooked by academic research: while traditionally studies in this area commonly view each institutional mode in isolation, in practice successful companies often apply a diverse growth strategy, which entails multiple modes of entry and expansion.

#### 2.2.2 Acquisition motives

Most researchers agree that acquisitions are complex phenomena shaped by various patterns of acquisition motives, which no single theory can comprehensively cover (e.g. Steiner 1977). Nevertheless, an abundant amount of literature has concentrated on explaining the reasons behind acquisitions, both at the macro and micro levels.

Macro level studies have clearly shown that acquisition activity generally occurs in waves, where the economy moves from relatively low levels of acquisition activity to a sharp rise in transactions, both in terms of frequency and monetary value (Andrade & Stafford 2004; Auster & Sirower 2002; Brush 1996; Gort 1969; Mitchell & Mulherin 1996; Mulherin & Boone 2000; Weston et al. 1990). From a U.S. perspective<sup>15</sup>, five historical acquisition waves can be identified (Jansen 2002; Kim 1998; Scherer & Ross 1990; Katz et al. 1997). Large-scale acquisition activity has started much more recently in Europe (Garette & Dussauge 2000). All in all, providing a detailed historical analysis of European transactions is difficult due to the lack of adequate data

.

For example, Deans et al. (2002) have shown how acquisition activity fluxes in most industries through a clear and predictable consolidation life cycle. Thus, acquisition opportunities can be seen as being different for different companies e.g. in newly deregulated industries compared to companies in highly concentrated industries.

Hunt (1990, 69) argues that this also applies to UK markets.

(Sachwald 1994, 17). Table 3 presents an overview of past acquisition waves and their main drivers.

Table 3 Overview of past acquisition waves (cf. Jansen 2002; Kim 1998; Scherer & Ross 1990; Katz et al. 1997)

Period	Acquisition type and main drivers
1897-1904	Predominately horizontal acquisitions. Caused a surge in industrial stocks and resulted in the creation of monopolies.
1916-1929	Horizontal and vertical acquisitions. The antitrust law of the 1920s reduced the proportion of horizontal acquisitions. Fewer monopolies, more oligopolies and vertical integration.
1965-1969	Conglomerate acquisitions. Empire building and benefiting from managerial synergies.
1981-1989	Divestitures, bargain-seeking acquisitions, hostile takeovers. Main drivers e.g. consolidation, specialisation, globalisation, deregulation, and restructuring.
1993-2001	Related acquisitions. Benefits from coordinating resources and responding to e.g. globalisation and increased importance of knowledge-based resources.

In addition to such temporal macro-level fluctuation, individual acquisitions occur for a variety of reasons. One of the more comprehensive theoretical taxonomies of acquisition motives has been presented by Trautwein (1990). This classification identifies seven different theories explaining acquisition activity.

Acquisition as a rational choice	Beneficiary: Acquirer shareholders	Net gains through synergy	Efficiency theory
		Wealth transfer from customers	Monopoly theory
		Wealth transfer from target shareholders	Raider theory
		Net gains through private information	Valuation theory
	Beneficiary: Managers		Empire-building theory
Acquisition as a process outcome	Process theory		
Acquisition as a macroeconomic phe	Disturbance theory		

Figure 5 Theories of acquisition motives (Trautwein 1990, 284)

Typically, acquisition research has assumed that acquisition activity is a result of rational choice. Trautwein (1990) adds two exceptions to this notion. First, at a macroeconomic level acquisitions can be explained through disturbance theory. According to Gort (1969), acquisition waves are a result of economic disturbances that cause changes in individual expectations and increase the general level of uncertainty, thus generating discrepancies in asset valuation. However, other explanations regarding the macroeconomic nature of acquisitions have also been presented. From an institutional theory perspective, isomorphism may provoke organisations to imitate each other's practices, such as acquisitions, thus causing macroeconomic effects (Amburgey & Miner 1992; Carow et al. 2004; Laamanen et al. 2004). Weston et al. (1990, 99-103) and Deans et al. (2002), on the other hand, propose that product and industry life cycle considerations predict different types and magnitude of aggregate acquisition activity.

Secondly, *process theory* argues that acquisition choices are not comprehensively rational decisions, but are affected by e.g. bounded rationality, organisational routines, and political power (Trautwein 1990). For example, Rond & Bouchikhi (2004) distinguish between different strands of process theory, i.e. the organisational life-cycle, teleological, evolutionary, and dialectic approaches, and study their applicability in understanding alliance development. Similar approaches have also been used in acquisition research. For example, Auster and Sirower (2002) use related argumentation to propose institutional theory as an interpretative framework for understanding the incentives behind acquisition waves. However, it could be argued that despite these factors, acquisition choices can be intended to be rational or include

rational arguments, although the outcome may not follow one logical line of reasoning.

From a broad perspective, the remaining acquisition motives can be explained by two main classes of theories. *Managerial or empire-building theories* suggest that managers intentionally embark upon acquisitions to maximise their own benefits instead of those of their shareholders. This would imply the maximisation of revenue or personal power and fringe benefits at the expense of profits. (Mueller 1969; Berkovitch & Narayanan 1993; Baumol 1962; Marris 1964)

Value-maximising theories can further be divided according to the source of benefits. Acquisition motives related to monopoly and raider theory imply wealth transfer from other stakeholders in favour of the acquirer's shareholders <sup>16</sup>. *Monopoly theory* views acquisitions as being planned and executed to achieve market power. Trautwein (1990) argues that these so-called collusive synergies (see Chatterjee 1986) can be realised from both horizontal and conglomerate transactions, but represent no efficiency gains at the level of the economy. In motives linked to *raider theory*, value is allegedly transferred from the shareholders of the target firm to those of the acquiring firm. However, this argument lacks both complete logic and supporting empirical evidence (Trautwein 1990).

Valuation theory views acquisitions as being executed as a consequence of so-called private information. The assumption is that the acquirer possesses valuable and unique information to enhance the value of the combined firm through purchasing an under-valuated target, or the acquisition entails benefits that can be realised only through combining two distinct firms. (Trautwein 1990, see also Barney 1988)

Finally, *efficiency theory* argues that acquisitions are executed to achieve different types of synergies. Financial synergies result from achieving a lower cost of capital due to e.g. an increase in size or risk diversification (e.g. Scherer & Ross 1990). Operational synergies stem from combining separate units or from knowledge transfer (e.g. Porter 1985, 325). Operational synergies may result in reduced costs for the involved units, or enable the firm to offer unique products or services. Managerial synergies are derived from infusing superior new management into firms suffering from competence or motivational deficiencies (e.g. Scherer & Ross 1990; Walsh & Ellwood 1991).

Trautwein (1990, 292-293) argues that valuation theory, empire-building theory, and process theory have the highest degree of plausibility. However, as can be expected, available evidence is severely limited as such motives are rarely explicitly stated or visible through the actions of the acquirer. Efficiency

Haspeslagh & Jemison (1991) refer to this as value capture.

gains are the most common motive cited by managers. However, empirical evidence does not support the successful realisation of such gains.

From a theoretical point of view, Trautwein's classification does not include typical motives related to vertical acquisitions that are linked to managing critical external dependencies (cf. Walter & Barney 1990). From a resource dependency viewpoint, vertical acquisitions in particular can be seen as a means to reduce the uncertainty and external dependence regarding the external resources that the firm needs to fulfil its goals (Pfeffer 1972; Finkelstein 1997; cf. Pennings 1981; Pfeffer & Salancik 1978). Similarly, horizontal acquisitions may be seen as a way to buy out competitors and thus reduce competitive or commensalistic interdependence (Pfeffer 1972). Additionally, the bidding firm may benefit from acquiring its direct competitor by changing existing customer relationships so that the relative dependence of its prior customers increases by reducing the customers' availability of reaching their goals outside the focal relationship (cf. Emerson 1962). Reducing external interdependence is also related to conglomerate transactions, where it is linked to risk diversification (Pfeffer 1972).

Overall, the classification by Trautwein does not explicitly examine acquisition motives and objectives from the viewpoint of company management. It also excludes the selling motives of the target firm<sup>17</sup> as well as some less strategic incentives<sup>18</sup>. Figure 6 attempts to summarise common motives behind international horizontal acquisitions from the viewpoint of an acquirer company's management rather than from that of acquisition theory.

<sup>17</sup> For example, attaining access to the resources of the larger acquiring company (e.g. Weston et al. 1990), or providing an exit method for aging owner-managers (e.g. Scherer & Ross 1990).

<sup>&</sup>lt;sup>18</sup> For example, considerations relating to taxation, government policy, or short-term share price development (e.g. Scherer & Ross 1990; Weston et al. 1990; Ansoff et al. 1972).

# Expansion & development

- Geographic expansion
- Product expansion
- Follow clients
- Redeploy resources to target
- Redeploy resources from target
- Converge new, emerging industry

# Increase internal efficiency

- Obtain economies of scale
- Obtain economies of scope

# Improve competitive environment

- · Increase market share
- Pursue market power
- Achieve size required for global competition
- · Defence mechanism
- Acquire competitor
- Pre-empt competitors
- Create barriers to market entry
- Reduce industry overcapacity
- Benefit from cost differentials (e.g. labour)

## Financial motives

- · Diversify risk
- Invest in fastergrowing economy
- Turnaround failing target

# Personal motives

- Increase sales and asset growth
- Gain personal power and prestige
- Cash in on short-term stock market reactions through incentive systems

#### Other

- Circumvent protective tariffs, quotas, etc.
- Benefit from exchange rate differentials

Figure 6 Potential objectives behind horizontal cross-border acquisitions (cf. Weston et al. 1990; Capron & Mitchell 1997; Ansoff et al. 1972; Walter & Barney 1990; Bower 2001; Brouthers et al. 1998; Steiner 1977; Howell 1970; Kitching 1967)

In line with the results of previous studies (e.g. Walter & Barney 1990; Capron & Mitchell 1997; Brouthers et al. 1998), it is argued that objectives related to improving internal efficiency, company expansion and development, and improving the firm's competitive environment are the most commonly cited reasons for horizontal cross-border acquisitions. Typically, several different motives may simultaneously influence the behaviour of the acquiring firms (e.g. Walter & Barney 1990; Brouthers et al. 1998).

### 2.3 Pre-acquisition combination potential

#### 2.3.1 Strategic fit and the relatedness of resources

The strategic management stream of acquisition research largely stems from diversification theory and therefore has strongly focused on the pre-acquisition combination of the target and bidder firms. Especially the relationship between relatedness and acquisition success has gained substantial attention and can be viewed as one of the most studied areas in this field of research (Chandler 1987; Rumelt 1986; Seth 1990a).

Relatedness can be defined as common skills, resources, markets, production technologies, distribution systems, and purposes between the combined firms (Rumelt 1986, 11-19). In spite of the complexity entailed in this definition, studies have traditionally operationalised relatedness using the Standard Industry Classification (SIC) codes of the bidder and target firms (e.g. Morck et al. 1990; Kusewitt 1985) or other simplified measures.

For example, Shelton (1988) has developed a generic classification of target-bidder pairs based on concepts introduced by Salter & Weinhold (1979). The typology divides acquisitions into four categories of strategic fit based on the relatedness of the firms' products and markets (Figure 7). Each fit represents a different type of asset combination with differing potential for value creation. Another commonly used taxonomy for examining strategy fit is the FTC classification<sup>20</sup> (e.g. Chatterjee 1986; Lubatkin 1987) but also more detailed operationalisations of relatedness and strategic fit have been employed (e.g. Farjoun 1998; Hopkins 1987).

c

<sup>&</sup>lt;sup>19</sup> Jemison & Sitkin (1986, 146) define strategic fit as the degree to which the target augments or complements the parent's strategy and thus contributes to the financial and non-financial goals of the acquirer.

See also the extended version of the FTC model by Larsson (1990).

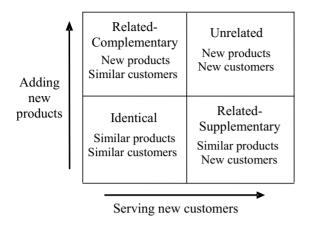


Figure 7 Strategic fits between target and bidder firms (Shelton 1988, 280)

Early literature on diversification claims that diversified firms have a number of advantages largely unavailable to their highly focused counterparts, and thus unrelated acquisitions should create more value than related transactions. Related arguments are linked to market power advantages and financial benefits from using internal markets for capital and other resources. (e.g. Caves 1981; Williamson 1986; Scherer & Ross 1990; Grant 2002) This proposition of a positive and linear relationship between diversification and performance builds largely on the work of Gort (1962) and the tradition of industrial organisation economics. Behaviour supporting this proposition was clearly visible during the 1960s as the U.S. economy experienced a strong increase in company diversification. Yet empirical support is not universal and findings have been inconsistent.<sup>21</sup>

More recently, the trend has turned towards reduced diversification, which can be observed both in strategy literature and company behaviour. From a theoretical point of view, discussion has revolved around the concepts of core competences and capabilities<sup>22</sup> (see e.g. Prahalad & Hamel 1990; Teece et al. 1997). In connection with this contemporary view on strategy, it has been argued that related diversification should outperform unrelated moves as the former includes more points of contact and overlap between the firms' value chains, resulting in higher potential for operational synergies (Rumelt 1986; Capon et al. 1988; Kusewitt 1985; Palich et al. 2000). Managers are also argued to be better positioned to identify and exploit opportunities within their

.

For a more extensive review of general diversification studies see Palich et al. (2000).

These concepts will be returned to in Sub-chapter 4.2.2 as they are central components of the contemporary resource-based view.

own area of expertise (Pennings et al. 1994; Roberts & Berry 1985; Prahalad & Bettis 1986).

As has been the case with general diversification studies, empirical results concerning the relationship between relatedness and performance are also inconclusive within acquisition research<sup>23</sup>. Nevertheless, continuous efforts have been made to empirically substantiate such a connection. For example, Cording et al. (2002) assert that conflicting results on relatedness may reflect problems in measurement and classification rather than the true dynamics underlying acquisitions.

As such, the traditional notion of combination potential builds on the similarity of the acquisition counterparts (e.g. Shelton 1988; Singh & Montgomery 1987). Differences in strategic and operational focus have often been viewed as less valuable or even as a factor which deteriorates performance. Larsson & Finkelstein (1999) argue that this traditional concept of relatedness does not take into account complementary sources of synergy such as matching products, market access, or know-how (cf. Harrison et al. 1991; Larsson 1990; Capron et al. 1998). Therefore, the authors propose that combination potential should be understood both in terms of economies of sameness (from combining similar operations) and economies of fitness (from combining complementary operations).

In line with this argument, empirical studies have recently given indications that the integration of complementary resources actually holds greater synergy potential than the integration of identical resources (e.g. Hitt et al. 1998). Similarly, results of the meta-analysis by Palich et al. (2000) suggest that moderate levels of diversification yield higher levels of performance than limited or extensive diversification, thus suggesting a curvilinear relationship between relatedness and performance. Strategy scholars explain these findings by arguing that acquisitions, which combine complementary resources, provide the potential to create a unique and difficult-to-imitate resource bundle. This kind of competitive advantage can be sustained for a long period of time, thus leading to higher long-term company performance (Harrison et al. 2001).

Theoretically, this observation has also been connected to the notion that acquisitions will result in above average returns only when uniquely valuable synergistic assets are involved (cf. valuation theory). Highly similar resources

<sup>&</sup>lt;sup>23</sup> Certain studies report a positive relationship between relatedness and performance (Shelton 1998; Singh & Montgomery 1987; Kusewitt 1985; Rumelt 1986; Maquieira et al. 1998; Pennings et al. 1994), others a negative association (Chatterjee 1986; Agrawal et al. 1992). Lubatkin (1987), in turn, found no statistically difference between related and unrelated deals (see also King et al. 2004; Montgomery & Wilson 1986). Some studies also give indications that related-complementary holds the highest synergy potential (e.g. Hopkins 1987; see also Shelton 1988; Lubatkin 1983), but conflicting findings have also been reported (Kitching 1967).

are generally easy for the whole market to detect whereas complementary resources provide synergistic opportunities, which are often not so obvious to all market players.

#### 2.3.2 Other combination attributes

As research on the effects of relatedness has not been able to provide sound results, scholars have attempted to find other pre-acquisition antecedents to successful acquisitions. One concept which has arisen from this discussion is organisational fit<sup>24</sup>. For example, Weber et al. (1996) argue that acquirers also need to consider the organisational or cultural compatibility of the firms as part of pre-acquisition planning, as a lack of cultural fit may undermine the prospect of achieving synergy or generate additional costs during the integration process<sup>25</sup>. Studies in this area have discussed aspects such as the difficulties in matching firms' operating systems, management styles, subjective and objective organisational cultures (Lubatkin 1983; Buono et al. 1985; Datta 1991; Chatterjee et al. 1992; Leighton & Tod 1969), as well as matters of national culture (Morosini et al. 1998; Weber et al. 1996).

Overall, research on organisational fit is much less-established than literature on strategic compatibility (Datta 1991). However, it is hard to draw an analogy between these two research topics due to e.g. the nature, availability, and operationalisation of related data. Furthermore, the notion of fit seems to promote the idea of homogeneous organisations and that the respective cultures should be fully assimilated during post-acquisition integration (Risberg 2003). However, cultural diversity may also entail certain benefits and all acquisitions may not require an assimilation strategy (e.g. Nahavandi & Malekzadeh 1988). Nonetheless, exploring and apprehending organisational similarities and differences can facilitate the integration process and indirectly affect acquisition performance (Risberg 2003; Larsson & Finkelstein 1999).

A number of authors have suggested that size differences between the bidder and target firms also influence acquisition performance (e.g. Kitching 1967; Kusewitt 1985; Lubatkin 1983; Hunt 1990). Intuitively, it could be expected that relatively large acquisitions<sup>26</sup> would have a greater combination

<sup>&</sup>lt;sup>24</sup> Jemison & Sitkin (1986, 147) define organisational fit as the match between administrative and cultural practices, and personnel characteristics of the combined firms that may directly affect the subsequent integration process.

<sup>&</sup>lt;sup>25</sup> In line with this notion, Chatterjee et al. (1992) find that organisational fit is an important factor in creating value in related acquisitions.

Ratio of the target firm assets, staff etc. compared to those of the bidder firm.

potential, especially in the case of related acquisitions. When the acquiring firm is substantially larger than the target, combination potential is limited by size constraints (e.g. Seth 1990b; Larsson & Finkelstein 1999). Organisational literature suggests a similar relationship by arguing that when the target firm is relatively small, the human integration needs of the target are commonly overlooked by the buyer (Mirvis 1985), and that these acquisitions may not receive sufficient managerial attention to realise the projected synergies (Larsson & Finkelstein 1999).

Although a number of studies have provided supportive evidence for a positive relationship between relative size and acquisition performance<sup>27</sup>, conflicting results have also been reported (e.g. Kusewitt 1985; Agrawal et al. 1992). For example, Penrose (1959) and Shrivastava (1986) argue that the larger the size of the acquired firm relative to the bidder, the more difficult it is for the bidder firm's management to understand and carry out appropriate integrative actions.

Both Kusewitt (1985) and Lubatkin (1983) suggest that the relationship between size and performance may be more complex than is generally assumed. Kusewitt (1985) proposes that both excessively small and excessively large acquisitions should be avoided. Lubatkin (1983), in turn, suggests that a small acquisition may play a role in promoting a capability also linked to enhancing acquisition performance, namely acquisition experience.

This learning perspective asserts that with each successful acquisition, up to a certain point, company management should become more skilled in finding the necessary integrative actions and avoiding related problems, thus increasing the probability of positive acquisition outcomes (e.g. Lubatkin 1983). An opposite view holds that very high acquisition rates can lead to corporate indigestion (see e.g. Kusewitt 1985).

Empirical findings regarding this performance antecedent are also mixed (e.g. Hunt 1990; Kusewitt 1985; Fowler & Schmidt 1989). Haleblian & Finkelstein (1999) argue that the acquisition experience curve is U-shaped. Thus, relatively inexperienced acquirers inappropriately apply knowledge from previous acquisitions to dissimilar targets. Through experience, company management learns to generalise knowledge when an acquisition is similar to prior situations, and to discriminate dissimilar situations where previous experience cannot be applied. Zollo & Singh (2004) report similar findings from the banking industry, where the codification of tacit knowledge from

2

Supporting findings have been reported by e.g. Shelton (1988), Seth (1990b), Hunt (1990) and Larsson & Finkelstein (1999). Kitching (1967) reported that acquisitions where the target firm's sales were less than 2% of the acquirer exhibit especially high failure rates (cf. Kusewitt 1985). Seth (1990b) further confirmed these results and found that after excluding small targets, related acquisitions significantly outperformed unrelated deals.

previous acquisitions is shown to have a positive impact on performance. Laamanen et al. (2004) find that acquisition experience is also positively related to the propensity to engage in large acquisitions and it decreases the tendency to imitate other's acquisition practices in the same industry.

Other target or acquirer characteristics, which have been studied in relation to performance include the financial performance or quality of the target firm (Hunt 1990; Kitching 1967; Kusewitt 1985; Morck et al. 1990; Zollo & Singh 2004), the acquirer's financial slack (i.e. excess financial resources or favourable debt position) (Hitt et al. 1998), and organisational age or structure (Fowler & Schmidt 1989; Shrivastava 1986). We now turn to examining the pre-acquisition phase from an acquisition management perspective and discuss issues related to this stage that influence post-acquisition integration and deal outcomes.

#### 2.3.3 Managerial considerations

While much of the discussion in the previous section can be related to the selection process of potential acquisition candidates, the role of target analysis, negotiation process and deal agreement attributes<sup>28</sup> have also raised academic interest. From a managerial point of view, due diligence can be seen as one of the key tasks in the pre-acquisition phase. Due diligence is a process that may already begin in the earliest stages of the acquisition by assisting in target firm selection (Hitt et al. 2001). However, due to its complexity and required efforts, there should be a certain threshold to initiating the process.

The primary objective of due diligence is to provide an objective, independent examination of the value and risks associated with the target firm. Its main focus is on financials, tax matters, asset valuation, company operations, and providing assurances to the creditors, advisors, and acquirer management. (Angwin 2001) Hitt et al. (2001) argue that effective due diligence should also take into account organisational and cultural factors, and try to identify possible human barriers in the process. Separate 'cultural due diligence' solutions for identifying corresponding culture profiles have also been coined (Jansen 2002; Carleton & Stevens 2004; Pribilla 2002). However, as discussed in the previous section, it cannot clearly be stated what type of impact on performance a certain level of fit will have. International acquisitions represent an even more complicated due diligence process due to

\_

<sup>&</sup>lt;sup>28</sup> For example, deal initiator, negotiation approach (i.e. merger or tender offer), method of payment (i.e. stock or cash), number of bidders/offers, number of days to reach settlement, secrecy, characterisation of the deal (friendly, neutral or hostile), ethical concerns, opportunism, and premium paid (see e.g. Walsh 1989; Hunt 1990; Hitt et al. 1998; Datta et al. 1992).

legal, fiscal and cultural issues (see Kissin & Herrera 1990; Hitt et al. 2001; Angwin 2001). Despite the importance of due diligence (e.g. Hitt et al. 2001), research specifically focused on this process is virtually non-existent (Shimizu et al. 2004).

The due diligence process also has implications in terms of target valuation. General valuation guidelines, though abundant (e.g. Sirower 1997; Rappaport 1998; Dibelius 2002; MacDougal & Malek 1970), rely on valuating target assets and their combinational value, but are rarely sensitive to costs associated with realising the projected synergies. For example, Jansen (2002) argues that acquiring firms are typically over-optimistic regarding integration costs, and therefore acquisitions frequently exhibit below-normal returns. Furthermore, the valuation of resources is not always an easy task due to e.g. information asymmetry and matters of embeddedness (Cording et al. 2002). From the process perspective, problems linked to over-payment can occur due to fragmented perspectives (Haspeslagh & Jemison 1991), bounded rationality (Lubatkin 1983), the exaggerated self-confidence of managers (i.e. managerial hubris) (Hayward & Hambrick 1997; Roll 1986), and escalating momentum to close the initiated deal (Haspeslagh & Jemison 1991).

A significant portion of acquisition research has focused on alternative ways of structuring acquisition deals in order to mitigate risks related to the post-acquisition phase. The key question concerning payment methods relates to whether a certain transaction should be completed through stock or through cash<sup>30</sup>. In addition to risk assessment, literature suggests that company management should consider e.g. the possible under- or over-valuation of the acquirer's shares, tax treatments, and short-term market reactions when deciding the method of payment. (Rappaport & Sirower 1999; King et al. 2004) Reuer et al. (2004) examine the antecedents of performance-contingent payout structures and find that firms tend to use contingent payouts in international acquisitions when investing in high-tech and service industries or when the bidder lacks experience in the acquired business. However, evidence relating to a direct relationship between the method of payment and performance remains, as yet, to be demonstrated (King et al. 2004).

International acquisitions generally involve more information asymmetry than domestic deals. Given the risks related to such deals, outside advisors

<sup>&</sup>lt;sup>29</sup> Barney (1988) concludes that in order to obtain above-normal returns from acquisitions, firms should complete deals only in imperfectly competitive markets, where other bidders value the target at a lower level than the focal bidder due to private or uniquely valuable synergies (cf. valuation theory).

From a market perspective, in cash transactions, the shareholders of the acquiring firm hold the entire risk related to synergy realisation. In stock transactions, the risk (as well as the potential value) is shared between bidder and target shareholders in proportion to the ownership of the combined firm. Furthermore, the exchange of shares can be structured in two ways: either through a fixed-share deal or through a fixed-value deal (see Rappaport & Sirower 1999).

such as investment bankers and legal counsellors often play a significant role in closing cross-border deals (Shimizu et al. 2004). Although issues relating to possible agency conflicts have produced some research (e.g. Kosnik & Shapiro 1997; Kesner et al. 1994), research on the roles of professional outside advisors (i.e. investment bankers, management consultants, lawyers, and accounting firms) in the pre-acquisition process is limited (Shimizu et al. 2004), which cannot be seen as truly surprising, taking into account the confidentiality of these relationships.

From a process perspective, the whole pre-acquisition stage should not be seen merely as a separate phase, but should also pave the way for post-period actions in order to support subsequent value creation. For example, Henderson (1989) argues that the acquiring firms should use the due diligence and negotiation processes to get a head start on the post-acquisition process by outlining the means to achieve the post-acquisition goals and attempting to avoid unrealistic expectations (see also Croyle & Kager 2002).

#### 2.4 Post-acquisition integration

#### 2.4.1 Definitions and concepts

Acquisition literature has frequently pointed out that the combination potential linked to a certain transaction does not itself bring the expected benefits; rather managerial actions after the agreement largely determine the results (Datta 1991; Hunt 1990; Schuler & Jackson 2001; Haspeslagh & Jemison 1991). Problems linked to the post-acquisition phase are also commonly seen as a major reason for acquisition failure. For example, Shrivastava (1986, 66) argues that one-third of all merger failures are caused by faulty integration. In the following, the central concepts linked to post-acquisition integration will be discussed in the light of extant research.

Post-acquisition integration involves actions taken to secure the efficient and effective direction of organisational activities and resources to accomplish a set of acquisition objectives (Pablo 1994; Haspeslagh & Jemison 1991). Previous studies have identified multiple integration levels (e.g. Lees 2003; Pablo 1994; Zollo & Singh 2004) and types (e.g. Birkinshaw et al. 2000; Shrivastava, 1986; Haspeslagh & Jemison 1991). The adopted level and type of integration is determined by various strategic and organisational factors, and is considered critical to the deal outcome (Kitching 1967; Pablo 1994; Shrivastava 1986; Haspeslagh & Jemison 1991; Lees 2003; Larsson & Finkelstein 1999; Napier 1989).

Drawing on the seminal work by Thompson (1967), the level of integration can be defined as the extent to which functions of the acquired unit are linked to, aligned with, or centralised in the equivalent functions of the acquiring firm (cf. Lawrence & Lorsch 1967, 11). In acquisition literature, the level of integration basically refers to the degree of post-acquisition change in the organisations' structural, administrative, and cultural configuration, and can be seen as ranging from autonomy to total absorption (Schweiger & Walsh 1990; Pablo 1994; Lees 2003; Child et al. 2001; Olie 1994)<sup>31</sup>. Thus, in this context, the concept goes beyond the functional or departmental integration perspective (cf. Lawrence & Lorsch 1967) and includes organisation-wide cultural integration, smaller intra-departmental subgroups, and individual integration (cf. Elsass & Veiga 1994).

In general, as the degree of integration increases, so does the complexity of the process (Jemison & Sitkin 1986; Kitching 1967; Pablo 1994). A high level of integration improves the coordination of knowledge flows, which can increase the potential benefits of joint knowledge development, but at the same time it will cause significant organisational disruption. Low levels of integration respectively will cause less disruption and support autonomous knowledge creation. (Puranam et al. 2003; Lees 2003; Very et al. 1997) For example, human resources and capabilities exhibit characteristics which are sensitive to organisational disruption and at the same time present risk due to their high level of mobility (Cording et al. 2002).

In addition to recognising the overall profoundness of integration, other authors have chosen to distinguish between different integration types. In this context, Shrivastava's (1986) typology is probably the most cited<sup>32</sup>:

- *Procedural integration* involves the combining of systems and procedures on operating, management control, and strategic planning levels. The goal is to unify and standardise work procedures in order to improve communication and the productivity of processing information. This type of integration is typically related to combining accounting systems as well as legal and strategic planning issues.
- Physical integration usually accompanies procedural integration. It can
  involve e.g. the consolidation of production, research and development,
  and real estate assets. Problems in this area are typically related to the

For example, Haspeslagh & Jemison (1991, 117-121) apply a similar categorisation by differentiating between substantive, administrative, and symbolic interaction. Substantive interactions involve capability transfer, while administrative integration focuses on developing common information and control systems. Symbolic interactions are aimed at influencing certain beliefs.

3

<sup>&</sup>lt;sup>31</sup> While e.g. Zollo & Singh (2004) and Morosini et al. (1998) operationalise the level of integration through ordinal categories, for example Lees (2003) presents a more intricate classification of integration levels.

- realisation of synergies as well as to replacement and redeployment issues
- Managerial and socio-cultural integration involves several tasks, such
  as the selection or transfer of managers, changing the organisational
  structure, developing a consistent corporate culture, and committing
  and motivating personnel. This integration type is even more complex
  and time-consuming than the previous ones.

Birkinshaw et al. (2000) describe the different aspects of the integration process in a similar fashion to Shrivastava (1986). They suggest a process model consisting of two parts: task integration and human integration. Task integration stresses value creation as the acquisition objective, measured in terms of the transfer of capabilities and resource sharing. Human integration, in turn, is primarily concerned with generating satisfaction and, ultimately, a shared identity among the employees of both firms. Empirical findings indicate that in effective integration, these two sub-processes do not proceed at the same pace, but that different aspects should be advanced in different phases. In the early phase of integration, the acquired company should be left relatively autonomous in terms of task integration while human integration proceeds smoothly. This will lead to cultural convergence and mutual respect which enables further task integration and renewed efforts to achieve synergies through knowledge transfer and combination in the later phase. (Birkinshaw et al. 2000)

Thus, post-acquisition integration can also be understood as the transfer or dismissal of tangible and intangible assets, which aims at creating value (e.g. Haspeslagh & Jemison 1991; Larsson & Finkelstein 1999; Håkanson 1995; Bresman et al. 1999; Ranft & Lord 2002; Schuler & Jackson 2001). For example, Capron (1999) has studied these value creation mechanisms through two concepts; asset divestiture and resource redeployment.

Asset divestiture refers to the elimination of redundant activities and inefficient management practices. This behaviour is explained through market inefficiencies, i.e. transaction costs, which prevent firms from using market contracting to rationalise and specialise their assets (Scherer & Ross 1990; Dranove & Shanley 1995; Teece 1982). Some strands of acquisition research perceive asset divestiture as evidence of failure. However, from a strategic perspective, acquisitions may provide the means for restructuring company resources, and asset divestiture can be seen as a logical consequence of this process (Capron et al. 2001; Dranikoff et al. 2002). For example, firms in traditional manufacturing industries may use multiple acquisitions and divestitures to reconfigure their assets to respond to the requirements of the contemporary business environment. In such a context, divestitures may be a

consequence of consolidating manufacturing capacity to increase efficiency and disposing of industry over-capacity. Acquisitions, on the other hand, may be used to build an after-sales service network to support traditional manufacturing activities, gain access to growing markets, or otherwise provide benefits from the resultant combinations of company resources. (cf. Dutz 1989; Capron et al. 2001; Fernández 2004, 112) Thus, acquisitions and divestitures can be seen as two sides of the same coin.

Resource redeployment is defined as the use by a target or acquiring firm of the other's resources, which includes both the physical transfer of resources to new locations and the sharing of resources without physical transfer (Capron 1999, 990). The use of acquisitions as a mechanism for such redeployment is explained through market failure arguments; market imperfections create complications in the pricing and transfer of intangible assets in particular, and increase the associated risks of establishing arm's length contracts to access such resources (Chi 1994; Teece 1982; Williamson 1975). While the concept of resource redeployment, as explained by Capron (1999), includes the transfer of physical resources as well as intangible assets, such as knowledge or skills, other authors have chosen to separate these aspects.<sup>33</sup>

#### 2.4.2 Antecedents and consequences of integration

Several studies have examined the association between relatedness and the subsequent integration level as well as the significance of integration in explaining acquisition outcome. For example, Datta & Grant (1990) find that in unrelated acquisitions, the extent of autonomy<sup>34</sup> allowed to target company management is significantly greater than in related acquisitions, suggesting more profound integration in related acquisitions (see also Chatterjee et al. 1992; Nahavandi & Malekzadeh 1988; Shrivastava 1986). While the autonomy allowed in unrelated deals was positively related to acquisition performance, no significant relationship was found between autonomy and performance in related deals (Datta & Grant 1990). Datta & Grant (1990) continue to argue that, at times, integration can be detrimental to performance

<sup>&</sup>lt;sup>33</sup> Haspeslagh and Jemison (1991, 28-32) distinguish between resource sharing (i.e. the combination and rationalisation of operating assets), functional skill transfer (i.e. shifting process skills and detailed knowledge), and general management skill transfer as different types of capability transfer.

Autonomy is understood as the amount of day-to-day freedom that the target company management is given to manage its business. Autonomy is regarded as a major motivator in satisfying people's higher order needs (e.g. meaningful and responsible work), and is associated with organisational flexibility and the effective response to environmental contingencies. (Datta & Grant 1990)

due to e.g. organisational differences. Thus, deciding on the level of integration in related acquisitions should be made only after the careful examination of all the relevant factors related to this trade-off.

In their study, Larsson & Finkelstein (1999, 12) found the quantity and quality of integration to be the strongest predictor of acquisition performance. A high degree of integration is an important means of synergy realisation, especially when the combination potential is high. Similar findings on a positive relationship between integration and synergy have also been asserted by other researchers (e.g. Shrivastava 1986; Zollo & Singh 2004; Castrogiovanni & Bruton 2000). However, for example, the study by Ansoff et al. (1972) reported that integration had little influence in acquisition performance (see also Datta 1991). Paine & Power (1984), in turn, propose that successful acquisitions can also involve minimal integration<sup>35</sup>, and that partial integration may produce the poorest performance.

In addition to value creation objectives, integration decisions have been shown to be influenced by organisational task needs, cultural characteristics, power aspects, and the similarity of the companies' strategic visions (Pablo 1994). In fact, the findings by Pablo (1994) indicate that organisational task needs, which reflect the need to maintain some level of structural differentiation between the combined firms to protect organisational context-bound capabilities, commonly outweigh strategic task needs. Olie (1994) suggests that high levels of integration increase the risk of conflict potential and an eventual breakdown of the combination due to organisational diversity. Such conflicts would thus hinder the implementation of the acquisition and have a deteriorating effect on acquisition performance. Conversely, the study by Larsson & Finkelstein (1999, 12) found no significant relationship between the degree of integration and employee resistance.

Thus, integration seems to have two types of influence on acquisition performance. In related acquisitions, the realisation of the projected synergies may be jeopardised, given an insufficient level of integration. On the other hand, excessive reconfiguration can prevent the development of conditions conducive for independent value creation and, for example, unintentionally increase employee turnover. (Pablo 1994; Cannella & Hambrick 1993; Hambrick & Cannella 1993). Table 4 sums up the trade-offs between high and low levels of integration identified in previous studies.

<sup>&</sup>lt;sup>35</sup> Factors supporting low levels of integration can be e.g. low temperamental fit, the need for decentralised decision-making, or a lack in understanding the acquired business (Paine & Power 1984).

Table 4 Integration trade-offs in acquisitions (cf. Graebner 2004; Zollo & Singh 2004; Larsson & Finkelstein 1999)

HIGH INTEGRATION	LOW INTEGRATION
Critical for realising synergies (Larsson & Finkelstein 1999)	Less disruption to existing resources and routines (Buono & Bowditch 1989)
Critical for transferring knowledge (Ranft & Lord 2002)	Less negative employee sentiments (Chatterjee et al. 1992)
Critical for reconfiguring resources (Capron & Mitchell 1997)	Lower employee turnover (Hambrick & Cannella 1993)
Increases probability of successful launch of subsequent products (after the first launch) (Puranam et al. 2003)	Increases probability of successful launch of first product after the acquisition (Puranam et al. 2003)
Allows tighter control and closer observation of potential problems (less related risks) (Pablo et al. 1996)	Critical for fostering acquired knowledge and related innovation (Ranft & Lord 2002; Pablo et al. 1996)
	Less coordination costs and related financial and strategic risks (Pablo 1994; Pablo et al. 1996)

However, as Puranam et al. (2003) note, in practice integration is not a dichotomous variable. More elaborate integration typologies, which aim to capture this complexity in a better manner, have been presented by e.g. Napier (1989), Haspeslagh & Jemison (1991), and Leroy (2004). The typology of Haspeslagh & Jemison (1991) is probably the most widely applied in acquisition research (Figure 8).

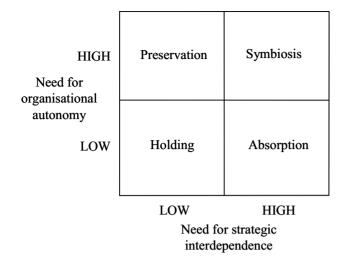


Figure 8 Types of acquisition integration approaches (Haspeslagh & Jemison 1991, 145)

In this typology, the key determinants for each integration approach are the need for strategic interdependence between the combined companies, and the need for organisational autonomy. The need for strategic interdependence indicates the extent to which capability transfer between the firms needs to be employed in order to accomplish the acquisition's purpose. On the other hand, interdependence disturbs organisational boundaries and may result in negative employee reactions. The need for autonomy indicates the extent to which the organisations need to be kept separate in order to avoid such negative reactions, which can destroy the potential benefits of the acquisitions. (Haspeslagh & Jemison 1991; Pablo et al. 1996) Thus, managers need to balance these two needs when deciding on the appropriate integration approach. For example, if the primary objective is to keep the source of acquired benefits intact, a preservation approach may be in order, which entails managing the target's operations at arm's length. In contrast, if the aim is to eliminate all differences between the firms, an absorption strategy entailing full consolidation is seen as the optimal choice.

The framework entails many qualities linked to value creation potential and integration trade-offs discussed above. In addition, the model recognises the possibility of firms achieving benefits, typically linked to both high and low integration levels, through the symbiotic approach (see also Graebner 2004). However, the typology of Haspeslagh & Jemison stays at a strategic level and does not explicitly take into account, for example, target company reactions (Risberg 2003). It fails to appreciate fully the fact that post-acquisition integration can be *a complex and interactive process* of mutual adjustment,

which may involve attributes of different approaches at lower organisational levels.

Furthermore, the majority of research in this area either draws from a purely strategic school of thought promoting tight integration in related acquisitions, or from a human resource management perspective underlining the need for autonomy. In terms of acquisition-related value creation, less research has been conducted, for example, relating to value creation potential in linkage to relatively low integration, in particular in the context of horizontal acquisitions.

### 2.4.3 Managerial considerations

According to Schweiger & Weber (1989), integration must be carefully planned, if the expected synergies are to be realised. Literature suggests that integration planning should already commence in the pre-acquisition stage (Noble et al. 1997; Hubbard 1999; Shrivastava 1986) and several studies have shown that the lack of systematic integration planning has led to failure in achieving the integration objectives (Jemison & Sitkin 1986; Kitching 1967; Schuler & Jackson 2001; Hitt et al. 1998). However, Haspeslagh & Jemison (1991) point out that 'determinism' in carrying out the outlined integration strategy may also cause problems. This notion implies that, in the light of new information, it may be necessary to adjust these initial plans and therefore flexibility within integration is also important.

When planning for post-acquisition integration, it should be acknowledged that effective integration requires substantial financial and managerial resources (Haspeslagh & Jemison 1991). As such, one key issue in post-acquisition management is the selection of managers and integration teams who will see the integration process through at different organisational levels (Leighton & Tod 1969; Marks & Mirvis 1998; Inkpen et al. 2000; Haspeslagh & Jemison 1991; Kitching 1967). As management attention and energy is generally extracted from other organisational activities, integration can distract the acquirer from its own core business, thereby compromising other important goals (cf. Hitt et al. 1991; Schoar 2002). Being able to preserve momentum during this turbulent phase is therefore critical (Graebner 2004).

Integration management has also been seen as critical due to its potential in mitigating dysfunctional organisational consequences. Such human resource issues have become increasingly important due to the emphasised role of knowledge-based resources in contemporary acquisitions (e.g. Bresman et al. 1999). Key aspects linked to this discussion include (Mayerhofer & Hartmann 2004; cf. Schuler & Jackson 2001):

- Cultural integration,
- Retention of key talent and managers
- Communication

A significant amount of research has been dedicated to examining postacquisition integration as "the meshing of people, cultures and organisational practices" (Nahayandi & Malekzadeh 1988, 88). From this perspective, it has been argued that initial organisational fit, as such, may be an insufficient determinant of success, as the management of cultural integration or acculturation<sup>36</sup> also plays an important role in this process. Empirical evidence on horizontal acquisitions suggests that it is not culture differences as such that matter, but rather that the two companies find a solution so they can work together (Cartwright & Cooper 1992). Nahavandi & Malekzadeh (1988) argue that in order to assure successful acquisition implementation, the organisations should have similar preferences regarding the ways in which these two groups adapt to each other and resolve emergent conflict. For example, the combination of an acquirer, which promotes adherence in organisational culture across its units, with a target, which is interested in preserving its own culture and practices, may result in acculturative stress and implementation failure. Furthermore, managers can support the desired cultural outcome through various actions. For example, involving the affected employees in such activities as introduction programmes, training, cross visits, retreats, and other socialisation rituals, can encourage the creation of a joint organisational culture (Larsson & Lubatkin 2000, 21).

In the case of cross-border acquisitions, differences between national cultures create additional challenges for post-acquisition integration (Barkema et al. 1996). Preferences between different integration approaches have also been shown to be sensitive to national culture. For example, Child et al. (2001) find that acquirers portray different integration styles, which may cause conflicts when the preferred acculturation modes differ. On the other hand, Morosini et al. (1998) report a positive relationship between national cultural distance and post-acquisition performance. This view is also supported by Vermeulen & Barkema (2001), who argue that cross-border acquisitions are an important source of new information and capabilities, which provide strategic flexibility to the acquirer.

Alongside the rise of studies concerning cultural clashes, research on employee turnover and retention has also increased (e.g. Ranft & Lord 2000;

<sup>36</sup> Acculturation can be defined as changes induced in cultural systems resulting from the diffusion of cultural elements in both directions (Nahavandi & Malekzadeh 1988, 81).

Cannella & Hambrick 1993)<sup>37</sup>. In some cases, employee turnover may be a desired outcome, for example, in the case of incompetence. In other cases, the retention of acquired expertise can be an essential determinant for realising the acquisition objectives. Research in this area has primarily focused on top management turnover (Walsh 1988; Cannella & Hambrick 1993; Very et al. 1997; Krug & Nigh 1998; Bergh 2001), although employee losses at lower organisational levels can also have detrimental effects (e.g. Coff 1999; Inkpen et al. 2000). Employee retention can be supported by e.g. providing career development possibilities (Larsson et al. 2001) and establishing effective compensation programmes (Wood 1992; Inkpen et al. 2000). Cross-posting staff and offering cross-organisational responsibilities to acquired personnel can also increase employee motivation (Mayerhofer & Hartmann 2004) and has been shown to increase value creation (Graebner 2004).

Furthermore, managing possible layoffs and divestitures is closely related to employee motivation and retention. Layoffs not only affect those employees whose contracts are terminated, but also the 'survivors' of the divestiture process, whose continued efforts are most vital to organisational success (Brockner 1992). Downsizing can, for example, induce job insecurity among the remaining staff, resulting in stress, dissatisfaction, and thus lower productivity (e.g. Mishra et al. 1998). For example, Chadwick et al. (2004) find that showing consideration toward employees' morale and welfare<sup>38</sup> during downsizing is positively related both to perceived success and financial performance.

An important part of such consideration is communication towards employees in terms of both quality and quantity (e.g. Elsass & Veiga 1994; Shrivastava 1986; Risberg 2001; Schweiger & DeNisi 1991). Unfortunately, managers tend to adhere solely to formal communication and keep their divulged information at a safe level, thus potentially creating even greater anxiety and confusion (Marks & Mirvis 1998, 173-177)<sup>39</sup>. Furthermore, research indicates the importance of individual managers as dispensers of information involving individual-level consequences to their subordinates (Schweiger et al. 1987; Graebner 2004). Therefore, communication essentially needs to reach influential managers at all hierarchical levels.

<sup>37</sup> For example, Cannella & Hambrick (1993) provide an extensive review of the impact of CEO departures.

This was measured through the amount and frequency of communication with employees, offering a detailed rationale for initiating divestitures, the degree of dignity and compassion given to those colleagues made redundant.

<sup>&</sup>lt;sup>39</sup> Whalen (2004) reports that informal communication tools especially, e.g. joint volunteer initiatives, cross-divisional training, and managers walking around, have a positive effect on performance.

Overall, literature on post-acquisition management has been biased towards human resource issues whereas there is remarkably little research on the other aspects of post-acquisition change (Child et al. 2001; Larsson & Finkelstein 1999). For example, while several studies have acknowledged the role of employee reactions in explaining post-acquisition outcomes, few have examined the effects on supplier and customer relationships (e.g. Anderson et al. 2001; Havila & Salmi 2000). This, despite the fact that numerous acquisitions are motivated by e.g. the possibility to gain quick access to new markets (e.g. Bower 2001), which inevitably involves matters impacting external inter-organisational relationships. Post-acquisition management research still entails a number of research gaps, for example, linked to moving beyond strategic intent towards operations level actions, and investigating the role of other stakeholders apart from employees.

### 3 PRIOR RESEARCH ON ACQUISITION-RELATED VALUE CREATION

### 3.1 Acquisition performance measurement

Early research on acquisitions was strongly focused on analysing the average performance effects of transactions, and scholars have continued to produce studies in this area during former decades. Research on acquisition performance and value creation has stemmed from two separate schools of thought: economics and finance.

Finance scholars have typically studied acquisitions or 'the market for corporate control'<sup>40</sup> (see e.g. Manne 1965) relying on stock market-based performance measures (Jarrell et al. 1988; Jensen & Ruback 1983). The popularity of capital market studies is a result of several attractive features. First, data are publicly available enabling the use of large data samples. Secondly, the stream relies upon the well-established efficient market hypothesis<sup>41</sup>. Thirdly, using measurements such as abnormal returns enables the use of broad samples as data are not subject to industry sensitivity. (Cording et al. 2002)

While Jensen (1984, 120) has argued that "scientific evidence indicates that activities in the market for corporate control almost uniformly increase efficiency and shareholders' wealth", when examining the division of this wealth creation, it can be noted that benefits, even if attainable on average, are not evenly distributed. Studies on the abnormal returns show that in general bidding firms seem to attain no significant positive returns, while target shareholders garner the majority of abnormal returns (Chatterjee 1992; Datta et al. 1992; Jarrell et al. 1988; Jensen & Ruback 1983; King et al. 2004; Carper 1990; Agrawal et al. 1992).

<sup>&</sup>lt;sup>40</sup> From this perspective, acquisition markets are seen as an arena in which managerial teams compete for the rights to manage corporate resources (Jensen & Ruback 1983, 5).

This implies that investors are able to accurately predict the future cash flows of the combined firms.

These studies have typically applied event study methodology<sup>42</sup> and examined stock prices shortly after the deal is announced. The positive or negative stock market reactions are supposed to reflect both the anticipations of the shareholders and actual acquisition success. However, the assumption that investors are able to predict accurately the future cash flows of the combined firm could well be questioned. On the other hand, this directly addresses the validity of the established efficient market hypothesis (Shleifer & Vishny 1991). To a lesser extent, stock prices have also been used as a success indicator in later event windows<sup>43</sup>.

While event studies have been a popular tool for examining initial reactions to acquisition announcements and average success rates, this methodology offers limited applicability for investigating the actual effects of postacquisition integration (cf. Cording et al. 2002; Larsson & Finkelstein 1999). An increasing interest towards these issues has altered the definition of success towards a more long-term perspective and brought about alternative methods for assessing acquisition performance. The most established of these approaches is the economics school which uses accounting-based measures to examine performance (e.g. Ravenscraft & Scherer 1987; Goldberg 1983; Porter 1987; Hunt 1990; Dickerson et al. 1997). These studies typically rely on statistical analysis and use e.g. operating profit, return on equity, and return on assets as indicators of performance (e.g. Zollo & Singh 2004; Krishnan et al. 1997; Ramaswamy 1997; Grant et al. 1988). Similarly, Brush (1996) uses industry-specific market share as a measure of competitive performance (cf. Buzzell et al. 1975) and argues it to be the only performance measure available at the level of disaggregation necessary for intra-industry analysis.

The justification for using accounting-based measures relates to the fact that company managers (and external analysts) frequently use the same measure as supportive tools for strategic decision-making (Harrison et al. 1991; Grant et al. 1988). Thus, these measures are argued as reflecting the impact of company strategy more directly than stock prices (Grant et al. 1988). Nevertheless, accounting measures also have their drawbacks; long-term financial figures are affected by numerous factors, and the actual acquisition impact may be hard to identify through the noise. Furthermore, financial data always reflect the past rather than the future (Montgomery & Wilson 1986). All in all, studies representing the economics school have failed to find

Event studies examine the effects of the acquisition on the stock market valuations of target and bidder firms around the time the deal is announced. A common method is to calculate cumulative abnormal returns, i.e. the increase in stock price over that which the capital asset pricing model, would predict excluding the acquisition (Fama et al. 1969; Cording et al. 2002). See also Datta et al. (1992) on operationalising shareholder wealth creation as prediction errors.

<sup>&</sup>lt;sup>43</sup> Results of the meta-analysis by King et al. (2004) show these long-term effects to be significantly negative for the acquiring firm.

consistent evidence of improved performance or productivity gains in relation to acquisitions (Caves 1989; Goldberg 1983; Ravenscraft & Scherer 1987; Kaplan 2000).

Subjective success measures offer a finer-grained option for examining value creating mechanisms. During recent years an increasing amount of studies have used surveys (e.g. Capron 1999; Cannella & Hambrick 1993; Chadwick et al. 2004) or case studies (e.g. Ravenscraft & Scherer 1987; Haspeslagh & Jemison 1991; Larsson 1990; Vaara 1992) to evaluate success, for example, against specific acquisition objectives. While these methods have certain consequences towards generalisation, for example, case studies enable the investigation of the complex relationships behind performance (Cording et al. 2002; Vaara 1996).

Only a small number of studies have examined operation-specific performance (Langabeer 2003), although a handful of studies have examined the effects of acquisitions on R&D performance. Related empirical findings show that acquisitions have a negative effect on both R&D input and output (Hitt et al. 1991), and that firms active in the market for corporate control introduce fewer new products (Hitt et al. 1996). More recently, Langabeer (2003) has explored the relationship between acquisitions and supply chain performance. Findings suggest that, overall, acquisitions have a negative effect on operational performance, and that a negative relationship prevails between the volume and intensity of acquisitions and supply chain performance. However, the study only examines performance one year after deal completion. Performance effects on a broader time horizon could show different results as operations have had time to stabilise.

In the light of academic research, Hunt (1990, 70) has concluded that studies using financial, accounting, or managerial performance assessment have displayed an acquisition failure rate of around 50%. This is confirmed by the recent meta-analysis by King et al. (2004); results show that, on average, the performance of acquiring firms is negatively affected, to a modest extent, in terms of both stock and accounting measures. Also consultancy literature has constantly provided projections of average acquisition success rates. These studies generally report that over half of acquisitions reduce shareholder value (e.g. compared to industry trend) or fail to meet their initial expectations (Unlocking shareholder value 1999; Merger integration 2001; Henry & Jespersen 2002; Corporate marriage 1999; Merger endgames 2002).

In terms of international acquisitions, findings on stock market effects are different compared to domestic deals (Shimizu et al. 2004). While domestic deals have been shown to reduce the acquirer's shareholder value, several studies report positive wealth creation effects in cross-border acquisitions (e.g. Markides & Ittner 1994; Morck & Yeung 1992; see also Eun et al. 1996). This

finding is emphasised in studies covering more recent acquisitions which could be seen as evidence of the diminution of negative cross-border attributes (e.g. high cultural distance and low organisational fit) due to rapid globalisation. (Shimizu et al. 2004) However, studies using account-based (Lee & Caves 1998) or subjective (see Nitsch et al. 1996) performance measures have suggested less positive outcomes for international acquisitions.

#### 3.2 Sources of value creation

Extant research has identified a number of potential sources of value creation in acquisition situations. However, as is the case with assessing acquisition performance as such, research has mainly applied a capital market perspective. Based on this tradition, Seth (1990a, 1990b) presents a rather typical, yet comprehensive, classification and asserts that five principal value creation explanations exist:

- Market power
- Economies of scale
- Economies of scope
- Coinsurance
- Risk diversification

Market power offers the ability to control the price, quantity, or nature of the products sold in the output market. In horizontal acquisitions, such market power benefits are supposed to result in revenue-side gains for the acquiring firm, due to monopolistic or oligopolistic opportunities (see e.g. Stigler 1968). Increased power also has effects towards input markets. Related benefits are then linked to reduced costs (Larsson 1990). Seth (1990b), however, incorporates these benefits under scale economies.<sup>44</sup>

Economies of scale arise when the increased size of a single operating unit e.g. producing or distributing a single product reduces the unit cost of production or distribution (Chandler 1990, 17). The source of these economies relates both to the indivisibility of resources (Weston et al. 1990, 194) and to benefits arising from accumulated experience (Perspectives on experience 1970).

In contrast, economies of scope result from the use of processes within a single operating unit to e.g. produce or distribute more than one product (Chandler 1990, 17; Seth 1990a, 440). Benefits can arise from the shared use

See also Bain (1959) on both buyer and seller concentration.

of indivisible tangible assets such as specialised production capacity or intangible assets such as proprietary know-how (Teece 1980).

Coinsurance refers to an acquisition situation where the earning streams of the acquirer and target firm are imperfectly correlated, which is argued to increase the optimal amount of debt after the acquisition. As the value of tax savings on incremental debt is greater than incremental leverage-related cost, by increasing debt after the acquisition, the combined firm stands to create addition value. Gains from coinsurance are generally related to conglomerate acquisitions. However, in the case of pure related-supplementarity, potential for coinsurance benefits may also exist. (Seth 1990a, 1990b)

Benefits from risk or financial diversification are also expected to be more important in conglomerate than related acquisitions. These gains apply to situations where the returns of the combined firms are imperfectly correlated. In such a situation, the existence of various market perfections such as costly information or the indivisibility of financial assets may lead to gains from pooling risk through acquisitions. Unlike the first four benefit types, which result from changes in operating decisions (e.g. production, marketing, research and development, human resource, or financial decisions), risk diversification gains occur due to the combination alone. (Seth 1990a; 1990b)

According to Lubatkin (1983), horizontal acquisitions are most likely to benefit from economies of scale, market power, and to a lesser extent, diversification economies<sup>45</sup>. Furthermore, Singh & Montgomery (1987) argue that related acquisitions contain potential for economies of scope. (cf. Chatterjee 1986; Seth 1990a, 1990b)

Chatterjee (1986) discusses the same issue of acquisition-related value creation through the concept of synergies<sup>46</sup>. He divides synergies into three broad categories based on the distinct competence or scarce resources to which each synergy type is linked. *Collusive synergies* refer to resources leading to market power. *Operational synergies* involve resources leading to production and/or administrative efficiencies (cf. economies of scale and scope). Finally, *financial synergies* represent resources that lead to a reduction in the cost of capital. At a conceptual level, Chatterjee (1986) argues that all related acquisitions may stand to benefit from operational and financial synergies, whereas only purely horizontal acquisitions can produce collusive synergies.

4

<sup>&</sup>lt;sup>45</sup> Lubatkin (1983) views horizontal and product concentric acquisitions jointly, while distinguishing marketing concentric acquisitions as their own group. In addition, all acquisition types can benefit from banking and compensation economies (see Howell 1970).

<sup>&</sup>lt;sup>46</sup> By definition, synergy exists when the value of the combined entity exceeds the sum of the values of the individual firms (Seth 1990a) and is thus considered as a synonym for value creation.

The above discussion largely depicts the traditional view of horizontal acquisitions which stresses the role of monopolisation effects and scale economies that dates back to the 1950s<sup>47</sup>. More recently, strategy scholars have promoted the idea that horizontal acquisitions can also be used to reconfigure the resources of the acquirer and target firms (Capron et al. 1998; Karim & Mitchell 2000; Krishnan et al. 2004; Bowman & Singh 1993). Market power and scale efficiencies may be important incentives for horizontal deals in relatively stable industries (Dutz 1989). However, many contemporary corporations operate in dynamic environments with frequent technical innovation, regulatory change, and increased globalisation. Acquired market power or scale efficiencies are likely to erode gradually in such a setting. (Capron et al. 1998, 632) This proposition has inspired a number of authors to re-examine the sources and mechanisms of value creation behind horizontal acquisitions.

Capron (1999) discusses value creation in horizontal acquisitions through the exploitation of two types of synergies: (1) *cost-based synergies* and (2) *revenue-based synergies* (cf. Anand & Singh 1997; Eccles et al. 1999). Cost-based synergies are supposed to be primarily derived from scale and scope economies, based largely on the argumentation above. The realisation of revenue-based synergies, in turn, is closely linked to resource redeployment (see Sub-chapter 2.4.1).

Revenue-based synergies acknowledge the possibility of the acquirer and the target achieving a higher level of sales growth together than either company on its own, by combining their resources. These synergies are harder to estimate than cost reductions because they involve external variables, such as customer reactions. Related synergy potential can be realised, for example, when a superior product of the target is combined with the more extensive distribution channel of the acquirer. (Eccles et al. 1999) Several empirical studies have analysed resource redeployment following acquisitions (Capron et al. 1998; Karim & Mitchell 2000; Krishnan et al. 2004). Commonly studied resources include the sales force, brands, and other marketing-related assets (e.g. Capron & Hulland 1999). Another important driver of many recent acquisitions has been the potential synergy linked to redeploying new technologies and R&D knowledge (Ranft & Lord 2002; Bresman et al. 1999).

In line with this argument, several studies have pointed out that traditional synergy typologies overlook the value creation potential related to combining complementary resources. While, for example, economies of scale are achieved through the accumulation of similar resources and assimilation of

<sup>47</sup> Stigler & Bain (1950) started the debate on which effect had been the superior motive behind the first acquisition wave, which was mainly comprised of horizontal transactions.

activities, revenue side benefits commonly build on complementary resources. (Larsson 1990; cf. Capron 1999; Hitt et al. 2001) Larsson (1990) refers to these benefits as 'economies of fitness', and stresses that they should not be confused with economies of scope. For example, economies of scope are generally only discussed in connection with production while economies of fitness consider the interaction between various organisational parts (Larsson 1990).

Seth et al. (2002) and Shimizu et al. (2004) imply that the sources of value creation may differ between domestic and international acquisitions. Whilst in domestic deals, synergistic gains are supposed to be derived from increased operational efficiency, market power, or financial leverage, cross-border acquisitions are linked to the exploitation of firm-specific resources due to market imperfections (Morck & Yeung 1992; Seth et al. 2002), thus supporting the resource reconfiguration argument. In addition, Vermeulen & Barkema (2001) find that cross-border deals provide new knowledge and perspectives. The partners' individual experiences can help firms learn new skills, discover unknown financing options, gather important information about specific industries, and learn about the general institutional context at the local level (cf. Hamel 1991; Beckman & Haunschild 2002).

The above findings suggest that the traditional approach to examining acquisition-related value creation may not be the most valid when discussing horizontal cross-border acquisitions in the contemporary environment. In order to capture the mechanisms behind value creation in a more comprehensive manner, the present study adopts a strategic rather than a capital market perspective towards value creation. Value creation is understood as a long-term phenomenon that results from managerial actions and interaction between the combined firms (cf. Haspeslagh & Jemison 1991; Larsson & Finkelstein 1999). Value creation is discussed from the perspective of acquirer company management; not from the owners' viewpoint as such. The focus area of the chosen perspective is illustrated in Figure 9.

Management of acquiring firm	Accounting-based and subjective evaluation	
	Short-term performance	Long-term performance
Measurement focus	Realised combination benefits	Realised benefits from resource reconfiguration
10000	Expected future benefits based on information available to managers	Expected future benefits based on information available to managers

acquiring firm	Market-based evaluation	
	Short-term performance	Long-term performance
Measurement focus	Realised market value capture	Realised market value creation
	Expected future benefits based on information available to markets	Expected future benefits based on information available to markets

Figure 9 Different perspectives towards acquisition-related value creation

Studies using market-based measures reflect performance in terms of the stockholders' predictions regarding future cash flows. These predications are always based on limited information regarding the actual implementation plans and objectives. Event study results typically reflect initial perceptions and short-term value capture, which involves value shifted from previous stakeholders to new stakeholders of the combined firm (Haspeslagh & Jemison 1991; Trautwein 1990). Long-term studies reflect predictions based on improved information. However, long-term stock development will include an increasing amount of other unrelated factors (e.g. other acquisitions, other strategic decisions) influencing perceived performance, thus making it difficult to distinguish acquisition-related effects from this noise.

When concentrating on company actions aimed at value creation, a management perspective would seem to provide a more fruitful approach. Subjective performance evaluation enables one to tap the expected long-term implications of the acquisition in a better manner. Accounting-based measures are used to add also an objective aspect to performance. However, it should be noted that accounting-based data only reflect past actions and is easily distorted by external noise. The long-term perspective is adopted in order to capture the effects of resource reconfiguration more comprehensively and not merely to concentrate on the benefits that arise from combination alone (see Haspeslagh & Jemison 1991, 29; Seth 1990a).

### 4 THEORETICAL FRAMEWORK

#### 4.1 Operational aspect to post-acquisition integration

Several recent studies have noted that research on post-acquisition change has been fragmented. Human resource issues have received the most attention whereas there is remarkably little research on the other aspects of post-acquisition change. (Child et al. 2001; Larsson & Finkelstein 1999) Numerous related questions have remained unanswered and several research gaps still prevail. This is partly due to the lack of integration among the different schools of thought; although a vast amount of research has been published, few scholars have endeavoured to harmonise theoretical perspectives and to provide holistic understanding rather than partial explanations. For example, the substantial increase of human integration literature can be seen as a counteraction to early acquisition research which gave a disproportionate weight to strategic pre-acquisition attributes. This has left gaps in terms of deepening the explanatory power of strategy literature regarding the actual post-acquisition actions taken to implement strategy, and concerning the interplay between the strategic and human sides of integration.

This study focuses on one of the more neglected aspects of post-acquisition change, namely the role of the company's operations integration in value creation. Although various authors have touched upon these issues, this has rarely been the main area of interest. Thus, numerous references to synergy potential linked to combining certain operations can be found, but comprehensive analyses of the source and nature of this synergy as well as descriptions of how this potential is realised through integration are virtually nonexistent.

As discussed in Chapter 3, traditional acquisition literature has stressed the role of economies of scale and scope in horizontal acquisitions (e.g. Scherer & Ross & 1990, 163-165; Weston et al. 1990, 250-251). Although such potential may be present in several operational areas of business (e.g. advertising, distribution, service networks, and research and development) (Porter 1980, 7-8), acquisition research has mainly referred to production economies in this context. This observation applies especially to quantitative studies based on secondary data, which have commonly considered the effects on production costs and capacity as being more or less a synonym for economies of scale and scope or operational synergy (e.g. Gupta & Gerchak 2002; see also Seth

1990a). A similar approach has been applied, to a certain extent, concerning marketing and R&D operations, in which case synergy is largely understood in terms of spreading the costs of creating intangible assets (e.g. brand names and know-how) or pooling sales forces and advertising efforts (Porter 1980; Scherer & Ross 1990). According to this view, firms with similar customer segments are supposed to generate superior benefits (e.g. Seth 1990a). Thus, synergies have been discussed from the perspective of manufacturing companies and operational synergies are largely understood as being related to cost cutting (cf. Larsson 1990, 79; Porter 1980, 8).

Similarly, research on the role of operation-specific resources as acquisition determinants is still somewhat limited. Extant empirical research on capability-seeking acquisitions has focused on R&D-related motives. Less attention has been given to distribution-related resources and capabilities (see Anand & Delios 2002). Nevertheless, literature has shown both e.g. technology and distribution channel-related aspects to be important motives for cross-border acquisitions (Inkpen et al. 2000; Capron & Hulland 1999).

In the context of manufacturing industries, the initial starting point of the study was to focus on the firms' sourcing, manufacturing, and distribution resources and capabilities, which together constitute the internal logistics system of a manufacturing firm (cf. Bowersox et al. 1986), and how they are affected in linkage to horizontal cross-border acquisitions. However, during the progress of the study, it became obvious that the role of these resources and capabilities extends beyond traditional operations boundaries in acquisition situations. Therefore, assets related to product development were included in the examination of purchasing and manufacturing operations. Respectively, distribution resources also carry sales force and customer relations-related resources and capabilities. The first group is jointly referred to as upstream operations, the latter as downstream operations (see Figure 10).

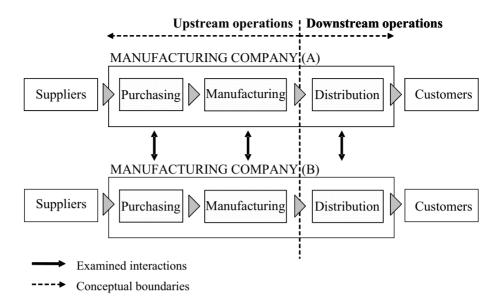


Figure 10 Operational focus of the study in manufacturing industries

Paper 4, on the other hand, discusses a case study from one specific service industry. The logistics service sector specialises in carrying out operations related to the same material flow, which penetrates the manufacturing firm, but beyond its organisational boundaries. Therefore, the contribution of this case can be seen as an extension to the operational view described above, where a manufacturing firm has chosen to outsource part of its operations, which links it to other supply chain members, to a third party. However, it should be noted that this third party operates in its own organisational and industrial context (as opposed to vertically integrated logistics operations).

From an operations point of view, the customer is an integral part of the process of producing and delivering a certain service (e.g. Chase 1978). This sets certain limitations on the direct applicability of operations management literature in terms of service firms (see e.g. Larsson & Bowen 1989). However, from the mid-1970s onwards, a significant amount of literature has been produced attempting to bring together the concepts and tools in operations and service management (see Johnston 1994). For example Chase (1978) discusses the service system in terms of front office and back office operations. Fließ & Kleinaltenkamp (2004), in turn, separate the overall service production process into two stages. The first stage refers to the service provider's potential, which comprises capacity factors or assets as well as the commodity factors, i.e. internal production factors. These factors provide the foundation for service production and delivery. The second stage in service

production then includes the customer's contribution to service operations by integrating additional production factors into the process. Internal production factors can be fully disposed of by the service provider and they are normally independent of a specific customer, whereas the service provider's disposal of external production factors is limited.

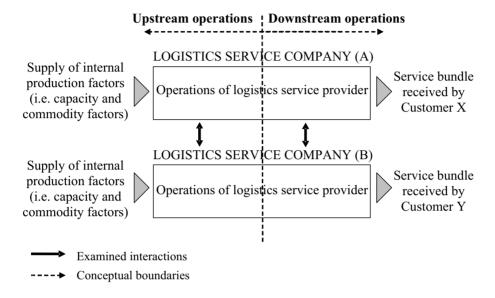


Figure 11 Operational focus of the study in the logistics service sector

In this study, the operations of the service provider are divided in line with the above distinctions (see Figure 11). The first operational area involves managing the procurement and pre-combination of back office operations or internal production factors (i.e. upstream operations). The second area encompasses the management of front office operations where external production factors and the role of the customer contact are accorded greater emphasis (i.e. downstream operations). The first area comprises the processing (or technical) core of the service provider, while the second is subject to the variability that human beings bring into the service system (cf. Chase 1978, 1996).

Figures 10 and 11 illustrate the operational focus of the study from the perspective of a single acquirer-target pair. From this point of departure, the aim is to explore the interaction between the formerly separate operations of firms that have been brought together through horizontal acquisition. The interaction between the respective operations is examined through concepts

and frameworks offered by three theoretical perspectives, which will be presented briefly in the following.

#### 4.2 Adopted theoretical perspectives

#### 4.2.1 Industrial organisation and cost efficiency tradition

Horizontal acquisitions have received much attention from both industrial organisation and traditional cost efficiency theory perspectives, which build on economic analysis. Acquisition research representing the school of industrial organisation studies the role of market power in acquisition activity. From this viewpoint, the concept of market structure is fundamental, which is mediated through market conduct into performance (e.g. Scherer & Ross 1990). Horizontal acquisitions are seen as a means to deal with competitive pressure by creating industry barriers (Bain 1959; Caves & Porter 1977) and increasing market power (Heflebower 1963; Stigler 1968; Eckbo 1983). Fundamentally, firms are seen as engaging in horizontal acquisitions to generate monopolistic rent. Such effects are supposed to increase consumer prices and reduce total output (cf. Bain 1959). From a power dependence perspective (e.g. Emerson 1962), it could be argued that horizontal acquisitions also affect supplier relationships, and that bidder firms may benefit from exerting their increased power on the supplier.

In terms of horizontal acquisitions, traditional cost efficiency theories base their synergy argumentation on issues of economies of scale and, to a lesser extent, scope (Chatterjee 1992; Dutz 1989). These benefits can only be derived through the physical consolidation of the firms' resources (Chatterjee 1992, 268), aimed at increasing the efficiency of existing operations and generating cost-side effects (Steiner 1977).<sup>48</sup>

From this tradition, the present study applies the concepts of market power (understood both in terms of customers and suppliers), economies of scale and scope and examines their role in contemporary horizontal acquisitions. Furthermore, though the primary focus is on the internal examination of the case deals<sup>49</sup>, it is acknowledged that the acquisition process can also be contingent upon certain external industry attributes, which can be seen as relating to industrial organisation tradition.

<sup>48</sup> See discussion in Sub-chapters 3.2 and 4.1.

<sup>&</sup>lt;sup>49</sup> Cf. Barney (1991) on resource-based analysis.

#### 4.2.2 Resource-based view

As for example, Capron et al. (1998) argue, the above view may have limited applicability to contemporary horizontal acquisitions due to the more dynamic competitive environment. The resource-based view from strategy literature is proposed to provide complementary elements to this tradition. Strategy literature suggests that acquisitions can be used as a means to restructure organisations and increase efficiency and effectiveness by changing business operations (Seth 1990a; Bowman & Singh 1993). This restructuring can produce both cost- and revenue-side benefits (Capron 1999) through divestment (Capron et al. 2001) and resource redeployment (Capron et al. 1998).

As such, resource-based theories form a diverse variety of approaches, which can be grouped under this heading. The outlines of this general approach are visible, but there is not as yet a consensus over the terminology used. This shortcoming has lead to an ever-increasing amount of new definitions and overlapping concepts. (Hodgson 1998) The primary area of interest of this view relates to the origins of heterogeneity in company performance, which is explained through the conceptualisation of the firm as a bundle of idiosyncratic resources and capabilities (Silverman 2002; cf. Mahoney & Pandian 1992; Penrose 1959). Industrial organisation economics, by contrast, explains the behaviour and performance of companies through differences across industries and strategic groups (Silverman 2002; cf. Mahoney & Pandian 1992; Wernerfelt 1984). The resource-based view entails the assumption of market imperfections due to e.g. the inimitability and embeddedness of resources (Montgomery & Wernerfelt 1988; Makadok 2001) and potential opportunistic behaviour (Chi 1994), which limit the firm's ability to buy and sell discrete resources<sup>50</sup>.

From the resource-based view, this study applies the key concepts of resources and capabilities. A resource is an observable, but not necessarily tangible, asset or input that can be valued and traded (e.g. physical assets, brands, patents). A capability is a special type of resource that is organisationally embedded and non-tradable in the sense that it can change ownership only as part of its entire unit. Capabilities are embodied in the continuous enactment of people and organisational practices and deal with the firm's capacity to deploy other resources to reach a desired end. (cf. Amit & Schoemaker 1993; Helfat & Peteraf 2003; Makadok 2001)

A valuable resource or capability enables a firm to improve its market position relative to its competitors, i.e. it is a source of competitive advantage.

<sup>&</sup>lt;sup>50</sup> See also Nelson & Winter (1982) on market imperfections linked to e.g. R&D.

In order to represent a source of sustained competitive advantage, both resources and capabilities must have the same attributes; the resource or capability must be valuable, in short supply relative to demand (i.e. rare), and costly to imitate or directly substitute. (Hoopes et al. 2003; Amit & Schoemaker 1993; Barney 1991) Competition and other environmental changes erode the competitive advantage of companies over time (Teece 1982; Dierickx & Cool 1989). Thus, the most critical competence for a firm in the long run is its ability to reconfigure its resources and capabilities (cf. Hamel & Prahalad 1989).

In the context of acquisitions, the above discussion has two implications. First, acquisitions can be used to improve a firm's market position relative to its competitors by acquiring valuable resources and capabilities from other firms, by employing existing ones in new uses through combination (e.g. Wernerfelt 1984; Capron et al. 1998), and, though not explicitly addressed in existing acquisition literature, by jointly creating new resources and capabilities through acquisition. Secondly, integration management can also be seen as its own capability, which is composed of a set of routines to assess and carry out necessary integrative actions between the resources and capabilities of the combined firms (e.g. Zollo & Winter 2002, 340).

In terms of this study, the focus is on the role of operation-specific resources and capabilities. Accordingly, the examination concentrates on resources and capabilities linked to upstream and downstream operations<sup>51</sup>, of which an inexhaustive list is presented in Table 5 (cf. Amit & Schoemaker 1993; Barney 1991; Hitt & Ireland 1986; Capron et al. 1998; Markides & Williamson 1996).

<sup>51</sup> In Paper 3, the further distinction between purchasing, manufacturing, and distribution operations is made as discussed in Sub-chapter 4.1.

Table 5 Resources and capabilities linked to the upstream and downstream operations of firms

operations of firms		
Resources and capabilities linked to upstream	Resources Sourcing channels, production plants and equipment, R&D equipment, back office company facilities, and related physical assets	
operations	Tradable know-how (e.g. patents, proprietary technology)  Human capital contributing to operations	
	Capabilities Capabilities linked to manufacturing (e.g. flexibility, process-related know-how)	
	Capabilities linked to R&D (e.g. innovation capability, product development cycles)	
	Capabilities linked to supplier relationships and related know-how	
	Other organisation and coordination capabilities	
Resources and capabilities linked to downstream operations	Resources  Distribution channels, equipment, front office company facilities, and related physical assets  Tradable know-how (e.g. licenses)  Human capital contributing to operations  Capabilities  Capabilities linked to customer relationships and related know-how (e.g. experience, knowledge on customer preferences)  Capabilities linked to customer service and image (e.g.	
	how (e.g. experience, knowledge on customer preferences)	

Several studies also have identified managerial and financial resources as company attributes that can be used to improve efficiency and effectiveness (Chatterjee & Wernerfelt 1991; Teece 1986; Capron et al. 1998). These types of resources and capabilities are also acknowledged. However, in the examination of business units in manufacturing industries, these attributes are considered as factors linked to the overall acquisition process rather than as a primary area of focus (Paper 3). In the case study from the logistics service sector (Paper 4), managerial and financial resources have a greater importance as the analysis covers both company and business unit levels. Naturally, this

Other organisation and coordination capabilities

particular case does not include a manufacturing aspect. A more generic approach is thus adopted by discussing upstream and downstream resources and capabilities.

### 4.2.3 General network theory

In addition to applying the resource-based view to complement traditional horizontal acquisition theory, this study also explores how general network theory<sup>52</sup> could provide a theoretical viewpoint for explaining acquisition outcomes. From this perspective, acquisitions provide a means to build a flexible network design to manage knowledge-based resources better, as well as to acquire and transfer intangible assets through horizontal patterns of exchange to benefit the whole network. Such aspects have not received much attention in the field of acquisition research but would provide useful insights into understanding related value creation in a dynamic business environment.

In contemporary literature, networks are often referred to as interorganisational structures. However, the concept can also be used to describe the functioning of an individual firm (e.g. Tsai & Ghoshal 1998; Flap et al. 1998; Nohria & Eccles 1992). Network analysis provides a number of tools to map the structure of inter- or intra-organisational relationships and to analyse potential sources of value in the network. Network analysis emphasises three sources of value creation (Lazzarini et al. 2001, 10-11):

- Social structure
- Learning
- Network externalities

Social network approaches stress the influence of social structure on individual or collective behaviour and consequent performance. Different strands of social network analysis have different views on what type of relationship encourages cooperative behaviour and enhances performances. Other scholars emphasise the advantageous effects of strong ties and the density of the network as a whole. Related arguments build on the concept of trust, shared norms of behaviour, and reducing opportunism. (see e.g. Coleman 1988; Walker et al. 1997) Another view argues that sparse networks with structural holes and so-called weak ties are essential in generating new information and diversity by limiting knowledge overlaps (e.g. Granovetter

In this context, general network theory refers to network theory as it is understood and applied in contemporary strategic management literature. This approach draws heavily on e.g. sociology and it focuses on the social conditions influencing company behaviour and performance, thus, also addressing the value creation possibilities linked to inter- and intra-firm networks.

1973; Burt 1992). Although these views can to a certain extent be seen as complementary, they would also appear to have different implications for network formation and related value creation (Walker et al. 1997, 109-113; see also Ahuja 2000).

In terms of value creation, two main types of learning can be identified. The first type of learning occurs when autonomous agents or groups develop local knowledge independently. This type of learning enables specialisation and favours knowledge diversity in a network. An essential ability, from a network perspective, would be to summarise and transfer these particular skills through interaction with other agents. Learning of the second type is more systematic and it involves joint efforts to create and refine knowledge. (Lazzarini et al. 2001) An example of such co-specialisation could be the interaction within Toyota's supplier network as described by Dyer & Nobeoka (2000). In this case, Toyota had organised a number of problem-solving teams to provide solutions to its own production problems. In line with the key elements of co-specialisation, these groups have developed reciprocal obligations and motives to share knowledge with other network members.

The final source of value is network externalities. Such effects are relevant to products for which user utility increases with the number of other agents consuming the same good (Katz & Shapiro 1985, 424)<sup>53</sup>. Expressed in mathematical terms, as the number of nodes in the network increases arithmetically, the value of the whole network increases exponentially (Kelly 1998, 23). Typical examples related to direct network externalities include communication networks, such as telephone or fax systems, where a number of end users join a system that allows network members to exchange e.g. information with one another (e.g. Katz & Shapiro 1985). Such networks experience small gains when they are newly established. Once the network has a critical amount of members, value may increase rapidly in proportion to a relatively marginal growth in the network structure. (Kelly 1998) Systems or markets that exhibit such a positive relationship between membership value and network size are said to generate network effects or externalities (Katz & Shapiro 1994, 94). For example, Thompson (1967, 26-29) describes the nature of organisations, which create value by offering mediating technology to interdependent customers. This mediating technology facilitates information and/or material flows between customers, which are distributed in space and

This study focuses on direct network externalities. These effects are linked either to the direct physical connection between the number of purchasers and product quality, or to the connection between the experience and size of the network and the quality and availability of its (post-purchase) services. Indirect network effects, on the other hand, are related to complementary products such as system hardware and software, and the relationship between the number of purchasers of one product and the product quality of the other. (see e.g. Katz & Shapiro 1985)

time. Typical examples of such network organisations include banks, insurance companies, phone companies, employment service companies as well as postal and other delivery services. The logistics service sector represents such an empirical context to which general network theory is applied in Paper 4.

An alternate network-related approach to viewing acquisitions would be to examine the impact of acquisitions on the firms' external business relationships. This approach builds on the work of the International Marketing and Purchasing group (IMP) and industrial network theory. Contributions in this field have successfully underlined shortcomings in traditional acquisition research, and explored the role of direct customer and supplier relationships of the combined firms (e.g. Anderson et al. 2001) as well as broader business networks (e.g. Havila & Salmi 2000) in the acquisition context.

The IMP approach concentrates on networks of external business relationships and primarily provides tools for understanding focal dyadic relationships from a positional perspective and, on the other hand, viewing networks from an aggregate, market, perspective (cf. Möller 1992, 13). However, in this study, networks are understood as a set of internal relationships, which may entail different qualities and possibilities for value creation as discussed above. A certain type of (integration) relationship may enhance certain value creation possibilities for the firm (i.e. network) as a whole, but can also lead to reduced opportunities for other value creation types. Thus, general network theory was considered a more fruitful approach for the purposes of this study.

#### 4.3 Theoretical framework

From a theoretical standpoint, the aim of this thesis is to assess how different theoretical perspectives succeed in explaining contemporary acquisition motives, integrative actions, and outcomes at an operative level. Based on the discussion above, a tentative theoretical framework is devised to address the study objectives (Figure 12).

#### **ACQUISITION CONTEXT**

**Company attributes:** strategic fit, organisational fit, geographical coverage, relative size, pre-acquisition performance, acquisition experience etc.

**Industry attributes:** product/service industry, underlying technology, consolidation level etc.

Other attributes: legislative factors, country specific factors etc.

#### **ACQUISITION PROCESS**

Pre-acquisition phase	Post-acquisition phase	Effects on value creation
Operational aspect Objectives and combination potential on	Level and type of integration on operational level	Operational level effects from:  • Creating new resources & capabilities
operational level  Other aspects e.g. stra		Leveraging existing resources & capabilities

### THEORETICAL LENS

**Industrial organisation & cost efficiency theories:** market power and economies of scale and scope

**Resource-based theory:** resource / capability redeployment, divestiture **General network theory:** social structure, learning, network externalities

Figure 12 Theoretical framework for examining the operational aspect of horizontal cross-border acquisitions

As can be noted from Figure 12, the study object is complex, which can also be regarded as one reason why researchers have continued to produce ambiguous empirical results. While the main body of acquisition research has been founded largely upon finance, which typically focuses on direct effects, more recent contributions from the strategy school suggest that due to the complex processual and contextual nature of acquisitions, related integration and value creation cannot be explained by one single attribute or theory (Hitt et al. 1998; Hunt 1990).

The framework presented in Figure 12 includes company-specific attributes commonly used in acquisition research (see Chapter 2), industry-specific attributes (e.g. Deans et al. 2002; Weston et al. 1990, 99-103), and the overall

acquisition process itself (e.g. Jemison & Sitkin 1986) as potential determinants of operation-level outcomes<sup>54</sup>. Operational level objectives and combination potential give an *ex ante* indication and orientation of potential sources of value creation. However, this setting does not fully determine the nature, scope, and probability of actual value creation, which is further influenced by the integrative actions taken and practical impediments such as inter-organisational friction (cf. Haspeslagh & Jemison 1991; Graebner 2004<sup>55</sup>).

Overall, there seem to be serious gaps in understanding what variables actually have a significant effect on acquisition outcomes. The recent study by King et al. (2004) draws a rather grim picture of research in this field. Although acquisitions have been studied for decades, there has been little overlap in the variables used to explain acquisition performance. This has inhibited the accumulation of knowledge, given the high level of research activity in the area. Furthermore, results from their meta-analysis show that the impact of four commonly examined variables (i.e. diversification of the acquirer, relatedness, method of payment, acquisition experience) does not significantly explain acquisition performance. The authors argue that, as a consequence, both traditional acquisition theory and research methods may require revision. First, the majority of extant acquisition performance research has employed purely short-term stock-based measures, thus overlooking acquisition effects on other relevant dimensions (King et al. 2004). Secondly, the research field has suffered from both theoretical fragmentation (Larsson & Finkelstein 1999) and from a lack of continuity (King et al. 2004). Finally, problems related to data availability have led to the wide use of solely secondary data, which raises questions regarding data relevance.

This study attempts to address these common problems, both in terms of methodological and theoretical considerations. Several scholars (e.g. Larsson & Finkelstein 1999; Hitt et al. 1998; Shimizu et al. 2004) encourage the incorporation of different theoretical views that aim to provide a more realistic assessment of relevant factors in the acquisition process. Nevertheless, the aim is to build on extant research rather than to disperse the field further. The main foundation lies on the works of Capron (1999), Pablo (1994), Hitt et al. (1998), Larsson & Finkelstein (1999), and Haspeslagh & Jemison (1991), which have discussed the themes of complementarity as a part of combination potential, integration approaches and their determinants, and resource and capability transfer. This study adds to this basis by concentrating on the

54 Cf. acquisition framework and scenarios by Hunt (1990), which differentiate between contextual and acquisition process variables.

-

As Graebner (2004) argues, acquisitions can also yield serendipitous value, which involves resource recombinations that were entirely unanticipated.

operational aspect of these issues embedded in the overall acquisition process. By applying this perspective to empirical studies, fine-grained measures of deal factors can be used in order to provide a better understanding of how value is actually created. Furthermore, the applicability of general network theory in understanding operational interdependencies and post-acquisition outcomes is explored.

## 5 SUMMARY OF ORIGINAL MANUSCRIPTS

This chapter summarises the main results and respective contributions of each paper incorporated in this thesis. While the papers are presented in the order of their composition, it should be noted that due to a large number of rewrites, research has proceeded partly in a parallel fashion. Furthermore, as can be observed by comparing the individual manuscripts, the use and definitions of concepts have evolved as the theoretical and empirical focus of the study has gradually refined during the research process.

# 5.1 Paper 1: Logistics integration in horizontal mergers and acquisitions

This paper initiates the investigation of gaps in the understanding of operational issues in an acquisition context through examining the integration of sourcing, manufacturing, and distribution operations in horizontal acquisitions. The paper holds three contributions. First, it reviews literature from logistics and general acquisition management, in order to identify previous research contributions touching upon this area. Secondly, results from an exploratory survey on practitioners' views concerning the role of these issues are presented. Finally, the combined findings are developed into a framework that addresses the operational aspects of acquisition activity for use in further empirical analysis.

The literature review was a twofold process. From the logistics and supply chain management discipline, articles published within leading journals during a more than ten year period were systematically reviewed. For the review of general management type literature on acquisitions, a structured literature search was performed using electronic journal databases. Interesting reference leads were then followed to other articles, research papers, and books. Thus, the reviewed material was fairly diverse and spanned a longer time period. Results, as a whole, indicate that operational issues in general and logistics issues specifically, have received little research attention. Thus, it is argued that the research gap identified offers a sound basis for performing further empirical investigation.

In parallel with the literature review, a survey to map an initial picture of the practitioners' view on the topic was executed. Questions addressed e.g. acquisition motives, operation-specific expectations, the implemented level of integration, and the difficulty of synergy realisation. Results showed product and market extension to be the most common acquisition motive. Other significant motives were linked to buying out competitors, and the desire to benefit from synergies in sourcing, manufacturing, and distribution. However, the realisation of synergies related to the internal logistics process was considered challenging. Generating benefits, especially in sales and manufacturing, was seen as a difficult task. These results further supported the notion of the importance of continuing research in the chosen area; operations integration can be seen as a relevant aspect of the most common motives in horizontal acquisitions, and significant challenges are related to the realisation of operational benefits in the post-acquisition phase.

In addition, the survey explored interdependencies between background variables and operation-specific factors. No significant linear relationship was found between the relative size of the combined companies and the difficulty of synergy realisation, thus supporting findings suggesting a more complex relationship between size considerations and the post-acquisition process. Similarly, no uniform linear relationship was observed between the level of integration and efforts related to value creation. This questions the weight of the common assumption that high levels of integration will directly generate negative organisational effects which significantly hinder value creation (e.g. Olie 1994, 384; Larsson & Finkelstein 1999, 6-7). The positive aspects of tight integration (see Table 4) may outweigh related drawbacks in horizontal acquisitions (cf. Larsson & Finkelstein 1999). For example, high levels of integration in supportive operations (IT, R&D, and finance) were found to facilitate synergy realisation in manufacturing.

Operation-specific objectives were found to correlate positively with the adopted level of integration in both downstream and upstream operations. Furthermore, synergy expectations in these operations also influenced the integration approach in other areas. For example, distribution-related objectives were widely connected to virtually all other operations, thus indicating that high projected benefits from combined distribution and sales correlate with the tight integration of the overall logistics process and supportive operations, such as IT and administration. A similar correlation was found between R&D-related objectives and integration in purchasing.

Overall these findings suggest that complex relationships prevail between common background variables and the operational aspect of horizontal acquisitions, as well as within and between specific operations. Common generalisations on post-acquisition integration seem insufficient to our understanding of the logic behind empirical observations.

Based on the above argument, a tentative framework is then proposed for a deeper analysis of these interdependencies (Figure 13). The framework builds on previous acquisition research on integration and performance determinants (Impacting factors in Figure 13). It is postulated that operation-specific combination potential, integration, and synergy will also be contingent upon the overall acquisition motive<sup>56</sup>. Operational impacts are analysed by adapting the resources-processes-values framework presented by Christensen & Overdorf (2000) to the present context.

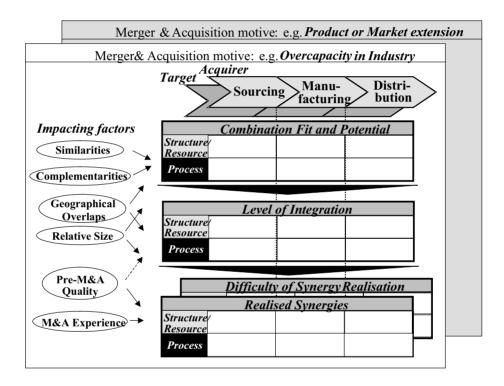


Figure 13 Framework for assessing logistics impact in mergers and acquisitions

In the light of the whole research process, Paper 1 identifies an interesting research gap with practical relevance. From extant research, the framework highlights potentially relevant variables in understanding the operational aspect of acquisitions, of which a hypothetical example is given. However, no specific theory is used to explain the dynamics between the variables.

Follows the classification of Bower (2001). The two motives illustrated in Figure 13 are merely examples of possible motives.

### 5.2 Paper 2: Integration and synergies of operations in horizontal M&A

Paper 2 continues to discuss the relation between horizontal acquisitions and upstream and downstream operations. While Paper 1 establishes that operation-specific benefits play an important role in horizontal acquisitions, both as direct motives and as indirect components in other common motives, the main contribution of Paper 2 is in identifying the nature and source of related synergies.

The paper builds purely on literary evidence extracted through a literature search covering articles published in 20 core journals during 1998-2002. Compared to the literature review conducted in connection with Paper 1, it employed a more systematic strategy and contemporary focus. The reviewed journals represented the most likely forum to find articles on the topic, based on both the amount of published acquisition research and disciplinary focus. From the reviewed material, 19 articles were established as having implications for operations integration and related synergies and these were then analysed in more detail.

As an additional contribution, the paper links the research area identified in Paper 1 to more established acquisition research. The theoretical background of traditional research on horizontal acquisitions and relevant contributions from the strategic management school are briefly reviewed. From this tradition, value creation explained through cost efficiency theories and the resource-based view is found to have relevance at an operational level. Based on these two perspectives, value creation itself is divided into taking form in either cost- or revenue-based synergies. The realisation of these synergies is argued to be linked to specific value creation mechanisms; cost-based synergies are commonly associated with economies of scale and scope, while revenue-based synergies are generally linked to resource redeployment as a part of post-acquisition integration. This theoretical set-up is then compared to the extant literary evidence (Table 6).

Table 6 Potential sources of operations synergies in horizontal acquisitions

	Cost-based synergies	Revenue-based synergies	
Down- stream operations	Increased efficiency in warehousing and outbound logistics due to consolidation and redeployment of superior processes	Redeployment of complementary distribution resources, i.e. distribution channels, customers, geographical spread	
	(Croyle & Kager 2002; Harding & Yale 2002; Heracleous & Murray 2001; Schmidt & Rühli 2002)	(Anand & Delios 2002; Capron & Hulland 1999; Capron & Pistre 2002; Harding & Yale 2002; Harrison et al. 2001; Hastings 1999; Larsson & Finkelstein 1999; Light 2001; Meyer & Estrin 2001; Sull 1999)	
<b>Upstream</b> operations	Increased efficiency in production due to consolidation; cost savings in purchasing due to increased market power towards suppliers	Redeployment of intangible resources in production and R&D (e.g. technologies) and superior processes	
	(Ashkenas & Francis 2000; Croyle & Kager 2002; Harding & Yale 2002; Hastings 1999; Heracleous & Murray 2001; Larsson & Finkelstein 1999; Light 2001; Sull 1999)	(Heracleous & Murray 2001; Larsson & Finkelstein 1999; Meyer & Estrin 2001; Schmidt & Rühli 2002; Sull 1999)	

Both upstream and downstream operations were touched upon in the reviewed articles, and both operation types were shown to hold potential for cost- and revenue-based synergies. Revenue-based synergies were commonly linked to the resource redeployment of operational resources and processes. In this context, resource complementarity was emphasised in a number of articles. Cost-based synergies were connected to economies of scale, the redeployment of intangible practices, and increased purchasing power towards suppliers.

The source and realisation of synergies is further illustrated by presenting two case studies from previously published studies. The examples highlight the importance of integration management in creating value both by reducing cost and enhancing revenues. The synergies described are hard to realise when the acquired firm remains procedurally, physically, and organisationally separate. Poor integration management will reflect on employee reactions and external customer and supplier relationships even when the level of integration is low. Focusing on only a single type of synergy may also have drawbacks, for example, in terms of the sustainability of generated benefits. Rather, the examined cases argue in favour of combining synergies, both in terms of type and affected operations.

As an individual publication, Paper 2 illustrates value creation possibilities derived from the integration of operations in horizontal acquisitions through the framework presented. Synergies are addressed regarding their theoretical

basis, their role as acquisition motives, and associated post-acquisition integration. In terms of the overall research process, the paper also had relevance by providing a basis for contrasting primary empirical observations from the cases examined (see Papers 3 & 4).

# 5.3 Paper 3: Impacts of international mergers and acquisitions on the logistics operations of manufacturing companies

Building on the groundwork laid out in Papers 1 and 2, Paper 3 initiates case-based empirical investigation into the operational aspect of value creation. The paper reports the results of a multiple case study covering six horizontal cross-border acquisitions carried out by Finnish manufacturing firms during 1998-2001. The focus is on exploring and explaining matters of resource redeployment and capability transfer, related to sourcing, manufacturing, and distribution operations within the context of each case.

The theoretical focus of the paper is largely the same as in Paper 2. It is argued that the resource-based view can provide a fruitful approach to examining contemporary cross-border acquisitions. Thus, resources and capabilities are in central focus, both as pre-acquisition and post-acquisition factors. The role of these factors in the pre-acquisition phase is studied in linkage to the strategic fit matrix presented by Shelton (1988) and in terms of overall acquisition motives. The integration of operations is analysed by applying the formal capability transfer types of Haspeslagh and Jemison (1991) and the post-acquisition action measures used by Capron (1999). Value creation is assessed both in terms of self-reported measures at an operational level and accounting-based measures at business unit level. In addition to addressing the factors embodied in the acquisition process, the interplay between the procedural and contextual factors regarding industry attributes and relative size is investigated.

In terms of industry attributes, a linkage between the industry consolidation curve (Deans et al. 2002), the technological innovation cycle (Utterback 1996), and the empirical cases is identified. Cases that represented industries in the early stages of consolidation were largely motivated by rapid expansion, thus building a more established position to reduce the probability of failure and market exit in subsequent cycle phases. Less attention was paid to related costs, profitability, and the organisation of cost efficient operations. In general, the case acquisitions from more mature industries were more selective, aimed at strengthening core competencies as well as increasing overall profitability and operational efficiency. In terms of post-acquisition integration, these deals

were linked to knowledge and technology-related matters and involved reciprocal interaction more frequently.

Due to the broad product ranges and geographical structures of the case units, strategic fit between the combined firms was seldom found to represent one single type. However, most cases primarily exemplified complementary and supplementary features. Furthermore, individual deals were found to be driven by multiple motives.

These findings suggest that combinational fit and pre-acquisition objectives form a rather complex setting. Therefore, the use of very simplified methods in classifying acquisitions and their objectives may not hold practical relevance and also explains some of the inconsistency in research results. The results also encourage the further investigation of complementary resources to explain acquisition activity and post-acquisition outcomes.

The integrative actions relating to operational resources and capabilities varied a great deal from case to case (Table 7). In Case A, operations integration was minimal. The acquisition was motivated by gaining a passive presence in a growing market and reaping the resultant financial synergies. Thus, the adopted integrative actions seem to be in line with these objectives. In the remaining cases, integrative actions most commonly involved the redeployment of the acquirer's resources and capabilities to the target. This often entailed divesting the target's resources when they overlapped, and transferring the acquirer's operative practices to the target organisation. Resources which were more complementary than overlapping could be left intact. In Cases C & D redeployment also occurred in the opposite direction, which was linked to making use of the target's distribution network and contacts to disperse new markets.

Table 7 Resource redeployment and capability transfer in the acquisition cases

	A	В	C	D	E	F
Distribution resources Distribution capabilities	-	*** ***	** *	**	- -	-
Manufacturing resources Manufacturing capabilities	-	***	*	*	- ***	- ***
Sourcing resources Sourcing capabilities	- -	***	*	*	*	***

<sup>-</sup> resources/capabilities kept separate

redeployment/transfer from target to acquirer

<sup>\*</sup> redeployment/transfer from acquirer to target \*\*\* reciprocal redeployment/transfer

In three cases, reciprocal redeployment was used to restructure resources and to create new operational solutions. This did not necessarily mean abandoning the existing resources or capabilities, although this was also an option, but combining them in a new way. This could involve e.g. altering sourcing practices due to increased company size, developing solutions to enhance skill transfer in manufacturing operations, or rethinking the organisation of distribution flows. The archetypical case in this sense, Case B, was quite exceptional, both in respect of pre- and post-acquisition factors. In this case, the acquirer was actually smaller than the target organisation, although both were relatively large firms and competed on a global scale. The companies were merged fully, which meant questioning the previous ways of operating and involved asset divestiture as well as reciprocal interaction. The whole post-acquisition process, which had taken several years, had only recently come to an end, and the company management proclaimed itself quite happy with the results, although benefits were not vet visible in the reported financial figures.

Overall, when joining complementary and supplementary resources, the expected synergies had roughly been realised, although it might have consumed much more temporal, financial and managerial resources than were originally planned. However, in some cases the divestment of identical resources had not resulted in the expected cost savings. By contrast, the costbased synergies projected in Case A were realised in a relatively effortless and speedy manner. In terms of capability transfer, complementarity in R&D as well as in manufacturing technology and knowledge was central. Functional skill transfer was also used to enhance sourcing capabilities. In cases where the acquirer was substantially larger than the target, the acquirer's existing skills and knowledge were commonly transferred to the target organisation. When there was a lesser power differential or objectives were directly linked to capability seeking, new mechanisms to combine and create new capabilities were set up (e.g. establishing specific management teams or employee networks to exchange ideas). Results in this area were difficult to quantify and perceive by examining solely accounting-based figures. The actions may indeed have led to improved capabilities in a specific area, but any potential that might have existed had yet to produce tangible results, financial or otherwise.

As the paper is exploratory in nature, the empirical material gathered is reflected against multiple concepts and constructs. Given that the paper also applies cross-case analysis, the paper holds a wide range of contributions despite its inherent limitations. The empirical cases bear evidence concerning the role of operations resources and capabilities in linkage to acquisition objectives, combination potential, and post-acquisition integration. Findings

indicate that their combination can create value through streamlining and transferring existing competencies, as well as by creating new competencies through reciprocal exchange. Results illustrate contingencies within each acquisition, and through cross-case comparison, four different deal patterns can be roughly identified. However, the aim, as such, is not to make normative statements on best acquisition practices, but to describe and explain patterns within and between cases. In the light of general acquisition research, the paper holds implications for directing further efforts to examining the role industry attributes play, beyond the traditional industrial organisation perspective, the relevance of common acquisition classifications, the validity of traditional methods of measuring acquisition success, and the evolutionary aspect of acquisitions in internal organisation development.

# 5.4 Paper 4: Mergers & acquisitions in the logistics service industry: case study findings

Paper 4 adds to previous contributions by extending its scope into a service industry context. Conceptually, it is based on the same argumentation as Papers 2 and 3, but adds a general network theory perspective. This additional theoretical lens is hoped to shed light on value creation possibilities linked to relatively low levels of post-acquisition integration, an issue, which the other two theoretical perspectives do not address.

The purpose of the paper is to describe and explain the acquisition driven growth and development of one case company representing the logistics service sector. The service sector was chosen on the basis that it has grown substantially during the past decade and has been showing early signs of consolidation through increased acquisition activity. Furthermore, the paper explores the applicability of general network theory in analysing acquisition-related value creation; an all-channel service network built on mediating technology (cf. Thompson 1967; Arquilla & Ronfeldt 1998) thus seemed an appropriate case target.

By conducting an embedded case study (cf. Yin 1991, 49-50), the paper aims to answer three research questions: 1) how are acquisitions perceived as a part of company growth strategy as opposed to other methods of expansion in the industry examined, and 2) how do the different theoretical perspectives succeed in explaining acquisition motives and 3) related value creation in the examined industry.

All three theoretical perspectives and their respective value creation arguments described in Chapter 4 are applied in the paper. General network theory and its applicability for studying intra-organisational networks and the

acquisition process are discussed in more detail, as this approach is novel in acquisition research. Figure 14 summarises this discussion with respect to the source of value and coordination mechanisms connected to two distinct types of organisational interdependency and their respective integration approaches.

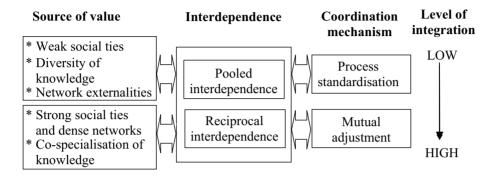


Figure 14 Network interdependencies and related level of integration (cf. Lazzarini et al. 2001)

It is argued that in related acquisitions at least some degree of interorganisational integration is necessary in the post-acquisition period. High levels of integration improve the coordination of knowledge flows, which can increase the potential benefits of e.g. joint product development projects, and create new sources of competitive advantage. However, at the same time this is expected to cause significant organisational disruption and require mutual adjustment. Low levels of integration are respectively proposed to cause less disruption and support autonomous knowledge creation. Thus, high levels of integration would seem to indicate the reciprocal use of resources, whereas low levels of integration would imply the use of pooled resources, which might merely entail procedural integration so as to standardise internal processes.

While the paper illustrates that multiple types of acquisition have been conducted in the logistics service sector, it concentrates on the acquisition strategy of one pan-European freight forwarding and logistics service company. Of the numerous individual horizontal acquisitions that the case organisation had completed during 1999-2002, five case deals were selected for closer examination.

Overall, the case company had primarily followed an acquisition strategy related to complementary and supplementary fits, where targets have operated in an attractive geographical market, or filled a gap in the acquirer's service portfolio. All of the acquired companies were relatively small compared to the

acquiring company. Expansion into new national markets within the case organisation's core market area, i.e. Europe, was performed primarily through acquisition, while alliances were the preferred entry mode in more unfamiliar markets. Organic expansion was primarily used in countries where the case company had already established a market presence.

Most of the deals examined did not involve high levels of integration or substantial operational overlaps. Several targets continued to operate relatively autonomously, but at the same time benefited from being linked to an extensive network. Thus, interdependencies between network members can be described as pooled rather than reciprocal. Knowledge was diversified (e.g. area- or service-specific capabilities), though some generic knowledge (e.g. general management expertise) could be transferred from the acquirer to the targets. Joint learning and knowledge creation was not pursued systematically. The case organisation had encountered the most significant integration problems and unsatisfactory results where there had been major overlaps between the acquirer and target businesses.

While revenue development in the case company exhibited network externalities to a certain extent, the development of profitability had been rather the opposite. However, as volumes and customer requirements increase in the growing market areas connected to the network through acquisitions, network effects may become more visible. From a resource-based perspective, by adding additional geographical locations and capabilities through acquisitions, the case organisation had improved customer service possibilities for its whole customer network, thus creating potential for revenue-based synergies. None of the examined cases portrayed the traditional arguments related to industrial organisation or cost efficiency theories.

From a theoretical perspective, the results imply that general network theory can provide a fruitful basis for examining company growth strategies, especially in industries which rely on mediating technologies, such as the information or transportation sectors, as well as for explaining how low levels of integration may also entail value creation potential. In addition, the study underlines the importance of complementary and supplementary resources and capabilities when examining the motives and value creation effects of acquisitions. Managerial implications suggest that acquisition-driven growth may generate a rapid increase in revenues due to e.g. direct network effects. However, this positive effect is challenging to replicate in the development of profitability due to problems in integrating overlapping resources and delays in realising the full potential of the created network.

As a part of the entire research process, Paper 4 contributes by extending observations to service industries. Both upstream and downstream operations are shown to play an important role as acquisition objectives in the studied

case. In particular, ready-made facilities, market-specific knowledge, and customer contacts are seen as imperative when expanding operations to growing markets within the acquirer's core business. To support the preservation of the acquired resources and capabilities, the post-acquisition integration is loose and sensitive to organisational needs.

In this context, general network theory and the resource-based view correspond well with the observed value creation logic. Industrial organisation or cost efficiency theories, on the other hand, do not; although coupled together with other growth mechanisms, even relatively small acquisitions may increase volumes and related economies of scale in the long term. Thus, the paper also underlines the advantages of applying a longitudinal approach to acquisition studies, where the role of small, individual acquisitions is embedded in the firm's whole growth strategy.

### 6 DISCUSSION

This chapter discusses the research results at a more general level, based on the overall evidence obtained by the multi-method approach of the study as a whole. In terms of the research objectives presented in Table 1, Paper 2 directly address the second study objective relating to potential synergies realised through the post-acquisition integration of upstream and downstream operations. The third study objective is addressed in Papers 2-4, and these conclusions will be discussed in conjunction with the theoretical implications in Chapter 7. This chapter focuses on providing a conceptual synthesis in terms of the first research objective: how the upstream and downstream operations of companies are affected by horizontal acquisitions, and how these effects are linked to the overall acquisition process.

This synthesis includes features from typology development as explained by Doty & Glick (1994)<sup>57</sup> and theory building from case study research as explained by Eisenhardt (1989)<sup>58</sup>. The first promotes a top-to-bottom (i.e. conceptual, deductive) approach, the latter a bottom-up (i.e. empirical, inductive) approach. The use of both inductive and deductive elements reflects the nature of the overall research process and could be described as middle zone theorising (see Glaser & Strauss 1975, 5).

Each of the presented types illustrates a certain post-acquisition outcome at an operational level. All are founded on the synergy hypothesis<sup>59</sup>, but have different bases and management approaches for value creation. The presented types do not describe any specific cases, but represent ideal forms that build on multiple sources of evidence accumulated during the research process.

Typologies can provide a means for describing complex and holistic organisational phenomenon, while contributing to theory building. Typologies identify multiple ideal types, each of which represents a unique combination of organisational attributes that are believed to determine the relevant outcome. Thus, typologies differ in respect to classifications in the sense that the latter specify decision rules to categorise organisations into mutually exclusive and exhaustive sets. Ideal types represent organisational forms that *might exist* rather than frequently *do exist* in their extreme form. (Doty & Glick 1994, 232)

Theory building from case study research is an inductive process, which is highly iterative. The aim of this process is to develop, or at least begin to develop, theory. The final product of research may be concepts, a conceptual framework, propositions, or a mid-ranged theory. (Eisenhardt 1989)

<sup>&</sup>lt;sup>59</sup> I.e. acquisitions are considered to be fundamentally an outcome of (intendedly) rational decisionmaking which aims at realising synergies (cf. discussion on efficiency, monopoly, raider, valuation, and process theories in Sub-chapter 2.2.2). There would be significant limitations in attempting to explain, for example, managerialist acquisitions and their outcomes using the adopted value creation logic.

Table 8 summarises the key characteristics of the identified three main types of operations integration outcome. Each type will be discussed in more detail in the following subchapters.

Table 8 Operations integration typology

	TYPE I	TYPE A) ADD-ON B	II B) BROWNFIEL	TYPE III
Value creation objectives	Both up- and downstream operations	Downstream operations	Downstream operations	Upstream operations
Motives	Multiple	Increasing market coverage (geographic & product line)	Increasing market coverage (geographic)	Reducing upstream costs, improving innovation capability
Combinatio	on potential			
Upstream	Similar and complementary	Complementary	Similar	Similar and complementary
Downstream	n Similar and complementary	Complementary	Complementary	Complementary
Integration				
Upstream	Reciprocal	-	Unilateral	Reciprocal
Downstream	n Reciprocal	Unilateral / Reciprocal	Unilateral	-
Value creat	ion			
Upstream	Cost and revenue	e -	Cost	Cost and revenue
Downstream	n Cost and revenue	Revenue / Cost and revenue	d Revenue	-
	Creating new resources & capabilities Leveraging existing resources & capabilities	Leveraging existing resources & capabilities	Leveraging existing resources & capabilities	Leveraging existing resources & capabilities Creating new resources & capabilities

In addition to the three operational outcome types presented above, a fourth type could also be identified, where the value creation objectives of the acquisition are not linked operations integration. Evidence of horizontal crossborder acquisitions which had virtually no effect on the examined operations was also found during the course of the study.

Such transactions were motivated by factors not commonly associated with horizontal acquisitions, such as financial synergies and (geographical) risk diversification. 60 Markets with future growth potential seemed to attract such investment. Although the acquisition could contain combinational potential at an operational level as well, this was not acted upon. However, these circumstances entailed an option to utilise this potential as markets develop. Findings on the possible reasons for maintaining separate operations included the high sensitivity of products to the cultural environment, which limited the possibility to integrate sourcing and distribution channels, and substantial differences in organisational cultural and knowledge-based resources. However, according to Levitt (1983) sensitivity to the former differences does not require that an organisation ignore the possibilities of doing things differently or better. For example, the redeployment of certain intangible resources and capabilities (e.g. additional knowledge or more refined practices and technologies) could include synergy potential without directly ignoring cultural sensitivity.

### 6.1 Type I outcome: Up- and downstream integration

The first integration outcome type in Table 8 illustrates the value creation process of a horizontal cross-border acquisition, where value creation objectives are linked to resources and capabilities bound to both upstream and downstream operations of the combined companies. Such a setting would imply a merger-type acquisition where although the actual transaction consists of one firm purchasing the other, mutual motives for the combination exist and the relative size of the joint firms is more or less equal. By joining forces, the firms anticipate improving their competitive environment by enabling the generation of critical mass and related synergy to enhance survival and success in the global economy (cf. Hitt et al. 2001, 85). Potential synergies are linked both to joining similar resources in order to increase efficiency, and to adding complementary features in terms of products, markets, and knowledge, which can be redeployed to enhance customer value.

Due to the existence of both overlaps and complementarities in operational resources and capabilities, post-acquisition integration requires a variety of actions; the elimination of overlaps can cause divestitures in both firms,

<sup>&</sup>lt;sup>60</sup> In other words, while the other acquisition types primarily reflect objectives linked to expansion & development, increasing internal efficiency, and improving the competitive environment, this fourth type builds mainly on financial motives (cf. Figure 6).

complementary distribution channels enable the reciprocal cross-selling and bundling of products and services, and in order to augment the sharing of knowledge, connective links between the formerly separate organisations have to be created and supported. The increased scale and scope of joint operations allows management to consider developing operational procedures to create totally new resources and capabilities. Consequently, this type of acquisition includes the potential for cost- and revenue-based synergies in both upstream and downstream operations. This type of transaction does not rely on any single source of benefit and thus the outcome (when successful) could be argued to provide sustainable competitive advantage that is more difficult to imitate (cf. Markides & Williamson 1996, 344-345).

Due to the extent and complexity of integrative actions, this acquisition type also includes certain drawbacks and special attributes that should be taken into consideration. First, in order to ensure the continuity of activities and to support the realisation of value creation objectives, human resource and cultural aspects require special attention, both in pre-acquisition planning and post-acquisition implementation. Secondly, the complex acquisition process entails a substantial amount of hidden costs in terms of time, managerial and financial resources, and opportunity cost. Such features should be taken into account in acquisition management and valuation. For example, the analysis of alternative means of corporate growth and the evaluation of the target organisation are of the utmost importance. Similarly, failing to dedicate a sufficient amount and quality of managerial resources to carrying out the acquisition process can result in a situation where operations are severely disturbed as these resources are tied to attending to unexpected problems. Thirdly, as the acquisition affects the customer bases of both organisations, these stakeholder groups should be informed of how the acquisition process and the expected outcome will reflect on the service offered.

### 6.2 Type II outcome: Downstream integration

The second outcome type implies an acquisition process where operational objectives are primarily linked to leveraging the existing downstream operations of the target firm. As argued by Anand & Delios (2002, 120), downstream resources and capabilities such as distribution systems are not internationally fungible and can form barriers for market entry. Thus, acquisitions can offer an attractive option for international expansion. Market extension is considered to be the primary motive behind this acquisition type. In the context of international acquisitions, this generally refers to

geographical markets, but this can also entail moving into new complementing product markets to enhance customer value.

Findings related to this acquisition type resemble those of Meyer & Estrin (2001). Their study focuses on acquisitions in emerging markets such as CEE countries, and findings point to the existence of a special acquisition pattern common for these economies. In these so-called brownfield acquisitions (see Type II B in Table 8), the foreign acquirer initially acquires a local firm, but almost completely redeploys its own resources and capabilities to the target. Post-acquisition change is one-sided and e.g. local products and brand names can be phased out over a short transition period. The assets held by the local target, which are of primary importance, are related to market intelligence, distribution networks, local market share, individual customer relationships, and even proprietary real estate.

Conventional market extension acquisitions (see Add-on type in Table 8), on the other hand, leverage the assets of the local firm and combine them with the acquirer's resources. This may involve maintaining local products and brand names alongside those redeployed from the acquirer, or even redeploying the target's products/services through the existing distribution channels of the acquirer.

According to Meyer & Estrin (2001, 580-582), the choice between these two acquisition modes will depend on the quality of the resources possessed by the local firm. Based on the findings by Pablo (1994), it could be argued that the choice will also depend on the degree to which expected synergies rely on the preservation of a unique, context-specific set of organisational capabilities. Furthermore, both the findings of Meyer and Estrin and those of the present study point to the occurrence of brownfield acquisitions predominantly in transition economies. Thus, contextual variables linked to target market attributes are also suggested to bear relevance.

Compared to Type I acquisitions, add-on and brownfield acquisitions commonly involve large differences in relative size. In operational areas, where the target's assets are not central to realising acquisition objectives, the acquirer's resources and capabilities are redeployed, which may entail divestitures in the target organisation. Value creation potential in upstream operations relies primarily on cost-based synergies that are related to e.g. economies of scale in production due to increased volumes and the redeployment of the acquirer's operational practices and technologies in the target organisation. The integration of downstream operations primarily aims to generate revenue by allowing the acquiring firm to sell existing products to a wider body of customers. Depending on the acquisition objectives and target resources, revenue can also be enhanced by reciprocal cross-selling and by bundling products. In either case, objectives are realised by leveraging existing

resources and capabilities rather than jointly creating new ones. However, as the reciprocity of integration in both up- and downstream operations deepens, the more the acquisition will resemble a Type I acquisition.

As Type II acquisitions are primarily driven by the non-fungible market resources and capabilities of the target, it is essential that they are maintained or transferred in their intact form through the acquisition process. This should entail management actions in order to retain customers and key employees, even if the ultimate aim is gradually to replace them to a certain extent. Key employees can include sales personnel and, especially in the case of small entrepreneurial firms, certain managers. Regardless of the intended level of overall integration, procedural integration should be implemented at a rapid pace in order to enable the monitoring of the newly acquired target, and to avoid black spots during the post-acquisition period.

Compared to the first acquisition type, the target requirements may be less specific, which can reflect as lower pre-acquisition transaction costs. However, failing to assess the condition and sufficiency of the target's own resources and capabilities may result in higher integration costs than anticipated. Findings also suggest that expectations regarding cost-based synergies in upstream operations may be overoptimistic, as the drawbacks of extensive, unilateral integration come into effect. On the other hand, depending on the target's operational resources and capabilities, the acquisition might hold a wider array of value creation possibilities (cf. Type I) than were projected in the pre-acquisition phase. The inability of the acquirer to take into account new information and opportunities presented in the post-acquisition phase, could imply lost opportunities for creating serendipitous value.

### 6.3 Type III outcome: Upstream integration

While downstream assets are not internationally mobile, upstream assets, such as technology, are intrinsically fungible across borders. Therefore, acquisitions motivated by combining upstream resources and capabilities entail a different type of value creation process (see Type III in Table 8). Here, combination potential is linked to capitalising on the similarities and/or complementarities in sourcing and R&D, while maintaining separate distribution channels.

In an ideal situation, both firms produce similar products with similar inputs, but possess complementary innovation capabilities. Similarities will allow the firms to consolidate purchased volumes, inbound logistics flows, and sourcing operations as well as to streamline the joint supplier bases. Complementarities not only provide the potential for redeploying the superior

innovation capabilities (i.e. propriety technology, patents, know-how) of either organisation to improve the other's respective operations (cf. Capron 1999, 990), but also to create new resources and capabilities in this area that can be shared across the different products. The development of such platforms can provide reduced costs through economies of scope, but can also enhance revenue through enabling the development of new products and services and reducing time-to-market. Depending on the extent of these redeployment actions and their subsequent outcomes, manufacturing operations may also be altered or divested.

Ideally, post-acquisition change is reciprocal, where the best practices of each firm are objectively assessed and implemented in joint operations, and the creation of new resources and capabilities are supported by cross-organisational workgroups and other links. For example, even if initially the sourcing channels and practices of the acquirer are redeployed in the target, the future development of these operations should build on reciprocal interaction in order to benefit from the joint knowledge base.

As innovation resources and capabilities have a significant role in this acquisition type, post-acquisition management should put substantial efforts into ensuring the retention of related human resources and organisational procedures, which support innovation. Especially in cases where the acquirer is substantially larger than the target, creative individuals may feel uncomfortable in a larger, more bureaucratic, organisation and become frustrated (cf. Scherer & Ross 1990, 166). The exit of such key people can significantly erode the initial potential of the acquisition. Nevertheless, joining forces with a larger organisation may also invoke positive employee reactions. The acquisition may bring in the financial resources needed for long-term organisational development, and a larger employer may also offer increased options for personal career development.

Extant literature has asserted that value creation associated with revenue-based synergies and the creation of new resources and capabilities is more difficult to realise and estimate than those arising from leveraging or consolidating existing capabilities (Eccles et al. 1999, 141-142; Cording et al. 2002). Puranam et al. (2003) found evidence that the realisation of long-term product development benefits involves tight integration, and due to related organisational disruption, these acquisitions may be wrongly considered as failures, on the basis of short-term results. The findings of the present study provide supportive evidence for these observations in terms of revenue enhancement in upstream operations.

### 7 CONCLUSIONS

### 7.1 Theoretical implications

From a theoretical perspective, the results of the present study have implications for both acquisition research in general, and the applicability of the three theoretical foundations presented in Chapter 4, in understanding the operation level mechanisms of contemporary horizontal cross-border acquisitions. From the acquisition research point of view, contributions are primarily linked to the operations integration typology presented in the previous chapter. Although various integration typologies can be found in existing acquisition literature (see e.g. Haspeslagh & Jemison 1991; Zaheer et al. 2003 Napier 1989; Leroy 2004; Howell 1970), previous contributions have focused on the strategic and/or organisational dimensions of integration.

However, these typologies commonly fail to acknowledge that integration outcomes may differ at operational levels. Certain operational areas may be preserved as independent units thus relying on diversity as a source of value creation. Other areas may provide potential for value creation through absorption or co-specialisation. As a result, an operational dimension could be added to the more established strategic and organisational dimensions of integration. Thus, building on the work of Haspeslagh & Jemison (1991), differences in the need for strategic interdependency and the need for organisational autonomy between the upstream and downstream operations of the combined firms could be viewed as resulting in several integration approaches or operational level outcomes within a single acquisition (see Figure 15).

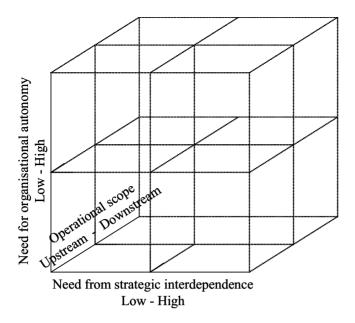


Figure 15 Dimensions of integration outcome (cf. Haspeslagh & Jemison 1991)

Compared to the functional acquisition types and related integration outcomes presented by Howell (1970), the typology presented here provides a wider spectrum of integration outcomes and a deeper understanding of the interplay of different factors behind each outcome. Howell (1970) differentiates between financial, marketing, and manufacturing acquisitions, which he sees as a set of cumulative classes<sup>61</sup> that could provide a substitute for the FTC classification. Howell (1970) adopts a very straightforward approach towards integration based on the concept of strategic fit and does not take account of other factors linked to the acquisition process or the various differences in the gradation of integration.

The typology itself illustrates that even within solely horizontal cross-border acquisitions, there is great diversity in pre-acquisition settings that cannot be fully captured through traditional operationalisations of strategic fit and relatedness. International horizontal acquisitions could simply be considered as purely supplementary or product-concentric transactions. However, this is not necessarily the case when discussing the combination of complex international organisations, even at a business unit level, and considering pre-acquisition fit as a condition which sets the stage for post-acquisition value creation. Previous research has also acknowledged similar problems and has suggested this to be one major reason for mixed research

<sup>61</sup> I.e. marketing acquisitions can derive financial benefits and manufacturing acquisitions, in turn, can derive also marketing and financial benefits.

results (e.g. Markides & Williamson 1996; Seth et al. 2002). In this study, a fruitful approach was found by considering both the underlying acquisition motives and also the operational similarities and complementarities of the combined units.

Traditional acquisition research from the strategic school has adopted a very straightforward approach to acquisition-related value creation. Overall, a disproportionate emphasis has been placed on pre-acquisition factors, setting aside processual factors and practical impediments to value creation. Research findings suggest more complex relationships between combination potential, integration, and value creation. Acquisition integration is in itself a complex concept, and clustering e.g. administrative, operational, and human integration aspects under one or a very few one-dimensional measures would seem to have a low construct validity. Measures that differentiate between various areas and types of integration (cf. Capron 1999) as well as acknowledge the possibility of reciprocal redeployment flows can be considered to provide a better understanding of the relationship between integration and value creation.

As discussed in the previous chapter, similar pre-acquisition settings do not always result in similar post-acquisition outcomes. From a value creation perspective, post-acquisition integration also depends on the ability of the acquirer to act on new opportunities that emerge during the acquisition process, the nature of the anticipated synergies and their organisational context (cf. organisational task needs), cultural and organisational factors, the power differential between the transaction parties, and the acquirer's ability to look beyond the initial power differential, when assessing appropriate integrative actions. Furthermore, due to information asymmetry, the acquirer may not be fully informed of the true combination potential, which will then result in a revision of the initial integration plans.

As some studies imply (e.g. Larsson & Finkelstein 1999), integration does not inevitably lead to negative employee reactions. First and foremost, as has been noted in previous research, the translation of task integration into actual value is significantly influenced by how successfully it is coupled with human integration (e.g. Birkinshaw et al. 2000). Secondly, the realisation of revenue-based synergies may contain less incitement for employee resistance. In addition, even in the case of horizontal acquisitions, relatively loose integration can provide a basis for value creation. Employees from a small target company may associate the acquisition with positive career aspects in such a situation. However, as this study had limited evidence on matters of human integration, these implications should be treated with caution.

Findings on operational integration also hold relevance for research on acquisition performance measurement. As described in the individual papers,

acquisitions and individual synergies differ in terms of their measurability and time required to generate benefits. Furthermore, some of the cases examined bore evidence of objectives, which were founded in increasing future competitive advantage rather than maximising short- or medium-term profits. Relying on pure accounting-based measures in such circumstances could be considered unfounded. Moreover, event studies cannot capture the effects of post-acquisition integration, which can be seen as a significant determinant of performance in horizontal acquisitions. This study does not aim to make absolute assessments of acquisition performance across the studied cases. Rather the point is to underline the contextual nature of acquisition success, which should be taken into account when assessing the validity of different measures and interpreting their results.

In terms of the three specific theoretical perspectives, empirical evidence was found on mechanisms described by each of the approaches. Elements of the industrial organisation tradition and the influence of market power rationale were present in several cases. Acquired market power was exercised primarily towards suppliers. Increasing market share was also a present motive, but indications of a relationship to increased customer prices were not found. Rather this was associated with reducing resource dependency in terms of competitors and providing a basis for improved profitability through e.g. scale economies (cf. Buzzell & Gale 1987). Motives related to establishing a greater degree of control over the firm's environment<sup>62</sup> were stated, regardless of the industry and consolidation phase in question. However, the manner in which this issue was tackled differed across industries and cases, and this argument alone was insufficient to explain fully the rationale or value creation process of any of the cases examined.

When discussing horizontal acquisitions at an aggregate level, as was done in the expert interviews, cost efficiencies driven by economies of scale can be seen as an important factor in explaining overall acquisition activity. This was especially the case in mature industries with highly capitalised production facilities. Similarly, the general acquisition strategy of a certain firm could be gradually to reap scale economies in a more fragmented industry, through several acquisitions and internal expansion. However, the individual cases of this study gave more support to the presence of economies of scope than economies of scale (cf. Type III outcome). Neither was limited to cost efficiencies in production, but was nevertheless generally linked to upstream operations. Downstream operations may have also provided some potential for economies of scale and scope, but these were less frequently acted upon.

<sup>&</sup>lt;sup>62</sup> Cf. resource dependence theory.

Although the legacy of cost efficiency theories was found to be of importance, this perspective by itself would reveal only a limited understanding of post-acquisition outcomes. First, the traditional view considers value creation as being a result of restructuring existing resources and capabilities and divesting excess assets. However, several cases portrayed value creation based on enhanced revenue as well as on creating new resources and capabilities through reciprocal integration and co-specialisation. Secondly, understanding the role of intangible capabilities such as market intelligence, customer relations, and organisational practices, which have highly imperfect markets, are hard to fit into the logic of the cost efficiency tradition. In these senses, the resource-based view offers an essential part of understanding horizontal cross-border acquisitions.

Furthermore, while cost efficiency theories could be seen as promoting tight consolidation and with resource-based theories relying on extensive redeployment, general network theory could be considered as contributing towards understanding acquisitions that are based on relatively low levels of integration and pooling diversified knowledge. Although this does not conflict with the notion of non-physical resource redeployment, such an additional perspective assists in comprehending the heterogeneity of organisational outcomes and appropriate coordination mechanisms in deals primarily hoping to achieve revenue-based synergies. Nevertheless, as this discussion has illustrated, although separating different types of value creation and related integrative actions can increase the theoretical understanding of the studied phenomenon, in practice these mechanisms commonly intertwine, forming a complex effect.

## 7.2 Managerial implications

Although the aims of this study are primarily non-normative, the research results point to a number of factors that would merit increased managerial attention. First, as acquisition activity has rapidly increased during recent years, so has the amount of money being redistributed and the number of people who have a financial interest in the M&A business. Adding pressures due to the consolidation of competitors and customers, frequent revisions of the definition of core business depending on the economic outlook, and fluctuations in the amount of excess financial resources and market capitalisation to this state of events, may result in acquisitions with no true potential for value creation or where the same benefits could be obtained at an equivalent or even lower cost through e.g. internal investment. From an operations integration perspective, isomorphic acquisitions can cause a

mismatch between combination potential and integrative actions, and produce substantial integration costs due to insufficient integration planning. Overall, results also underline the importance of functional corporate governance when deciding whether to embark upon specific acquisitions.

Secondly, when planning for post-acquisition integration, the nature and extent of the expected benefits should by considered against the temporal, financial and managerial resources required for their realisation. Assessing the required resources based merely, for example, on the relative size of combined firms is unwise. Attaining and allocating sufficient managerial resources can prove especially challenging. While convergence between strategic alignment and a specific acquisition is a pivotal issue, strategic intentions should be translated into digestible tasks and objectives at an operational level, which can be handled without severely compromising organisational momentum. Breakdowns between the strategic and operational levels, in terms of management, communication, and monitoring may cause negative employee reactions, deteriorating customer service, and increased total integration costs. The importance of post-acquisition monitoring in realising operational objectives also underlines the significance of swift procedural integration. Regardless of the overall extent of physical integration, research findings advocated the need speedily to integrate reporting and, at least, the basic IT systems in order to assure the continuity of everyday operations and to enable the monitoring of post-acquisition development against set milestones. These findings underline the need to develop, through further research efforts, concrete tools to evaluate and manage possible sources of discontinuation that can disturb the internal and operational processes of companies.

Thirdly, before deciding on appropriate actions concerning operations integration, the acquirer should have attained an in-depth understanding of the acquired business and its resources and capabilities. Both over- and underestimating the needs for divestiture, redeployment and related management can hinder value creation. Inappropriate divestitures and replacement of e.g. organisational practices can cause problems in terms of human integration and, at worse, cause value destruction. For example, significant differences in relative size can induce simplified views where an analogy is drawn between size and superiority. On the other hand, overestimating the target's qualities can result in the underutilisation of value creation potential.

Fourthly, in the case of horizontal cross-border acquisitions, although evidence on both cost- and revenue-based synergies was found, revenue-based synergies played a slightly more significant role in explaining value creation objectives and integration outcomes than could be expected, based on the extant literature regarding horizontal acquisitions. It has been argued that cost-

based benefits are easier to capture than those aimed at enhancing revenue (Anand & Singh 1997), and are considerably simpler to value (Cording et al. 2002; Eccles et al. 1999). However, the present research provides more support for the findings of Capron (1999), who suggests that cost-based synergies are more difficult to achieve than was previously thought. Results indicate that acquirers often underestimate the time and effort needed to realise cost-based synergies, especially when they are directly linked to the rationalisation of resources. Cost savings related to collusive synergies and the redeployment of capabilities did not necessarily portray these problems. The case studies presented do not provide evidence of the pre-eminence of either synergy type. In practice, synergies often intertwine and both have their respective challenges in terms of operations integration and related human integration management.

Furthermore, as the measurability and realisation time of these synergy types inherently differ, comparing value creation outcomes between individual cases within their respective contexts would be questionable. Even though none of the empirical cases presented can be characterised as an outright failure, several acquisitions had consumed more resources than anticipated. Such acquisitions may have proven themselves to have enhanced value creation possibilities in the long run, but the period of post-acquisition turbulence had been relatively severe and lengthy, and, at the time of data collection, synergy potential had not yet been realised in full.

## 7.3 Limitations and suggestions for further research

Although the use of multiple methodological approaches can be seen as a notable asset to this study, which has considerably increased the overall understanding of the phenomenon examined, the study also includes a number of methodological limitations. First, the empirical data were reconstructive in the sense that they were collected after post-acquisition integration had begun. This holds some disadvantages related to the post-rationalisation of previous actions and to matters of accurate recollection. However, this approach was considered necessary due to the fact that it often takes several years to complete integration and realise synergy potential (see e.g. Kitching 1967).

Adopting a more longitudinal approach would have undoubtedly provided a more in-depth view of the integration process. However, such a tactic entails significant risk on the researcher's part; when committing to a specific case shortly after the deal has been closed, it is uncertain whether commitment will continue to be forthcoming on the part of the case organisation and whether interaction will progress to actual operations integration, both of which are

necessary to attain meaningful results. Furthermore, gaining organisational access proved difficult in connection with this study, which can be considered a common problem in acquisition research.

In terms of individual methods, although comparable in terms of acquisition research, the questionnaire response rate in Paper 1 was fairly low. In addition, non-response biases were not evaluated, nor were controlling variables used in the analysis. Regarding the conducted case studies, the fact that interview data came from only one informant can be seen as a major limitation. Preliminary data for Paper 3 were gathered by several interviewees (two interviewees per interview), which did enable researcher triangulation. There again, though all the interviews were recorded, not all of the recordings were delivered to the author, but were provided in the form of partial transcripts, organised under the interview structure. In order to increase construct validity despite these limitations, different kinds of data were used, special attention was paid to the selection of informants, and the preliminary reports were sent to key informants for possible comments. For example, for the purposes of this study, additional case-specific data were collected from secondary sources such as financial statements, annual reports, press releases, and the popular business press; in certain acquisition case studies this type of material has been used as the sole source of empirical evidence (see e.g. Hitt et al. 1998). Furthermore, restricting the study perspective and data collection to the acquiring firm also entails limitations.

It is acknowledged that results may not be readily generalisable beyond the set constraints, i.e. horizontal cross-border acquisitions between European counterparts. In addition, since research on cross-border acquisitions is still in its early stages, it could be argued that the concept of international acquisitions still requires reframing (Shimizu et al. 2004; cf. Anand et al. 2005). Thus, the present research offers only one interpretation of the concept, as is also the case for horizontal transactions. There again, in line with case study research tradition, the main intention here is to push towards generalisability to theory rather than to a specific population (cf. Yin 1991, 21; Lukka & Kasanen 1995, 77). Such generalisation can be based on e.g. an understanding and communication of the contextual surroundings behind each case (see Lukka & Kasanen 1995 on constructive generalisation) or on replication through multiple case studies (cf. Yin 1991, 36; 44-45). In this sense, the results presented may hold a wider applicability.

The synthesised conclusions of this study were based on a constant iterative process between the extant literature and different modes of empirical investigation. A natural extension to this research would be to use the presented ideal types as guiding constructs for formulating propositions. Thus,

the typology could be evaluated using e.g. quantitative questionnaire data to test the multivariate profiles of each type.

Another possible direction for further research would be to attempt to assess the sustainability of the different types of synergies in alternate contexts. As the results of this study illustrate, the realisation of cost-based synergies is not necessarily as effortless as previously suggested in the literature. Adding to the commonly assumed notion that the valuation of cost-based synergies is also straightforward has led researchers to urge practitioners to engage in acquisitions which involve similar resources and rely on leveraging existing resources to reduce costs, and to avoid complementary acquisitions striving to create new sources of competitive advantage (e.g. Cording et al. 2002). Although leveraging acquisitions may well be seen as the more attractive option from a short-term perspective, comparing the long-term benefits of these two value creation logics could provide an interesting and more profound insight on these issues.

Research on the risks of post-acquisition integration has primarily focused on employee-related issues. However, in cases of profound integration, this period also sets challenges for retaining customers and suppliers. Thus, matters related to communication towards customers and the process of transferring customer loyalty to new contact persons or brands would offer an interesting and relatively untouched area for continuing research. A fruitful basis for investigation might be to study relatively small market entry type acquisitions, which involve the rapid replacement of the target's upstream resources and capabilities, and a more transitional approach in terms of resources and capability connected to the immediate customer interface.

As a part of acquisition management, the relevance of human assets in terms of employee specific know-how, collective employee capabilities used to generate rent from resources, and resources and capabilities linked to external interaction, has significantly increased as acquisitions frequently involve firms from service industries. While in 1988 two thirds of international acquisition investments were made in manufacturing industries, in 2001 services industries attracted approximately the same relative amount of investment while manufacturing industry acquisitions represented only a third of the total value of cross-border acquisitions (see Appendix 1). Extending empirical inquiry into service industries beyond the logistics service sector while using a similar theoretical perspective to that applied in the present study might provide contrasting results.

Furthermore, general network theory might also be adapted towards research focusing on other service industries or, for example, the R&D units of manufacturing firms. Investigating alternative integration strategies (resource pooling vs. co-specialisation) regarding R&D resources and capabilities would

be interesting both due to the increased popularity of related acquisition motives and the importance of organisational issues and human capabilities in these acquisitions owing to risks linked to the high level of resource mobility.

# REFERENCES

- Agrawal, Anup Jaffe, Jeffrey F. Mandelker, Gershon N. (1992) The post-merger performance of acquiring firms: a re-examination of an anomaly. *Journal of Finance*, Vol. 47, No. 4, 1605-1621.
- Ahuja, Gautam (2000) The duality of collaboration: inducements and opportunities in the formation of interfirm linkages. *Strategic Management Journal*, Vol. 21, No. 3, 317-343.
- Amburgey, Terry L. Miner, Anne S. (1992) Strategic momentum: the effects of repetitive, positional, and contextual momentum on merger activity. *Strategic Management Journal*, Vol. 13, No: 5, 335-348.
- Amit, Raphael Schoemaker, Paul J. H. (1993) Strategic assets and organizational rents. *Strategic Management Journal*, Vol. 14, No: 1, 33-46.
- Anand, Jaideep Capron, Laurence Mitchell, Will (2005) Using acquisitions to access multinational diversity: thinking beyond the domestic versus cross-border M&A comparison. *Industrial and Corporate Change*, Vol. 14, No: 2, 191-224.
- Anand, Jaideep Delios, Andrew (2002) Absolute and relative resources as determinants of international acquisitions. *Strategic Management Journal*, Vol. 23, No: 2, 119-134.
- Anand, Jaideep Singh, Harbir (1997) Asset redeployment, acquisitions and corporate strategy in declining industries. *Strategic Management Journal*, Vol. 18, Special Issue, 99-118.
- Anderson, Helén Havila, Virpi Salmi, Asta (2001) Can you buy a business relationship? *Industrial Marketing Management*, Vol. 30, No. 7, 575-586.
- Andrade, Gregor Stafford, Erik (2004) Investigating the economic role of mergers. *Journal of Corporate Finance*, Vol. 10, No. 1, 1-36.
- Angwin, Duncan (2001) Mergers and acquisitions across European borders: national perspectives on pre-acquisition due diligence and the use of professional advisors. *Journal of World Business*, Vol. 36, No: 1, 32-57.
- Ansoff, H. Igor Brandenburg, Richard G. Portner, Fred E. Radosevich, Raymond (1972) *Twenty years of acquisition behavior in America. A comparative study of mergers and acquisitions of U.S. manufacturing firms 1946-1965.* Cassell: London.

- Arbnor, Ingeman Bjerke, Björn (1997) *Methodology for creating business knowledge*. 2<sup>nd</sup> edition. Sage: Thousand Oaks, CA.
- Arquilla, John Ronfeldt, David (1998) Preparing for information-age conflict: part one: conceptual and organizational dimensions. *Information, Communication & Society*, Vol. 1 No: 1, 1-22.
- Ashkenas, Ronald N. Francis, Suzanne C. (2000) Integration managers: special leaders for special times. *Harvard Business Review*, Vol. 78, No: 6, 108-115.
- Auster, Ellen R. Sirower, Mark L. (2002) The dynamics of merger and acquisition waves. *Journal of Applied Behavioral Science*, Vol. 38, No: 2, 216-244.
- Babbie, Earl (1989) *The practice of social research*. Wadsworth Publishing Company: Belmont, CA.
- Bain, Joe S. (1959) *Industrial organization*. John Wiley & Sons: New York, NY.
- Barkema, Harry G. Bell, John H. J. Pennings, Johannes M. (1996) Foreign entry, cultural barriers and learning. *Strategic Management Journal*, Vol. 17, No: 2, 151-166.
- Barkema, Harry G. Vermeulen, Freek (1998) International expansion through start-up or acquisition: a learning perspective. *Academy of Management Journal*, Vol. 41, No. 1, 7-26.
- Barney, Jay B. (1988) Returns to bidding firms in mergers and acquisitions: reconsidering the relatedness hypothesis. *Strategic Management Journal*, Vol. 9, Special Issue, 71-78.
- Barney, Jay (1991) Firm resources and sustained competitive advantage. *Journal of Management*, Vol. 17, No. 1, 99-120.
- Baumol, William J. (1962) On the theory of expansion of the firm. *American Economic Review*, Vol. 52, No. 4, 1078-1087.
- Beckman, Christine M. Haunschild, Pamela R. (2002) Network learning: the effects of partners' heterogeneity of experience on corporate acquisitions. *Administrative Science Quarterly*, Vol. 47, No. 1, 92-124.
- Benbasat, Izak Goldstein, David K. Mead, Melissa (1987) The case research strategy in studies of information systems. *MIS Quarterly* Vol. 11, No: 3, 369-386.
- Bergh, Donald D. (2001) Executive retention and acquisition outcomes: a test of opposing views on the influence of organizational tenure. *Journal of Management*, Vol. 27, No: 5, 603-622.
- Bergmann, Helmut (2002) Merger control. In: *Handbook of international mergers and acquisitions*, ed. by Gerhard Picot, 213-267. Palgrave Macmillan: Houndmills.

- Berkovitch, Elazar Narayanan, M. P. (1993) Motives for takeovers: an empirical investigation. *Journal of Financial and Quantitative Analysis*, Vol. 28, No. 3, 347-362.
- Birkinshaw, Julian Bresman, Henrik Håkanson, Lars (2000) Managing the post-acquisition integration process: how the human integration and task integration processes interact to foster value creation. *Journal of Management Studies*, Vol. 37, No. 3, 395–423.
- Bonoma, Thomas V. (1985) Case research in marketing: opportunities, problems and a process. *Journal of Marketing Research*, Vol. 22, No: 2, 199-208.
- Bower, Joseph L. (2001) Not all M&As are alike and that matters. *Harvard Business Review*, Vol. 79, No. 3, 92-101.
- Bowersox, Donald J. Closs, David J. Helferich Omar K. (1986) *Logistical* management: a systems integration of physical distribution, manufacturing support and materials procurement. 3<sup>rd</sup> edition, Macmillan: New York, NY.
- Bowman, Edward H. Singh, Harbir (1993) Corporate restructuring: reconfiguring the firm. *Strategic Management Journal*, Vol. 14, Special Issue, 5-14.
- Bresman, Henrik Birkinshaw, Julian Nobel, Robert (1999) Knowledge transfer in international acquisitions. *Journal of International Business Studies*, Vol. 30, No. 3, 439-462.
- Brockner, Joel (1992) Managing the effects of layoffs on survivors. *California Management Review*, Vol. 34, No. 2, 9-28.
- Brouthers, Keith D. Brouthers, Lance Eliot (2000) Acquisition or greenfield start-up? Institutional, cultural and transaction cost influences. *Strategic Management Journal*, Vol. 21, No: 1, 89-97.
- Brouthers, Keith D. Brouthers, Lance Eliot (2003) Why service and manufacturing entry mode choices differ: the influence of transaction cost factors, risk and trust. *Journal of Management Studies*, Vol. 40, No: 5, 1179-1204.
- Brouthers, Keith van Hastenburg, Paul van den Ven, Joran (1998) If most mergers fail why are they so popular? *Long Range Planning*, Vol. 31, No: 3, 347-353.
- Brush, Thomas H. (1996) Predicted change in operational synergy and post-acquisition performance of acquired businesses. *Strategic Management Journal*, Vol. 17, No. 1, 1-24.
- Buckley, Peter J. Ghauri, Pervez N. (eds.) (2002) *International mergers and acquisitions*. Thomson: Australia.

- Buono, Anthony F. Bowditch, James L. (1989) *The human side of mergers and acquisitions. Managing collisions between people, cultures, and organizations.* Jossey-Bass: San Francisco, CA.
- Buono, Anthony F. Bowditch, James L. Lewis, John W., III (1985) When cultures collide: the anatomy of a merger. *Human Relations*, Vol. 38, No: 5, 477-500.
- Burt, Ronald S. (1992) *Structural holes: the social structure of competition*. Harvard University Press: Cambridge, MA.
- Buzzell, Robert D. Gale, Bradley, T. (1987) *The PIMS principles. Linking strategy to performance.* Free Press: New York, NY.
- Buzzell, Robert D. Gale, Bradley T. Sultan, Ralph G. M. (1975) Market share the key to profitability. *Harvard Business Review*, Vol. 53, No: 1, 97-106.
- Cannella, Albert A., Jr. Hambrick, Donald C. (1993) Effects of executive departures on the performance of acquired firms. *Strategic Management Journal*, Vol. 14, Special Issue, 137-152.
- Capon, Noel Hulbert, James M. Farley, John U. Martin, L. Elizabeth (1988) Corporate diversity and economic performance: the impact of market specialization. *Strategic Management Journal*, Vol. 9, No: 1, 61-74.
- Capron, Laurence (1999) The long-term performance of horizontal acquisitions. *Strategic Management Journal*, Vol. 20, No. 11, 987-1018.
- Capron, Laurence Dussauge, Pierre Mitchell, Will (1998) Resource redeployment following horizontal acquisitions in Europe and North America, 1988-1992. *Strategic Management Journal*, Vol. 19, No: 7, 631-661.
- Capron, Laurence Hulland, John (1999) Redeployment of brands, sales forces and general marketing expertise following horizontal acquisitions. *Journal of Marketing*, Vol. 63, No: 2, 41-54.
- Capron, Laurence Mitchell, Will (1997) Outcomes of international telecommunication acquisitions: analysis of four cases with implications for acquisitions theory. *European Management Journal*, Vol. 15, No: 3, 237-251.
- Capron, Laurence Mitchell, Will Swaminathan, Anand (2001) Asset divestiture following horizontal acquisitions: a dynamic view. Strategic Management Journal, Vol. 22, No: 9, 817-844.
- Capron, Laurence Pistre, Nathalie (2002) When do acquirers earn abnormal results? *Strategic Management Journal*, Vol. 23, No. 9, 781-794.

- Carleton, J. Robert Stevens, Alan (2004) When worlds collide. The need for cultural assessment and integration. In: *Proceedings of the 2<sup>nd</sup> IASTED International Conference on Alliances, Mergers, and Acquisitions 2004*, ed. by M. H. Hamza, 113-121. Acta Press: Anaheim, CA.
- Carow, Kenneth Heron, Randall Saxton, Todd (2004) Do early birds get the returns? An empirical investigation of early-mover advantages in acquisitions. *Strategic Management Journal*, Vol. 25, No. 6, 563-585.
- Carper, William B. (1990) Corporate acquisitions and shareholder wealth: a review and exploratory analysis. *Journal of Management*, Vol. 16, No: 4, 807–23
- Cartwright, Sue Cooper, Cary L. (1992) *Mergers and acquisitions: the human factor*. Butterworth-Heinemann: Oxford.
- Castrogiovanni, Gary J. Bruton, Garry D. (2000) Business turnaround processes following acquisitions: reconsidering the role of retrenchment. *Journal of Business Research*, Vol. 48, No. 1, 25-34.
- Caves, Richard E. (1981) Diversification and seller concentration: evidence from changes, 1963-72. *Review of Economics and Statistics*, Vol. 63, No. 2, 289-293.
- Caves, Richard E. (1989) Mergers, takeovers, and economic efficiency: foresight vs. hindsight. *International Journal of Industrial Organization*, Vol. 7, No. 1, 151-174.
- Caves, R. Porter, M. E. (1977) From entry barriers to mobility barriers: conjectural decisions and contrived deterrence to competition. *Quarterly Journal of Economics*, Vol. 91, No. 2, 241-262.
- Chadwick, Clint Hunter, Larry W. Walston, Stephen L. (2004) Effects of downsizing practices on the performance of hospitals. *Strategic Management Journal*, Vol. 25, No. 5, 405-427.
- Chandler, Alfred D., Jr (1987) Strategy and structure. Chapters in the history of American industrial enterprise. MIT press: Cambridge, MA.
- Chandler, Alfred D., Jr. (1990) *Scale and scope. The dynamics of industrial capitalism.* Belknap Press: Cambridge, MA.
- Chase, Richard B. (1978) Where does the customer fit in the service operation? *Harvard Business Review*, Vol. 56, No. 6, 137-142.
- Chase, Richard B. (1996) The mall is my factory: reflections of a service junkie. *Production and Operations Management*, Vol. 5, No. 4, 298-308.

- Chatterjee, Sayan (1986) Types of synergy and economic value: the impact of acquisitions on merging and rival firms. *Strategic Management Journal*, Vol. 7, No: 2, 119-139.
- Chatterjee, Sayan (1992) Sources of value in takeovers: synergy or restructuring implications for target and bidder firms. *Strategic Management Journal*, Vol. 13, No: 4, 267-286.
- Chatterjee, Sayan Lubatkin, Michael H. Schweiger, David M. Weber, Yaakov (1992) Cultural differences and shareholder value: linking equity and human capital. *Strategic Management Journal*, Vol. 13, No: 5, 319-334.
- Chatterjee, Sayan Wernerfelt, Birger (1991) The link between resources and type of diversification. *Strategic Management Journal*, Vol. 12, No: 1, 33-48.
- Chen, Haiyang Hu, Michael Y. (2002) An analysis of determinants of entry mode and its impact on performance. *International Business Review*, Vol. 11, No. 2, 193-210.
- Chi, Tailan (1994) Trading in strategic resources: necessary conditions, transaction cost problems, and choice of exchange structure. Strategic Management Journal, Vol. 15, No: 4, 271-290.
- Child, John Faulkner, David Pitkethly, Robert (2001) *The management of international acquisitions*. Oxford University Press: Oxford.
- Christensen, Clayton M. Overdorf, Michael (2000) Meeting the challenge of disruptive change. *Harvard Business Review*, Vol. 78, No. 2, 66-76.
- Coff, Russell W. (1999) How buyers cope with uncertainty when acquiring firms in knowledge-intensive industries: caveat emptor. *Organization Science*, Vol. 10, No: 2, 144-161.
- Coleman, James S. (1988) Social capital in the creation of human capital. American Journal of Sociology, Vol. 94, Supplement, 95-120.
- Cooper, Harris M. (1989) *Integrating research. A guide for literature reviews*. 2<sup>nd</sup> edition, Sage Publications: Newbury Park, CA.
- Cording, Margaret Patricia (2004) Organizational integrity and acquisition performance. The role of values in value creation. UMI Dissertation Services: Ann Arbor, MI.
- Cording, Margaret Christmann, Petra Bourgeois, L. J., III (2002) A focus on resources in M&A success: a literature review and research agenda to resolve two paradoxes. *Paper presented at the 2002 Annual Meeting of the Academy of Management*, Denver, USA, August 9-14, 2002, 1-40.
- Corporate marriage: blight or bliss? A monograph on post-merger integration (1999) A.T. Kearney: Chicago, IL.

- Cowles, Deborah L. Kiecker, Pamela Little, Michael W. (2002) Using key informant insights as a foundation for e-retailing theory development. *Journal of Business Research*, Vol. 55 No: 8, 629-636.
- Croyle, Randy Kager, Patrick (2002) Giving mergers a head start. *Harvard Business Review*, Vol. 80, No: 10, 2-3.
- Das, T. K. Teng, Bing-Sheng (1998) Resource and risk management in strategic alliance making process. *Journal of Management*, Vol. 24, No: 1, 21-42.
- Datta, Deepak K. (1991) Organizational fit and acquisition performance: effects of post-acquisition integration. *Strategic Management Journal*, Vol. 12, No: 4, 281-297.
- Datta, Deepak K. Grant, John H. (1990) Relationships between type of acquisition, the autonomy given to the acquired firm, and acquisition success: an empirical analysis. *Journal of Management*, Vol. 16, No: 1, 29-44.
- Datta, Deepak K. Pinches, George, E. Narayanan, V. K. (1992) Factors influencing wealth creation from mergers and acquisitions: a meta-analysis. *Strategic Management Journal*, Vol. 13, No. 1, 67-84.
- Davis, Peter S. Desai, Ashay B. Francis, John D. (2000) Mode of international entry: an isomorphism perspective. *Journal of International Business*, Vol. 31, No. 2, 239-258.
- Deans, Graeme K. Kroeger, Fritz Zeisel, Stefan (2002) The consolidation curve. *Harvard Business Review*, Vol. 80, No: 12, 20-21.
- Denzin, Norman K. (1978) *The research act. A theoretical introduction to sociological methods.* 2<sup>nd</sup> edition, McGraw-Hill Book Company: New York, NY.
- Denzin, Norman K. Lincoln, Yvonnna S. (eds.) (1994) *Handbook of qualitative research*. Sage Publications: Thousand Oaks, CA.
- Dewing, A. S. (1921) A statistical test of the success of consolidations. *Quarterly Journal of Economics*, Vol. 36, No. 1, 84-101.
- Dibelius, Alexander (2002) Mergers and acquisitions: interface between companies and the capital markets. In: *Handbook of international mergers and acquisitions*, ed. by Gerhard Picot, 29-52. Palgrave Macmillan: Houndmills.
- Dickerson, Andrew P. Gibson, Heather D. Tsakalotos, Euclid (1997) The impact of acquisitions on company performance: evidence from a large panel of UK firms. *Oxford Economic Papers*, Vol. 49, No: 3, 344-361.

- Dierickx, Ingemar Cool, Karel (1989) Asset stock accumulation and sustainability of competitive advantage. *Management Science*, Vol. 35, No: 12, 1504-1511.
- Doty, D. Harold Glick, William H. (1994) Typologies as a unique form of theory building: toward improved understanding and modelling. *Academy of Management Review*, Vol. 19, No. 2, 230-251.
- Dranikoff, Lee Koller, Tim Schneider, Antoon (2002) Divestiture: strategy's missing link. *Harvard Business Review*, Vol. 80, No: 5, 74-83.
- Dranove, David Shanley, Mark (1995) Cost reductions or reputation enhancement as motives for mergers: the logic of multihospital systems. *Strategic Management Journal*, Vol. 16, No: 1, 55-74.
- Dunning, John H. (1998) The European internal market program and inbound foreign direct investment. In: *Globalization, trade and foreign direct investment,* ed. by John H. Dunning, 49-115. Elsevier Science: Oxford.
- Dunning, John H. (2001) The eclectic (OLI) paradigm of international production: past, present and future. *International Journal of the Economics of Business*, Vol. 8, No. 2, 173-190.
- Dutz, Mark A. (1989) Horizontal mergers in declining industries: theory and evidence. *International Journal of Industrial Organization*, Vol. 7, No. 1, 11-33.
- Dyer, Jeffrey H. Kale, Prashant Singh, Harbir (2004) When to ally & when to acquire. *Harvard Business Review*, Vol. 82, Nos: 7/8, 109-115.
- Dyer, Jeffrey H. Nobeoka, Kentaro (2000) Creating and managing a highperformance knowledge-sharing network: the Toyota case. *Strategic Management Journal*, Vol. 21, No. 3, 345-367.
- Dyer, W. Gibb, Jr. Wilkins, Alan L. (1991) Better stories, not better constructs, to generate better theory: a rejoinder to Eisenhardt. *Academy of Management Review*, Vol. 16, No: 3, 613-619.
- Eccles, Robert G. Lanes, Kersten L. Wilson, Thomas C. (1999) Are you paying too much for that acquisition? *Harvard Business Review*, Vol. 77, No: 4, 136-146.
- Eckbo, B. Espen (1983) Horizontal mergers, collusion and stockholder wealth. *Journal of Financial Economics*, Vol. 11, Nos: 1-4, 241-273.
- Eisenhardt, Kathleen M. (1989) Building theories from case study research. *Academy of Management Review*, Vol. 14, No: 4, 532-550.
- Elsass, Priscilla M. Veiga, John F. (1994) Acculturation in acquired organizations: a force-field perspective. *Human Relations*, Vol. 47, No: 4, 431-453.

- Emerson, Richard M. (1962) Power-dependence relations. *American Sociological Review*, Vol. 27, No. 1, 31-41.
- Erramilli, M. Krishna Rao, C. P. (1993) Service firms' international entry mode choice: a modified transaction-cost analysis approach. *Journal of Marketing*, Vol. 57, No. 3, 19-38.
- Eun, Cheol S. Kolodny, Richard Scheraga, Carl (1996) Cross-border acquisitions and the shareholder wealth: tests of the synergy and internationalization hypotheses. *Journal of Banking & Finance*, Vol. 20, No: 9, 1559-1582.
- Fama, Eugene F. Fisher, Lawrence Jensen, Michael C. Roll, Richard (1969) The adjustment of stock prices to new information. International Economic Review, Vol. 10, No: 1, 1-21.
- Fang, Tony Fridh, Camilla Schultzberg, Sara (2004) Why did the Telia-Telenor merger fail? *International Business Review*, Vol. 13, No: 5, 573-594.
- Farjoun, Moshe (1998) The independent and joint effects of the skill and physical bases of relatedness in diversification. *Strategic Management Journal*, Vol. 19, No: 7, 611-630.
- Fernández, Isabel (2004) Reverse logistics implementation in manufacturing companies. Acta Wasaensia, No. 127, Industrial Management 8. University of Vaasa: Vaasa.
- Finkelstein, Sydney (1997) Interindustry merger patterns and resource dependence: a replication and extension of Pfeffer (1972). Strategic Management Journal, Vol. 18, No: 10, 787-810.
- Flap, Henk Bulder, Bert Völker, Beate (1998) Intra-organizational networks and performance: a review. *Computational & Mathematical Organization Theory*, Vol. 4, No: 2, 109-147.
- Fließ, Sabine Kleinaltenkamp (2004) Blueprinting the service company.

  Managing service processes efficiently. *Journal of Business Research*, Vol. 57, No: 4, 392-404.
- Fowler, Karen L. Schmidt, Dennis R. (1989) Determinants of tender offer post-acquisition financial performance. *Strategic Management Journal*, Vol. 10, No: 4, 339-350.
- Garette, Bernard Dussauge, Pierre (2000) Alliances versus acquisitions: choosing the right option. *European Management Journal*, Vol. 18, No: 1, 63-69.
- Glaser, Barney G. Strauss, Anselm L. (1975) *The discovery of grounded theory: strategies for qualitative research.* 7<sup>th</sup> edition, Aldine: Chicago, IL.
- Goldberg, W. H. (1983) *Mergers: motives, modes and methods*. Nicols: New York, NY.

- Gort, Michael (1962) *Diversification and integration in American industry*. Princeton University Press: Princeton, NJ.
- Gort, Michael (1969) An economic disturbance theory of mergers. *Quarterly Journal of Economics*, Vol. 83, No: 4, 624-642.
- Graebner, Melissa E. (2004) Momentum and serendipity: how acquired leaders create value in the integration of technology firms. Strategic Management Journal, Vol. 25, Nos: 8-9, 751-777.
- Granovetter, Mark S. (1973) The strength of weak ties. *American Journal of Sociology*, Vol. 78, No. 6, 1360-1380.
- Grant, Robert M. (2002) Contemporary strategy analysis. Concepts, Techniques, Applications. 4<sup>th</sup> edition. Blackwell Publishers: Malden, MA.
- Grant, Robert M. Jammine, Azar P. Thomas, Howard (1988) Diversity, diversification, and profitability among British manufacturing companies, 1972-84. *Academy of Management Journal*, Vol. 31, No. 4, 771-801.
- Graves, Desmond (1981) Individual reactions to a merger of two small firms of brokers in the re-insurance industry: a total population survey. *Journal of Management Studies*, Vol. 18, No: 1, 89-113.
- Greenwood, Royston Hinings, C. R. Brown, John (1994) Merging professional service firms. *Organization Science*, Vol. 5, No. 2, 239-257.
- Gummesson, Evert (2000) *Qualitative methods in management research*. 2<sup>nd</sup> edition. Sage Publications: Thousand Oaks, CA.
- Gupta, Diwakar Gerchak, Yigal (2002) Quantifying operational synergies in a merger/acquisition. *Management Science*, Vol. 48, No. 4, 517-533.
- Haleblian, Jerayr Finkelstein, Sydney (1999) The influence of organisational acquisition experience on acquisition performance: a behavioural learning perspective. *Administrative Science Quarterly*, Vol. 44, No: 1, 29-56.
- Hall, R. Duane (1986) Overseas acquisitions and mergers combining for profits abroad. Praeger Publishers: New York, NY.
- Hambrick, Donald C. Cannella, Albert A., Jr. (1993) Relative standing: a framework for understanding departures of acquired executives. *Academy of Management Journal*, Vol. 36, No. 4, 733-762.
- Hamel, Gary (1991) Competition for competence and inter-partner learning within international strategic alliances. *Strategic Management Journal*, Vol. 12, Special Issue, 83-103.
- Hamel, Gary Prahalad, C. K. (1989) Strategic intent. *Harvard Business Review*, Vol. 67, No. 3, 63-76.

- Harding, David Yale, Phyllis (2002) Discipline and the dilutive deal. Harvard Business Review, Vol. 80, No. 7, 18-20.
- Harrison, Jeffrey S. Hitt, Michael A. Hoskisson, Robert E. Ireland, R. Duane (1991) Synergies and post-acquisition performance: differences versus similarities in resource allocations. *Journal of Management*, Vol. 17, No: 1, 173-190.
- Harrison, Jeffrey S. Hitt, Michael A. Hoskisson, Robert A. Ireland, R. Duane (2001) Resource complementarity in business combinations: extending the logic to organizational alliances. *Journal of Management*, Vol. 27, No. 6, 679-690.
- Harzing, Anne-Wil (2002) Acquisitions versus greenfield investments: international strategy and management of entry modes. *Strategic Management Journal*, Vol. 23, No. 3, 211-227.
- Haspeslagh, Philippe C. Jemison, David B. (1991) *Managing acquisitions*. *Creating value through corporate renewal*. Free Press: New York, NY.
- Hastings, Donald F. (1999) Lincoln Electric's harsh lessons from international expansion. *Harvard Business Review*, Vol. 77, No. 3, 163-178.
- Havila, Virpi Salmi, Asta (2000) Spread of change in business networks: an empirical study of mergers and acquisitions in the graphic industry. *Journal of Strategic Marketing*, Vol. 8, No. 2, 105-119.
- Hayward, Mathew L. A. Hambrick, Donald C. (1997) Explaining the premiums paid for large acquisitions: evidence of CEO hubris. *Administrative Science Quarterly*, Vol. 42, No: 1, 103-127.
- Heflebower, R. B. (1963) Corporate mergers: policy and economic analysis. *Quarterly Journal of Economics*, Vol. 77, No. 4, 537-558.
- Helfat, Constance E. Peteraf, Margaret A. (2003) The dynamic resource-based view. *Strategic Management Journal*, Vol. 24, No: 10, 997-1010.
- Henderson, A. Randal (1989) Business sales and acquisitions: post-acquisition integration. *CMA Magazine*, Vol. 63, No. 3, 32-36.
- Hennart, Jean-Francois Reddy, Sabine (1997) The choice between mergers/acquisitions and joint ventures: the case of Japanese investors in the United States. *Strategic Management Journal*, Vol. 18, No: 1, 1-12.
- Henry, David Jespersen, Frederick F. (2002) Mergers: why most big deals don't pay off. Business Week Online, October 14, 2002. <a href="http://www.businessweek.com/magazine/content/02\_41/b38030">http://www.businessweek.com/magazine/content/02\_41/b38030</a> 01.htm>, retrieved 4.4.2005.

- Heracleous, Loizos Murray, John (2001) The urge to merge in the pharmaceutical industry. *European Management Journal*, Vol. 19, No: 4, 430-437.
- Hitt, Michael A. Harrison, Jeffrey S. Ireland, R. Duane (2001) *Mergers and acquisitions: a guide to creating value for stakeholders*. Oxford University Press; New York, NY.
- Hitt, Michael Harrison, Jeffrey Ireland, R. Duane Best, Aleta (1998) Attributes of successful and unsuccessful acquisitions of US firms. *British Journal of Management*, Vol. 9, No: 2, 91-114.
- Hitt, Michael A. Hoskisson, Robert E. Ireland, R. Duane Harrison, Jeffrey S. (1991) Effects of acquisitions on R&D inputs and outputs. *Academy of Management Journal*, Vol. 34, No. 3, 693-706.
- Hitt, Michael A. Hoskisson, Robert E. Johnson, Richard A. Moesel, Douglas D. (1996) The market for corporate control and firm innovation. *Academy of Management Journal*, Vol. 39, No: 5, 1084-1119.
- Hitt, Michael A. Ireland, R. Duane (1986) Relationship among corporate level distinctive competencies, diversification strategy, corporate structure and performance. *Journal of Management Studies*, Vol. 23, No: 4, 401-416.
- Hodgson, Geoffrey M. (1998) Evolutionary and competence-based theories of the firm. *Journal of Economic Studies*, Vol. 25, No. 1, 25-56.
- Hoopes, David G. Madsen, Tammy L. Walker, Gordon (2003) Why is there a resource-based view? Toward a theory of competitive heterogeneity. *Strategic Management Journal*, Vol. 24, No: 10, 889-902.
- Hopkins, H. Donald (1987) Acquisition strategy and the market position of acquiring firms. *Strategic Management Journal*, Vol. 8, No: 6, 535-547.
- Howell, Robert A. (1970) Plan to integrate your acquisitions. *Harvard Business Review*, Vol. 48, No. 6, 66-76.
- Hubbard, Nancy (1999) *Acquisition: strategy and implementation.* MacMillan Press: Basingstoke.
- Hunt, John W. (1990) Changing pattern of acquisition behaviour in takeovers and the consequences for acquisition processes. *Strategic Management Journal*, Vol. 11, No: 1, 69-77.
- Håkanson, Lars (1995) Learning through acquisitions. Management and integration of foreign R&D laboratories. *International Studies of Management and Organization*, Vol. 25, Nos: 1-2, 121-157.

- Häkkinen, Lotta Hilmola, Olli-Pekka (2005) Methodological pluralism in case study research: an analysis of contemporary operations management and logistics research. *International Journal of Services and Operations Management*, Vol. 1, No. 3, 239-256.
- Inkpen, Andrew C. Sundaram, Anant K. Rockwood, Kristin (2000) Crossborder acquisitions of U.S. technology assets. *California Management Review*, Vol. 42, No. 3, 50-71.
- Jansen, Stephan A. (2002) Pre- and post-merger integration in cross-border transactions: trends, tools, theses, and empirical tests of old and new economy deals. In: *Handbook of international mergers and acquisitions. Preparation, implementation and integration,* ed. by Gerhard Picot, 371-398. Palgrave Macmillan: Houndmills.
- Jarrell, Gregg A. Brickly, James A. Netter, Jeffry M. (1988) The market for corporate control: the empirical evidence since 1980. *Journal of Economic Perspectives*, Vol. 2, No. 1, 49-68.
- Jemison, David B. Sitkin, Sim B. (1986) Corporate acquisitions: a process perspective. *Academy of Management Review*, Vol. 11, No. 1, 145-163.
- Jensen, Michael C. (1984) Takeovers: folklore & science. *Harvard Business Review*, Vol. 62, No. 6, 109-121.
- Jensen, Michael C. Ruback, Richard S. (1983) The market for corporate control: the scientific evidence. *Journal of Financial Economics*, Vol. 11, Nos: 1-4, 5-50.
- Jick, Todd D. (1979) Mixing qualitative and quantitative methods: triangulation in action. *Administrative Science Quarterly*, Vol. 24, No: 4, 602-611.
- Johnston, Robert (1994) Operations: from factory to service management. *International Journal of Service Industry Management*, Vol. 5, No: 1, 49-63.
- Kaplan, Steven N. (ed.) (2000) *Mergers and productivity*. The University of Chicago Press: Chicago, IL.
- Karim, Samina Mitchell, Will (2000) Reconfiguring business resources following acquisitions in the US medical sector, 1978-1995. Strategic Management Journal, Vol. 21, Special Issue, 1061-1081.
- Katz, Jeffrey P. Simanek, Astrid Townsend, James B. (1997) Corporate mergers and acquisitions: one more wave to consider. *Business Horizons*, Vol. 40, No: 1, 32-40.
- Katz, Michael Shapiro, Carl (1985) Network externalities, competition and compatibility. *American Economic Review*, Vol. 75, No. 3, 424-440.

- Katz, Michael L. Shapiro, Carl (1994) Systems competition and network effects. *Journal of Economic Perspectives*, Vol. 8, No. 2, 93-115.
- Kelly, Kevin (1998) New rules for the new economy. Viking Penguin: New York, NY.
- Kesner, Idalene F. Shapiro, Debra L. Sharma, Anurag (1994) Brokering mergers: an agency theory perspective on the role of representatives. *Academy of Management Journal*, Vol. 37, No: 3, 703-721.
- Kim, Kyung-Hwan (1998) Determinants of successful acquisition management: a process perspective in the lodging industry. Doctoral dissertation, Virginia Polytechnic Institute and State University. <a href="http://scholar.lib.vt.edu/theses/available/etd-72098-16051/">http://scholar.lib.vt.edu/theses/available/etd-72098-16051/</a>, retrieved 30.3.2005.
- King, David R. Dalton, Dan R. Daily, Catherine M. Covin, Jeffrey G. (2004) Meta-analyses of post-acquisition performance: indications of unidentified moderators. *Strategic Management Journal*, Vol. 25, No: 2, 187-200.
- Kissin, Warren D. Herrera, Julio (1990) International mergers and acquisitions. *Journal of Business Strategy*, Vol. 11, No. 4, 51-55.
- Kitching, John (1967) Why do mergers miscarry? *Harvard Business Review*, Vol. 45, No: 6, 84-101.
- Kogut, Bruce Singh, Harbir (1988) The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, Vol. 10, No: 3, 411-432.
- Kosnik, Rita D. Shapiro, Debra L. (1997) Agency conflicts between investment banks and corporate clients in merger and acquisition transactions: causes and remedies. *Academy of Management Executive*, Vol. 11, No: 1, 7-20.
- Krishnan, Hema A. Miller, Alex Judge, William, Q. (1997) Diversification and top management team complementarity: is performance improved by merging similar and dissimilar teams? *Strategic Management Journal*, Vol. 18, No: 5, 361-374.
- Krishnan, Rajani A. Joshi, Satish Krishnan, Hema (2004) The influence of mergers on firms' product-mix strategies. *Strategic Management Journal*, Vol. 25, No: 6, 587-611.
- Krug, Jeffrey A. Nigh, Douglas (1998) Top management departures in cross-border acquisitions: governance issues in an international context. *Journal of International Management*, Vol. 4, No. 4, 267-287.
- Kumar, Nirmalya Stern, Louis W. Anderson, James C. (1993) Conducting interorganizational research using key informants. *Academy of Management Journal*, Vol. 36, No. 6, 1633-1651.

- Kusewitt, John B., Jr. (1985) An exploratory study of strategic acquisition factors relating to performance. *Strategic Management Journal*, Vol. 6, No: 2, 151-169.
- Laamanen, Tomi Maula, Markku V. J. Mullagiri, Mohan (2004) Experimental and model learning and the propensity to make exceptionally large acquisitions. In: *Proceedings of the 2<sup>nd</sup> IASTED International Conference on Alliances, Mergers, and Acquisitions 2004*, ed. by M. H. Hamza, 44-53. Acta Press: Anaheim, CA.
- Langabeer, Jim (2003) An investigation of post-merger supply chain performance. *Journal of Academy of Business and Economics*. <a href="http://www.findarticles.com/p/articles/mi\_m0OGT/is\_1\_2/ai\_113563628">http://www.findarticles.com/p/articles/mi\_m0OGT/is\_1\_2/ai\_113563628</a>, retrieved 4.4.2005.
- Larsson, Rikard (1990) Coordination of action in mergers and acquisitions.

  Interpretive and systems approaches towards synergy. Lund
  University Press: Lund.
- Larsson, Rikard Bowen, David, E. (1989) Organization and customer: managing design and coordination of services. *Academy of Management Review*, Vol. 14, No: 2, 213-233.
- Larsson, Rikard Driver, Michael Holmqvist, Mikael Sweet, Patrick (2001) Career dis-integration and re-integration in mergers and acquisitions: managing competence and motivational intangibles. *European Management Journal*, Vol. 19, No. 6, 609-618.
- Larsson, Rikard Finkelstein, Sydney (1999) Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: a case survey of synergy realization. *Organization Science*, Vol. 10, No: 1, 1-26.
- Larsson, Rikard Lubatkin, Michael (2000) *Achieving acculturation in mergers and acquisitions: a case survey study.* Institute of Economic Research, Working Papers Series 2000/4. School of Economics and Management, Lund University: Lund.
- Lawrence, Paul R. Lorsch, Jay W. (1967) Organization and environment.

  Managing differentiation and integration. Harvard University:
  Boston, MA.
- Lazzarini, Sergio G. Chaddad, Fabio R. Cook, Michael L. (2001) Integrating supply chain and network analyses: the study of netchains. *Journal of Chain and Network Science*, Vol. 1 No: 1, 7-23.

- Lee, Tung-Jean Caves, Richard E. (1998) Uncertain outcomes of foreign investment: determinants of the dispersion of profits after large outcomes. *Journal of International Business Studies*, Vol. 29, No: 3, 563-582.
- Lees, Stan (2003) Global acquisitions strategic integration and the human factor. Palgrave MacMillan: New York, NY.
- Leighton, Charles M. Tod, G. Robert (1969) After the acquisition: continuing challenge. *Harvard Business Review*, Vol. 47, No. 2, 90-102.
- Lemoine, W. (2004) Towards a model of organizational modal choice in LSPs foreign operations. In: *Proceedings of the International Multi-conference on Advanced Computer Systems & Computer Information Systems and Industrial Management Applications, Vol. 2*, ed. by K. Saeed R. Mosdorf J. Pejace O-P Hilmola Z. Sosnowski I. El-Fray, 271-284. University of Finance and Management, Białystock: Białystock.
- Leroy, Frédéric (2004) Integration processes and organizational combinations in horizontal mergers and acquisitions. In: *Proceedings of the 2<sup>nd</sup> IASTED International Conference on Alliances, Mergers, and Acquisitions 2004*, ed. by M. H. Hamza, 152-157. Acta Press: Anaheim, CA.
- Levitt, Theodore (1983) The globalization of markets. *Harvard Business Review*, Vol. 61, No. 3, 92-102.
- Light, David A. (2001) Who goes, who stays? *Harvard Business Review*, Vol. 79, No: 1, 35-44.
- Lindgren, Ulf (1982) Foreign acquisitions. Management of the integration process. Stockholm School of Economics: Stockholm.
- Livermore, Shaw (1935) The success of industrial mergers. *Quarterly Journal of Economics*, Vol. 50, No: 1, 68-96.
- Lubatkin, Michael (1983) Mergers and the performance of the acquiring firm. Academy of Management Review, Vol. 8, No. 2, 218-225.
- Lubatkin, Michael (1987) Merger strategies and stockholder value. *Strategic Management Journal*, Vol. 8, No. 1, 39-53.
- Lukka, Kari Kasanen, Eero (1995) The problem of generalizability: anecdotes and evidence in accounting research. *Accounting, Auditing & Accountability Journal*, Vol. 8, No. 5, 71-90.
- M&A in 2000: fast start ... fading finale (2001) Quarterly league table releases from Thomson Financial. January 4, 2001. <a href="http://www.tfsd.com/league/pdfs/4Q2000/f4qma2000rp.PDF">http://www.tfsd.com/league/pdfs/4Q2000/f4qma2000rp.PDF</a>, retrieved 30.3.2005.

- MacDougal, Gary E. Malek, Fred V. (1970) Master plan for merger negotiations. *Harvard Business Review*, Vol. 48, No: 1, 71-82.
- Mace, Myles L. Montgomery, George G. (1962) *Management problems of corporate acquisitions*. Harvard University Press: Boston, MA.
- Mahoney, Joseph T. Pandian, J. Rajendran (1992) The resource-based view within the conversation of strategic management. *Strategic Management Journal*, Vol. 13, No. 5, 363-380.
- Makadok, Richard (2001) Towards a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, Vol. 22, No: 5, 387-402.
- Manne, Henry G. (1965) Mergers and the market for corporate control. *Journal of Political Economy*, Vol. 73, No. 2, 110-120.
- Maquieira, Carlos P. Megginson, William L. Nail, Lance (1998) Wealth creation versus wealth redistributions in pure stock-for-stock mergers. *Journal of Financial Economics*, Vol. 48, No: 1, 3-33.
- Markides, Constantinos C. Ittner, Christopher D. (1994) Shareholder benefits from corporate international diversification: evidence from US international acquisitions. *Journal of International Business Studies*, Vol. 25, No. 2, 343-366.
- Markides, Constantinos C. Williamson, Peter J. (1996) Corporate diversification and organizational structure: a resource-based view. *Academy of Management Journal*, Vol. 39, No. 2, 340-367.
- Marks, Mitchell Lee Mirvis, Philip H. (1998) *Joining forces: making one plus one equal three in mergers, acquisitions, and alliances.*Jossey-Bass: San Francisco, CA.
- Marris, Robin (1964) *The economic theory of managerial capitalism*. Macmillan: London.
- Mayerhofer, Helene Hartmann, Linley C. (2004) Supporting M&A integration with international HR assignments. In: *Proceedings of the 2<sup>nd</sup> IASTED International Conference on Alliances, Mergers, and Acquisitions 2004*, ed. by M. H. Hamza, 122-130. Acta Press: Anaheim, CA.
- McKiernan, Peter Merali, Yasmin (1997) Integrating information systems after a merger. In: *Creating value through acquisitions, demergers, buyouts and alliances*, ed. by Bruce Lloyd, 59-75. Elsevier Science: Oxford.
- Merger endgames: industry consolidation and long-term strategy (2002) A.T. Kearney. <a href="http://www.atkearney.de/content/misc/wrapper.php/id/48534/area/anlagenbau/name/pdf\_merger\_endgames\_s\_1046116286fae1.pdf">http://www.atkearney.de/content/misc/wrapper.php/id/48534/area/anlagenbau/name/pdf\_merger\_endgames\_s\_1046116286fae1.pdf</a>, retrieved 4.4.2005.

- Merger integration: delivering on the promise after the deal (2001) Booz-Allen & Hamilton. <a href="http://www.fleetcapital.com/resources/other/bamerg.pdf">http://www.fleetcapital.com/resources/other/bamerg.pdf</a>, retrieved 4.4.2005.
- Meyer, Klaus E. Estrin, Saul (2001) Brownfield entry in emerging markets. *Journal of International Business Studies*, Vol. 32, No. 3, 575-584.
- Miczka, Switbert F. L. Größler, Andreas (2004) Merger dynamics a system dynamics analysis of post-merger integration processes. Paper presented at the 22nd International Conference of the System Dynamics Society, Oxford, UK, July 25-29, 2004, 1-30.
- Mirvis, Philip H. (1985) Negotiations after the sale: the roots and ramifications of conflict in an acquisition. *Journal of Organizational Behaviour*, Vol. 6, No: 1, 65-84.
- Mishra, Karen E. Spreitzer, Gretchen M. Mishra, Aneil K. (1998)

  Preserving employee morale during downsizing. *Sloan Management Review*, Vol. 39, No: 2, 83-95.
- Mitchell, Mark L. Mulherin, J. Harold (1996) The impact of industry shocks on takeover and restructuring activity. *Journal of Financial Economics*, Vol. 41, No: 2, 193-229.
- Möller, Kristian (1992) Research traditions in marketing: theoretical notes.

  Helsinki School of Economics and Business Administration,
  Working Papers W-23: Helsinki.
- Montgomery, Cynthia A. Wernerfelt, Birger (1988) Diversification, ricardian rents and Tobin's q. *RAND Journal of Economics*, Vol. 19, No: 4, 623-632.
- Montgomery, Cynthia A. Wilson, Vicki A. (1986) Mergers that last: a predictable pattern? *Strategic Management Journal*, Vol. 7, No: 1, 91-96.
- Morck, Randall Shleifer, Andrei Vishny, Robert W. (1990) Do managerial objectives drive bad acquisitions? *Journal of Finance*, Vol. 45, No: 1, 31-48.
- Morck, Randall Yeung, Bernard (1992) Internationalization: an event study test. *Journal of International Economics*, Vol. 33, No: 1-2, 41-56.
- Morosini, Piero Shane, Scott Singh, Harbir (1998) National cultural distance and cross-border acquisition performance. *Journal of International Business*, Vol. 29, No. 1, 137-158.
- Mueller, Dennis C. (1969) A theory of conglomerate mergers. *Quarterly Journal of Economics*, Vol. 83, No. 4, 643-659.
- Mulherin, J. Harold Boone, Audra L. (2000) Comparing acquisitions and divestitures. *Journal of Corporate Finance*, Vol. 6, No. 2, 117-139.

- Nahavandi, Afsaneh Malekzadeh, Ali R. (1988) Acculturation in mergers and acquisitions. *Academy of Management Review*, Vol. 13, No: 1, 79-90.
- Napier, Nancy K. (1989) Mergers and acquisitions, human resource issues and outcomes: a review and suggested typology. *Journal of Management Studies*, Vol. 26, No. 3, 271-289.
- Nelson, Richard R. Winter, Sidney G. (1982) *An evolutionary theory of economic change*. Belknap Press: Cambridge, MA.
- New patterns of industrial globalisation. Cross-border mergers and acquisitions and strategic alliances (2001) Organisation for Economic Co-operation and Development (OECD): Paris.
- Nitsch, Detlev Beamish, Paul Makino, Shige (1996) Entry mode and performance of Japanese FDI in Western Europe. *Management International Review*, Vol. 36, No. 1, 27-43.
- Noble, Alex F. de Gustafson, Loren T. Hergert, Michael (1997) Planning for post-merger integration eight lessons for merger success. In: *Creating value through acquisitions, demergers, buyouts and alliances*, ed. by Bruce Lloyd, 51-57. Elsevier Science: Oxford.
- Nohria, Nitin Eccles, Robert G. (1992) Face-to-face: making network organizations work. In: *Networks and organizations: structure, form, and action*, ed. by Nitin Nohria Robert G. Eccles, 288-308. Harvard Business School Press; Boston, MA.
- Olie, René (1994) Culture and institutions in international mergers. *Organization Studies*, Vol. 15, No. 3, 381-405.
- Osland, Gregory E. Taylor, Charles R. Zou, Shaoming (2001) Selecting international modes of entry and expansion. *Marketing Intelligence & Planning*, Vol. 19, No. 3, 153-161.
- Pablo, Amy L. (1994) Determinants of acquisition integration level: a decision-making perspective. *Academy of Management Journal*, Vol. 37, No: 4, 803-836.
- Pablo, Amy L. Sitkin, Sim B. Jemison, David B. (1996) Acquisition decision-making processes: the central role of risk. *Journal of Management*, Vol. 22, No: 5, 723-746.
- Paine, Frank T. Power, Daniel J. (1984) Merger strategy: an examination of Drucker's five rules for successful acquisitions. *Strategic Management Journal*, Vol. 5, No. 2, 99-110.
- Palich, Leslie E. Cardinal, Laura B. Miller, C. Chet (2000) Curvilinearity in the diversification-performance linkage: an examination of three decades of research. *Strategic Management Journal*, Vol. 21, No: 2, 155-174.

- Parvinen, Petri M. T. (2003) *Towards a governance perspective to mergers and acquisitions*. Helsinki University of Technology: Helsinki.
- Pennings, Johannes M. (1981) Strategically independent organizations. In: *Handbook of organizational design Vol. 1*, ed. by Paul C. Nystrom William H. Starbuck, 433-455. Oxford University Press: Oxford.
- Pennings, Johannes M. Barkema, Harry Douma, Sytse (1994) Organizational learning and diversification. *Academy of Management Journal*, Vol. 37, No. 3, 608-640.
- Penrose, Edith Tilton (1959) *The theory of the growth of the firm.* John Wiley & Sons: New York, NY.
- Perspectives on experience (1970) Boston Consulting Group: Boston, MA.
- Pfeffer, Jeffrey (1972) Merger as a response to organizational interdependence. *Administrative Science Quarterly*, Vol. 17, No: 3, 382-394.
- Pfeffer, Jeffrey Salancik, Gerald R. (1978) *The external control of organizations. A resource dependence perspective.* Harper & Row: New York, NY.
- Picot, Gerhard (2002) Restructuring with mergers and acquisitions. In: Handbook of international mergers and acquisitions, ed. by Gerhard Picot, 292-308. Palgrave Macmillan: Houndmills.
- Porter, Michael, E. (1980) Competitive strategy. Techniques for analyzing industries and competitors. Free Press. New York, NY.
- Porter, Michael E. (1985) Competitive advantage. Creating and sustaining superior performance. Free Press: New York, NY.
- Porter, Michael E. (1987) From competitive advantage to corporate strategy. *Harvard Business Review*, Vol. 65, No. 3, 43-59.
- Prahalad, C. K. Bettis, Richard A. (1986) The dominant logic: a new linkage between diversity and performance. *Strategic Management Journal*, Vol. 7, No: 6, 485-501.
- Prahalad, C. K. Hamel, Gary (1990) The core competence of the corporation. *Harvard Business Review*, Vol. 68, No. 3, 79-91.
- Pribilla, Peter H. (2002) Personnel and cultural integration. In: *Handbook of international mergers and acquisitions. Preparation, implementation and integration,* ed. by Gerhard Picot, 309-341. Palgrave Macmillan: Houndmills.
- Puranam, Phanish Singh, Harbir Zollo, Maurizio (2003) A bird in the hand or two in the bush? Integration trade-offs in technology-grafting acquisitions. *European Management Journal*, Vol. 21, No. 2, 179-184.

- Ramaswamy, Kannan (1997) The performance impact of strategic similarity in horizontal mergers: evidence from the U.S. banking industry. *Academy of Management Journal*, Vol. 40, No: 3, 697-715.
- Ranft, Annette L. Lord, Michael D. (2000) Acquiring new knowledge: the role of retaining human capital in acquisitions of high-tech firms. *Journal of High Technology Management Research*, Vol. 11, No: 2, 295-319.
- Ranft, Annette L. Lord, Michael D. (2002) Acquiring new technologies and capabilities: a grounded model of acquisition implementation. *Organization Science*, Vol. 13, No: 4, 420-441.
- Rappaport, Alfred (1998) Creating shareholder value. A guide for managers and investors. 2<sup>nd</sup> edition, Free Press: New York, NY.
- Rappaport, Alfred Sirower, Mark L. (1999) Stock or cash? The trade-offs for buyers and sellers in mergers and acquisitions. *Harvard Business Review*, Vol. 77, No: 6, 147-158.
- Ravenscraft, David J. Scherer, F. M. (1987) *Mergers, sell-offs, and economic efficiency*. The Brookings Institution: Washington, DC.
- Reuer, Jeffrey J. Shenkar, Oded Ragozzino (2004) Mitigating risk in international mergers and acquisitions: the role of contingent payouts. *Journal of International Business Studies*, Vol. 35, No: 1, 19-32.
- Risberg, Anette (2001) Employee experiences of acquisition processes. *Journal of World Business*, Vol. 36, No. 1, 58-84.
- Risberg, Anette (2003) The merger and acquisition process. Journal of International Business Literature Review. <a href="http://copenhagen.jibs.net/LitReview/2003/2003\_1\_34.pdf">http://copenhagen.jibs.net/LitReview/2003/2003\_1\_34.pdf</a>, retrieved 9.5.2005.
- Roberts, Edward B. Berry, Charles A. (1985) Entering new businesses: selecting strategies for success. *MIT Sloan Management Review*, Vol. 26, No: 3, 3-17.
- Roberts, Edward B. Liu, Wenyun Kathy (2001) Ally or acquire? How technology leaders decide. *MIT Sloan Management Review*, Vol. 43, No: 1, 26-34.
- Roll, Richard (1986) The hubris hypothesis of corporate takeovers. *Journal of Business*, Vol. 59, No. 2, Part 1, 197-216.
- Rond, Mark, de Bouchikhi, Hamid (2004) On the dialectics of strategic alliances. *Organization Science*, Vol. 15, No. 1, 56-69.
- Rumelt, Richard P. (1986) *Strategy, structure, and economic performance*. Revised edition, Harvard Business School Press: Boston, MA.
- Sachwald, Frédéric (ed.) (1994) European integration and competitiveness.

  Acquisitions and alliances in industry. Edward Elgar: Aldershot.

- Salter, Malcolm S. Weinhold, Wolf S. (1979) Diversification through acquisition. Free Press: New York, NY.
- Scandura, Terri A. Williams, Ethlyn A. (2000) Research methodology in management: current practices, trends, and implications for future research. *Academy of Management Journal*, Vol. 43, No: 6, 1248-1264.
- Scherer F.M. Ross, David (1990) *Industrial market structure and economic performance*. 3<sup>rd</sup> edition. Houghton Mifflin Company: Boston, MA.
- Schmidt, Sascha Rühli, Edwin (2002) Prior strategy processes as a key to understanding mega-mergers: the Novartis case. *European Management Journal*, Vol. 20, No: 3, 223-234.
- Schoar, Antoinette (2002) Effects of corporate diversification on productivity. *Journal of Finance*, Vol. 57, No: 6, 2379-2403.
- Schuler, Randall Jackson, Susan (2001) HR issues and activities in mergers and acquisitions. *European Management Journal*, Vol. 19, No. 3, 239-253.
- Schweiger, David M. DeNisi, Angelo S. (1991) Communication with employees following a merger: a longitudinal field experiment. *Academy of Management Journal*, Vol. 34, No: 1, 110-135.
- Schweiger, David M. Ivancevich, John M. Power. Frank R. (1987) Executive actions for managing human resources before and after acquisition. *Academy of Management Executive*, Vol. 1, No: 2, 127-138.
- Schweiger, David M. Walsh, James P. (1990) Mergers and acquisitions: an interdisciplinary view. In: *Research in personnel and human resource management*. *A research annual*, *Vol.* 8, ed. by Gerald R. Ferris Kendrith M. Rowland, 41-107. Jai Press: Greenwich, CT.
- Schweiger, D. Weber, Y. (1989) Strategies for managing human resources during mergers and acquisitions: an empirical investigation. *Human Resource Planning*, Vol. 12, No. 2, 69-86.
- Seth, Anju (1990a) Sources of value creation: an empirical investigation. Strategic Management Journal, Vol. 11, No: 6, 431-446.
- Seth, Anju (1990b) Value creation in acquisitions: a re-examination of performance issues. *Strategic Management Journal*, Vol. 11, No: 2, 99-115.
- Seth, Anju Song, Kean P. Pettit, R. Richardson (2002) Value creation and destruction in cross-border acquisitions: an empirical analysis of foreign acquisitions of U.S. firms. *Strategic Management Journal*, Vol. 23, No: 10, 921-940.

- Shelton, Lois M. (1988) Strategic business fits and corporate acquisition: empirical evidence. *Strategic Management Journal*, Vol. 9, No. 3, 279-287.
- Shimizu, Katsuhiko Hitt, Michael A. Vaidyanath, Deepa Pisano, Vincenzo (2004) Theoretical foundations of cross-border mergers and acquisitions: a review of current research and recommendations for the future. *Journal of International Management*, Vol. 10, No: 3, 307-353.
- Shleifer, Andrei Vishny, Robert W. (1991) Takeovers in the '60s and the '80s: evidence and implications. *Strategic Management Journal*, Vol. 12, Special Issue, 51-59.
- Shrivastava, Paul (1986) Postmerger integration. *Journal of Business Strategy*, Vol. 7, No. 1, 65–76.
- Silverman, Brian S. (2002) Organizational economics. In: *The Blackwell companion to organizations*, ed. by Joel A. C. Baum, 467-493. Blackwell Publishers: Oxford.
- Singh, Harbir Montgomery, Cynthia A. (1987) Corporate acquisition strategies and economic performance. *Strategic Management Journal*, Vol. 8, No: 4, 377-386.
- Sirower, Mark L. (1997) The synergy trap. How companies lose the acquisition game. Free Press: New York, NY.
- Steiner, Peter O. (1977) *Mergers. Motives, effects, policies.* University of Michigan Press: Ann Arbor, MI.
- Stigler, George J. (1968) The organization of industry. Irwin: Homewood, IL.
- Stigler, George J. Bain, Joe S. (1950) Discussion. *American Economic Review*, Vol. 40, No: 2, 63-66.
- Sull, Don (1999) Spinning steel into gold: the case of Ispat International N.V. *European Management Journal*, Vol. 17, No: 4, 368-378.
- Teece, David J. (1980) Economies of scope and the scope of the enterprise. *Journal of Economic Behaviour and Organisation*, Vol. 1, No. 3, 233-247.
- Teece, David J. (1982) Towards an economic theory of the multiproduct firm. Journal of Economic Behavior and Organization, Vol. 3, No. 1, 39-63.
- Teece, David J. (1986) Profiting from technological innovation: implications for integration, collaboration, licensing and public policy. *Research Policy*, Vol. 15, No. 6, 285-305.
- Teece, David J. Pisano, Gary Shuen, Amy (1997) Dynamic capabilities and strategic management. *Strategic Management Journal*, Vol. 18, No: 7, 509-533.

- Thompson, James D. (1967) Organisations in action: social science bases of administrative theory. McGraw-Hill: New York, NY.
- Trautwein, Friedrich (1990) Merger motives and merger prescriptions. Strategic Management Journal, Vol. 11, No: 4, 283-295.
- Tsai, Wenpin Ghoshal, Sumantra (1998) Social capital and value creation: the role of intrafirm networks. *Academy of Management Journal*, Vol. 41, No: 4, 464-476.
- Unlocking shareholder value: keys to success (1999) KPMG. <a href="http://pages.stern.nyu.edu/~adamodar/pdfiles/eqnotes/KPMGM&A.pdf">http://pages.stern.nyu.edu/~adamodar/pdfiles/eqnotes/KPMGM&A.pdf</a> >, retrieved 4.4.2005.
- Utterback, James M. (1996) *Mastering the dynamics of innovation*. Harvard Business School Press: Boston, MA.
- Vaara, Eero (1992) *Mergers and acquisitions between Finland and Sweden* 1981 1991. Publications of the Helsinki School of Economics and Business Administration, D-164: Helsinki.
- Vaara, Eero (1996) Reflections on research approaches and success in mergers and acquisitions. In: *Theory building in the business sciences:* papers from the second EDAMBA summer school, ed. by Tom Elfring Hans Siggaard Jensen Arthur Money, 171-183. Handelshøjskolens Forlag: Copenhagen.
- Vaara, Eero (2000) Constructions of cultural differences in post-merger change process: a sensemaking perspective on Finnish-Swedish cases. *M@n@gement*, Vol. 3, No: 3, 81-110.
- Vermeulen, Freek Barkema, Harry (2001) Learning through acquisitions. Academy of Management Journal, Vol. 44, No. 3, 457-476.
- Very, Philippe Lubatkin, Michael Calori, Roland Veiga, John (1997) Relative standing and the performance of recently acquired European firms. *Strategic Management Journal*, Vol. 18, No: 8, 593-614.
- Walker, Gordon Kogut, Bruce Shan, Weijian (1997) Social capital, structural holes and the formation of an industry network. *Organization Science*, Vol. 8, No: 2, 109-125.
- Walsh, James P. (1988) Top management turnover following mergers and acquisitions. *Strategic Management Journal*, Vol. 9, No. 2, 173-183.
- Walsh, James P. (1989) Doing a deal: merger and acquisition negotiations and their impact upon target company top management turnover. Strategic Management Journal, Vol. 10, No: 4, 307-322.
- Walsh, James P. Ellwood, John W. (1991) Mergers, acquisitions, and the pruning of managerial deadwood. *Strategic Management Journal*, Vol. 12, No: 3, 201-217.

- Walter, Gordon A. Barney, Jay B. (1990) Management objectives in mergers and acquisitions. *Strategic Management Journal*, Vol. 11, No. 1, 79-86.
- Weber, Yaakov Shenkar, Oded Raveh, Adi (1996) National and corporate cultural fit in mergers/acquisitions: an exploratory study. *Management Science*, Vol. 42, No. 8, 1215-1227.
- Wernerfelt, Birger (1984) A resource-based view of the firm. *Strategic Management Journal*, Vol. 5, No. 2, 171-180.
- Weston, J. Fred Chung, Kwang S. Hoag, Susan E (1990) *Mergers, restructuring, and corporate control.* Prentice Hall: Englewood Cliffs, NJ
- Whalen, Patricia T. (2004) Integrating merging firms the importance of informal socialization in merger success. In: *Proceedings of the 2<sup>nd</sup> IASTED International Conference on Alliances, Mergers, and Acquisitions 2004*, ed. by M. H. Hamza, 102-112. Acta Press: Anaheim, CA.
- Williamson, Oliver E. (1975) Markets and hierarchies: analysis and antitrust implications. Free Press: New York, NY.
- Williamson, Oliver E. (1986) *Economic organization: firms, markets and policy control*. New York University Press: New York, NY.
- Williamson, Oliver E. (1991) Comparative economic organization: the analysis of discrete structural alternatives. *Administrative Science Quarterly*, Vol. 36, No. 2, 269-296.
- Wood, Judy (1992) Structuring compensation plans for mergers and acquisitions. *Compensation and Benefits Review*, Vol. 24, No. 5, 47-56.
- World investment report 2000. Cross-border mergers and acquisitions and development (2000) United Nations Conference on Trade and Development (UNCTAD): New York, NY.
- World investment report 2004. The shift towards services (2004) United Nations Conference on Trade and Development (UNCTAD): New York, NY.
- Yin, Robert K. (1981) The case study crisis: some answers. *Administrative Science Quarterly*, Vol. 26, No. 1, 58-65.
- Yin, Robert K. (1991) *Case study research. Design and methods*. Revised edition, 7<sup>th</sup> printing, Sage Publications: Newbury Park, CA.
- Zaheer, Srilata Schomaker, Margaret Genc, Mehmet (2003) Identity versus culture in mergers of equals. *European Management Journal*, Vol. 21, No: 2, 185-191.

- Zollo, Maurizio Singh, Harbir (2004) Deliberate learning in corporate acquisitions: post-acquisition strategies and integration capability in U.S. bank mergers. *Strategic Management Journal*, Vol. 25, No: 13, 1233-1256.
- Zollo, Maurizio Winter, Sidney (2002) Deliberate learning and the evolution of dynamic capabilities. *Organization Science*, Vol. 13, No. 3, 339-351.

# APPENDIX 1 GEOGRAPHICAL AND SECTORAL DISTRIBUTION OF CROSS-BORDER ACQUISITIONS, 1987-2003 (Source: UNCTAD, cross-border M&A database [www.unctad.org/fdistatistics])

 $Value\ of\ cross-border\ acquisition\ sales\ 1987-2003, worldwide\ and\ by\ selected\ seller\ regions/economies$ 

Millions o	f US dollars
------------	--------------

Region/economy	1987	1988	1989	1990	1991	1992
Total world	74 509	115 623	140 389	150 576	80 713	79 280
European Union	12 761	31 012	47 358	62 133	36 676	44 761
Other Western Europe	448	3 262	1 591	5 237	1 844	1 070
Central and Eastern Europe	-	-	27	285	880	2 733
United States	51 765	63 904	68 821	54 697	28 226	15 839

٨	Λi	1	li	Λn	c	^	fΙ	T	Q	А	പ	lar	c
ı	/11	ш	ш	OH		()			•	"	()	1413	`

Region/economy	1993	1994	1995	1996	1997	1998
Total world	83 064	127 110	186 593	227 023	304 848	531 648
European Union	38 537	55 280	75 143	81 895	114 591	187 853
Other Western Europe	2 061	1 982	3 971	6 617	6 958	6 538
Central and Eastern Europe	1 178	1 419	6 050	3 679	5 764	5 116
United States	19 978	44 730	53 237	68 069	81 707	209 548

Millions of US dollars

Region/economy	1999	2000	2001	2002	2003
Total world	766 044	1 143 816	593 960	369 789	296 988
European Union	357 311	586 521	212 960	193 942	121 977
Other Western Europe	13 407	24 126	16 035	6 802	16 168
Central and Eastern Europe	10 371	17 147	11 988	17 463	14 438
United States	251 934	324 350	184 880	73 233	69 670

Percentage of total

Region/economy	1987	1988	1989	1990	1991	1992
European Union	17 %	27 %	34 %	41 %	45 %	56 %
Other Western Europe	1 %	3 %	1 %	3 %	2 %	1 %
Central and Eastern Europe	0 %	0 %	0 %	0 %	1 %	3 %
United States	69 %	55 %	49 %	36 %	35 %	20 %

Percentage of total

Region/economy	1993	1994	1995	1996	1997	1998
European Union	46 %	43 %	40 %	36 %	38 %	35 %
Other Western Europe	2 %	2 %	2 %	3 %	2 %	1 %
Central and Eastern Europe	1 %	1 %	3 %	2 %	2 %	1 %
United States	24 %	35 %	29 %	30 %	27 %	39 %

Percentage of total

Region/economy	1999	2000	2001	2002	2003
European Union	47 %	51 %	36 %	52 %	41 %
Other Western Europe	2 %	2 %	3 %	2 %	5 %
Central and Eastern Europe	1 %	1 %	2 %	5 %	5 %
United States	33 %	28 %	31 %	20 %	23 %

# Value of cross-border acquisition sales 1987-2003 by sector of seller

Mill	lions	of I	TC	401	lare

Sector	1987	1988	1989	1990	1991	1992
Total	74 509	115 623	140 389	150 576	80 713	79 280
Primary	10 795	3 911	1 941	5 170	1 164	3 637
Manufacturing	42 393	73 727	89 596	75 495	36 176	43 222
Tertiary	21 321	37 986	48 851	69 911	43 297	32 384
Unknown	0	0	0	0	76	37

Millions	of	HC	dol	arc
14111110113	O1	$\circ$	uoi	iuis

Sector	1993	1994	1995	1996	1997	1998
Total	83 064	127 110	186 593	227 023	304 848	531 648
Primary	4 201	5 517	8 499	7 935	8 725	10 599
Manufacturing	43 204	69 321	84 462	88 522	121 379	263 206
Tertiary	35 649	52 270	93 632	130 232	174 744	257 843
Unknown	10	1	0	334	0	0

# Millions of US dollars

Sector	1999	2000	2001	2002	2003
Total	766 044	1 143 816	593 960	369 789	296 988
Primary	10 000	9 815	28 280	12 751	7 714
Manufacturing	288 090	291 654	197 174	137 414	129 713
Tertiary	467 853	842 342	368 506	219 623	159 561
Unknown	101	5	0	0	0

Percentage of total

i ereemage or total						
Sector	1987	1988	1989	1990	1991	1992
Primary	14 %	3 %	1 %	3 %	1 %	5 %
Manufacturing	57 %	64 %	64 %	50 %	45 %	55 %
Tertiary	29 %	33 %	35 %	46 %	54 %	41 %
Unknown	0 %	0 %	0 %	0 %	0 %	0 %

Percentage of total

Sector	1993	1994	1995	1996	1997	1998
Primary	5 %	4 %	5 %	3 %	3 %	2 %
Manufacturing	52 %	55 %	45 %	39 %	40 %	50 %
Tertiary	43 %	41 %	50 %	57 %	57 %	48 %
Unknown	0 %	0 %	0 %	0 %	0 %	0 %

Percentage of total

Sector	1999	2000	2001	2002	2003
Primary	1 %	1 %	5 %	3 %	3 %
Manufacturing	38 %	25 %	33 %	37 %	44 %
Tertiary	61 %	74 %	62 %	59 %	54 %
Unknown	0 %	0 %	0 %	0 %	0 %

# Most common seller industries in cross-border acquisitions

(US	Value D million)	% of total
1987		
1. Chemicals and chemical products	16 836	23 %
2. Mining, quarrying and petroleum	10 452	14 %
3. Finance	7 360	10 %
4. Electrical and electronic equipment	7 135	10 %
5. Business services	6 237	8 %
1991		
1. Finance	14 188	18 %
2. Community, social and personal service activities	9 554	12 %
3. Electrical and electronic equipment	8 361	10 %
4. Trade	7 904	10 %
5. Chemicals and chemical products	5 773	7 %
1995		
1. Finance	31 059	17 %
2. Chemicals and chemical products	26 984	14 %
3. Food, beverages and tobacco	18 108	10 %
4. Electricity, gas, and water	12 240	7 %
5. Community, social and personal service activities	12 110	6 %
1999		
1. Transport, storage and communications	167 723	22 %
2. Finance	126 710	17 %
3. Chemicals and chemical products	86 389	11 %
4. Business services	52 748	7 %
5. Electrical and electronic equipment	51 770	7 %
2003		
1. Finance	54 790	18 %
2. Transport, storage and communications	34 724	12 %
3. Food, beverages and tobacco	29 597	10 %
4. Coke, petroleum and nuclear fuel	24 267	8 %
5. Business services	23 565	8 %

# APPENDIX 2 OUESTIONNAIRE USED IN PAPER 1

# Strategic background and synergy issues related to Mergers and Acquisitions

Answers will not be used so that specific companies can be identified.

How would you characterise the typical size 2 3 difference (sales) between the units (target and (Target very ("Merger of (Target very acquirer)? small equals") large compared to compared to the acquirer) acquirer) According to your experience, how would you 1 2 3 5 rate the following as strategic reasons for (Not at all (Extremely M&As important) important) To deal with overcapacity in the industry through consolidation

To grow by buying out competitors in geographically fragmented markets

To extend into new products or markets

To exploit synergies in sourcing, manufacturing or distribution

To get hand of Research & Development capacity

To exploit eroding industry boundaries by "inventing a new industry"

To restructure a low-performing company and sell it further

To make a short-term financial investment

3. How did you rate the expected synergies of the acquisition, in different areas, at the time of M&A?

1 2 (Not at all important)

1 2 3 4 5 Not at all (Extremely important) important)

Sourcing/purchasing

Manufacturing

Distribution

Sales

Supply chain-related IT systems (such as ERP-systems)

Research & Development

General Administration

Finance

To what extent have you combined the
4. following resources or processes of the target companies with your own company?

1 2 3 4 5 (Kept (Total separate) integration)

Sourcing/purchasing Manufacturing Distribution

Salec

Sales

Supply chain-related IT systems (such as ERP-systems)

Research & Development

General Administration

Finance

realise the <i>expected synergies</i> in the listed areas?	(Very easy)	2	3	4	(Very difficult)
Sourcing/purchasing Manufacturing Distribution Sales Supply chain-related IT systems (such as ERP-syste Research & Development General Administration Finance	ems)				
Other comments:					
Finally, please fill in your contact information					
Position: Name: Address:					
Tel: E-mail:					

Many thanks for your time and co-operation!

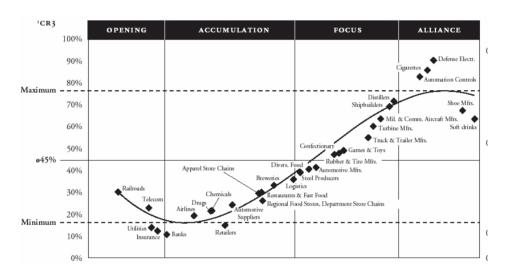
# APPENDIX 3 INTERVIEW GUIDE USED IN PAPER 3

#### 1. Background information

- 1.1. Interviewee (Name, Current position)
- 1.2. Company/Division (Name, Current business sector, Annual sales, Number of employees, Main products, Main market areas)

# 2. General market and company/division information

2.1. Using the chart below, please describe the current situation in your business sector in terms of industry consolidation in the Nordic and European market (market share of three largest companies in the business sector). How has this situation changed during the past 5 years? How do you expect the situation to develop in the near future?

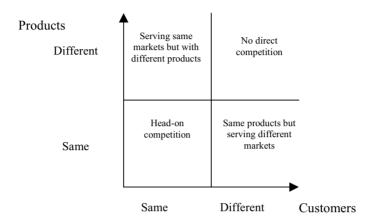


- 2.2. Does your division have a clear M&A strategy? If it does, please state this strategy in 2-3 sentences.
- 2.3. What type of M&A's has your division mainly performed (percentages of horizontal, vertical and conglomerate deals)?
- 2.4. What have been the three main motivations for your division to perform horizontal M&A's?

#### 3. General information related to the M&A in question

3.1. Pre-merger situation of acquirer and target companies (Annual sales, Number of employees, Main products, Main market area)

3.2. Please briefly describe the relationship between the target and your division **prior to the M&A**. Were the two competitors? In what sense (see picture below)? Please mark as percentages if the situation differed in different markets. Did they have any co-operative activities prior to the M&A? If they did, how did they co-operate?



- 3.3. Who was the main initiator for the M&A (company board / owners / management)? Did this suggestion receive any resistance among the other mentioned groups? If it did, what were the main arguments against the M&A?
- 3.4. Please describe briefly the 3 main motivations of your division for this M&A. Did external changes in the business environment influence the M&A decision? How?
- 3.5. Was this M&A directly affected by other M&A's concerning your division? If it was, what was this other M&A and how did it affect this particular deal?
- 3.6. What did the deal actually consist of (a whole company / only certain business units or facilities)? Did civil authorities require the divestment of some other business units or operations before authorising the deal?
- 3.7. How was the deal paid for (stock / cash)? What was the paid amount?
- 3.8. How tightly have the two entities been combined in terms of a) Resources (resources = knowledge, financial assets, physical assets, human capital and other tangible or intangible factors that a business owns or controls)?, b) Personnel transfer, organisation structure, work procedures and developing of a consistent corporate culture?
- 3.9. What have been the main (positive or negative) effects of this M&A on your division? Please also rate the magnitude of these effects.

#### **Profitability**

Strong negative effect	1	2	3	4	5	6	7	Strong positive effect
Measured based on wh	at:	· _						

Operational efficiency	(cost savings from	n economies of scale (	or scope, divestiture etc.)
------------------------	--------------------	------------------------	-----------------------------

Strong negative effect	1	2	3	4	5	6	7	Strong positive effect
Measured based on wh	iat.	?_						
Other effect, what?								
Strong negative effect	1	2	3	4	5	6	7	Strong positive effect
Measured based on wh	at	?						

- 3.10. Have these effects differed from those anticipated in terms of type and magnitude? If they have, please mark the anticipated effects in the above chart. For what reasons have the effects differed in your opinion?
- 3.11. How long has this particular M&A process been (in months)? a) Strategic planning and searching for candidates, b) M&A implementation and negotiations, c) Post-merger integration
- 3.12. What has been your personal role in this particular M&A process (strategic planning / implementation and negotiations / integration)?

#### 4. Logistics structure

Please state the number and the locations of different logistics facilities (i.e. production facilities, warehousing facilities, sales company) in Europe before and after the M&A using the map and chart in the appendix.

- 4.1. What was the logistics structure of **your division like prior to the M&A** (number and location of facilities in different countries)?
- 4.2. What was the logistics structure of **the target like prior to the M&A** (number and location of facilities in different countries)?
- 4.3. What is the logistics structure of **your division currently like** (number and location of facilities in different countries)?

# 5. Distribution and warehousing

Distribution is the link between customers and production. It includes the warehousing, transportation and retailing of products.

- 5.1. How would you describe your division's **distribution strategy**?
  - distribution structure (centralised decentralised distribution)
  - choice of transport providers (several transport providers or few partners)
  - outsourcing decisions (use of outsourcing in distributive activities)

Has the M&A affected this strategy? How? Has the joint entity primarily adopted the solutions used by the acquirer or the target? Why have you chosen to do so?

- 5.2. How tightly have **distribution resources** of the two entities been integrated? Why have you chosen to do so? How tightly has the **distribution organisation** of the two entities been integrated? Why have you chosen to do so?
- 5.3. What have been the main (positive or negative) effects of this M&A on **distribution**? Please also rate the magnitude of these effects.

Operational efficiency (cost savings from economies of scale or scope, divestiture etc.)

Strong negative effect	1	2	3	4	5	6	7	Strong positive effect
Measured based on wh	at:	_						
Other effect, what?								
Strong negative effect	1	2	3	4	5	6	7	Strong positive effect
Measured based on wh	at:	_						

- 5.4. Have these effects differed from those anticipated in terms of type and magnitude? If they have, please mark the anticipated effects in the above chart. For what reason has the effects differed in your opinion?
- 5.5. Think about **the integration process in distribution**. How easy or difficult has this process been? Which areas proved to be problematic? Why?

### 6. Manufacturing/Production

Production involves the material processes and flows inside the company, which turn purchased materials or components into final products. Production strategy plans and manages these processes, in-house inventory and production scheduling.

- 6.1. How would you describe your division's production strategy?
  - make or buy decisions
  - make to order, make to stock
  - unique vs. standardised products, mass-customisation
  - job-shop, continuous flow production)

Has the M&A affected this strategy? How? Has the joint entity primarily adopted the solutions used by the acquirer or the target? Why have you chosen to do so?

- 6.2. How tightly have production resources of the two entities been integrated? Why have you chosen to do so? How tightly has the **organisation in production** of the two entities been integrated? Why have you chosen to do so?
- 6.3. What have been the main (positive or negative) effects of this M&A on **production**? Please also rate the magnitude of these effects.

Operational efficiency (cost savings from economies of scale or scope, divestiture etc.)

6.4.

6.5.

Strong negative effect 1 2 3 4 5 6 7 Strong positive effect
Measured based on what?
Other effect, what?
Strong negative effect 1 2 3 4 5 6 7 Strong positive effect
Measured based on what?
Have these effects differed from those anticipated in terms of type and magnitude? If they have, please mark the anticipated effects in the above chart. For what reasons have the effects differed in your opinion? Think about <b>the integration process in manufacturing</b> . How easy or difficult has this process been? Which areas proved to be problematic? Why?

# 7. Sourcing/Procurement

Sourcing links the production of materials and component manufacturers to final product assembly. Sourcing strategy involves make-or buy-decisions, supplier base organisation and the maintaining of these supplier relationships.

- 7.1. How would you describe your division's **sourcing strategy**?
  - Centralised vs. decentralised sourcing
  - Multiple suppliers vs. strategic suppliers (arm's length vs. closer co-operation)
  - Used terms of delivery

Has the M&A affected this strategy? How? Has the joint entity primarily adopted the solutions used by the acquirer or the target? Why have you chosen to do so?

- 7.2. How tightly have **sourcing resources** of the two entities been integrated? Why have you chosen to do so? How tightly has the **organisation in sourcing** of the two entities been integrated? Why have you chosen to do so?
- 7.3. What have been the main (positive or negative) effects of this M&A on sourcing? Please also rate the magnitude of these effects.

Operational efficiency (cost savings from economies of scale or scope, divestiture etc.)

Strong negative effect	1	2	3	4	5	6	7	Strong positive effect
Measured based on wh	iat.	_						
Other effect, what?								
Strong negative effect	1	2	3	4	5	6	7	Strong positive effect
Measured based on wh	iat.	_						

7.4. Have these effects differed from those anticipated in terms of type and magnitude? If they have, please mark the anticipated effects in the above chart. For what reasons have the effects differed in your opinion?

7.5. Think about **the integration process in sourcing**. How easy or difficult has this process been? Which areas proved to be problematic? Why?

## 8. IT systems supporting logistics operations

IT systems supporting logistics operations enable the flow of information within the company as well as across organisational borders. They are also used to automate processes and control operations regardless of physical distances.

- 8.1. How tightly have IT systems of the two entities been integrated on a general level? Why have you chosen to do so?
- 8.2. Did the two entities use ERP systems prior to the merger? If they did, how and to what extent were the systems combined? Has the joint entity primarily adopted the solutions used by the acquirer or the target? Why have you chosen to do so?
- 8.3. Has the M&A affected the choice of the following supporting IT applications in logistics? How?
  - Distribution Management System
  - Warehouse Management System
  - Order Planning
  - Production Planning
  - IT systems in purchasing

Has the joint entity primarily adopted the solutions used by the acquirer or the target? Why have you chosen to do so?

8.4. Think about **the process of integrating IT systems**. How easy or difficult has this process been? Which areas proved to be problematic? Why?

#### APPENDIX 4 INTERVIEW GUIDE USED IN PAPER 4

#### Market structure and position

- How would you define the market that your company serves? What size do you estimate this market to be? How has the market size developed during the past five years (1999-2003)?
- What do you estimate the current annual growth rate to be? How has the annual growth rate developed during the past five years (1999-2003)?
- What do you estimate the current market consolidation rate to be (see appendix)? How has the consolidation rate developed during the past five years (1999-2003)?
- What do you estimate your company's current market share to be? How has this share developed during the past five years (1999-2003)?
- How does your company rank in the identify market? How has the rank developed during the past five years (1999-2003)?

## **Company strategy**

- What are your company's three leading competitors in the market identified above?
- How does your company compare to these three leading competitors in terms of:
  - o Relative prices?
  - o Relative costs?
  - o Relative breadth of service portfolio?
  - o Relative service quality?
  - o Relative company image/reputation?

#### Company performance

- Please fill in the financial data requested in the appendix on the:
  - o Development of company's net sales during the past five years (1999-2003) *on a quarter year level.*
  - o Development of company's operating profit (pre-tax and pre-interest profit) during the past five years (1999-2003) on a quarter year level.
  - o Development of company's total assets during the past five years (1999-2003) on a quarter year level.
- If annual net sales data are available from a longer period of time, e.g. from 1987 onwards, this would also be of interest to the research group.

## General growth strategy

- How would you rank importance of the following general growth strategies for your company?
  - o Organic growth
  - o M&A
  - o Joint-ventures
  - o Alliances
  - o Piggy-backing
- What, in your view, are the main pros ands cons of M&A as opposed to other means of firm growth?
  - o M&A vs. Organic growth
  - o M&A vs. Joint-ventures
  - o M&A vs. Alliances

## o M&A vs. Piggy-backing

## **Development of Firm X's network**

 During the years 1999-2003, Firm X's network has expanded from xxx locations in xxx countries to xxx locations in xxx countries. What is considered as a 'location' by Firm X?

#### Acquisitions

- The appendix includes a list of Firm X's past acquisition targets (years 1999-2003). Please verify the list and fill in all missing information.
- Which 'new locations' and 'new countries' have these acquisitions brought to Firm X's network (see appendix)?

#### Organic growth

- The appendix shows Firm X's past organic network expansion (years 1999-2003). Please verify the list and fill in all missing information.
- Which 'new locations' and 'new countries' have these new establishments brought to Firm X's network (see appendix)?

#### Divestitures

- What rationalisation and restructuring measures have been implemented in Firm X during 1999-2003:
  - o Has Firm X implemented any asset divestitures and personnel cut backs in the acquired businesses? Which locations have been effected by these measures and what has been the magnitude of the taken actions?
  - o Has Firm X implemented any asset divestitures and personnel cut backs in its existing businesses? Which locations have been effected by these measures and what has been the magnitude of the taken actions?

#### **Acquisition motives**

- Please mark the overlapping and complementary features of the service and customer portfolios of the acquisition targets with Firm X's existing businesses using the tables in appendix.
- In connection with the M&A deals, what have been the main acquisition motives for your company? E.g.
  - o Geographical expansion
  - o Increase market share
  - o Enhance service portfolio
  - o Pre-empt competitors
  - o Turn around failing target
  - o Obtain scale economies
  - o Diversify risk
  - o Reduce industry over-capacity
  - o Industry convergence
  - o Other
- Have the acquisition motives varied between the different targets? How? Have your company's acquisitions motives evolved during the past five years? How?
- Have external changes in the business environment influenced your company's M&A decisions? How?

#### Post-acquisition actions

- What kind of organisational relationship has been adopted between acquirer and target to achieve the strategy behind the deals (see appendix)? Has structural integration varied between the different targets? How and why?
- To what extent has your company used resources and capabilities (e.g. physical resources, human capital, knowledge, competences, technological processes, organizational structures, management systems, organizational cultures, external networks) from the acquired businesses to assist your existing business?
- To what extent has your company transferred resources and capabilities from your existing business to assist the acquired businesses?
- What kind of post-acquisition integration mechanisms have been created to link the target and acquiring businesses (e.g. cross-posting staff, formation of corporate task forces, and joint management of shared activities)?

#### M&A outcome

- What have been the main benefits that your company has realised from past M&A deals?
- What have been the main problem areas related to past M&A? What kind of weak points have been identified in the management of past deals?
- What have been the main internal effects of the acquisitions, in terms of:
  - o Geographical coverage?
  - o Service portfolio?
  - o Innovation capability?
  - o Service quality?
  - o Operating costs?
- What have been the main external effects of the acquisitions, in terms of:
  - o Customers?
  - o Competitors?
  - o Suppliers e.g. trucking companies?
- What kind of measures does your company use to evaluate acquisition success? How has the overall success of the M&A deals been assessed?

## APPENDIX 5 INTERVIEW STRUCTURE AND TOOL USED IN EXPERT INTERVIEWS

**Limitations and definitions**: This research is limited to examining the following type of acquisitions. You may comment on also other acquisition types, but please mention this in connection with giving a specific answer.

- 1. Acquisitions. The transaction has a clearly definable acquiring party as opposed to the acquired party. Thus, this excludes pure merger type transactions. This limitation is made as the acquisition process is approached from the acquirer's perspective, which has (superior) power when deciding on actions related to post-acquisition integration.
- **2. Horizontal acquisitions.** Both counterparts of the deal operate in the same industry and on the same industry level (e.g. production firm acquiring another production firm). The deal counterparts do not need to be direct competitors, but this is of course a possibility. This distinction leaves out vertical and conglomerate acquisitions.
- **3. International acquisitions.** The deal counterparts originate (i.e. have their head offices) from different countries. However, geographical overlaps may exist in their respective operations (e.g. the acquirer already conducts operations in the home market of the target firm).
- Briefly describe your background in relation to acquisition activity (e.g. industry background, personal role in acquisition process).
- **Factors leading to acquisition activity.** Based on your experience, what do you consider to be the main reasons which lead companies to engage in acquisition activity (external/environmental factors, the acquirer's strategic motives and operational objectives, opportunism etc.)? Why do you regard these as the most important factors?

- 2 1 To enhance product/service portfolio offered to existing customer base
- 2\_2 To expand into new geographical markets with existing products/services
- 2\_3 To increase current market share
- 2 4 To obtain scale economies
- 2 5 To obtain economies of scope
- 2\_6 To diversify risk
- To gain 'critical mass' (e.g. to penetrate global markets)
- 2 8 To ensure company survival (e.g. pre-empting possible takeover, defence mechanism)
- 2 9 To gain R&D capabilities, related know-how and technologies
- 2 10 To exploit eroding industry boundaries by "inventing a new industry"
- 2 11 To restructure a low-performing company
- 2 12 To reduce overcapacity in the industry through consolidation
- 2\_13 To grow by buying out competitors
- 2\_14 To buy specific customer relationships
- 2 15 To buy market-specific knowledge
- 2\_16 To move into new capability areas
- 2\_17 To obtain a 'bargain' due to market valuation differentials
- 2 18 To increase profitability
- 2 19 To increase managerial prestige and personal remuneration
- 2 20 To create shareholder value
- 2 21 To create barriers for industry entry
- 2 22 To derive financial synergies driven by reductions in the cost of capital
- 2 23 To respond to regulatory changes in the business environment e.g. EU enlargement
- 2\_24 To investing free cash flows to derive greater returns
- 2\_25 To reconfigure the product/service-mix toward more high-profit products/services
- 2 26 To acquire a certain brand
- 2\_27 To 'prune managerial deadwood'
- 2 28 To benefit from market power effects towards customers
- 2\_29 To benefit from market power effects towards suppliers

3 Acquirer and target firm -related factors. Strategic and operational fit. Based on your experience, what do you consider to be the most critical factors related to the acquirer and target firms and their combinational attributes, which have the most impact on the acquisition outcome (either in a positive or negative sense)? Why do you regard these as the most important factors?

#### Attributes identified by prior research

- 3 1 Consolidation rate in industry
- 3 2 Relative size of firms involved
- 3 3 Absolute size of firms involved
- 3 4 Acquisition type (capability strengthening, extension, or creation)
- 3 5 Diversification of the acquirer
- 3 6 Prior relationship between firms involved
- Financial performance of target firm
- 3 8 Financial performance of acquirer (acquirer's financial slack, indebtedness)
- 3 9 Acquisition experience of management of the acquiring firm
- 3 10 Quality of target firm management
- 3\_11 Similarity of marketing operations between firms involved (geographic markets, customer groups)
- 3\_12 Similarity of production operations between firms involved (input, process, and product types)
- 3\_13 Complementarity of marketing operations between firms involved (geographic markets, customer groups)
- 3\_14 Complementarity of production operations between firms involved (input, process, and product types)
- 3 15 Similarity of tangible/hard resources between forms involved
- 3\_16 Similarity of intangible/soft resources, processes, and functional skills between firms involved
- 3 17 Complementarity of tangible/hard resources between firms involved
- 3\_18 Complementarity of intangible/soft resources, processes and functional skills between firms involved
- 3 19 Acquirer's experience in target market
- 3 20 Growth rate in target market
- 3 21 Consolidation in target market
- 3 22 Time elapsed since previous acquisition performed by the acquirer
- 3\_23 Potential synergies that are not known to other bidders
- 3 24 Potential uniquely valuable synergies unavailable to potential competitors
- 4 Acquirer and target firm -related factors. Organisational and cultural fit. Based on your experience, what do you consider to be the most critical factors related to the organisational/cultural similarities or dissimilarities in the acquirer and target firms, which have the most impact on the acquisition outcome (either in a positive or negative sense)? Why do you regard these as the most important factors?

#### Attributes identified by prior research

- 4 1 Differences in ownership and organisational structure between firms involved
- 4 2 Differences in national culture
- 4\_3 Differences in management style between the firms involved (degree of emphasising authority, risk-taking, formality, employee participation etc.)
- Factors related to pre-acquisition management (e.g. target analysis, due diligence, negotiations etc.). Based on your experience, what do you consider to be the most critical actions related to pre-acquisition management, through which (acquirer) firm management can have the most impact on the acquisition outcome (either in a positive or negative sense)? Why do you regard these as the most important factors?

- 5\_1 Quality of formal search and screening efforts within the acquiring firm (corporate acquisition function)
- 5\_2 Involving managers in the acquisition screening process
- 5 3 Consistency of individual deal with overall company strategy

- 5 4 Dedicating adequate financial resources for pre-acquisition phase
- 5 5 Dedicating adequate human resources for pre-acquisition phase
- 5\_6 Involving outside advisors in the pre-acquisition phase (e.g. investment bankers, consultants)
- 5\_7 Quality of pre-acquisition due diligence (assessment of expected acquisition benefits and costs)
- 5\_8 Maintaining discipline in target pricing (e.g. avoiding high premiums due to managerial hubris)
- 5\_9 Assessing the risk of realising expected synergies vs. premium to be paid
- 5 10 Number of potential bidders
- 5\_11 Determining the appropriate method of payment / need for acquirer to finance deal by debt
- 5 12 Negotiating integrity
- 5\_13 Resolving ambiguity between acquirer and target expectations during negotiation
- 5 14 Acquisition agreement type (friendly or hostile)
- 5 15 Establishing pre-acquisition blueprint for consolidation in the post-acquisition phase
- 5\_16 Encouraging managers from the firms involved to develop future operating plans in the pre-acquisition phase
- 5 17 Relationship management with existing customers (pre-acquisition communication)
- 5\_18 Relationship management with existing suppliers (pre-acquisition communication)
- 5\_19 Relationship management with other relevant stakeholders (stockholders, employees, labour unions, government agencies, press, financial community) (pre-acquisition communication)
- **Factors related to operational integration.** Based on your experience, what do you consider to be the most critical actions related to the integration of operations and the exchange of information and know-how, through which (acquirer) firm management can have the most impact on the acquisition outcome (either in a positive or negative sense)? Why do you regard these as the most important factors?

- 6\_1 Overall degree of interaction between the firms involved (e.g. restructuring, information and material flows)
- 6\_2 Overall extent of coordinative effort to improve the quality of that interaction through special integration managers, transition teams etc.
- 6\_3 Establishing task forces to identify and evaluate potential synergies on an operational level
- 6\_4 Involving outside advisors in the post-acquisition phase (e.g. consultants)
- 6\_5 Being able to adjust one's initial view of the appropriate integration approach (creating balance between determination and adaptation of consolidation blueprint)
- 6 6 Setting an integration timetable and adhering to it
- 6 7 Managing the rationalisation of overlapping physical resources
- 6\_8 Transferring operation-specific skills and moving to best practices
- 6\_9 Sharing physical resources in order to benefit from complementarities
- 6 10 Disposing of managerial weaknesses
- 6 11 Allocating financial resources to support company-specific capabilities
- 6\_12 Allocating managerial resources to support company-specific capabilities
- 6\_13 Allocating financial resources to support joint capability development
- 6 14 Allocating managerial resources to support joint capability development
- 6 15 Developing common reporting, control and planning systems
- 6\_16 Developing common managerial information systems
- 6\_17 Developing common information systems on an operational level (e.g. inventory control, MRP, order processing systems)
- 6 18 Integration of organisational structure
- 6\_19 Quality and frequency of acquisition performance evaluation

Factors related to human integration and stakeholder management. Based on your experience, what do you consider to be the most critical actions related to employee integration and motivation, and to the post-acquisition management of other stakeholder groups, through which (acquirer) firm management can have the most impact on the acquisition outcome (either in a positive or negative sense)? Why do you regard these as the most important factors?

#### Attributes identified by prior research

- 7 1 Re-establishing new strategic leadership in the joint organisation
- 7 2 Establishing credibility of integration management team
- 7\_3 Continuing communication of planned restructuring actions, their reasons, consequences and timetable towards employees
- 7 4 Communication and confirmation of things what will not change
- 7\_5 Defining and communicating the organizational mission to (new) employees
- 7\_6 Getting to know the other organisation: travelling, talking to people, getting acquainted with the other's business
- 7\_7 Educating managers about each other's organisational and cultural contexts
- 7 8 Preserving distinct organisational cultures
- 7\_9 Developing new corporate culture with joint values
- 7\_10 Retaining key managers from the target organisation in the post-acquisition phase
- 7\_11 Retaining key personnel on lower organisational levels
- 7 12 Developing incentives and compensation systems for managers
- 7 13 Developing incentives and compensation systems for lower level employees
- 7 14 Providing opportunities for personal and career development to employees
- 7 15 Resolving employee complaints and addressing concerns of acquired personnel
- 7 16 Setting specific goals and timelines for the acquired organisation
- 7 17 Being able to demonstrate early operating results
- 7 18 Urging the managers of the firms involved to interact more
- 7\_19 Giving senior management responsibilities to managers from the acquiring company to supervise employees from both the acquires and acquiring firms
- 7 20 Developing tasks that are shared between functional teams from both firms
- 7 21 Organising joint staff meetings, seminars and training programmes
- 7 22 Relationship management with existing suppliers (post-acquisition communication)
- 7\_23 Relationship management with existing customers (post-acquisition communication)
- 7\_24 Relationship management with other relevant stakeholders (stockholders, employees, labour unions, government agencies, press, financial community) (post-acquisition communication)
- 8 How would you assess the importance of the different aspects of the acquisition process in terms of overall acquisition performance? Based on your experience, please rank the importance of the different aspects (1 = the most important, 5 = the least important).

Acquirer and target firm -related factors. Strategic and operational fit.

Acquirer and target firm -related factors. Organisational and cultural fit.

Factors related to pre-acquisition management.

Factors related to operational integration.

Factors related to human integration and stakeholder management.

9 In your opinion, how should acquisition success and related value creation be measured from the acquiring firm's perspective? Why do you regard these as the most important measures?

- 9\_1 Effects on market share
- 9\_2 Effects on overall market position
- 9\_3 Effects on sales
- 9 4 Effects on intrinsic profitability
- 9\_5 Effects on relative profitability compared to industry average
- 9 6 Effects on shareholder value
- 9\_7 Effects on ROA, ROI etc.
- 9\_8 Effects on earnings per share
- 9 9 Effects on cash flow

- 9 10 Effects on operational effects (e.g. efficiency)
- 9 11 Measuring against specific acquisition objectives

## 10 In your opinion, what are the typical sources of value creation in acquisitions? Attributes identified by prior research

- 10 1 Creation of new know-how from interaction between the firms involved
- 10 2 Transfer of existing know-how through interaction between the firms involved
- 10\_3 Benefiting from an organisation of autonomous units which each have their own specific capabilities (e.g. marketing expertise, supplier relationships, innovation capabilities)
- 10 4 Increased efficiency in distribution and sales due to economies of scale and scope
- 10 5 Increased efficiency in production and sourcing due to economies of scale and scope
- 10\_6 Increased efficiency in distribution and sales by transferring superior processes and related knowledge from acquired/acquiring firm
- 10\_7 Increased efficiency in production and sourcing by transferring superior processes and related knowledge from acquired/acquiring firm
- 10 8 Increased cost savings due to increased negotiating power towards suppliers
- 10 9 Increased margins due to increased negotiation power towards customers
- 10\_10 Increased sales due to wider product line market coverage (e.g. greater customer value through 'bundling' products)
- 10\_11 Increased sales due to wider geographic market coverage (e.g. cross-selling products through the counterparts distribution channel)
- 10\_12 Increased innovation capability by using the superior innovation capability (proprietary technology, patents) of the acquired/acquiring firm to enhance product features
- 10 13 Financial synergies driven by reductions in the cost of capital
- 10 14 Managerial synergies from improving the range or depth of general management skills
- 10\_15 Administrative synergies from consolidation and reduced administrative overhead per unit
- Several studies have reported that a large portion of performed acquisition fail in one way or the other (estimates range from 50 to 70 %). In your opinion, what are the main reasons behind these grim figures (e.g. pursuing the wrong deals, overvaluation, and integration problems)?
- 12 In your opinion, how much do situation-specific circumstances or unexpected factors affect acquisition outcomes? Could you give an example of such a situation?
- 13 In your opinion, what are the central factors in deciding between growth and internationalisation through acquisition as opposed to other organisational modes of expansion (e.g. alliances, greenfield investment, joint ventures)?

- 13 1 Consolidation rate in industry
- 13 2 Relative size of firms involved
- 13 3 Acquisition type (capability strengthening, extension, or creation)
- 13 4 Type of expected synergy (modular, sequential, or reciprocal)
- 13 5 Nature of desired resources (hard/tangible or soft/intangible)
- 13 6 Financial performance of target firm
- 13\_7 Financial performance of acquirer (acquirer's financial slack, indebtedness)
- 13 8 Acquisition experience of management of the acquiring firm
- 13 9 Internal R&D intensity of the acquirer
- 13\_10 Consolidation in specific target market
- 13 11 Growth rate of target market
- 13\_12 Degree of target market uncertainty
- 13 13 Legal, financial, and other country differences
- 13\_14 Relative currency and stock market valuation in acquirer and target countries
- 13\_15 Acquirer's experimental knowledge of target market (country or customer segment)
- 13 16 Acquirer's experience in target industry (specific business)

## APPENDIX 6 LIST OF EXPERT INTERVIEWS

Rolf Saxberg, Sponsor Capital Oy, Senior Advisor, 19.10.2004

Kirsti Piponius, Sodexho Oy, Vice Chairman of the Board, Member of Hallitusammattilaiset ry., 20.10.2004

Jukka Alho, Finland Post Corporation, President and CEO, 20.10.2004

Timo Peltola, Huhtamäki Oyj, Former President and CEO, Member of the Board of Directors, Member of Hallitusammattilaiset ry., 21.10.2004

Lasse Kurkilahti, Kemira Oyj, President and CEO, Member of Hallitusammattilaiset ry., 25.10.2004

Petri Myllyneva, Roschier Holmberg, Head of Turku Office, Head of Pharmaceuticals and Biosciences Team, and Kirsi Swanljung, Roschier Holmberg, Specialist Counsel, 25.10.2004

Sven Bertlin, Wärtsilä Corporation, Executive Vice President, 26.10.2004

Sten-Olof Hansén, Turku School of Economics and Business Administration, Emeritus Professor, Member of Hallitusammattilaiset ry., 26.10.2004

Mika Ståhlberg, Krogerus & Co., Partner, 28.10.2004

Jussi Sarvikas, UPM-Kymmene Corporation, Vice President, Logistics, 28.10.2004

Risto Virrankoski, Outokumpu Oyj, Deputy CEO, Vice Chairman of the Group Executive Committee (retired on February 15 2005), 29.10.2004

Ilkka Pitkänen, Kone Corporation, Vice President, Alliances and Acquisitions, 29.10.2004

Antti Vehviläinen, Stora Enso Oyj, Vice President, Transport and Distribution, 1.11.2004

Kari Neilimo, SOK Corporation, Chairman and CEO, 2.11.2005

Jukka Suominen, Silja Oyj Abp, Former President and CEO, ADR-Haanpää, Chairman of the Board, Member of Hallitusammattilaiset ry., 5.11.2005

Mikko Haapanen, ELC Finland, Partner, Chairman of the Board, Member of Hallitusammattilaiset ry., 5.11.2004

## PAPER 1

Häkkinen, Lotta – Norrman, Andreas – Hilmola, Olli-Pekka – Ojala, Lauri (2004) Logistics integration in horizontal mergers and acquisitions. *International Journal of Logistics Management*, Vol. 15, No. 1, 27-42.

Republished with permission as pre-print MS Word version,
Emerald Group Publishing Limited.
http://www.emeraldinsight.com/ijlm.htm

## LOGISTICS INTEGRATION IN HORIZONTAL MERGERS AND ACQUISITIONS

Lotta Häkkinen, Andreas Norrman, Olli-Pekka Hilmola and Lauri Ojala Turku School of Economics and Business Administration

#### **Abstract**

This article discusses the integration of logistics after Mergers and Acquisitions (M&A's) of firms within the same industry and same industry level (i.e. horizontal M&A's). First, we present a review of academic literature on M&A's both in general management type literature and in logistics journals. We conclude that operational issues, in general, and logistics issues, in particular, have received little attention in this field of research. In parallel with the literature review, we conducted an exploratory survey of Swedish and Finnish manufacturers that had accomplished horizontal M&A's during 1995-2001. The aim of the survey was to find out how company management perceives the importance of logistics issues in M&A's and also, how difficult it is to realise synergies in logistics. Finally, we present a framework for further studies and the analysis of the interrelationship between logistics and M&A's.

Keywords: Logistics; Mergers and Acquisitions; Post-merger integration; Supply Chain Management

#### Introduction

Mergers and Acquisitions (M&A's) have become an inseparable part of international business operations and a major means for companies to grow in size, go international or obtain know-how [1, 2, 3]. Currently companies primarily seek profit improvement by the rapid expansion of sales via mergers, whereas in the 1960s a typical merger motive was to build a conglomerate [4, 5, 6, 7]. Another reason for M&A's is to achieve synergies and economies of scale – e.g. in Supply Chain Management (SCM) related activities [8, 9, 10].

Although many benefits of M&A's are stressed when a deal is announced, research on M&A's has reported relatively high rates of failure [11, 12]. Percentages showing how many mergers actually destroy shareholder value, or otherwise fall short of meeting their strategic goals, vary from 50-80 % [13]. According to a recent KPMG survey, the success rate of mergers seems to be on the grow [14]. Research on merger success is inconclusive and the concept of merger success is ambiguous. From a logistics perspective M&A's could create synergies and economies of scale and scope, as well as problems.

The purpose of this paper is to investigate gaps in the current understanding of issues related to logistics in an M&A situation, and to propose a tentative framework for more detailed analysis. This is done by

- a) reviewing academic literature within "logistics" and "Merger & Acquisitions",
- b) exploring practitioners' views on logistics activities and their impact in an M&A situation by use of a survey, and by
- c) combining findings from the literature review and the survey to form a conceptual model that addresses M&A issues in a more detailed logistics context than previous models.

#### **Mergers and Acquisitions**

A merger is the result of a mutual agreement of the management of two or more companies to form a new joint legal entity through the exchange of shares or other funds. An acquisition or a take-over takes place when the management of one company makes a direct offer to the shareholders of another company to acquire controlling interest of this firm [8]. In this article we will discuss the two terms jointly as M&A, which is common practice.

M&A's can be divided into horizontal, vertical and conglomerate M&A's. In horizontal M&A's, both companies operate in the same industry and on the same industry level. Narrowly defined, both companies should be direct competitors on the same markets [7] whilst other definitions are less strict [15]. Vertical M&A's involve firms that operate in different stages of the same industry. Firms in conglomerate M&A's, on the other hand, do not operate in the same business sector at all. Our focus will be on horizontal M&A's, as we argue that most logistics synergies as well as potential problems will be found here. Furthermore, the study of vertical M&A's would cover issues that are very close to those normally studied within Supply Chain integration/Supply Chain Management research, namely the integration of companies "along a chain".

Normally an M&A can be divided into three phases: the pre-merger process, the actual deal, and the post-merger integration process. Pre- and post-merger processes have traditionally been viewed as separate issues: merger performance has been regarded to be the result of the success of pre-merger decision-making plus the success of post-merger implementation. Some authors suggest that the merger outcome is primarily influenced by pre-merger strategy and planning [16], others have the opposite view [17, 18].

Each M&A has its own set of motives behind it. Categorisations of these exist [7, 15] but since M&A's often combine multiple motives, an unambiguous classification seems hard to develop. Bower [2] distinguishes between five major M&A types (see Table 1).

## Table 1. Different types of Merger & Acquisitions based on motives [2]

**Overcapacity M&A**: Common when there is substantial overcapacity and hence inefficiency in a certain industry, leading to an opportunity to gain from restructuring. This kind of industry consolidation can increase the acquirer's market power and form entry barriers for competitors. According to Bower, overcapacity M&A's account for 37 % of recent M&A deals.

**Product or Market Extension M&A**: Used to extend into new markets or products. Internationalisation through cross-border mergers is one main sub-motive in this group. The number of cross-border mergers has rapidly increased, especially in Europe since the beginning of the European integration process. Cross-border mergers are a valid option when seeking to go international as they may provide quicker access to new markets and better local contacts than start-ups. Extension M&A's account for 36 % of M&A's.

**Geographic Roll-up M&A**: Used to seek growth and efficiency gains by buying out competitors in geographically fragmented markets. This M&A type has many similarities with both overcapacity and extension mergers, but unlike extension M&A they usually occur domestically and the acquirer is typically larger than the target. Apart from expanding its market presence, these mergers allow the acquirer to benefit from economies of scale and scope.

**Research and Development M&A**: Aims at obtaining R&D capacity and/or transferring R&D knowledge. This M&A type is common especially in high-tech and pharmaceutical industries.

**Industry Convergence M&A**: Aims at creating a whole new industry by culling resources from eroding industries. However, Bower doesn't give any clear boundaries of what can be classified as a new industry. Also these M&A's are hard to analyse as well as to manage successfully.

To examine problems which arise in these different types of M&A's, Bower presents a framework for three areas of impact: *resources, processes and values*. Resources refer to tangible and intangible assets; processes deal with activities that turn resources into goods and services; and values underpin the decisions employees make and how they make them. These three categories are also mentioned in other studies [19].

M&A's are often motivated by the possibility of synergy benefits. Synergy occurs when two or more units can be run more efficiently and/or effectively combined than separately [12]. This is often the case in horizontal M&A's. However, synergy potential doesn't turn into real benefits on its own. [10, 20, 21]

Synergies differ in terms of measurability and the efforts required to generate benefits [22, 23]. Operational synergies result from economies of scale in e.g. production, administration and marketing. They come from eliminating excess capacity and related costs, or from economies of scale e.g. in purchasing, production, administration and marketing. Collusive synergies are benefits that are derived from increased market and purchasing power. An example is revenue enhancement which refers to the possibility to achieve a higher level of sales together than either company on their own, e.g. when a superior product from the target is combined with the more extensive distribution channel of the acquirer. These synergies are harder to estimate than operational synergies as they involve external variables, such as customer reactions. Managerial synergies result from applying complementary competencies, replacing incompetent managers, or from using the skills of general management across different areas of business [5]. Financial synergies come from risk diversification and coinsurance. The two last synergy types are often connected to conglomerate M&A's.

## Literature review

Our literature review is divided into two parts: a) how articles published during the last decade in logistics and Supply Chain Management journals discuss M&A's; and b) how general management research on M&A's has elaborated on logistics and Supply Chain issues (sample of 126 articles).

## M&A in logistics and Supply Chain journals

The review of all articles in 242 issues published during the last decade in the six major academic international journals focused on logistics, distribution, purchasing and Supply Chain Management, found no articles focusing on the interface between logistics/SCM and M&A/horizontal integration (see Table 2).

Table 2. Review of how logistics and SCM journals have published research on M&A

Journal	From Issue, Volume, Year	To Issue, Volume, Year	No of issues	Articles on M&A or horizontal integration
	loode, Fording, Fod.	10000, 10101110, 1001	110 01 133463	
Int. J. Of Physical Distribution & Logistics Management	Issue 2, Vol.19, 1989	Issue 1, Vol.32, 2002	122	2 *
J. Of. Business Logistics	Issue 1, Vol.11, 1990	Issue 2, Vol.22, 2001	23	0
Int. J. Of Logistics Management	Issue 1, Vol.1, 1990	Issue 1, Vol.13, 2002	25	1 **
Eur. J. Of Purchasing & Supply				
Management	Issue 1, Vol.1, 1994	Issue 2, Vol.8, 2002	32	0
Supply Chain Management: An				
Int. Journal	Issue 1, Vol.1, 1996	Issue 1, Vol.7, 2002	27	0
Int. J. Of Logistics: Research &		,		
Applications	Issue 1, Vol.1, 1998	Issue 1, Vol.5, 2002	13	0

<sup>\* [24,25]; \*\* [26]</sup> 

Three articles were found that to some degree addressed M&A or horizontal integration. Currie [24] briefly discusses M&A's among IT service providers and the consolidation of this market, but doesn't address the integration of physical Supply Chains. Caputo and Mininno [25] discuss horizontal integration as "the co-ordination between institutions placed on the same level of the channel". The article doesn't refer to M&A situations, only to the collaboration between separate companies. Ojala [26] discusses the M&A's of logistics service providers in the Nordic countries, but does not address M&A's in manufacturing industries.

Our observation is that M&A's are a relatively unexplored area in logistics and SCM research. One reason for this could be that this topic is uninteresting, or that getting access to information on M&A's can prove to be problematic. However, our opinion is that the issue is important, both for general managers who must understand pre-merger barriers and their impact before closing a deal, as well as for logistics managers who make and implement decisions in the post-merger phase.

#### Logistics in M&A articles

For the review of general management type literature on M&A's, a structured literature search was made using the search engines of electronic journal databases, such as EBSCO, ProQuest and Emerald (covering over 3,000 publications), and using specific keywords. Our goal was to find articles addressing operational and logistics-related issues in M&A situations. When finding interesting references in an article we have also "snowballed" to other articles, research papers and books. We have also browsed the tables of contents in journals to find interesting articles. The review on M&A articles is not exclusive, but we believe we have found a valid sample. The theoretical perspectives in M&A research are summarised in Table 3.

Table 3. Overview of reviewed articles (articles can be classified to more than one category, making the sum higher than 100%)

er of	5 ,	Т	heory	/ field		Merger phase in process			Method					essing issues
Total number		Strategic	HRM	Financial	Operational	Pre-merger	Deal	Post-merger	Case	Survey	Concept	Modelling	Other	Not address logistics issu
	126	105	26	38	0	56	34	102	38	43	27	11	24	116
		83%	21%	30%	0%	44%	27%	81%	30%	34%	21%	9%	19%	92%

Number of articles Percentage of papers

The most dominating theory field was strategic management, while none of the M&A articles reviewed had an operational point of departure. Most addressed post-merger issues, and although the

articles used a variety of different methods, most were done using either a survey or case studies. Only 8% elaborated in some way on logistics issues.

Seven of the ten articles addressing logistics and Supply Chain issues were published in 1999 or later and only two before 1995 (see Table 4). Most of the articles addressed the post-merger phase (8) and six focused on the pre-merger phase.

Table 4. Logistics issues addressed in M&A articles

					Logistics issues								
			er pha roces		Structure			Process			Synergies		
		Pre-		Post-	Distri-	Prod-	Sour-	Distri-	Prod-	Sour-	Distri-	Prod-	Sour-
Author	Year	merger	Deal	merger	bution	uction	cing	bution	uction	cing	bution	uction	cing
Best, W.J. & Seger, R.E. [20]	1989			Х				Х			Х		
Taqi, S. J. [10]	1991			х							х	X	х
Grundy, T.	1996	х	Х	х							х	X	х
Eccles, R.G., Lanes, K.L. & Wilson, T.C. [23]	1999		Х					х	Х	Х			
Larsson, R. & Finkelstein, S [22]	1999	х	Х	х							х	X	х
Havila, V. & Salmi, A. [28]	2000			х	x	Х	Х						
Agami, A [9]	2001	х	Х	Х							х	х	х
Anderson, H., Havila, V. & Salmi, A [29]	2001	х		Х	х	Х	X						
Fletcher, R. & Barrett, N. [30]	2001			х	x	х	x						
Wall, S. & Rees. B. [8]	2001	х									х	Х	х

Building on Bower's framework [2], we explored how the authors discussed logistics *resources* and *processes* in distribution, manufacturing and sourcing. As resources, we focus on *logistics structures*, which refer to the network of resources such as distribution networks and service providers, manufacturing plants and supplier networks. *Logistics processes* are the processes and activities needed to manage the logistics flows. The category of *synergy benefits* in the areas of distribution, manufacturing and sourcing has been added. Most articles discussed synergies in distribution, production and/or sourcing. Logistics processes were the least discussed topic.

Agami [9] studies cross-border mergers and briefly considers the integration and synergy realisation aspects, when the companies' manufacturing and distribution resources are equally strong.

Best and Seger [20] focus on synergy benefits in distribution, which are argued to be an important reason for M&As but are "easy to see but hard to get". Best and Seger suggest that eight factors (distribution channels; order entry co-ordination; pricing; organisational integration; inventory control; credit, invoicing and receivables policies; physical distribution operations; and cost allocation) should be assessed in order to find the degree of commonality between the companies. The degree of commonality then determines the suitable level of integration. Three alternate levels of integration are presented: selective co-operation compromised solutions and full consolidation. The authors propose the third approach to be adopted when a large company acquires a small one.

Eccles et al. [23] discuss the optimum price of a target, and find synergy value to be a key factor. Synergies mentioned include hard synergies coming from eliminating jobs, facilities and related expenses, or from economies of scale in purchasing. Cost savings potential is high when the target operates in the same industry and in the same country. The authors also identify revenue enhancement synergies, which can occur e.g. when the target has a superior or complementary product that can be distributed through the acquirers more extensive distribution channels. Grundy [27] studies the value creation of acquisitions and also finds synergistic value to be important (e.g. in distribution and sourcing).

Havila and Salmi [28] and Anderson et al. [29] apply the IMP approach to study the impact of M&A in industrial networks, and identify different types of synergies, which result from e.g. the integration of production capacity, the relocation of production facilities, and improved prices from suppliers. Also using the IMP approach, Fletcher and Barrett [30] report from a cross-border M&A briefly on synergies resulting from the rationalisation of distribution, the restructuring of manufacturing operations, and better economies in Supply Chain Management and logistics.

Taqi [10] stresses the difficulties in achieving synergies, and argues that two main reasons for this are "more talking than doing" in companies and the under-estimation of the "time, pain and involved costs". Merging distribution and sales has a lot of logic in horizontal M&A – but the process is often difficult and time consuming.

Wall and Rees [8] point out M&A as an important issue in international business strategy and discuss briefly cost and revenue based synergies. Cost based synergies (e.g. in production and logistics) are argued to be especially important in horizontal M&A's. Two other benefits explicitly mentioned are distributive economies and synergies in purchasing.

Larsson and Finkelstein [22] present a model describing synergy realisation (Figure 1). Their model includes e.g. operational synergies in operations and marketing through economies of scale and collusive synergies from purchasing power.

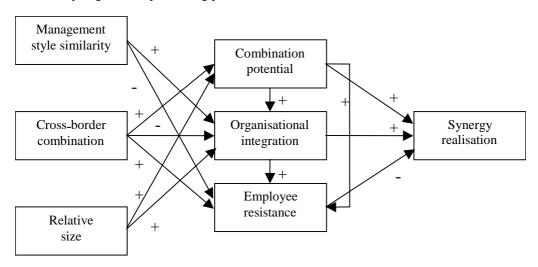


Figure 1. Model of M&A performance [22]

The model is based on different theoretical perspectives and takes both pre- and post-merger processes into account. The model differs from traditional frameworks as M&A success is measured by the synergy realisation from the combination (the actual net benefits, e.g. reduced costs per unit, increases in income) instead of using more common accounting-based measures or stock values.

High combination potential and a high level of organisational integration have a positive impact on the realisation of synergies, while severe employee resistance harms synergy realisation. It can also be seen that various pre- and post-merger attributes affect each other and ultimately the degree of synergy realisation, such as the similarity and complementarities as well as the companies' relative sizes.

Singh and Zollo [31] provide another interesting general M&A model. However, the authors don't specifically address logistics issues. The model considers the most important characteristics of merger success to be the quality of the target (the pre-acquisition performance level) and the geographical overlap of the markets. Learning mechanisms, such as the acquirer's M&A experience, also play an important role in merger success.

From a logistical point of view, the following aspects seem the most important to understand when studying M&A situations: *combination potential*, *level of integration*, *realised synergies*, *geographical overlaps*, *relative size*, *the target quality* (but maybe also the acquirer), and the *acquirer's M&A experience*.

Most authors, with the exception of Best and Seger [20] only point at SCM issues or synergies without going into details. M&A literature has so far mainly concentrated on issues related to strategic management, financial implications and human resource issues. Logistics and Supply Chain Management issues haven't reached the same level of interest, although operational synergies might be stressed on a more general level. Our hypothesis is that while the synergy benefits are easy to discuss from a general management perspective, more detailed research is needed to explore and discuss the *resources* and *processes* where the synergies are developed.

## Research hypotheses in the survey

As can be established from our extensive literature review, academic researchers have paid little attention to logistics issues in M&A situations. In parallel to the literature review, our objective has been to start mapping this scantly covered area to get an initial picture of the practitioners' view on this topic. For this purpose six research hypotheses have been formulated. All hypotheses and their theoretical backgrounds are presented briefly in the following.

Previous research has already pointed out that mergers and acquisitions are often motivated by the possibility of generating different types of synergy benefits. This motive is assumed to be especially important in the case of horizontal acquisitions where synergy potential is the highest [10]. Logistics functions would seem to provide potential for both cost saving type of synergies as well as revenue enhancement synergies [23]. However, there are many other motives for M&A [2].

Hypothesis 1: The possibility to achieve synergy benefits in logistics is an important motive for horizontal mergers.

According to Shrivastava's [19] classification, logistics synergies are generally of the operational type, and require relatively high levels of integration and more effort and time to be realised. Some authors have also established synergy realisation in logistics to be exceptionally challenging [32, 33].

Hypothesis 2: Synergies in logistics are hard to realise as opposed to other synergies.

One commonly used background variable in M&A research is the relative size difference of the merging companies [22]. For example, Augustine [34] and Shrivastava [19] suggest that small targets are relatively easy to integrate with the parent company. The larger the relative size of the target is, the more the acquiring company has to swallow, and the greater the risk of conflict is.

Hypothesis 3: There is a relationship between the relative size difference of the merging companies, and the difficulty of synergy realisation. The smaller the target is compared to the acquirer, the easier synergy realisation will be.

Another general assumption in M&A literature is that high levels of integration between the merging firms positively influence post-merger performance [31, 35], especially in terms of synergy realisation [22]. Thus, companies should adopt a high level of integration in the functions, where they have high expectations to ultimately realise potential synergies.

Hypothesis 4: There is a positive relationship between the rate of expected synergy benefits and the realised level of integration. The higher the rate of expected benefits is, the higher the level of integration will be.

Contemporary M&A research generally assumes that the greater the degree of integration is, the greater the risk of conflict will be [36]. One reason for this is employee resistance [22]. This is especially the case in horizontal mergers where the degree of relatedness between the companies is high, which generally results in high levels of replacement [37].

Hypothesis 5: There is a positive relationship between the level of integration and the rated difficulty of synergy realisation. The higher the realised level of integration is, the more problems will be encountered during the integration process.

As for example Taqi [10] points out, synergy realisation requires both time and effort. The greater the benefits are that the company hopes to generate from the merger, the more time and effort will probably go into the realisation of these benefits. On the other hand, if no benefits are expected from the integration of a certain function, then probably little effort will be put into synergy realisation in this function.

Hypothesis 6: There is a positive relationship between the rate of expected benefits and the difficulty of synergy realisation. The higher the expectations are, the more difficult it is to achieve these expectations.

Our last four hypothesis (3-6) are summarised in Figure 2. This simple model for our first explorative study has many similarities, but is not fully consistent, with e.g. the model of Larsson and Finkelstein (see Figure 1). The reason for this is that the explorative study was performed in parallel with the literature review. A combination of the models will be presented in the final section of the paper.

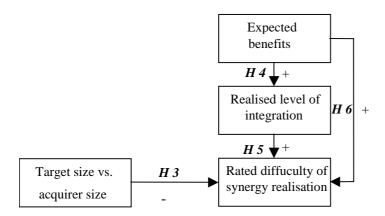


Figure 2. Hypotheses 3-6 in the explorative study

## Survey methodology

The research population consisted of horizontal merger or acquisition deals made in manufacturing industries in Sweden or Finland during the years 1995-2001. The population was limited to deals where at least 90% of the shares were acquired and where either a Swedish or Finnish company was the acquirer. A fairly comprehensive list of the population was obtained by combining information from the websites of KMPG Sweden, one of Sweden's leading professional service firms in the field of financial information, and Talouselämä, a major Finnish weekly business magazine. The original database, also including M&A's in other industries and deals where the acquired share were less than 90%, consisted of over 7700 deals.

The main part of the data has been gathered through a questionnaire addressed to the management of 257 acquiring companies (referring to 484 horizontal M&A deals) included in this database. Efforts were made to identify and contact the key decision-makers in each of these companies. The majority of the companies were contacted by email as the data collection was carried out using a web-based questionnaire, and email contact was considered to be more flexible and easy in international correspondence. However, 58 companies were contacted by regular mail as no email contact information was found. The questionnaire itself included one background data question, and two behavioural information questions (32 sub-questions). All used a 5-point Likert scale as the answer format. Questions were company and deal specific. Companies were encouraged to participate, as the key findings of the research would be made available for everybody who contributed to it.

The response rate in terms of deals rose to 10% and 12% in terms of the total number of companies. This response rate is comparable with another survey study by Capron [38] on the long-term performance of horizontal acquisitions. The Swedish population was more active both in terms of the number of questionnaire responses and respondents. The companies, which were contacted by email, had a slightly better response rate than those, which were contacted by post. In addition to the actual questionnaire answers, the research group received information about the merger and acquisition deals through email correspondence with the companies.

The obtained data was primarily analysed using statistical methods, as the central data for analysis was quantitative survey data. A quantitative approach was chosen, as the aim is to examine a relatively unexplored field of research and to form a general picture of this field for future research to study in more detail. All used statistical tests are non-parametric, as the analysed data was partly ordinal and partly nominal. The testing of Hypotheses 1 and 2 was done using merely descriptive statistics, while the Spearman rank correlation test was used to examine Hypotheses 3 to 6.

## Survey results

This section presents and analyses the research results and using statistical methods tests whether the research hypotheses are true or false based on the research sample. In statistical testing, a significance level of 5% (p < 0.05) is used. Values with a significance level of less than 1% and 0.1% are also identified.

## Merger motives

According to Hypothesis 1, the possibility to gain from synergies in logistics is an important motive for horizontal mergers and acquisitions. Building on Bower's [2] classification of merger motives, the respondents were asked to evaluate the importance of each of the given motives for the researched deal. The rated importance of logistics synergies-based M&A's, and other strategic types of M&A's, are given in Figure 3.

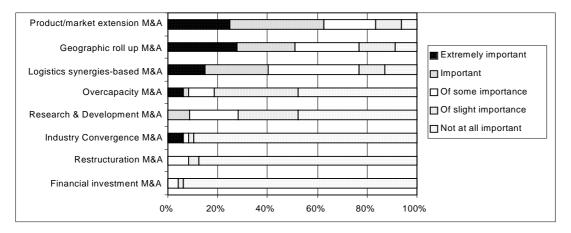


Figure 3. Rated importance of different merger motives (n=48)

The questionnaire respondents rated logistics synergies as the third most important reason for the horizontal merger they had experienced. The most common motive rose to be the possibility to extend into new products or markets through M&A's. 63% of the respondents considered it to be either an important or an extremely important strategic reason for pursuing M&A's. The next most important motives were to grow by buying out competitors in geographically fragmented markets (51%), and to exploit synergies in sourcing, manufacturing or distribution (40%). All three types of M&A's, as well as that of dealing with overcapacity in the industry, can be seen as affecting logistics activities, thus supporting Hypothesis 1.

These findings also support the trends presented in M&A literature. The typical merger motives for the 1970-80s, such as mergers as short term financial investments and gaining from the restructuring a low performing companies, are not among the most common reasons for M&A activity today. Instead, the majority of contemporary deals are motivated by the possibility to improve profits through the rapid expansion of sales (i.e. market or product extension) [4, 5].

## Difficulty of synergy realisation

Hypothesis 2 suggests that synergies in logistics (divided into distribution, manufacturing and purchasing functions) are harder to realise than synergies in other functions. The results concerning the rated difficulty of realising synergies in different functions are shown in Figure 4.

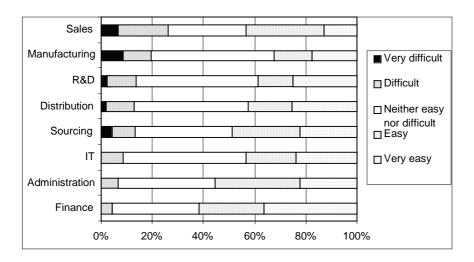


Figure 4. Rated difficulty of synergy realisation in different functions (n=48)

As can been seen from Figure 4, the differences between the examined functions are not significant. Synergy realisation seems to be most difficult in sales. 26% of the respondents considered it to be difficult or very difficult, but at the same time 43% thought it to be either easy or very easy. Manufacturing was rated to be the next most challenging function followed by R&D and the two other logistics functions, sourcing and distribution. Perhaps unsurprisingly, financial synergies were considered to be the easiest to realise (62%), closely followed by administrative synergies (56%).

The results do not unequivocally support Hypothesis 2, as differences between various functions were relatively small. The major conclusion is that company management considers synergy realisation generally to be "neither easy nor difficult" or even relatively easy.

#### Relative size difference

Hypothesis 3, in turn, suggests that there is a negative relationship between the difficulty of synergy realisation and the relative size difference of the merging companies. The smaller the target company is compared to the acquirer, the easier it is to realise synergies. To test this hypothesis Spearman rank order correlations were calculated (see Table 5). The hypothesised relationship is expressed as negative correlation values (R).

Table 5. Spearman rank order correlation values between the difficulty of synergy realisation in different functions and the relative size of the merging companies (n=48)

	Relativ	e size
	Spearman	
Difficulty of synergy realisation	R	р
Sourcing	-0.099	0.524
Manufacturing	0.140	0.358
Distribution	0.006	0.966
Sales	0.118	0.441
IT	-0.023	0.883
R&D	0.021	0.893
Administration	-0.110	0.478
Finance	0.108	0.475

<sup>\*\*\*</sup> p < 0.001; \*\* p < 0.01; \* p < 0.05

The results do not support Hypothesis 3. There is no significant relationship (p < 0.05) between the variables in any of the examined functions. In three of the functions (sourcing, IT and administration), the calculated correlation value indicates a negative relationship between the two variables, and in the other five the correlation value is positive.

These findings question the ideas of Augustine [34], who suggests that the larger the target is compared to the acquirer, the more the acquiring company has to swallow and the greater the risk of

conflict. The research of Larsson and Finkelstein [22] might shed some light on the reasons for this phenomenon. They find that mergers with relatively small companies have less synergy potential, and small mergers do not always receive sufficient managerial attention. This lack of attention might also lead to situations where insufficient efforts are put into the synergy realisation process.

## Relationships between synergy expectations, realisation and the level of integration

Expected benefits and level of integration

Hypothesis 4 argues that there is a positive relationship between the rate of expected benefits and the realised level of integration. As Table 6 shows, this is true for some of the functions but the results do not totally support this hypothesis.

Table 6. Spearman rank order correlation values between the rate of expected benefits and the level of integration (n=48)

				Level of in	atagration			
				Level of fi	negration			
Expectations	Sourc.	Manuf.	Distrib.	Sales	IT	R&D	Admin.	Finance
Sourc.	0.102	-0.064	-0.028	-0.173	-0.209	0.050	-0.030	-0.209
Manuf.	0.113	0.169	0.106	0.029	0.155	0.152	0.098	0.003
Distrib.	0.519***	0.387**	0.523***	0.481***	0.382**	0.338*	0.391**	0.291
Sales	0.359*	0.354*	0.298*	0.381**	0.152	0.222	0.150	0.027
IT	0.217	0.267	0.064	0.009	0.024	0.303*	0.013	-0.038
R&D	0.377**	0.229	0.282	0.129	0.132	0.501***	0.233	0.027
Admin.	0.139	0.292*	0.262	0.117	0.235	0.469***	0.259	0.155
Finance	0.193	0.147	-0.085	-0.123	-0.231	0.120	-0.174	-0.192

<sup>\*\*\*</sup> p < 0.001; \*\* p < 0.01; \* p < 0.05

Of the examined functions, the hypothesised relationship prevails internally only in distribution, sales and R&D. In all three, the correlation value is positive, thus indicating that when the expected synergies are high in these functions, companies also adopt a high level of integration to realise these benefits. The positive correlation in distribution is especially high (p < 0.001). This indicates that the reorganisation of distribution resources and processes to get rid of e.g. overlapping networks is common in post-merger situations. Although not significant, the correlation values for manufacturing and sourcing are also positive.

Other interesting findings can also be made from Table 6. The expectations in all the three functions with significant internal correlation (distribution, sales and R&D) seem to affect the level of integration in other functions as well. First, the results show a link between the expected benefits in R&D, and the sourcing function. One possible explanation for this correlation is that companies might seek to gain from R&D synergy benefits by, for example, altering their product structures so that the same components can be used for several different products. This would allow to reduce the number of suppliers, and to integrate the companies' sourcing processes.

Secondly, the rate of expected benefits in distribution has a significant positive impact on the integration level in all other functions except finance. The fact that the restructuring of distribution affects other functions has also been seen during last decade's wave of centralised distribution [39]. There is also a significant relationship between the synergy expectations in sales and the level of integration in sourcing, manufacturing and distribution. These findings seem to indicate that if companies wish to benefit from the integration of distribution and sales channels, integrative actions are also required in prior Supply Chain functions (sourcing and manufacturing) as well as in some supportive functions, such as administration and IT.

## Level of integration and synergy realisation

According to Hypothesis 5, there is a positive relationship between the level of integration and the rated difficulty of synergy realisation: the higher level of integration, the more difficulties will be encountered during the synergy realisation process. The calculated rank order correlations between these two variables are given in Table 7.

Table 7. Spearman rank order correlation values between the level of integration and the difficulty of synergy realisation in different functions (n=48)

	Difficulty of synergy realisation							
Integration	Sourc.	Manuf.	Distrib.	Sales	IT	R&D	Admin.	Finance
Sourc.	0.222	-0.055	0.214	-0.075	0.206	0.152	-0.031	0.035
Manuf.	0.011	-0.129	-0.014	-0.099	0.260	-0.029	-0.110	0.013
Distrib.	0.118	-0.081	0.037	0.043	0.093	-0.062	-0.016	-0.248
Sales	-0.031	-0.093	0.078	0.115	0.146	-0.068	-0.027	-0.247
IT	-0.266	-0.300*	0.041	0.085	-0.144	-0.116	-0.158	-0.547***
R&D	-0.169	-0.341*	-0.088	-0.174	0.242	-0.013	-0.138	-0.250
Admin.	0.087	-0.136	0.083	-0.032	0.157	0.008	-0.061	-0.206
Finance	-0.279	-0.508***	-0.062	-0.132	-0.123	-0.382*	-0.336*	-0.512***

<sup>\*\*\*</sup> p < 0.001; \*\* p < 0.01; \* p < 0.05

By examining the correlation matrix above, Hypothesis 5 can be rejected. There is a significant level of correlation in only one of the examined functions internally, in finance – and the relation here is negative: the tighter the integration, the easier it is to realise synergies. The level of integration in finance also seems to have impact on synergy realisation in other functions as well. Similarly, significant relationships can be detected between the level of integration in IT and the rated difficulty of synergy realisation in manufacturing and finance, and between the integration level in R&D and synergy realisation in manufacturing.

All these significant correlation values are negative, indicating a relationship contrary to the relationship that Hypothesis 5 suggests. In cross-functional correlations, this suggests that high levels of integration in certain functions might ease synergy realisation in some other function. For example, when the finance, IT and R&D operations are integrated to a relatively high level, synergy realisation in manufacturing seems to become easier. In practice this would mean that when corporate control, management support system and product development are integrated, the chance to reap out synergies in manufacturing is higher.

## Expected benefits and synergy realisation

Hypothesis 6 suggests that a positive relationship prevails between the rate of expected benefits and the difficulty of synergy realisation, meaning that the higher the expectations are, the more difficult it will be to realise them. The correlation matrix of these two variables is pictured in Table 8.

Table 8. Spearman rank order correlation values between the rate of expected benefits and the difficulty of synergy realisation (n=48)

	Difficulty of synergy realisation							
Expectations	Sourc.	Manuf.	Distrib.	Sales	IT	R&D	Admin.	Finance
Sourc.	0.249	0.146	-0.325*	0.048	-0.032	-0.006	-0.229	-0.022
Manuf.	0.127	0.282	-0.167	0.192	0.166	-0.277	-0.284	-0.073
Distrib.	0.054	0.083	0.501***	0.274	0.167	0.026	0.063	-0.142
Sales	0.133	0.110	0.017	0.378**	0.104	-0.015	-0.121	-0.049
IT	0.003	-0.018	0.138	0.057	0.460**	-0.029	0.209	0.078
R&D	0.114	-0.294*	-0.138	-0.055	0.126	0.149	-0.020	-0.062
Admin.	-0.154	-0.306*	-0.198	-0.059	0.083	0.004	0.030	-0.219
Finance	0.372*	-0.041	0.179	-0.064	0.359*	0.277	0.188	0.426**

<sup>\*\*\*</sup> p < 0.001; \*\* p < 0.01; \* p < 0.05

The results above support Hypothesis 6. In four of examined eight functions, there is a significant, positive relationship between the variables internally. The only functions with clearly no such relationship are R&D and administration. It should be noted that the results do not tell anything about how high the finally realised synergies are, only that high expectations are more difficult to realise than low.

The hypothesised relationship also prevails in all three logistics functions, but only in distribution is this relationship significant. This is in accordance with the ideas of Best and Seger [20] who argue that synergy benefits in distribution are "easy to see but harder to get".

## Summary of synergies in logistics functions

There were no significant differences between the examined logistics functions in terms of the experienced difficulties in synergy. Synergy realisation in sourcing and distribution was rated to be slightly easier than in manufacturing.

In distribution, we found a strong relationship between synergy expectations and the level of integration. A significant relationship was also found between synergy expectations and the difficulty of synergy realisation. However, no significant relationship prevailed between the level of integration and the difficulty of synergy realisation. This indicates that high synergy expectations in distribution lead to high levels of integration in this function. However, the integration process can prove to be problematic. Furthermore, high expectations in distribution affect integration in other functions.

In manufacturing, no internal correlation existed between the expectations, integration and difficulties to realise synergies. However, the function was significantly effected by actions in other functions. The expectations in other functions had an impact on integration (distribution, sales and R&D), as well as on synergy realisation (R&D and administration) in manufacturing. The level of integration in other functions (IT, R&D and finance) had an impact on the difficulty of synergy realisation. This indicates that manufacturing seems to be more affected by what happens in other functions in an M&A situation, than by decisions regarding its own function.

No internal correlation existed within sourcing. Expectations in distribution, sales and R&D seemed to have an impact on the level of integration of sourcing, and expectations in finance effected synergy realisation in this function.

## Discussion: a framework for post-merger logistics analysis

As logistics scholars have not researched M&A, we have turned to general M&A frameworks which could be developed to suit logistics issues. Based on previous research work [2, 22, 31] and our empirical study, an initial framework is proposed for the deeper analysis of the interrelation between M&A and logistics (see Figure 5). The framework might initially be used to structure and illustrate impacting factors (with the exception of cultural factors) discussed in M&A research, and how these factors relate to logistics *structures*, *processes* and realised *synergies*.

First of all the type and motives of a certain M&A affect the M&A situation: while conglomerate M&A's might have little impact on logistics, vertical and horizontal presumably will have more. Horizontal M&A's probably have more impact on logistics structure and processes (and synergies), while vertical M&A's primarily affect the interfaces between the sequential firms. Different motives

for a horizontal M&A will have different affects on logistics (compare e.g. over-capacity with product or market extension M&A).

The framework consists of the three logistics sub-activities: sourcing, manufacturing and distribution, and distinguishes between logistics structures and processes. This 3x2 matrix can be used both in *pre-* and *post-merger analysis*, e.g. to map and evaluate the *combination fit and potential* for each "cell"; to map and evaluate *different levels of integration* and *realised synergies* for each "cell"; and finally to grasp the difficulties of realising synergies.

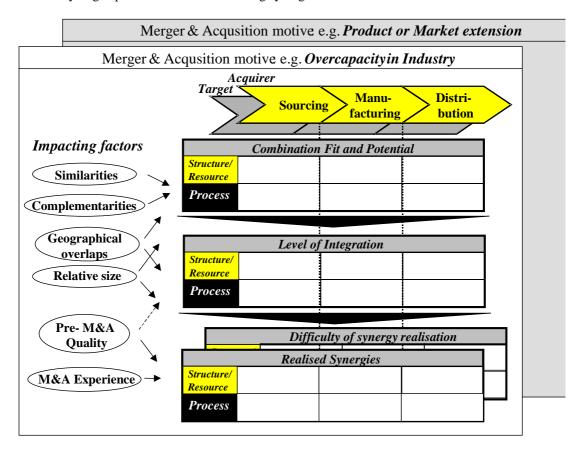


Figure 5. A framework for logistics impact in M&A's

According to Larsson and Finkelstein [22], realised synergies are the result of both the level of integration and the combination potential. From a logistics perspective, our hypothesis is that the most important factors affecting these elements are the similarities, complementarities and geographical overlaps of the companies' logistics structure and processes, the companies' relative size, the pre M&A quality of the processes, and finally the acquirer's M&A experience. Finally, a deep understanding of what the real difficulties in synergy realisation within logistics functions are would be important to be able to further improve the outcome of M&A's.

To exemplify the framework, we will elaborate briefly on distribution. The *distribution structure* is e.g. the network of warehouses and resources, and logistics service providers. The *distribution process* includes the activities and procedures that turn different input into delivery service, e.g. used within the warehouses and order taking processes. Similarities and complementarities apply both to structure and processes. If the two merging companies have served identical markets with similar service levels and have excess capacity, the potential is high to find cost efficiencies. If the companies have concentrated on different markets, the potential might be to increase market share by distributing one company's products in the others channels. The *level of integration* defines to what extent the distribution structures and processes could be combined: should two separate structures be used; should the "best parts" of the old solutions be combined; should one of the company's existing solution be used; or should a totally new solution be developed? This is dependent on the combination potential, but also on the relative size (and power) of the companies, and the quality of the old processes.

Finally, M&A experience may impact how well potential synergies are realised. Distribution activities might also impact the potential success of the M&A. Atlas Copco Tools, who in the 1990s centralised their global physical distribution, exemplifies this. After a successful centralisation, they

acquired some competitors (e.g. Desoutter and AEG). Atlas Copco's superior distribution set-up was the obvious choice for the combination. The centralised structure was easy to grow on (only adding more space at one location) and to quickly phase new products into [40, 41]. Here, the distribution set-up supported M&A activities, and was not a potential barrier in post-merger integration.

For researchers, we hope that the suggested framework can provide support both in defining research issues, and in finding patterns how M&A and logistics interact. Some issues for further research are:

- Could "best practices" in different M&A types be found that effectively combine logistics structures and processes?
- Are expected logistics synergies dependent on e.g. a) the aimed level of integration and/or b) factors such as the companies' relative size or the M&A motive?
- What are the biggest problems in synergy realisation in M&A situations from a logistics point of view?
- What is the impact of logistics on M&A success or failure?

If patterns on how M&A success or failure is related to logistics are identified, this could be structured in a similar framework. Practitioners could then use this to draw knowledge from other companies' experiences.

#### Conclusions

Although M&A's are an inseparable part of modern business, research shows no value creation to acquiring firms on average. This suggests that M&A are neither well understood in practice nor on a theoretical level. We reviewed literature both within M&A and logistics/SCM research to find how logistics issues in M&A situations have been discussed. As few contributions have been made within this area, we conclude that a research gap exists. Hence a questionnaire was sent to Swedish and Finnish manufacturing companies, which had used M&A's with the intention of enhancing their strategic position.

Logistics synergies seem to play an important role in M&A's, both as a direct motive and as an indirect affect of other important motives such as product or market extension. Synergy realisation in different functions was in general experienced to be easy rather than difficult. However, logistics functions were rated to be the most challenging in terms of synergy realisation after sales and R&D. It was also shown, that pre-merger expectations in distribution, sales, R&D and administration effect post-merger integration in several other functions. We also found, that the level of integration and difficulties in the synergy realisation process do not seem to be interdependent. Interestingly, the integration of IT, R&D and finance tends to make synergy realisation in manufacturing easier.

We conclude that the role of logistics in M&A situations leaves much to be investigated further. To support this relatively new area of research, we propose a conceptual framework to assess logistics impact in M&A's, together with a number of future research issues.

#### References

[1] Arislinger, Patricia L. and Thomas E. Copeland, "Growth Through Acquisitions: A Fresh Look," *Harvard Business Review*, Vol. 74, No. 1 (1996), pp. 126-133.

<sup>[2]</sup> Bower, Joseph L., "Not All M&As Are Alike - and That Matters," *Harvard Business Review*, Vol. 79, No. 3 (2001), pp. 93-101.

<sup>[3]</sup> Bresman, Henrik, Julian Birkinshaw and Robert Nobel, "Knowledge Transfer in International Acquisitions," *Journal of International Business Studies*, Vol. 30, No. 3, pp. 439-462.

<sup>[4]</sup> Sorensen, Donald E., "Characteristics of Merging Firms," *Journal of Economics and Business*, Vol. 52, No. 5 (2000), pp. 423-433.

<sup>[5]</sup> Katz, Jeffrey P., Astrid Simanek and James B. Townsend, "Corporate Mergers And Acquisitions: One More Wave To Consider," *Business Horizons*, January-February (1997), pp. 32-40.

<sup>[6]</sup> Garette, Bernard and Pierre Dussauge, "Alliances Versus Acquisitions: Choosing the Right Option," *European Management Journal*, Vol. 18, No. 1 (2000), pp. 63-69.

<sup>[7]</sup> Waldman, Don E. and Elizabeth J. Jensen, *Industrial Organization: Theory and Practice*, Boston: Addison Wesley Longman, 2001.

<sup>[8]</sup> Wall, Stuart and Bronwen Rees, *Introduction to International Business*, Malaysia: Pearson Education, 2001.

- [9] Agami, Abdel M., "Cross-Border Mergers among Multinational Businesses," *Multinational Business Review*, Spring (2001), pp. 77-87.
- [10] Taqi, S. J., "Catching Shadows: Success and Failure in the Search for Synergies," *The Journal of European Mergers and Acquisitions*, Vol. 3, No. 5 (1991), pp. 24-37.
- [11] Elsass, Priscilla M. and John F. Veiga, "Acculturation in Acquired Organizations: A Force-Field Perspective," *Human Relations*, Vol. 47, No. 4 (1994), pp. 431-453;
- [12] Lubatkin, Michael, "Mergers and the Performance of the Acquiring Firm," *Academy of Management Review*, Vol. 8, No. 2 (1983), pp. 218-225.
- [13] Meyer, Christine Benedichte, "Allocation Processes in Mergers and Acquisitions: An Organizational Justice Perspective," *British Journal of Management*, Vol. 12, No. 1 (2001), pp. 47-66.
- [14] KPMG Transaction Services, World Class Transactions: Insights into creating shareholder value through mergers and acquisitions, KPMG UK, 2001.
- [15] Walter, Gordon A. and Jay B. Barney, "Management Objectives in Mergers and Acquisitions," *Strategic Management Journal*, Vol. 11, No. 1 (1990), pp. 79-86.
- [16] Kitching, John, Acquisitions in Europe. Geneva: Business International, 1973.
- [17] Haspeslagh, Philippe C. and David B. Jemison, *Managing Acquisitions: Creating Value through Corporate Renewal*, New York: Free Press, 1991.
- [18] Pablo, Amy L., "Determinants of Acquisition Integration Level: A Decision-Making Perspective," *Academy of Management Journal*, Vol. 37, No. 4 (1994), pp. 803-836.
- [19] Shrivastava, Paul, "Postmerger Integration," *The Journal of Business Strategy*, Vol. 7, No. 1 (1986), pp. 65-76.
- [20] Best, William J. and Ron E. Seger, "Synergy Benefits In Distribution: Easy to See, Harder to Get," *The Journal of European Mergers and Acquisitions*, Vol. 2, No. 2 (1989), pp. 44-49.
- [21] Hilmola, Olli-Pekka, Andreas Norrman and Lauri Ojala, *Mergers Impact on Supply Chains in Ramp-up and Mature Industries: A System Dynamics Simulation*, The 7th International Symposium on Logistics and the 2nd International Symposium on Operations Strategy, Melbourne, Australia, 2002.
- [22] Larsson, Rikard and Sydney Finkelstein, "Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization," *Organization Science*, Vol. 10, No. 1 (1999), pp. 1-26.
- [23] Eccles, Robert G., Kersten L. Lanes and Thomas C. Wilson, "Are You Paying Too Much for That Acquisition?," *Harvard Business Review*, Vol. 77, No. 4 (1999), pp. 136-146.
- [24] Currie, Wendy, "The supply-side of IT outsourcing: the trend towards mergers, acquisitions and joint ventures," *International Journal of Physical Distribution and Logistics Management*, Vol. 30, No. 3/4 (2000), pp. 238-254.
- [25] Caputo, Mauro and Valeria Mininno, "Internal, vertical and horizontal logistics integration in Italian grocery distribution," *International Journal of Physical Distribution and Logistics Management*, Vol. 26, No. 9 (1996), pp. 64-90.
- [26] Ojala, Lauri, "Changing Logistical Patterns and Policies in Northern Europe," *International Journal of Logistics Management*, Vol. 2, No. 2 (1993), pp.42-54.
- [27] Grundy, Tony, "Strategy, Acquisitions and Value," *European Management Journal*, Vol. 14, No. 2 (1996), pp. 181-188.
- [28] Havila, Virpi and Asta Salmi, "Spread of change in business networks: an empirical study of mergers and acquisitions in the graphic industry," *Journal of Strategic Marketing*, Vol. 8, No. 2 (2000), pp. 105-119.
- [29] Anderson, Helén, Virpi Havila and Asta Salmi, "Can You Buy a Business Relationship?," *Industrial Marketing Management*, Vol. 30, No. 7 (2001), pp. 575-586.
- [30] Fletcher, Richard and Nigel Barrett, *Acquisition as a Phase in Internationalisation The End of the Road or a New Beginning?*, Presented at IMP group, Oslo, September 2001.
- [31] Singh, Harbir and Maurizio Zollo, *Creating Value in Post-Acquisition Integration Processes*, Philadelphia: The Wharton Financial Institutions Center: Working papers. University of Pennsylvania, 1998.
- [32] Kitching, John, "Why do mergers miscarry?," *Harvard Business Review*, November-December (1967), pp. 84-101.
- [33] "Planning to prove them wrong," The Economist, March 9th (2002), pp. 65.
- [34] A.T. Kearney, Corporate Marriage: Blight or Bliss? Chicago: A.T. Kearney, 1999.
- [35] Castrogiovanni, Gary J. and Garry D. Bruton, "Business Turnaround Processes Following Acquisitions: Reconsidering the Role of Retrenchment," *Journal of Business Research*, Vol. 48, No. 1 (2000), pp. 25-34.

- [36] Olie, René, "Culture and Institutions in International Mergers," *Organization Studies*, Vol. 15, No. 3 (1994), pp. 381-405.
- [37] Zollo, Maurizio, Strategies or Routines? Knowledge Codification, Path-Dependence and the Evolution of Post-Acquisition Integration Practices in the U.S. Banking Industry, Philadelphia: The Wharton Financial Institutions Center: Working papers. University of Pennsylvania, 1997.
- [38] Capron, Laurence, "The Long-Term Performance of Horizontal Acquisitions," *Strategic Management Journal*, Vol. 20, No. 11 (1999), pp. 987-1018.
- [39] Abrahamsson, Mats, Staffan Brege and Andreas Norrman, "Distribution Channel re-engineering organizational separation of the distribution and sales functions in the European market," *Transport Logistics*, Vol. 1, No. 4 (1998), pp. 237-249.
- [40] Norrman, Andreas, *Organising Time Based Direct Distribution in Industrial Firms* (in Swedish), Linköping: Linköping Studies in Science and Technology, Thesis No 515, 1995.
- [41] Abrahamsson, Mats and Staffan Brege, *Distribution Channel Reengineering*. Linköping: Research in Management, 1995.

**Lotta Häkkinen**, M.Sc., is a research associate at Turku School of Economics and Business Administration, Finland. Her current area of research is the impact of Mergers and Acquisitions on the logistics operations of companies.

**Dr. Andreas Norman** received his Doctorate in Logistics at Linköping University, Sweden with a dissertation on Organizing Timebased Distribution in Transnational Corporations. He worked in various teaching and research positions at Linköping University until 1997, when he started as a management consultant at A.T.Kearney. Since 1999 he is also a docent of International Logistics at the Turku School of Economics and Business Administration, and since 2000 he has been working part-time at Lund University. He has published several articles in conference proceeding and international journals on topics related to e.g. distribution, purchasing of advanced logistics services, and Supply Chain risk management.

**Ph.D. Olli-Pekka Hilmola** is currently working as an assistant professor at the Department of Marketing (International Business / Logistics) at Turku School of Economics and Business Administration in Finland. Before joining TSEBA, he has received M.Sc. as well as Ph.D. from the University of Vaasa, Finland. His core competencies include supply chain management, theory of constraints, system dynamics, and enterprise resource planning. He has published around 30 conference papers, and a number of journal articles and book chapters.

**Dr. Lauri M. Ojala** is a Professor of logistics at the Turku School of Economics and Business Administration (TSEBA). He is currently heading the Logistics Studies Program at the Department of Marketing in TSEBA. His research and development activities include international logistics, shipping economics, as well as transport and infrastructure markets. He has published in several international journals. Additionally, he has worked actively to establish and conduct Ph.D. training and workshops especially in the Nordic region.

## PAPER 2

Häkkinen, Lotta – Hilmola, Olli-Pekka (2005) Integration and synergies of operations in horizontal M&A. *International Journal of Management and Enterprise Development*, Vol. 2, Nos: 3/4, 288-305.

Republished with permission, Inderscience Publishers. http://www.inderscience.com/ijmed

# Integration and synergies of operations in horizontal M&A

## Lotta Häkkinen and Olli-Pekka Hilmola\*

Logistics, Department of Marketing Turku School of Economics and Business Administration Rehtorinpellonkatu 3, FIN-20500 Turku, Finland

Fax: +358 2 4814 280 E-mail: lotta.hakkinen@tukkk.fi

E-mail: olli-pekka.hilmola@tukkk.fi

\*Corresponding author

**Abstract:** This paper discusses the relation between operations management and horizontal mergers and acquisitions (M&A). Of special interest is the possibility for companies to benefit from M&A in the form of cost- and revenue-based synergies. The purpose of the paper is to provide an extensive and focused literature review of this topic, and to assess the importance of these issues in practical situations by illustrating and summarising previous research in the field. Results provide evidence of both synergies types and suggest that successful M&A will often benefit from both whereas an M&A strategy focusing solely on one type may contain drawbacks.

**Keywords:** operations management; mergers; acquisitions; synergies; literature review.

**Reference** to this paper should be made as follows: Häkkinen, L. and Hilmola, O-P. (2005) 'Integration and synergies of operations in horizontal M&A', *Int. J. Management and Enterprise Development*, Vol. 2, Nos. 3/4, pp.288–305.

**Biographical notes:** Lotta Häkkinen is currently completing her PhD at the Turku School of Economics and Business Administration (TSEBA) in Finland. Her research is concentrated on mergers and acquisitions, and how the post-merger integration process will have implications to logistics and operations. She has published some number of international conference papers and journal articles.

Olli-Pekka Hilmola is a Research Fellow of Logistics at TSEBA in Turku, Finland. Before joining TSEBA, he received his MSc and PhD from the University of Vaasa, Finland. Currently, Dr. Hilmola is also working as a Supply Chain Manager for electrical motor manufacturer in Rotatek Finland. His current research interests include supply chain management, theory of constraints, system dynamics, and total productivity management. He has published around 40 international conference papers, 15 journal articles and a number of book chapters. He is also a member of the editorial advisory board of Industrial Management and Data Systems.

#### 1 Introduction

Over the past decade, the magnitude of mergers and acquisitions (M&A) has expanded considerably and although the actual number of M&A has started to decrease, they continue to be large and substantive. As well as raising interest among practitioners, the amount of academic research and other publications on M&A related issues has increased substantially during past years [1]. Despite recent enthusiasm for M&A, numerous questions remain unanswered, which can be observed by viewing the high reported failure rates [2-3]. The conclusion on deal success or failure naturally depends on the adopted stakeholder perspective [4]. Stock market reactions to M&A announcements as well as long-term stock development are frequently used indicators of a deal's performance from the market's perspective. Such stock market-based studies have dominated M&A research. Though the perspective on M&A performance of these studies is narrow, at least some consensus has been reached on research practice and results [5]. On the other hand, studies that have adopted a strategic perspective to M&A performance, e.g., weighing the outcome to initial objectives, have reported a more mixed outcome. These studies have attempted to determine the long-term effects of M&A, but have failed to find consistent evidence of improved performance or productivity gains [6]. In addition to the lack of conclusive evidence on M&A success on average, even more ambiguity is related to how M&A can create value and the general concept of synergies [7].

The purpose of this paper is twofold. First, the paper aims at providing an extensive literature review of contemporary academic literature on the origin and realisation of M&A synergies from an operations management perspective. The second aim is to assess the importance of these issues in practical situations by illustrating and summarising the results of empirical research. Of special interest are cost- and revenue-based synergies derived from M&A activity [cf. 8–10]. The study focuses specifically on horizontal M&A, which involves companies that operate in the same industry and industry level. This M&A type is considered to be the most interesting when focusing on an operational level as these deals will most likely involve restructuring and provide opportunities linked to complementary resources due to related operations [cf. 11].

This paper is structured as follows: first, an overview of the strategic management stream of M&A research is presented. Second, the literature research process and its results are reported. This is followed by a more detailed examination and discussion of the contribution of the reviewed material to the relation between operations, such as purchasing, manufacturing, and distribution, and the phenomena of M&A. It is concluded that issues related to operations management, as such, aren't among the most popular topics of M&A research and much work remains to be done in this field in terms of both conceptual and empirical research. Though these issues are not crucial to all M&A, several of the reviewed empirical studies indicate that such matters frequently play a key role when achieving the objectives of contemporary M&A [for a comparison of different M&A waves, see *e.g.*, 12]. The goal of this study is to assess the importance of different sources of value creation in horizontal M&A from an operations management viewpoint and pave way for further empirical research.

### 2 Strategic management literature and synergies

The phenomenon of M&A has received a massive amount of academic interest over the past decades. Due to the ever-growing amount of scientific research linked to this research area, researchers have been eager to develop various categorisations to divide literature into different streams [1,7,13–14]. This paper focuses on the strategic management stream, which is central when discussing M&A related synergies. Studies in this stream have traditionally concentrated on explaining value creation through increased market power and efficiency gains through scale economies, which represent the tradition of industrial organisation economics [13,15–16; see also *e.g.*, 17]. However, recently, resource-based theories have gained ground in this stream [18–19; see *e.g.*, 20–23]. The strategic management stream adopts the perspective of an individual company and discusses the motives for different types of mergers, and the effects of M&A on company performance. Strategic scholars have been primarily concerned with questions such as which acquisition types are likely to succeed from market, accounting, or managerial perspectives [1].

## 2.1 Strategic management literature and synergies

## 2.1.1 Synergies as a M&A motive

Reasons for M&A are numerous and each merger has its own set of different motives behind it. A number of researchers have attempted to categorise mergers according to their motives, but an unambiguous classification seems to be hard to develop since in practice, the motivation for a certain merger is often a combination of objectives [see *e.g.*, 24]. Despite the variety of motives, most M&A are expected to result in some kind of synergistic benefits to the acquiring company [25]. However, in some cases, mergers have also been used to realise short-term financial benefits, to reduce risk by spreading activities into fields with different business cycles, or to serve purely managerial objectives [*e.g.*, 25–26].

Basically, synergies can be divided into two categories when discussing horizontal M&A [8–10,27], namely:

- 1 cost-based synergies (derived from economies of scale and scope; drawing from cost efficiency theories and industrial organisation economics)
- 2 revenue-based synergies (derived from resource redeployment; drawing from the resource-based view).

Cost efficiency theories and economics literature base their synergy argumentation on issues of economies of scale and scope [8]. The former gained ground during the early parts of the last century from the mass production system of Model T, but as well from the low volume aircraft manufacturing. Both of these classical cases argue that total costs will decline by certain percentage amount, as production volumes for particular end-item double – as Maital [28] argues, economies of scale (reductions in average and marginal costs) will happen due to ever larger operations. The early 20th century Ford Motor Company could be seen as an icon of economies of scale: Model T's list price in real terms decreased with more than 70% in only 20 years [29]. In the mean time, Henry Ford was able to increase production line worker wages to the higher levels, and gather in a very short time one of the world's largest fortunes [30]. Similar developments have been

reported ever since [e.g., 29,31–33]. However, recent research suggest that scale economies is not anymore a by-product of autonomous direct labour learning, but instead, it is a result from shared problem solving effort between different functions within the company [34–37].

Economies of scope was identified as a new cost-based strategy in 1970s [38], when Japanese car manufacturers were able to offer simultaneously low price, high variety and high quality [39]. One of the characteristics of scope economics is the increased number of product alternatives, and lower level of costs, as compared to an individual product case. The effect could be clarified with the use of product platforms [40-42], joint production [8,43], and alliances (like airline industry's 'code sharing'). Most often, companies strive to use same basic platforms in their products (e.g., cars, aeroplanes and consumer electronics); the development costs for a totally new platform are rather high, but the marginal costs to develop derivatives are very low. Marginal costs will not only decline in development activities, but also in purchasing and production, since offered products have significant similarities in purchased items (higher purchasing volume and lower inventory levels) and in used production technology (lower investments and labour costs). The use of scope economies has resulted in some occasions in astronomically high number of product variants; as Holweg and Pil [44] have shown, in car industry it is not so rare to find out a model, which has millions or billions of product derivatives [see also 45]. The exploitation of scale and scope economies through M&A is usually achieved through asset divestiture, i.e., the elimination of redundant activities and inefficient management practices. This is due to market inefficiencies, i.e., transaction costs, which prevent firms from using market contracting to rationalise and specialise their assets [15-16,46]. Some fields of M&A research perceive asset divestiture as evidence of M&A failure. However, from a strategic perspective, M&A provide a way to restructure company resources and asset divestiture is a logical consequence of this process [19,47].

The second synergy type, i.e., revenue-based synergies, acknowledges the possibility for the acquirer and the target to achieve a higher level of sales growth together than either company on its own by combining their resources [e.g., integrating two different technologies together in new products as 22 and 48 have shown]. These synergies are harder to estimate and monitor because they involve external variables, such as customer reactions [see e.g., 49]. Horizontal M&A can enhance revenue in at least two ways: by increasing geographical and product market coverage, or by enhancing the firms' innovation capability. Greater market coverage allows the merged firm to either sell existing products to new customer segments, or enables the firm to increase the variety of product lines and thus cross-sell and bundle products, which may have greater customer value than each product separately. Additionally, firm revenues can be increased by enhanced innovation capability [50]. This involves the transfer of superior innovation skills and knowledge from one firm to enhance the product features, organisational practices, or marketing capabilities of the other firm [8]. This kind of resource transfer is an important source of synergy especially in cross-border M&A [25]. The exploitation of revenue-based synergies through M&A is usually achieved through resource redeployment, i.e., the use by a target or acquiring firm of the other's resources, which includes both the physical transfer of resources to new locations and the sharing of resources without physical transfer [8]. The use of M&A as a mechanism for such redeployment is explained through market failure arguments. Market imperfections create complications in the pricing and transfer of, especially intangible, assets and increase the associated risks of establishing arm's length contracts to access such resources [46,51–52].

This typology does not explicitly include the effect of M&A on market power and the value creation potential of these effects. Capron [8] argues that market power motives are often intertwined with scale-based benefits [cf. 15]. However, the actual benefits will be visible on the revenue side as prices in an industry rise consequent to the increased control of a dominant firm [43,53]. Basically, an increase in market power may also decrease, *e.g.*, unit material costs due to increased control towards suppliers (cf. economies of scale).

### 2.1.2 Synergy potential and realisation in horizontal M&A

Traditionally, literature in this field has emphasised market power and scale efficiencies as incentives for horizontal M&A. These arguments are most relevant in stable industries. However, many corporations operate in dynamic environments where there is frequent technical innovation [50,54], regulatory change [implications of environmental regulations, 55], and increased globalisation [56–57]. Sustained market power or gained scale efficiencies are likely to gradually erode in dynamic industries [8]. Strategy researchers have argued that companies use M&A to restructure their own merging businesses as a response to commercial change rather than to reap scale benefits. Restructuring can increase company efficiency and effectiveness, for example, by changing the scope of business operations, rather than merely seeking short-term gains through increased scale efficiencies in existing operations [8,58].

In line with this argumentation, empirical studies have recently shown that the integration of complementary resources actually holds greater synergy potential than the integration of identical resources [e.g., 58]. Logically, M&A will result in above average returns only when uniquely valuable synergistic assets are involved. These kinds of assets exist when either other potential acquirers do not have adequate information about the potential asset combination, or no other combination of firm assets could produce the same value [see 59 on private synergies]. Highly similar resources are generally easy for the whole market to detect whereas complementary resources provide synergistic opportunities, which are often not so obvious to all market players due to information asymmetry. M&A which combine complementary resources provide potential to create a unique and difficult-to-imitate resource bundle. This kind of competitive advantage can be sustained for a long period of time, thus leading to higher long-term company performance [60]. Such complementary resources can be different products, market access or valuable and transferable know-how [1]. M&A involving firms with highly similar resources may produce more short-term value due to economies of scale, which are assumed to be relatively easy to realise. However, these types of mergers rarely create sustainable competitive advantages unless they produce substantial, monopoly-like, market power [60].

Montgomery and Wilson [11] argue that though the synergy potential in horizontal M&A is higher than for unrelated deals, the efforts needed to realise this potential are typically great. Therefore it should be stressed that potential alone is no guarantee for actual value creation. For example, the integration of highly similar resources in horizontal M&A frequently results in severe employee resistance, which can harm and slow down the integration process [1]. Thus, synergy potential requires managerial

actions, such as M&A integration planning and post-acquisition collaboration mechanisms, to be realised [*e.g.*, 7,61–62]. In summary, sources of value creation in horizontal M&A are numerous. However, the actual realisation of various synergies depends largely on the resource combination of the merging companies and on the efforts corporate management devotes to post-merger management.

## 3 Review of empirical studies on horizontal M&A

One of the aims of this paper is to provide a clearly focused and systematic literature review of contemporary academic literature on operations integration and synergies in horizontal M&A. The literature review reported by Häkkinen *et al.* [63] concluded that few contributions had been made in this area. The review covered a sample of books, academic journal articles, and conference papers by both M&A and logistics researchers, and also some nonacademic publications, which had been gathered using a 'snowballing' technique. Here, a more systematic approach is adopted towards the reviewed material: the review is limited to 20 academic journals and to articles published in them from 1998 to 2002. Also, the focus is specifically on finding evidence of the possibility for companies to benefit from horizontal M&A in the form of cost- and revenue-based synergies. The selected journals are listed in Table 1.

**Table 1** Reviewed journals and the number of reviewed articles

Journal	M&A articles	Articles with implications to operations management
Strategic Management Journal	19	5
Academy of Management Journal	6	0
Harvard Business Review	24	5
Journal of Business	2	0
Journal of Management	6	1
Journal of Management Studies	8	0
Administrative Science Quarterly	5	0
Organisation Science	10	1
Journal of International Business Studies	9	1
Long Range Planning	8	0
Int. Journal of Logistics Management	0	0
Journal of Business Logistics	0	0
Int. Journal of Physical Distribution and Logistics Management	1	0
Journal of Supply Chain Management*	0	0
Journal of Marketing	1	1
European Management Journal	21	3
MIT Sloan Management Review	8	0
Supply Chain Management Review	2	1
European Journal of Purchasing and Supply Management	0	0
Int. Journal of Logistics: Research and Applications	2	1
Total	132	19

Note: \* former Int. Journal of Purchasing and Materials

The first ten journals were chosen from the Social Sciences Citation Index listed under the disciplines of business, economics, or management, which had published the most M&A related articles during this period. The remaining ten journals were selected mainly from the logistics and supply chain management disciplines to underline the operations management aspect of the literature review (see Table 1). Nine journals were selected based on small sample survey carried out at the Joint-Nordic PhD Workshop on Case Study Research in Logistics, which was held in Turku, Finland (January 2003). Based on the survey results, nine more journals were selected from the top 12 periodicals, and one more journal was added from the previous literature review by Häkkinen *et al.* [63].

The review was limited to articles published from 1998 to 2002, as the aim was to get a picture of contemporary research in this field. First, the article abstracts of the chosen journals from this time period were scanned using the ProQuest Direct database search engine. The search was performed using the words 'merger', 'acquisition', 'mergers', 'acquisitions' and 'consolidation'. The search engine also automatically expanded the search to include the words 'alliance' and 'alliances'. These abstracts were later excluded. The abstracts of the 263 articles were then read to extract the articles actually dealing with M&A from the articles related to alternate meanings of the word 'acquisition'. For example, several of the excluded articles referred to the acquisition of information or knowledge, not actual corporate acquisitions. After this screening, 132 articles remained of which only five were published in the latter group of journals. These 132 articles were then read for a second time to establish, whether the articles might have relevance in terms of operations management related issues. Finally, 19 articles were established as having implications to matters related to operation management and related synergies in M&A situations.

#### 3.1 Results

Of these 19 articles, over half were published either in the *Harvard Business Review* or in the *Strategic Management Journal* (Table 1). Typically the articles presented the results of M&A surveys, or focused on illustrating matters related to M&A strategy and integration through brief case descriptions. In this context, operational effects were featured either as examined variables of a larger survey, or were mentioned in brief in connection to potential synergies or to encountered problems in the post-merger integration phase. A full list of these 19 articles featuring their main findings is given in the Appendix.

If it is assumed that the 19 articles found here represent the total amount of such articles in the whole sample of 132 M&A related articles, they would account for 14% of this sample. These 19 articles were classified based on whether the focus, from an operations management perspective, was on resources (*i.e.*, knowledge, physical assets, human capital, and other tangible and intangible factors that a certain business owns or controls) or processes (*i.e.*, patterns of interaction, coordination, communication, and decision making that employees use to transform resources into products and services). This division is based on a framework first presented by Christensen and Overdorf [64]. The framework was originally structured for examining problems that arise in companies during disruptive change, but it has also been used to analyse M&A effects [*e.g.*, 65]. From a logistical point of view, company resources and processes can either be tied to upstream operations (*e.g.*, manufacturing, related R&D and purchasing) or to downstream operations (*e.g.*, distribution, related networks and relationships) both of which can

contribute to M&A-related synergies. The articles were also categorised in terms of this upstream-downstream distinction. The used categories were not exclusive, so that articles discussing multiple themes appear in more than one category (Tables 2 and 3 in below).

 Table 2
 Issues related to operations management in the reviewed articles

	Issues re	Issues related to operations management				
	Upstream		Downstream			
	Resources	Processes	Resources	Processes		
No. of reviewed articles (n = 19)	15	4	15	1		
% of reviewed articles (n = 19)	79%	21%	79%	5%		
% of total sample of M&A articles (n = 132)	11%	3%	11%	1%		

**Table 3** Possible sources of operations synergies in horizontal M&A

	Cost-based synergies	Revenue-based synergies
Downstream operations	Increased efficiency in warehousing and outbound logistics due to consolidation and redeployment of superior processes (articles 7, 8, 11, 18)	Redeployment of complementary distribution resources, <i>i.e.</i> distribution channels, customers, geographical spread (articles 1, 3, 4, 8, 9, 10, 15, 16, 17, 19)
Upstream operations	Increased efficiency in production due to consolidation; cost savings in purchasing due to increased market power towards suppliers (articles 2, 7, 8, 10, 11, 15, 16, 19)	Redeployment of intangible resources in production and R&D ( <i>e.g.</i> technologies) and superior processes (articles 11, 15, 17, 18, 19)

As can be noted from Tables 2 and 3, both upstream and downstream operations were touched upon in reviewed articles. A common topic regarding downstream operations, which often featured issues relating to distribution, was the redeployment of marketing resources. This was often identified as an important motive for international M&A and an attractive source of value creation. Upstream operations were often linked to the discussion on consolidating manufacturing operations and gaining synergy benefits in purchasing due to increased negotiation power. The integration and value creation potential of resources had attracted more interest among the article authors than the role of processes in M&A situations. This may be due to the fact that processes are more intangible and can be tightly embedded in the host organisation, and are therefore harder to grasp and also to measure, *e.g.*, by means of a survey. Regarding value-creation, operations management issues were mentioned both in relation to cost-based synergies and market power gains [*e.g.*, 66–67] as well as to revenue-based synergies [*e.g.*, 68–69]. The content of the reviewed articles will be discussed in more detail in the following section.

## 4 Findings: the role of operations synergies in M&A

Merger and acquisition literature has mainly concentrated on general issues of strategic management, economics, and human resource management within the respective research streams. Operations management type issues, as such, are not among the most popular topics. Despite this, academic research has touched upon these issues although the primary focus has been elsewhere. Case studies especially often provide empirical evidence on synergies derived from the integration of operations. This section discusses these matters through the literature review findings and presents examples of successful and unsuccessful synergy realisation.

## 4.1 Potential operations synergies in horizontal M&A

## 4.1.1 Cost-based synergies and market power gains

The reviewed studies suggest that the possibility to benefit from operations synergies can be an important motive for horizontal M&A. For example, the expected synergies of the horizontal merger of Kellogg and Keebler Foods resulting from cost savings (*e.g.*, purchasing, capacity rationalisation, improved logistics and warehousing) were estimated to be \$170 million [66]. Several other case studies confirm that especially objectives concerning manufacturing are often linked to seeking economy of scale synergies from consolidating production facilities [*e.g.*, 67].

However, research results show that the consolidation of identical overlapping business resources and processes can, in some cases, decrease the potential for creating value and hinder the integration process. The elimination of overlapping resources may prove to be costly and cause employee resistance. In contrast, the complementarity of product ranges, for example, increases the potential for cooperation and value creation [1], which supports the ideas of Harrison *et al.* [58].

Horizontal M&A also affect company market power both in relation to customers and suppliers, and reaping benefits from the increase in market power is often mentioned as one M&A objective [e.g., 66]. The benefits of increased market power typically provide easy access to increased earnings with few internal constraints. However, poor M&A management can also induce problems in these areas and hinder the realisation of synergies [e.g., 70].

## 4.1.2 Revenue-based synergies

M&A is frequently used as a mechanism to exchange capabilities that otherwise would not be possible to efficiently get hold of through traditional market mechanisms [18,43,68]. This exchange consists both of the efficient redeployment of existing firm resources as well as the creation of capabilities from the newly formed resource bundle. The importance of downstream assets, such as distribution channels and sales forces, as a motive for cross-border mergers in particular, is great [68,71]. Furthermore, distribution networks are difficult to establish rapidly due to the complexity of social organisations and processes, and thus M&A offer a valid option for market entry [69].

Complementary resources of the organisations were one of the key motives for a number of the reviewed cases. In many cases, one of the companies had or was developing a product, which could be distributed more efficiently through the other company's complementary distribution channels [e.g., 66–67]. For example, in the case

of Unilever and Cheseborough-Ponds, each company had strengths in its own home market but these strengths were complementary and transferable to the distribution of the other's products [60]. However, the compatibility of company resources is by no means restricted to geographical spread. In the Kellogg and Keebler food case, Keebler filled a big strategic hole in direct distribution. Kellogg was developing a new line of snack foods, but had no system to distribute the products into points of impulse buying, *e.g.*, convenience stores and petrol stations. Keebler, on the other hand, had such a distribution system, but was lacking volume, which Kellogg's products thereby provided [66].

## 4.2 Realising operations synergies in horizontal M&A

In this section, the aim is to illustrate and summarise the issues discussed in previous sections linked to the source and realisation of synergies in different M&A situations. This is done by presenting two M&A cases from previously published studies, as well as summarising potential synergies derived from the integration of operations in a tentative framework. The first case highlights problems related to the realisation of cost-based synergies in manufacturing. The second case gives an example of successful resource redeployment and its effect on both cost- and revenue-based synergies.

Case Lincoln Electric [from Hastings, 70]

During 1987–1991 the American Lincoln Electric implemented a program of rapid foreign expansion which involved both building three green field plants and purchasing the operations of eight manufacturing plants via M&A. Lincoln anticipated tremendous opportunities to reduce costs in the targets through the redeployment of its own manufacturing processes. Synergies were also expected from the redeployment of the targets' European distribution channels to distribute Lincoln's existing products. However, due to insufficient international expertise of corporate management and poor integration management, the majority of the acquired units continued to make substantial losses in 1993. Lincoln had hoped that through inexistent integration management, the performance of the acquired manufacturing operations could be improved by offering its own efficient manufacturing process as a 'best practice'. The acquirer had adopted a passive role and failed to take into account cultural differences, for example, in employee incentives. The European recession and the lack of marketing efforts to push Lincoln's products through the acquired distribution channels led to an overcapacity situation. Only after making significant changes in corporate management and scaling down European operations, the corporation was able to slowly turn around and generate profit by mid-1994.

One thing, which is often stressed when discussing the integration process, is speed. The faster the two companies are brought together, the more likely the M&A is to live up to its expectations. Speedy integration provides visible benefits more quickly and also diminishes uncertainty within the organisation [72]. In the Lincoln Electronics case, integration was slow and its management poorly planned and carried out. As a result, even 'easy' synergies from increasing operational efficiency were not realised as the acquired companies remained physically and organisationally separate and no support was given to facilitate resource redeployment and knowledge transfer between the two companies [70].

As in the Lincoln Electronics case, one of the major objectives of international M&A is often to obtain control of the target's external relationships, *e.g.*, customer and supplier contacts. A general assumption seems to be that through M&A, the acquirer can take over the target's market position in the host country leaving existing business relationships intact. However, this is not necessarily the case, as also other empirical studies have shown [*e.g.*, 49].

Case Ispat International N.V. [from Sull, 73]

This case profiles the M&A strategy of Ispat International N.V, which grew from a single factory producing steel rod to the fourth largest steel rod producer in the world in less than a decade through a series of M&A of underperforming steel factories. Most of these acquisitions followed a similar pattern. As governments around the world privatised their steel industries, Ispat negotiated favourable prices to acquire underperforming factories from government owners. After negotiating a low price and favourable terms, Ispat rapidly improved the acquired plant's operations by leveraging its expertise in DRI (Direct Reduced Iron) and electric-arc furnace technologies and related know-how. The acquirer also invested heavily to remove bottlenecks in production and to improve quality. As production volumes grew, Ispat used its local sales networks located around the globe to cross-sell products to a wide customer base. Quality was improved by introducing management practices, such as daily production reports and meetings and quality programs, to develop cost-consciousness and discipline in the acquired factories. Cost savings came also through global purchasing synergies. Ispat increased production volumes and improved profitability in all the factories it acquired, although the level of improvement varied by plant.

In the Ispat case, the redeployment of intangible resources was effectively used in several M&A deals. This resulted in operational efficiencies, benefits from the increase in market power, and a rapid increase in sales. The case illustrates how the two types of synergies presented in this paper rarely occur separately. Also the case gives an example of the successful integration of complementary resources. However, again it must be stressed that the pure existence of complementary resources is no guarantee for synergies, but managers must work cooperatively after the M&A to create synergy through the integration process.

Table 3 attempts to illustrate the possibility of benefiting from different synergies derived from the integration of operations in horizontal M&A. The given examples are based on reported findings of previous M&A research from the reviewed literature (see also discussion above).

The reviewed literature provides most evidence of the role of synergies in the M&A of companies with highly similar resources, and cross-border M&A of companies with complementary resources. The former type of M&A is closely connected to synergies derived from the increase in market power and operational efficiency, whereas in the latter type an important source of synergy is the redeployment of tangible and intangible resources. All in all, it can be concluded that potential synergies derived from the integration of operations exist in several different types of horizontal M&A, and previous research provides examples of both successful and unsuccessful realisation of this potential. Some of the reviewed studies also stressed that M&A are not always driven by a quest for synergies, but in some cases M&A may also be the only option to break into a highly integrated market or supply chain [74–75].

#### 5 Conclusion

The past decade has experienced a substantial increase in both merger and acquisition activity, and in the amount of related research and literature. Despite the extensive amount of interest towards M&A, the high failure rate in achieving the initial strategic objectives suggests that this phenomenon is generally still not well understood in practice, nor on a theoretical level. Theoretical studies are fragmented and several important research gaps still exist.

This paper has strived to start filling one of these gaps by digging into issues related to cost- and revenue-based synergies derived from operations integration. The literature review results give evidence of both types of synergies in company operations. Although presented separately here, in practice, a successful M&A will often benefit from both synergy types whereas an M&A strategy focusing solely on one type may have some drawbacks. Rather, the examined cases argue in favour of combining synergies both in terms of synergy types and the affected operations (see Table 3) [e.g., 66,71,76]. Cost-based synergies are generally linked to the upstream operations of companies. For example, the integration of production operations may be perceived as baring substantial synergy potential. However, a number of empirical cases have provided some evidence that realising durable cost-savings by merely consolidating similar operations can be troublesome [1,58]. Rather, the realisation of cost-based synergies also requires active integration management and can be assisted by fostering related knowledge transfer. Synergies in purchasing can largely be explained through economies of scale and scope, and are generally less cumbersome to realise than cost-based synergies in production. Revenue-based synergies can result from a number of redeployment measures. Typically, they are linked to the redeployment of complementary distribution resources or intangible resources in production and R&D. Contemporary M&A are often motivated by this possibility to rapidly increase sales. However it should be noted that focusing more on revenue than profit in a company's M&A strategy will ultimately result in an untenable situation as the whole industry evolves [cf. 77].

The aim of this paper has been to illustrate that though many contributions concerning the relation between operations management and M&A have not yet been made, these issues are frequently encountered and considered in a variety of actual M&A situations. In addition to providing several different types of potential benefits (e.g., swift access to new geographical markets or critical technologies and capabilities), studies show evidence that the integration of company operations also can create a number of unexpected problems. Hopefully, this paper has successfully underlined the importance of these issues and given an initiative to researchers to perform further empirical studies related to these matters. Research has hitherto concentrated on studying M&A performance on average using either secondary accounting or market-based data or questionnaire responses. However, when studying such a complex phenomenon as M&A, more relevant results could be obtained by using rich in-depth data from certain case companies or industries or combining qualitative secondary data though metaanalysis.

#### References

300

- 1 Larsson, R. and Finkelstein, S. (1999) 'Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: a case survey of synergy realization', *Organization Science*, Vol. 10, No. 1, pp.1–26.
- 2 Rappaport, A. and Sirower, M.L. (1999) 'Stock or cash? The trade-offs for buyers and sellers in mergers and acquisitions', *Harvard Business Review*, Vol. 77, No. 6, pp.147–158.
- 3 Bruner, R.F. (Ed.) (2004) 'Does M&A pay?', Applied Mergers & Acquisitions, Forthcoming.
- 4 Seth, A. (1990) 'Value creation in acquisitions: a re-examination of performance issues', *Strategic Management Journal*, Vol. 11, No. 2, pp.99–115.
- 5 Hopkins, H.D., Chagantia, R., Kotabea, M. and Co-editors (1999) 'Cross-border mergers and acquisitions: global and regional perspectives', *Journal of International Management*, Vol. 5, No. 3, pp.207–239.
- 6 Kaplan, S.N. (Ed.) (2000) Mergers and Productivity, Chicago: National Bureau of Economic Research.
- 7 Haspeslagh, P.C. and Jemison, D.B. (1991) *Managing Acquisitions: Creating Value Through Corporate Renewal*, New York: Free Press.
- 8 Capron, L. (1999) 'The long-term performance of horizontal acquisitions', *Strategic Management Journal*, Vol. 20, No. 11, pp.987–1018.
- **9** Houston, J.F., James, C.M. and Ryngaert, M.D. (2001) 'Where do merger gains come from? Bank mergers from the perspective of insiders and outsiders', *Journal of Financial Economics*, Vol. 60, Nos. 2–3, pp.285–331.
- 10 Eccles, R.G., Lanes, K.L. and Wilson, T.C. (1999) 'Are you paying too much for that acquisition?', *Harvard Business Review*, Vol. 70, No. 4, pp.136–146.
- 11 Montgomery, C. and Wilson, V. (1986) 'Mergers that last: a predictable pattern', *Strategic Management Journal*, Vol. 7, No. 1, pp.91–96.
- 12 Katz, J., Simanek, A. and Townsend, J. (1997) 'Corporate mergers and acquisitions: one more wave to consider', *Business Horizons*, Vol. 40, No. 1, pp.32–40.
- 13 Birkinshaw, J., Bresman, H. and Håkanson, L. (2000) 'Managing the post-acquisition integration process: how the human integration and task integration processes interact to foster value creation', *Journal of Management Studies*, Vol. 37, No. 3, pp.395–425.
- 14 Weston, J.F., Siu, J.A. and Johnson, B.A. (2001) *Takeovers, restructuring, and corporate governance*, 3rd edition, Upper Saddle River, NJ: Prentice Hall.
- 15 Scherer, F.M. and Ross, D. (1990) *Industrial Market Structure and Economic Performance*, 3rd edition, New York: Houghton Mifflin.
- 16 Dranove, D. and Shanley, M. (1995) 'Cost reductions or reputation enhancement as motives for mergers: the logic of multihospital systems', *Strategic Management Journal*, Vol. 16, No. 1, pp.55–74.
- 17 Woodward, J. (1980) Industrial Organization: Theory and Practice, 2nd edition, New York: Oxford University Press.
- 18 Capron, L., Dussauge, P. and Mitchell, W. (1998) 'Resource redeployment following horizontal acquisitions in Europe and North America, 1988–1992', *Strategic Management Journal*, Vol. 19, No. 7, pp.631–661.
- 19 Capron, L., Mitchell, W. and Swaminathan, A. (2001) 'Asset divestiture following horizontal acquisitions: a dynamic view', *Strategic Management Journal*, Vol. 22, No. 9, pp.817–844.
- 20 Wernerfelt, B. (1984) 'A resource-based view of the firm', Strategic Management Journal, Vol. 5, No. 2, pp.171–180.
- 21 Penrose, E. (1959) The Theory of the Growth of the Firm, Oxford: Basil Blackwell.
- 22 Prahalad, C.K. and Hamel, G. (1990) 'The core competence of the corporation', *Harvard Business Review*, Vol. 38, No. 3, pp.79–91.

- 23 Teece, D., Pisano, G. and Shuen, A. (1997) 'Dynamic capabilities and strategic management', *Strategic Management Journal*, Vol. 18, No. 7, pp.509–533.
- 24 Brouthers, K., van Hastenburg, P. and van den Ven, J. (1998) 'If most mergers fail why are they so popular?', *Long Range Planning*, Vol. 31, No. 3, pp.347–353.
- 25 Seth, A., Song, K.P. and Pettit, R.R. (2002) 'Value creation and destruction in cross-border acquisitions: an empirical analysis of foreign acquisitions of U.S. firms', *Strategic Management Journal*, Vol. 23, No. 10, pp.921–940.
- **26** Waldman, D.E. and Jensen, E.J. (2001) *Industrial Organization: Theory and Practice*, Boston: Addison Wesley Longman.
- 27 Ansoff, H.I. (1965) Corporate Strategy: An Analytic Approach to Business Policy for Growth and Expansion, New York: McGraw Hill.
- 28 Maital, S. (1994) Executive Economics Ten Essential Tools for Managers, New York: Free Press.
- **29** Abernathy, W.J. and Wayne, K. (1974) 'Limits of the learning curve', *Harvard Business Review*, Vol. 52, No. 5, pp.109–119.
- 30 Chandler, A.D. (1986) 'The evolution of modern global competition', in M.E. Porter (Ed.) Competition in Global Industries, Boston, MA: Harvard Business School Press, pp.405–448.
- 31 Hirschmann, W.B. (1964) 'Profit from the learning curve', *Harvard Business Review*, Vol. 42, No. 1, pp.125–139.
- **32** Boston Consulting Group (1970) *Perspectives on Experience*, 2nd printing, USA: The Boston Consulting Group.
- 33 Womer, N.K. (1984) 'Estimating learning curves from aggregate monthly data', *Management Science*, Vol. 30, No. 8, pp.982–992.
- 34 Adler, P.S. and Clark, K.B. (1991) 'Behind the learning curve: a sketch of the learning process', *Management Science*, Vol. 37, No. 3, pp.265–281.
- 35 Hatch, N.W. and Mowery, D.C. (1998) 'Process innovation and learning by doing in semiconductor manufacturing', *Management Science*, Vol. 44, No. 11, pp.1461–1477.
- 36 Sinclair, G., Klepper, S. and Cohen, W. (2000) 'What's experience got to do with it? Sources of cost reduction in a large specialty chemicals producer', *Management Science*, Vol. 46, No. 1, pp.28–45.
- 37 Almgren, H. (2000) 'Pilot production and manufacturing start-up: the case of Volvo S80', International Journal of Production Research, Vol. 38, No. 17, pp.4577–4588.
- **38** Levitt, T. (1983) 'The globalisation of markets', *Harvard Business Review*, Vol. 61, No. 3, pp.92–102.
- 39 Stalk, G. (1984) Kaisha: The Japanese Corporation, New York: Basic Books.
- **40** Meyer, M.H. and Lehnerd, A.P. (1997) *The Power of Product Platforms Building Value and Cost Leadership*, New York: Free Press.
- **41** Feitzinger, E. and Lee, H.L. (1997) 'Mass customization at Hewlett-Packard: the power of postponement', *Harvard Business Review*, Vol. 75, No. 1, pp.116–121.
- 42 Sutton, J. (1998) Technology and Market Structure, Boston, MA: MIT Press.
- **43** Seth, A. (1990) 'Sources of value creation in acquisitions: an empirical investigation', *Strategic Management Journal*, Vol. 11, No. 6, pp.431–446.
- **44** Holweg, M. and Pil, F.K. (2004) *The Second Century: Reconnecting Customer and Value Chain Through Build-to-Order*, Cambridge, MA: The MIT Press.
- **45** Pil, F.K. and Holweg, M. (2001) 'Successful build-to-order strategies. Start with the customer', *MIT Sloan Management Review*, Vol. 43, No. 1, pp.74–83.
- **46** Teece, D.J. (1982) 'Towards economic theory of the multi-product firm', *Journal of Economic Behavior and Organization*, Vol. 3, pp.39–63.

- 47 Dranikoff, L., Koller, T. and Schneider, A. (2002) 'Divestiture: strategy's missing link', Harvard Business Review, Vol. 80, No. 5, pp.74–83.
- **48** Prahalad, C.K. (1993) 'The role of core competencies in the corporation', *Research Technology Management*, Vol. 36, No. 6, pp.40–47.
- **49** Havila, V. and Salmi, A. (2000) 'Spread of change in business networks: an empirical study of mergers and acquisitions in the graphic industry', *Journal of Strategic Marketing*, Vol. 8, No. 2, pp.105–119.
- 50 Helo, P.T., Hilmola, O.-P. and Maunuksela, A. (2004) 'Managing the productivity of product development a system dynamics analysis', *International Journal of Management and Enterprise Development*, Vol. 1, No. 4, pp.333–344.
- 51 Chi, T. (1994) 'Trading in strategic resources: necessary conditions, transaction cost problems, and choice of exchange structure', *Strategic Management Journal*, Vol. 15, No. 4, pp.271–290.
- 52 Williamson, O.E. (1975) Markets and Hierarchies: Analysis and Antitrust Implications, New York: Free Press.
- 53 Stigler, G.J. (Ed.) (1968) 'A theory of oligopoly', *The Organization of Industry*, Homewood, IL: Irwin, pp.39–63.
- 54 Helo, P.T. (2003) 'Technology trajectories in mobile telecommunications: analysis of structure and speed of development', *International Journal of Mobile Communications*, Vol. 1, No. 3, pp.233–246.
- 55 Lin, B., Jones, C.A. and Hsieh, C.H. (2001) 'Environmental practices and assessment: a process perspective', *Industrial Management and Data Systems*, Vol. 101, No. 2, pp.71–79.
- 56 Yasin, M.M., Wafa, M.A. and Zimmerer, T.W. (1995) 'A profile of successful US manufacturers: a starting point for evaluating the effectiveness of manufacturing strategies and practices', *Industrial Management and Data Systems*, Vol. 95, No. 10, pp.8–18.
- 57 Vokura, R.J. and Davis, R.A. (2004) 'Manufacturing strategic facility types', *Industrial Management and Data Systems*, Vol. 104, No. 6, pp.490–504.
- 58 Harrison, J.S., Hitt, M.A., Hoskisson, R.A. and Ireland, R.D. (1991) 'Synergies and post-acquisition performance: differences versus similarities in resource allocation', *Journal of Management*, Vol. 17, No. 1, pp.173–190.
- 59 Barney, J.B. (1988) 'Returns to bidding firms in mergers and acquisitions: reconsidering the relatedness hypothesis', *Strategic Management Journal*, Vol. 9, Special Issue, pp.71–78.
- **60** Harrison, J.S., Hitt, M.A., Hoskisson, R.A. and Ireland, R.D. (2001) 'Resource complementarity in business combinations: extending the logic to organizational alliances', *Journal of Management*, Vol. 27, No. 6, pp.679–690.
- **61** Kitching, J. (1967) 'Why do mergers miscarry?', *Harvard Business Review*, Vol. 45, No. 6, pp.84–101.
- **62** Jemison, D.B. and Sitkin, S.B. (1986) 'Corporate acquisitions: a process perspective', *Academy of Management Review*, Vol. 11, No. 1, pp.145–163.
- 63 Häkkinen, L., Norrman, A., Hilmola, O.-P. and Ojala, L. (2004) 'Logistics integration in horizontal mergers and acquisitions', *International Journal of Logistics Management*, Vol. 15, No. 1, pp.27–42.
- **64** Christensen, C. and Overdorf, M. (2000) 'Meeting the challenge of disruptive change', *Harvard Business Review*, Vol. 78, No. 2, pp.66–76.
- 65 Bower, J.L. (2001) 'Not all M&As are alike and that matters', *Harvard Business Review*, Vol. 79, No. 3, pp.92–101.
- **66** Harding, D. and Yale, P. (2002) 'Discipline and the dilutive deal', *Harvard Business Review*, Vol. 80, No. 7, pp.18–20.
- 67 Light, D.A. (2001) 'Who goes, who stays?', Harvard Business Review, Vol. 79, No. 1, pp.35–44.

- **68** Anand, J. and Delois, A. (2002) 'Absolute and relative resources as determinants of international acquisitions', *Strategic Management Journal*, Vol. 23, No. 2, pp.119–134.
- **69** Capron, L. and Hulland, J. (1999) 'Redeployment of brands, sales forces and general marketing expertise following horizontal acquisitions', *Journal of Marketing*, Vol. 63, No. 2, pp.41–54.
- **70** Hasting, D.F. (1999) 'Lincoln electric's harsh lessons from international expansion', *Harvard Business Review*, Vol. 77, No. 3, pp.163–178.
- 71 Meyer, K.E. and Estrin, S. (2001) 'Brownfield entry in emerging markets', *Journal of International Business Studies*, Vol. 32, No. 3, pp.575–584.
- 72 Croyle, R. and Kager, P. (2002) 'Giving mergers a head start', *Harvard Business Review*, Vol. 80, No. 10, pp.2–3.
- 73 Sull, D. (1999) 'Spinning steel into gold: the case of Ispat International N.V.', *European Management Journal*, Vol. 17, No. 4, pp.368–381.
- 74 Hertz, S. (2001) 'Dynamics of alliances in highly integrated supply chain networks', *International Journal of Logistics: Research and Applications*, Vol. 4, No. 2, pp.237–256.
- 75 Lalonde, B. (2000) 'The morphing of a supply chain', *Supply Chain Management Review*, Vol. 4, No. 2, pp.11–12.
- 76 Heracleous, L. and Murray, J. (2001) 'The urge to merge in the pharmaceutical industry', European Management Journal, Vol. 19, pp.430–437.
- 77 Deans, G.K., Kroeger, F. and Zeisel, S. (2002) 'The consolidation curve', *Harvard Business Review*, Vol. 80, No. 12, pp.20–21.

## 304 L. Häkkinen and O-P. Hilmola

Appendix 1

# Analysed 19 M&A articles featuring their main findings regarding operations management

Authors	Year	Publication	Findings related to operations management
Anand, J. and Delois, A.	2002	SMJ 23:2	Investors seeking distribution capabilities typically use M&A as a market entry form
Ashkenas, R. and Francis, S.	2000	HBR 78:6	Short examples from case deals: outsourcing the production of non-core components, operational benefits from redeployment manufacturing processes
Capron, L. and Hulland, J.	1999	JMAR 63:2	Cost-based synergies are minimally affected by the redeployment of <i>e.g.</i> distribution channels, while revenue-based synergies are significantly influenced.
Capron, L. and Pistre, N.	2002	SMJ 23:9	Acquirers earn abnormal returns when they receive distribution related resources from the target as a part of bilateral resource transfer (incl. resources related to distribution)
Capron, L., Mitchell, W. and Swaminathan, A.	2001	SMJ 22:9	Strategic similarity and resource asymmetry increase redeployment, which then leads to divestitures in the receiving firm (incl. resources related to logistics and manufacturing)
Capron, L., Dussauge, P. and Mitchell, W.	1998	SMJ 19:7	Firms frequently redeploy these resources to and from targets. They seek targets that complement their own strengths and weaknesses. Includes resources in R&D, manufacturing and marketing.
Croyle, R. and Kager, P.	2002	HBR 80:10	Underlines the importance of setting up integration teams in <i>e.g.</i> SCM, manufacturing, purchasing and logistics; linkage to fast costbased synergies
Harding, D. and Yale, P.	2002	HBR 80:7	Complementary distribution resources and revenue-based synergies; procurement savings, capacity rationalisation, improved logistics and warehousing efficiency and cost-based synergies
Harrison, J., Hitt, M., Hoskisson, R. and Ireland, R.	2001	JMAN 27:6	Resource complementarity, <i>e.g.</i> in distribution, leads to greater synergy potential; underlines the importance of integration management
Hastings, D.	1999	HBR 77:3	Potential cost-based synergies in manufacturing and revenue-based synergies in distribution can be squandered due to poor integration management

## Appendix 1 (continued)

Analysed 19 M&A articles featuring their main findings regarding operations management (continued)

Authors	Year	Publication	Findings related to operations management
Heracleous, L. and Murray, J.	2001	EMJ 19:4	Evidence of synergies from increased purchasing power, combined R&D operations, consolidated manufacturing and pooled marketing resources
Hertz, S.	2001	IJL 4:2	M&A might be the only way to break into highly integrated supply chains (in relation to both suppliers and customers)
Karim, S. and Mitchell, W.	2000	SMJ 21:10/11	Acquirers tend to use M&A either to reinforce existing skills or make substantial jumps into new skill sets; effects on manufacturing resources
Lalonde, B.	2000	SCMR 4:2	M&A might be the only way to break into highly integrated supply chains (in relation to both suppliers and customers)
Larsson, R. and Finkelstein, S.	1999	OS 10:1	Complementary operations increase the probability of synergy realisation in <i>e.g.</i> production and marketing; similarities elicit employee resistance
Light, D.	2001	HBR 79:1	Evidence of potential synergies in manufacturing (cost-based) and distribution (revenue-based) squandered due to an ill-conceived HR integration strategy
Meyer, K. and Estrin, S.	2001	JIBS 32:3	Redeployment can be reciprocal: target firms bring <i>e.g.</i> technological know-how and distribution resources, acquirer firms <i>e.g.</i> managerial and financial resources
Schmidt, S. and Ruhli, E.	2002	EMJ 20:3	Evidence of motives related to synergies in R&D and distribution
Sull, D.	1999	EMJ 17:4	Evidence of successful realisation of cost- and revenue-based synergies <i>e.g.</i> from redeploying manufacturing resources and processes

Abbreviations:

SMJ = Strategic Management Journal

HBR = Harvard Business Review

JMAR = Journal of Marketing

JMAN = Journal of Management

EMJ = European Management Journal

IJL = International Journal of Logistics: Research and Applications

SCMR = Supply Chain Management Review

OS = Organization Science

JIBS = Journal of International Business Studies

## PAPER 3

Häkkinen, Lotta (2005) Impacts of international mergers and acquisitions on the logistics operations of manufacturing companies. *International Journal of Technology Management*, Vol. 29, Nos: 3/4, 362-385.

Republished with permission, Inderscience Publishers. http://www.inderscience.com/ijtm

## Impacts of international mergers and acquisitions on the logistics operations of manufacturing companies

## Lotta Häkkinen

as through creating new capabilities.

Department of Marketing
Turku School of Economics and Business Administration
Rehtorinpellonkatu 3, FIN-20500 Turku, Finland
Fax: +358 2 481 4280 E-mail: lotta.hakkinen@tukkk.fi

Abstract: The ongoing trends of rapid technological development and globalisation have reshaped several industries during the past decade. For one, the newly emerged challenges have triggered a wave of mergers and acquisitions (M&A) within a number of industries as companies have sought efficient ways to enhance their business capabilities and to restructure themselves to better adapt to the new business environment. This paper discusses the value creational aspects of international M&A and addresses matters of resource redeployment and capability transfer related to the logistics operations of manufacturing companies. The empirical part of the paper reports on an explorative multiple-case study covering six horizontal M&A deals carried out by Finnish manufacturing companies during 1998–2001. Results suggest that the combining of complementary resources, in particular, and capability transfer (e.g. of technology-related knowledge) can create value

**Keywords:** mergers; acquisitions; resource redeployment; capability transfer; multiple-case study.

through the transference of existing key competencies to new contexts, as well

**Reference** to this paper should be made as follows: Häkkinen, L. (2005) 'Impacts of international mergers and acquisitions on the logistics operations of manufacturing companies', *Int. J. Technology Management*, Vol. 29, Nos. 3/4, pp.362–385.

**Biographical notes:** Lotta Häkkinen worked as acting Senior Research Associate at Turku School of Economics and Business Administration, Finland where she is currently a researcher. Her current research interests include the impact of mergers and acquisitions on company operations as well as company growth strategies.

#### 1 Introduction

During the past decade, several industries have been reshaped as a result of technological and social developments, which have lead to high interconnectedness of organisational systems and people. The trends of globalisation, market liberalisation and technological development have forced companies to reexamine their operations in order to answer to these challenges and growing customer expectations. These new challenges and opportunities have triggered a wave of mergers and acquisitions (M&A) within a number

of industries as companies have sought efficient ways to enhance their business capabilities and to restructure themselves to better adapt to the new business environment.

Although M&A activity, as its research, is by no means a new phenomenon, the phenomenon itself, as well as related studies, has evolved since the very first merger waves. Changes in the business environment and the strategic motivations for M&A have also changed the requirements for company management to successfully carry out merger processes (Jansen, 2002). Additionally, the latest merger wave (started in 1993 and peaked in 2000) affected European companies much more profoundly than previous ones, which mainly took place within the USA (Chapman and Edmond, 2000; Garette and Dussauge, 2000). Also the share of cross-border M&A has increased substantially (40% of the total number of transactions worldwide in 2000), which raises yet new issues for company management to consider (Jansen, 2002; United Nations Conference on Trade and Development, 2001).

Despite the increased interest towards M&A also from a scholarly perspective, several research gaps still exist within the research field. Studies are fragmented by nature and often lack a holistic view of the implications of mergers and acquisitions (Larsson and Finkelstein, 1999). For example, M&A-related synergies and value creation are a much-discussed topic in this field, yet inconclusiveness and general ambiguity often plague research results. Traditionally, studies have concentrated on explaining value creation through increased market power and operational efficiency, which are most relevant in stable industries. However, modern businesses that operate within dynamic environments may view M&A in a different manner. M&A would also seem to provide means to restructure company resources, and to transfer knowledge and build new capabilities through horizontal patterns of exchange to benefit the whole organisation (e.g. Capron, 1999; Chatterjee, 1992).

Another overlooked research topic has been the impact of M&A on the logistics operations of companies and related value creation (Häkkinen, 2003; Häkkinen *et al.*, 2004). However, these issues would seem to be central when pursuing M&A objectives related to increasing market coverage or enhancing the product portfolio. Such aspects have not yet received much attention in the field of M&A research but would provide useful insights into understanding M&A-related value creation in the modern business environment.

The motivation for conducting this particular study has been to start filling this research gap. This paper addresses changes in the logistics operations of manufacturing companies in the context of horizontal M&A. The paper reports on an explorative multiple-case study covering six cross-border M&A deals carried out by Finnish manufacturing companies during 1998–2001. In this study, mergers and acquisitions or M&A are referred to as a single business phenomenon as is done frequently within this field of research, despite the slight differences between these two concepts (e.g. Parvinen, 2003). The study focuses specifically on horizontal M&A, which involve companies that operate in the same industry and industry level. This M&A type is considered to be one of the most interesting types from a logistics perspective especially when focusing on the change aspect, as these deals may involve the restructuring of logistics resources due to overlapping operations, as well as skill transfer due to related, yet complementary, knowledge. Horizontal mergers have been considered to have the highest synergy potential and its realisation is assumed to be relatively effortless

(e.g. Taqi, 1991). Vertical M&A may also include considerable synergy potential from a logistics perspective, but these benefits will most likely be different by nature and related to managing the bullwhip effect more efficiently, for example.

## 2 Strategic management literature on M&A

## 2.1 Relation to other streams of M&A research

The phenomenon of M&A has received a massive amount of academic interest over the past decades. Due to the ever-growing amount of scientific research linked to this research area, scholars have also been eager to develop various categorisations to divide research into different streams. This paper focuses on the strategic management stream, which is central when discussing M&A-related value creation. This stream has its theoretical background primarily in industrial organisation economics, but recently also resource-based theories have gained ground in this stream (Birkinshaw *et al.*, 2000). The strategic management stream adopts the perspective of an individual company and discusses the motives for different types of mergers, and the effects of M&A on company performance (Larsson and Finkelstein, 1999). Strategic scholars have been primarily concerned with questions such as which acquisition types are likely to succeed, how can company management realise potential synergy benefits, create value, and transfer capabilities between organisations (Vaara, 1999).

In addition to the strategic management stream of M&A research, at least three others can be identified. The economic stream focuses on the impact of acquisitions based on theories of financial and organisational economies. The central research issue is the assessment of M&A activity on the overall economy, a specific industry, or on the value creation for company shareholders (Birkinshaw *et al.*, 2000; Baroncelli, 1998). Some authors also distinguish a financial stream, which is included here in the economic stream as a micro-level perspective.

The organisational stream studies the M&A integration process on an organisational or individual level. Central topics include organisational fit, cultural clashes and employee resistance (Larsson and Finkelstein, 1999; Vaara, 1999). As traditional economic, strategic and organisational perspectives haven't been able to explain the large percentage of M&A failures, scholars have started to focus on the impact of post-merger management on M&A performance. This so-called process perspective is in itself also fairly diverse, but has a more applied approach from a managerial perspective (e.g. Jemison and Sitkin, 1986).

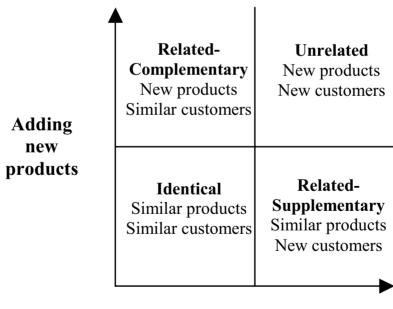
However, this interest towards post-merger actions cannot be seen as being limited to the process perspective as ideas have diffused also to other streams. For example, though the primary focus of this study is strategic, post-merger implications are by no means excluded. Rather the intention is to discuss both pre-merger circumstances and post-merger managerial actions. Therefore, the presented streams should not be understood as exclusive, and in practice researchers often combine perspectives from several different streams. Some scholars have also made efforts to specifically bring these streams closer together (*e.g.* Larsson and Finkelsten, 1999).

## 2.2 M&A typologies and combinational fit

Several different typologies have been created over time to categorise M&A (e.g. Larsson, 1990). A simple and conventional classification divides M&A into three categories: horizontal, vertical and diversified or conglomerate deals (Hodge and Anthony, 1988). In horizontal M&A, both companies operate in the same sector and level of business. Some classifications require that the companies be in direct competition with each other, whilst others are not so strict on this condition. Here this restriction is not seen necessary as long as both companies operated under the same SIC code. Vertical M&A are defined as deals between firms in buyer-seller, client-supplier, and other supply chain linkages. Conglomerate deals involve companies from unrelated businesses.

Basically the main criterion for all typologies is the companies' business relationship at the time of the combination, which sets certain expectations and boundaries for the type and magnitude of benefits that can be realised from the deal. A central concept for determining this relationship is strategic fit. Strategic fit has traditionally meant the relatedness of the products and markets of the merging companies (*e.g.* Salter and Weinhold, 1979; Shelton, 1988). Figure 1 illustrates the different dimensions of strategic fit through a framework based originally on an M&A classification made by Salter and Weinhold (1979).

Figure 1 Strategic fits between target and bidder firms (Shelton, 1988)



**Serving new customers** 

#### 366 L. Häkkinen

This study concentrates on horizontal deals where the strategic fit is primarily identical, complementary, or supplementary. Horizontal deals may involve unrelated features, but purely unrelated deals would be classified as conglomerates. In international M&A, the strategic fit would intuitively seem to be at least partially supplementary. However, the customer dimension is by no means limited to geographical market segments, and it should also be noted that cross-border M&A can have a variety of motives and fits driving the deal (Hopkins, 1999).

Organisational fit is another central concept for determining the combination potential of M&A, but its perspective is different from that of strategic fit. Organisational fit is defined as the match between organisational practices, cultures, and personnel characteristics (Datta, 1991). Culture is generally understood as including both corporate and national culture. Empirical studies suggest that good organisational fit eases the whole integration process (Larsson and Finkelstein, 1999). In this paper, the focus is not on organisational and cultural issues as such. However, it is acknowledged that internal company motives, strategic fit, and integration management are not the only factors that affect merger outcome.

## 2.3 M&A motives: the synergy hypothesis

On a broad level, horizontal M&A can be explained through two main classes of theories:

- 1 value-maximising theories
- 2 managerial theories (Capron, 1999; Seth et al., 2002).

Value-maximising theories (also referred to as the synergy hypothesis) assume that managers make M&A decisions with the objective of creating economic value. Managerial theories (also called the managerialism motive, conflict-of-interest hypothesis and agency hypothesis), on the other hand, suggest that managers embark on M&A to maximise their own benefit at the expense of other stakeholders. In their study, Seth, Song, and Pettit (2000) found the synergy hypothesis to be the primary explanation for value-increasing M&A, while value-reducing M&A appear to be driven by managerialism.

This study focuses on the first perspective, which is naturally of more relevance when examining M&A-related value creation. Under this perspective several motives or clusters of motives can be identified to further analyse the reasons and objectives of M&A activity (*e.g.* Bower, 2001; Brouthers *et al.*, 1998). However, an unambiguous classification seems to be hard to develop since in practice the motivation for a certain merger is often a combination of objectives and motives (Brouthers *et al.*, 1998).

## 2.4 Sources of value creation

In the context of M&A, value creation is understood as a long-term phenomenon that results from managerial actions and interaction between the merging firms. Value creation differs from value capture, which involves shifting value from previous stakeholders to new stakeholders of the acquiring firm and is a one-time event (Haspeslagh and Jemison, 1991).

Studies have identified a number of potential sources of value creation in M&A situations. Value can be created as a result of:

- increase in market power
- economies of scope
- economies of scale
- coinsurance
- risk diversification (Seth, 1990).

The first three sources of value creation are generally related to horizontal and vertical M&A, and are of interest in this paper, whilst coinsurance and risk diversification are associated with conglomerate deals. This classification represents the view of industrial organisation economics on M&A-related value creation.

Capron (1999) has studied horizontal M&A in particular and divides possible sources of synergy, in turn, into two groups based on their theoretical perspective. Horizontal M&A can create value by exploiting two types of synergies:

- 1 cost-based synergies (derived from economies of scale and scope; cost efficiency theories, economics)
- 2 revenue-enhancing synergies (derived from resource redeployment; resource-based theory).

This classification doesn't explicitly include market-power-related synergies. However, these synergies will also take form in saved costs and are of special interest in economics-based M&A research. Therefore, this synergy type would seem to fall in the first category.

Synergies of the first type are assumed to be easier to measure and the level of certainty that they will be achieved is quite high, although contradictory findings have also been reported (Larsson and Finkelstein, 1999; Harrison et al., 1991). They result from eliminating facilities and related costs, the increase in market power and economies of scale and scope. The potential for these synergies is especially high in domestic horizontal acquisitions (Seth et al., 2002). The second type of synergies acknowledges the possibility for the acquirer and the target to achieve a higher level of sales growth together than either company on its own can, by combining their resources. These synergies are harder to estimate because they involve external variables, such as customer reactions. Such synergies can potentially be realised, for example, when a superior product of the target is combined with the more extensive distribution channel of the acquirer (Eccles et al., 1999). A primary driver of many recent M&A have also been the potential synergy benefits from obtaining resources that are more intangible by nature such as knowledge-based resources or technologies (Ranft and Lord, 2002). This kind of resource transfer is an important source of synergy, especially in cross-border M&A (Seth et al., 2002).

Traditionally M&A research has emphasised market power and scale efficiencies as incentives for horizontal M&A (industrial organisation economics tradition), which are most relevant in stable industries. However, modern businesses operate in dynamic environments of frequent technological innovation, regulatory changes, and globalisation. Sustaining market power or gained scale efficiencies for long periods may be impossible

#### 368 L. Häkkinen

in dynamic industries (Capron *et al.*, 1998). Strategic researchers have argued that companies increasingly use M&A in order to restructure the merging businesses as a response to environmental change rather than to reap scale benefits (Haspeslagh and Jemison, 1991; Capron *et al.*, 1998). This approach is built on the ideas of the resource-based view, and is of special interest in this study.

## 2.5 Measuring value creation

The conclusion on the success or failure of a certain M&A deal depends for one on the adopted stakeholder perspective. Stock market reactions to M&A announcements, as well as long-term stock development, are frequently used indicators of a deal's performance from the market's perspective. Such stock-market-based studies have dominated M&A research. Though the perspective on M&A performance of these studies is narrow, at least some consensus has been reached on research practice and results (Hopkins, 1999).

Studies that have adopted a strategic perspective to M&A performance, on the other hand, have reported a more mixed outcome. These studies have used, for example, accounting-based measures of performance, market share figures, and various self-reported measures to evaluate M&A performance. These studies have attempted to determine the long-term effects of M&A, but have failed to find consistent evidence of improved performance or productivity gains (Kaplan, 2000). In this study, both self-reported and accounting-based measures are used to assess the level of performance in each case. These different types of measures are hoped to be complementary to each other and to add perspective to the examined phenomenon.

Also it should be noted that existing academic work on M&A activity has mainly been based on large sample studies. For example, Kaplan (2000) argues that large sample studies cannot possibly capture the richness of different effects in M&A situations. The key to understanding M&A and reaching relevant results would thus be to pursue case studies preferably conducted within one specific industry.

#### 3 Resource-based view on M&A

#### 3.1 The resource-based view of the firm

This study focuses on one specific strand of contemporary strategic management literature, which is often referred to as the resource-based, capabilities-based, or competence-based view. This view emphasises firm-specific capabilities and assets, and the existence of isolating mechanism as the determinants of firm performance (e.g. Capron, 1999; Seth et al., 2002; Penrose, 1959; Wernerfelt, 1984; Prahalad and Hamel, 1990; Teece et al., 1997). Resource-based theories form a diverse variety of approaches, which can be grouped under this heading. The outlines of this general approach are visible, but there is not yet a consensus over the used terminology and key concepts (Hodgson, 1998; Foss, 1999). This lack of uniform definitions has lead to an ever-increasing amount of new definitions and overlapping concepts.

In this paper the used key concepts are resources and capabilities, which are defined as follows. A resource is an observable (but not necessarily tangible) asset that can be valued and traded (*e.g.* a brand, patent, or license). A capability is not observable (thus also intangible), cannot be valued per se, and can change ownership only as part of its

entire unit (*e.g.* a certain management or logistics system which is embodied in the continuous enactment of people and practices). Furthermore, a capability can be valuable on its own or can increase the value of a resource (*e.g.* the linkage between marketing capabilities and brand value) (Makadok, 2001). Put in other words, resources are company-controlled assets, which are either tangible or intangible. Capabilities refer to the company's ability to perform a set of coordinated activities to achieve a certain result using the available resources (Helfat and Peteraf, 2003 cf. Bower, 2001).

Both concepts are used to explain the same phenomenon, *i.e.* competitive heterogeneity, from the perspective of the resource-based view. Ultimately, both resources and capabilities are potential sources of competitive advantage and can be seen as having also similar qualities. Thus, scholars have also considered resources and capabilities literature as one and the same (*e.g.* Hoopes *et al.*, 2003). Also, to be a source of sustained competitive advantage, both resources and capabilities must have the same attributes, *i.e.* they must be:

- valuable
- rare
- isolated from imitation or substitution.

A valuable resource (or capability) enables a firm to improve its market position relative to its competitors; that is, a source of competitive advantage. To sustain this competitive advantage, this resource must be in short supply relative to demand (*i.e.* rare) and costly to imitate or directly replicate (Hoopes *et al.*, 2003).

Competition and other environmental changes naturally erode the competitive advantage of companies over time. Thus the only real distinctive competence necessary is the ability of an organisation to form new capabilities and to renew them (Hamel and Prahalad, 1989). Several concepts have been developed to stress this dynamic viewpoint of resource-based theory and to analyse change in firm capabilities, *e.g.* dynamic capabilities (Teece *et al.*, 1997) and capability lifecycles (Helfat and Peteraf, 2003).

In the context of M&A, the discussion on resources and capabilities can have at least two kinds of implications. First, M&A can be used potentially to respond to changes in the firm's external environment by acquiring valuable resources and transferring capabilities from other firms to sustain or renew the sources of competitive advantage.

Second, this strategy may not solely be sufficient to support significant competitive advantage. For example, winners in high-technology industries have demonstrated timely responsiveness and rapid and flexible product innovation coupled with the capability to effectively coordinate and redeploy external resources and capabilities. Others have accumulated a large stock of valuable technology assets and still don't have many useful capabilities. This specific capability of being able to achieve new forms of competitive advantage is referred to as a dynamic capability (Teece *et al.*, 1997). Post-merger integration can also be seen as a dynamic capability, which is composed of a set of routines that integrate the resources and capabilities of the merged firms (Zollo and Leshchinkskii, 2000).

## 3.2 Strategic fit of resources and capabilities

Each of the four strategic fits presented in Figure 1 represents a different type of resource or capability combination and, thus, the opportunities for value creation are different in each type. Value creation based on an increase in market power is basically possible in all horizontal M&A. Opportunities for creating economies of scale and scope increase if the resources of the companies are related. Companies with identical fit are assumed to have the most potential in terms of economies of scale. If the companies' resources are unrelated, a potential source for value creation still exists, *e.g.* in exploiting possible market imperfections (Shelton, 1988).

Empirical studies have given indications that the integration of complementary (or supplementary) resources holds greater synergy potential than the integration of identical resources does (Harrison *et al.*, 1991). This finding is explained through the logic that M&A will result in above-average returns only when private or uniquely valuable synergistic assets are involved. These kinds of assets exist when either other potential acquirers do not have adequate information about the combination, or no other combination of firms could produce the same value (Barney, 1988).

From a resource-based viewpoint, M&A, which combines complementary resources, provides potential to create competitive advantages by combining acquired resources with existing ones to create a unique and difficult-to-imitate resource bundle. This kind of competitive advantage can be sustained for a relatively long period of time, thus leading to higher long-term company performance. Highly similar resources are generally easy for the whole market to detect whereas complementary resources provide synergistic opportunities, which are often not so obvious (Harrison *et al.*, 2001). Also, the integration of highly similar resources may only provide short-term benefits and the integration process may result in severe employee resistance (Larsson and Finkelstein, 1999; Harrison *et al.*, 2001).

## 3.3 Integrating resources and capabilities

A lot of debate on value creation and M&A has focused on whether or not acquisitions lead to value creation from a certain stakeholder perspective on average (Barney, 1988). Less attention has been given to how this value is actually created (Haspeslagh and Jemison, 1991). While questions linked to strategic fit may indeed determine the synergy potential of a certain M&A deal, synergy potential requires managerial actions, such as M&A integration planning and implementation, to be realised. Several researchers have underlined the need for active M&A management (e.g. Datta, 1991; Kitching, 1967). However, results on the 'best practices' of integration management and on the linkage of these issues to M&A performance are ambiguous (Nupponen, 1995). One logical reason for this is that management actions depend on the underlying objectives behind the M&A. Different levels and types of integration, and thus different post-merger actions, are required depending on the deal in question (e.g. Shrivastava, 1986).

M&A integration refers to the managerial actions taken primarily after the actual M&A transaction has taken place (Ashkenas and Francis, 2000). It can take several different forms and can involve different aspects. The level of integration, in turn, refers to the degree to which processes are linked, aligned, or centralised between the two merging organisations. It can generally be described as ranging from minimal, which

leaves the acquired company more or less autonomous, through limited integration to complete assimilation or combination of operations (Zollo, 1997).

One frequently cited classification of integration types has been presented by Shrivastava (1986), who distinguishes between physical, procedural, and managerial and sociocultural integration. The categorisation by Haspeslegh and Jemison (1991) resembles the one by Shrivastava, but emphasises the capability transfer aspect of M&A integration. Haspeslagh and Jemison (1991) suggest that three different types of active integration and related capability transfer exist:

- 1 operational resource sharing
- 2 functional skill transfer
- 3 general management skill transfer.

Operational resource sharing involves the combination and possible divestiture of certain operating assets of both companies. Functional skill transfer creates value, *e.g.* through sharing advanced process skills and detailed knowledge of a distribution channel. General management skill transfer aims at improving the range or depth of management skills between the organisations.

Another, slightly overlapping, but central concept linked to M&A integration is resource redeployment. Resource redeployment is defined as the use by the target or acquiring business of the other's resources. This includes both the physical transfer of resources to new locations and the sharing of resources without physical transfer (Capron *et al.*, 1998). In most horizontal M&A, resource redeployment leads to asset divestitures in the receiving firm. From a strategic perspective, M&A provide a way to restructure organisations and their resources, and asset divestiture is a logical consequence of this process (Capron *et al.*, 2001). In fact, studies show that companies that balance acquisitions and divestitures outperform those that focus solely on either one (Dranikoff *et al.*, 2002). Although resource redeployment in both directions has value-creating potential, research results suggest that the redeployment of the target's resources by the acquirer remains somewhat more problematic and less predictable than redeployment in the opposite direction (Capron, 1999; Capron and Pistre, 2002).

This study focuses on the resources redeployment and sharing of capabilities between formerly separate companies, which happens through the integration types presented above. Special emphasis is given to operational resource sharing and functional skill transfer in logistics operations. Discussion related to resource redeployment and capability transfer has often been limited to the contemplation of the fitness of existing resources and capabilities, and their transference. However, increased interaction between the merging companies may also pose opportunities to create new capabilities and resources. This aspect will also be taken into account in this paper.

## 4 Role of logistics operations in M&A situations

Contemporary M&A literature has mainly concentrated on general issues in strategic management, economic performance, and human resource type matters. Logistics issues, as such, aren't among the most popular topics and much work remains to be done in this field, both in terms of conceptual and empirical research. Nevertheless, a number of scholars have touched upon these logistics-related issues although the primary focus has

not been on logistics. Especially case studies on M&A deals often provide empirical evidence on the logistics synergies as M&A objectives, and as a potential source of value creation (Häkkinen, 2003; Häkkinen *et al.*, 2004).

Case descriptions have given indications of the high expectations of company management concerning especially cost saving type synergies in logistics when closing horizontal M&A deals. Horizontal deals may be motivated by the possibility of benefitting from savings due to increased purchasing power, capacity rationalisation, improved logistics, and warehousing efficiency, for example (Harding and Yale, 2002). The notion, that logistics synergies may be an important motive for conducting horizontal M&A, is also backed by the results of a recent survey (Häkkinen *et al.*, 2004). Several studies suggest that especially objectives concerning manufacturing are often linked to seeking economy of scale synergies from consolidating production facilities (Nupponen, 1995; Light, 2001).

Prior research has also reported that these high cost saving expectations are not always so easy to meet. The elimination of overlapping resources may prove to be costly and cause employee resistance. In contrast, the complementarity of some product ranges has, in some cases, more potential for cooperation and value creation (Nupponen, 1995, cf. Harrison *et al.*, 1991). The importance of downstream assets, such as distribution channels and sales forces, as a motive can be great particularly in cross-border mergers (Anand and Delois, 2002; Meyer and Estrin, 2001). By redeploying these existing resources, the acquiring company can rapidly increase the geographical spread of its products, or efficiently reach new customer segments (Harrison *et al.*, 2001). Furthermore, distribution networks are difficult to build from scratch due to the complexity of social organisations and processes, and thus M&A offer a valid option for market entry (Capron and Hulland, 1999).

In addition, M&A provide one way for companies to improve their technological capabilities through knowledge diffusion and interactive learning related to product and process technology in production. This motive is especially important in industries, which are characterised by rapid innovation, technological complexity, and a reliance on highly specialised skills. However, M&A-related technology or knowledge transfer is a complex process and can prove to be problematic (Ranft and Lord, 2002; Bresman *et al.*, 1999; Buono, 1997).

Horizontal M&A also affect the company's market power both in relation to customers and suppliers, and reaping benefits from the increase in market power is often mentioned as one M&A objective (Nupponen, 1995). These benefits typically provide easy access to increased earning with few internal constraints. However, poor M&A management can also induce problems in these areas. Also, it is not always certain that existing customer and supplier relationships will be left intact after the merger has taken place (Havila and Salmi, 2000).

From a logistics point of view, potential sources of value creation exist both in upstream and downstream activities, and can be embedded in either company resources (e.g. distribution assets) or distinctive capabilities (e.g. R&D capabilities linked to manufacturing, distribution networks, and relationships). At best, companies can benefit from better operational efficiency, increased market power, and a rapid increase in sales, which illustrates that successful M&A deals can gain from both cost-saving and revenue-enhancing synergies. However, it must be stressed that the pure existence of synergy potential is no guarantee for value creation. As a result of slow and poorly managed integration, even 'easy' synergies from the increase in market power and in

operational efficiency can be difficult to realise. Also, a general assumption seems to be that through M&A, the acquirer can take over the target's market position leaving existing business relationships intact. This is, however, not necessarily the case as empirical studies have shown.

## 5 Methodological considerations

The research strategy adopted in this paper is an explorative multiple-case study, which aims at describing and understanding the phenomenon under research in the chosen context. Such an approach is considered to be appropriate when little is known about the examined phenomenon and previously adopted perspectives seem inadequate or provide contradictory results (Eisenhardt, 1989). The topic of this research would seem to fulfil these criteria. The research relies profoundly on gathered empirical data as empirical evidence on this particular topic is scarce. No strict existing framework is used or tested although the data gathering and analysis have been influenced by ideas and concepts presented in M&A and logistics literature.

As the object of research is a complex system, which is affected by numerous internal factors (*e.g.* merger motives, actions of company owners, managers and staff) and external factors (*e.g.* policy, reactions of the company's customers and suppliers), widely prevailing laws may be hard to determine and may prove to be irrelevant in practice (Stank and Goldby, 1998). Due to this complexity, the research applies a systems approach, where knowledge depends on the entire examined system, and the explaining parts of the system are interpreted through the characteristics of the whole (Arbnor and Bjerke, 1997). However, as knowledge and understanding grows through the detailed examination of the research object, research could develop towards other methodological approaches.

A primarily qualitative approach has been chosen for the study, as the aim is to investigate the processes affecting the logistics resources and capabilities of manufacturing companies, *i.e.* resources and capabilities linked to in-house operations in distribution, manufacturing and sourcing (cf. Bowersox *et al.*, 1986). This paper reports on the results of a multiple-case study covering six horizontal M&A deals performed by Finnish companies during 1998–2001. All of the studied cases were cross-border M&A deals, where both counterparts of the deal were European-based companies. The scope of the study has been restricted to the impact on the companies' logistics resources and capabilities within Europe. The empirical data was gathered through six semi-structured interviews within the selected companies during spring 2003. The informants were top-level managers, whose primary duties were either related to M&A matters or to logistics. This interview data was supported by data retrieved from public domains (*e.g.* financial statements, press releases).

The studied cases varied to some extent in terms of the deal background and represented five different manufacturing industries. The current integration stage also differed between the cases to some extent. All but one company had concentrated on performing primarily horizontal M&A in the recent past. In some cases, the acquirer also had experience in conducting vertical acquisitions, but none reported to have made conglomerate M&A during the examined period.

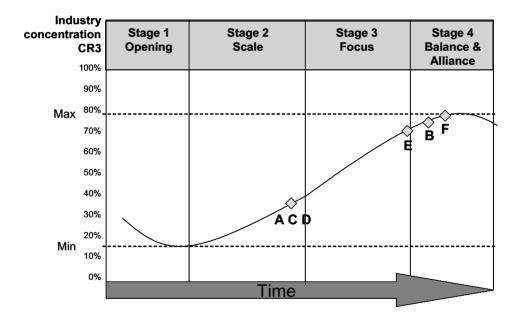
#### 374 L. Häkkinen

#### 6 Research results

## 6.1 Industry consolidation and technological innovation

Regardless of the exact industry in question, consolidation has been shown to follow a similar pattern. According to the analysis of Deans *et al.* (2002), industry development progresses through four phases, which differ in terms of length and merger activity, for example. An industry will take on average 25 years to pass through the four stages after which it will continue to defend its gained position in the final phase (see Figure 2). This so-called consolidation curve can be used to explain the logic behind the changes in merger, alliance and divestiture activity in industries. Market fragmentation in the opening phase is followed by a strong wave of consolidation as companies strive to grow through M&A. Mergers decline once a certain degree of concentration has been reached (Deans *et al.*, 2002; Kearney, 2002).

**Figure 2** Industry concentration in the case company industries on the consolidation curve (Deans, Kroeger and Zeisel, 2002; Kearney, 2002) (CR3 = Market share of the three largest enterprises relative to the overall market)



Another model which has been used to explain industry structures and evolution, specifically from a technological viewpoint, is the Abernathy-Utterback model (Utterback, 1994). The underlying idea of the model is based on the fluctuation of product and process innovation in a certain industry. During its formative years, the rate of product innovation in an industry is at its highest. During this period of high product innovation and great product variety, less attention is given to the actual processes by which the products are made. This period is typically followed by a transitional phase where the rate of product innovation slows down and the rate of process, in turn, speeds up. At this point, product variety decreases as a standard design, *i.e.* a dominant design,

gains ground. As products become more standardised, the pace of process innovation quickens (Utterback, 1994; Christensen *et al.*, 1998).

In accordance with this logic, in relatively new industries the number of new entrants is very high as this environment is very conducive for many firms as long as capital and technical barriers are not too high. Subsequently the number of competing firms increases rapidly (cf. first phase of the consolidation curve). As a dominant design emerges and the basis of competition changes, firms that are unable to make the transition toward greater process innovation will often fail and exit the market *e.g.* via acquisition or bankruptcy. This will rapidly decrease the number of competing firms on the market and increase consolidation (cf. final phases of the consolidation curve). However, Utterback (1994) later questions whether this logic applies to all market areas and industries. Although the idea of dominant design as an explanatory factor may not hold for non-assembled products, the evolution of industry structure seems to follow a similar pattern as Deans *et al.* (2002) clearly show.

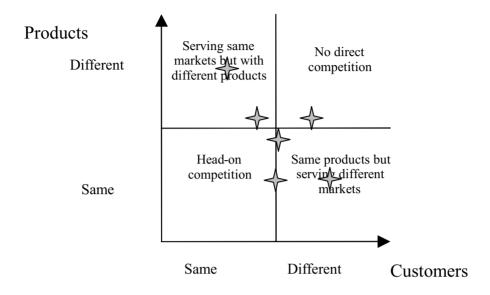
Also when examining the consolidation of the case company industries on a European level (see Figure 2), a connection between industry concentration, merger motives, and subsequent post-merger actions can be identified, which relates to this logic. Cases A, C, and D represent industries currently in the accumulation phase. In this stage size begins to matter and companies wishing to reach the next stage often use an aggressive M&A strategy by buying out competitors in important markets and try to rapidly increase their geographical presence. Less attention is given to costs and, for example, process efficiency. Cases E and F, on the other hand, represent industries in the final phases of the consolidation curve. At this point M&A become more selective as these deals aim at strengthening core competencies and increasing overall efficiency and profitability. Deals at this stage will involve more technology-related knowledge transfer as pure 'scale' type M&A. All the above-mentioned case deals fit their profiles as will be shown in the following sections of this paper.

The M&A made by case company B was rather exceptional to remaining five deals. Although both of the merging companies were European, the driving force of the whole deal was to produce one globally competitive company from two moderately sized European players. This can be noted when comparing the sheer volume of the merged companies; their combined turnover was over 2 billion euros, while the average for the other cases was some 500 million euros. As the estimated consolidation rate given in Figure 2 represents the situation on a European scale, it doesn't give an accurate picture when taking these matters into account. Globally the industry structure is very different and consolidation would be closer to the scale or focus phases.

## 6.2 Combination potential and motives of case deals

When comparing the strategic fit grid presented in Figure 1 with the studied M&A deals, it can be stated the strategic fit between the merging companies was seldom represented by one single category. In most cases, one single deal covered several fit types due to wide geographical presence and/or product range of the companies. However, most deals represented cases where the fit was primarily either complementary or supplementary, although some identical features were often linked to these deals (see Figure 3).

Figure 3 Strategic fits of case deals



This within-case overlap between different strategic fits can also be noted by examining the multiple motives for single acquisitions. Three main motives rose to be dominant in the studied deals. First, companies stressed the importance of M&A in strengthening their current market position. This motive was mentioned by large global companies and regional players alike. In practice, this motive was linked to buying out direct competitors.

The second main M&A motive was to expand into new geographical markets. The current area of growth for the studied Finnish companies seemed be connected to the EU enlargement process. Presence was increased in future EU member states, especially in the Baltic States and Poland, as well as in Russia. This did not necessarily require that the target was from any of the above-mentioned countries, as long as the target company had resources in these countries. Existing distribution and sales networks seemed to be especially attractive. This motive represents a pure related-supplementary fit.

The third motive was linked to related-complementary. The objective of this motive was to widen the current product range into new related products and/or to redeploy production know-how and technologies to serve existing customers with more comprehensive solutions. In addition to the internal motives of the acquiring company, external factors also influenced M&A decisions. In industries where the consolidation rate was high, M&A were seen as necessary strategy for company survival and growth. Also, as mentioned earlier, the EU enlargement process clearly influenced M&A decisions.

## 6.3 Integration of logistics resources and capabilities

In the following, the M&A-induced changes in the logistics resources and capabilities of the case companies are presented. Table 1 shows the results in brief from case to case in terms of the effects on the resources and capabilities of three logistics activities (*i.e.* distribution, manufacturing, and sourcing).

**Table 1** Resource redeployment and capability transfer in the logistics operations of the case companies

	A	В	С	D	Ε	F
Distribution resources	_	***	**	**	_	_
Distribution capabilities	_	***	*	*	_	_
Manufacturing resources	_	***	*	*	_	_
Manufacturing capabilities	_	***	*	*	***	***
Sourcing resources	_	***	*	*	*	***
Sourcing capabilities	-	***	*	*	*	***

Note:

- resources/capabilities kept separate
- \* redeployment/transfer from acquirer to target
- \*\* redeployment/transfer from target to acquirer

The effects on logistics resources and capabilities varied a great deal from case to case and the integration was carried out in a variety of ways depending on the case in question. Also it should be noted that a certain integrative action in the resources of a certain activity didn't necessarily mean identical actions in the related capabilities of that activity, though that was often the case (see Table 1).

In Case A, the integration of the logistics resources was quite minimal. The M&A was primarily motivated by gaining passive market presence as well as economical and financial synergies. These motives seem to be well in line with the adopted integrative actions as realising these benefits doesn't require tight integration of logistics operations.

In the remaining cases, post-merger actions took form most commonly in the direct redeployment of the acquirer's resources and capabilities to the target. In practice, this often meant divesting the target's resources when they overlapped with the acquirer's, and transferring the acquirer's key capabilities to the target organisation. Some resources could also be left relatively intact if they were more complementary than overlapping. For example in Case B, several factories that manufactured identical products were consolidated, but factories producing complementary products were left running. Redeployment also occurred in the opposite direction but not as often. This type of redeployment was typically linked to making use of the target's distribution network and contacts to disperse new markets.

In three cases, the joint entity used reciprocal redeployment and skill transfer to restructure resources and create new solutions to handle logistics-related activities. This did not necessarily mean abandoning existing resources or capabilities, although this was an option when joining resources, but combining them in a new, innovative way. New resources and capabilities were created in some cases to adapt to and to exploit the

<sup>\*\*\*</sup> reciprocal redeployment/transfer

#### 378 L. Häkkinen

company's new situation. This could mean, for example, altering sourcing due to the increase in company size, developing solutions that enhance skill transfer in manufacturing, or rethinking the organisation of distribution flows.

#### 7 Discussion

In the following, the similarities and differences between the examined case deals will be discussed in relation to previous findings in similar academic research. Table 2 summarises the background of each cases as well as the merger outcome in terms of company assessment and changes in the selected accounting-based figures.

 Table 2
 Cross-case comparison of M&A deals

	Case A	Case B	Case C	Case D	Case E*	Case F*
Relative size	Buyer >> Target	Buyer < Target	Buyer >>> Target	Buyer >>> Target	Buyer >> Target	Buyer > Target
Strategic fit	Supplementary	Overlap of different fits	Supplementary (complementary)	Supplementary	Supplementary (identical)	Supplementary (identical)
M&A motives						
Internal	Increasing geographical coverage, economic and financial motives	Increasing current market share, product & geographical coverage	Increasing geographical coverage	Increasing geographical coverage	Increasing geographical coverage, gaining R&D knowledge & technology	Increasing current market share & geographical coverage
External	EU enlargement	Consolidation in industry	Consolidation in industry	EU enlargement	Following customers demands	Consolidation in industry
Level of integration	Minimal	Full integration	Full integration	Full integration	Varied, integration in production and sourcing	Varied, integration in R&D and sourcing
Effects on						
distribution	Not measured	Increased efficiency and cost savings	Increased efficiency	Increased efficiency	Increase in cost, improved image towards customers	Not measured
Manufacturing	Not measured	Increased efficiency, gains from skill transfer	Gains from skill transfer, increase in cost	Gains from skill transfer, increase in cost	Gains from skill transfer, cost savings	Not measured
Sourcing	Not measured	Cost savings, improved service from suppliers	Cost savings	Cost savings	Cost savings	Cost savings

**Table 2** Cross-case comparison of M&A deals (continued)

	Case A	Case B	Case C	Case D	Case E*	Case F*
Sales	Less than combined turnover, subsequent steady increase	Slightly exceeded combined turnover, subsequent decline	Exceeded combined turnover, subsequent fluctuations	Exceeded combined turnover, subsequent fluctuations	Exceeded combined turnover, subsequent steady increase	Reached combined turnover, slight increase
Operating profit	Steady increase	Decline followed by slight improvement	Small fluctuations	Small fluctuations	Increase, subsequent decline	Strong decline followed by slight improvement
ROA (return on assets)	Steady increase	Steady increase	Small fluctuations	Small fluctuations	Increase, subsequent decline	Strong decline followed by slight improvement

Note: \* Accounting-based figures have been calculated from consolidated financial statements (not fully comparable)

The examined deals included capability-seeking M&A involving the transfer of capabilities, deals seeking a specific resource or a certain combination of resources, as well as more economically and financially oriented M&A. Case A stands out as a deal that was not motivated by any logistics-related benefits and had minimal impact on the carrying out of logistics activities in the company. The objective was rather to gain passive market presence (no resource redeployment involved) and financial synergies. Some alterations were made to unify to pricing strategies of the two companies, which company management saw as having a positive impact on profitability. The deal did not involve notable revenue-enhancing synergies, but costs seemed to have been reduced to some extent (see Table 2). It should be noted that the acquirer was several times larger than the target company, so the true impact may not be directly observable through the accounting-based measures.

All the other examined deals involved at least some kind of integration from a logistics perspective: either pure resource redeployment from one organisation to the other, some type of functional skill transfer, or integration resulting in a new solution which cannot be directly linked to either of the previously separate organisations. General management skill transfer was not mentioned during the interviews (cf. Haspeslagh and Jemison, 1991).

In terms of such post-merger actions, Case B also seems to be quite exceptional. In this case, the acquiring company was more or less half the size of the target company, although both companies were relatively large players in their industry and competed on a global scale. The two companies were merged fully, which in many functions (including logistics) meant questioning the previous ways of operating and subsequently involved restructuring and divestitures as well as reciprocal skill transfer. The whole post-merger process consumed several years of time as well as substantially managerial efforts and, as can be seen from Table 2, financial resources (drop in profitability and ROA). This post-merger period had only recently come to an end and company management now reported to be quite happy with the end results. Especially, the significant changes made in the distribution structure and strategy were finally starting to

bear fruit. In the interview related to this case, it was specifically stated that the M&A served as a catalyst for capturing the attention of company management to streamline the logistics resources and the related material flow of the whole company.

In the other four cases, post-merger integration was not seen as such a dichotomy, but actions depended on specific M&A motives. In cases of resource redeployment, highly similar and overlapping resources were divested and only the key resources were left untouched. These key resources were typically related to existing market presence and the distribution networks of the target, or complementary skills in manufacturing. All of these companies had been able to benefit from increased market power in sourcing in the form of cost savings (cf. Nupponen, 1995).

Cases C and D represent an identical M&A strategy. The objective of the acquirer was to buy out substantially smaller targets that were then quickly integrated into the acquirer. Overlapping facilities were in both cases divested (from the target's side) and only the key resources of the target company were kept. These key resources were related to existing market presence and the distribution networks of the target (*i.e.* related-supplementary fit). Capabilities linked to the examined operations were transferred from the acquirer to the target organisation. Benefits were derived from cost savings, but some problems had been encountered in the integration of manufacturing resources, which had in fact increased cost in this area. However, the deals had no significant effect on the result or performance of the acquiring company, as the target companies were substantially smaller in size.

Also Cases E and F have many similar features. Both had varied levels of integration and involved technology-related knowledge transfer and the building new capabilities in manufacturing and/or sourcing (see also Table 1). In Case E, in addition to gaining geographical coverage, the objective was to combine and create new capabilities linked to technological skill transfer in production, which was supported by setting up specific management teams to exchange ideas. In Case F, the objectives were similar, but technological skill transfer was related to both sourcing and manufacturing. One main objective was to combine volumes in sourcing, which had indirect effects on R&D and manufacturing (rethinking product composition). Neither case had realised substantial financial benefits to date, but company management was pleased with outcomes in the selected operations. Also further integrative actions were not out of the question.

To summarise, when joining complementary and supplementary resources, the expected synergies had more or less been successfully realised in the case companies, although it might have consumed much more time than originally planned. However, in some deals the divestment of identical resources had not resulted in the expected cost savings, at least not to date. Time and comprehensive planning seemed to be essential for reaping these synergies. These results seem to back the findings of Harrison, Hitt, Hoskisson, and Ireland (2001).

When examining the skill transfer aspect, complementarity in R&D as well as in manufacturing technology and knowledge was central. Also functional skill transfer was used in enhancing sourcing capabilities. In cases where logistics skills were affected by the deal, the acquirer's existing skills and knowledge were commonly transferred to the target organisation, but new mechanisms to combine and create new capabilities were also set up (e.g. establishing specific management teams and networks to exchange ideas) (cf. Zollo and Leshchinkskii, 2000). Results in this area were difficult to quantify and perceive by examining solely accounting-based figures. The actions might have lead to improved capabilities in a specific area, but benefits might not have yet been totally

capitalised (as opposed to economic and financial benefits in Case A). Therefore, the examination of such capability-based strategic synergies would seem to require different methods and measurements than cost-based synergies, for example, on which prior M&A research has primarily concentrated.

Despite the fact that all the examined cases describe M&A activity in a European context, the findings also have implications concerning international M&A in general. For one, the results illustrate the relationship between international M&A and internal markets. When choosing market entry mode, M&A would seem to offer a valid option for gaining rapid access to markets of growing importance, e.g. countries about to join an internal market. Also, as shown by the research results, companies striving after scale efficiencies may face a laborious integration process even when dealing within a single internal market. However, M&A may offer means to gain adequate size to 'go global' although the benefits generally related to global companies may be challenging to realise during a short time span (cf. Levitt, 1983). In contrast, deals motivated by capability transfer and creation (important, for example, for overseas M&A (cf. Subramaniam and Venkatraman, 2001)) rather than by the redeployment of physical resources, will have less problems related to identical fit, but will require more attention regarding integration mechanisms to realise the full potential of combined knowledge.

#### 8 Conclusion

This paper has tried to take initial steps in filling one of the existing gaps in M&A research. The aim has been to illustrate through exploratory case studies that though many theoretical contributions concerning the relation between logistics and M&A have not yet been made, these issues are frequently encountered and considered in a variety of actual M&A situations.

Empirical findings show that post-merger actions involving the redeployment of logistics resources and transfer of logistics capabilities are often closely linked to realising M&A objectives. Research findings indicate that the combining of identical and complementary logistics resources and capabilities can create value through the transference of existing key knowledge to new contexts, as well as through creating new capabilities. A M&A deal might even give initiative for company management to, for example, redesign existing logistics resources and related material flows anew, which may then produce new sources of competitive advantage. Essentially this means, that horizontal M&A cannot be purely viewed as mechanisms for scale and scope efficiencies and market power, and consequently underlines the importance of adopting a resource-based evolutionary point of view in M&A analysis (cf. Capron *et al.*, 1998). Also, the aspect of creating new types of resources and capabilities as a result of the M&A, which are not directly connectable to either of the formerly separate companies, has not been comprehensively discussed in existing literature.

The empirical analysis of the integration effects in this paper is however somewhat limited due to the fact that the stage of M&A integration process differed between the examined deals. In some cases, the integration was seen as a matter of the past. In others the integration process was still going on in some areas of business, and even though the actual transaction had taken place two to three years ago, company management might still be planning to reap synergies from operations which had been left more or less intact until now. Also M&A-related value creation was assessed using primarily subjective

evaluations with supporting accounting-based measures. For these reasons, it is rather difficult to report on the total of achieved synergies and make exhaustive case comparisons in terms of created value, although some indications were fairly evident.

Although the empirical data gathered for this study is fairly narrow, the reported results would seem to provide a good basis for continuing research in this area. The ultimate aim of this and subsequent studies is to create and test new theory concerning this scantly covered but interesting topic. Hopefully, this paper has underlined the significance of these issues, as well as given initiative to studying post-merger actions, implications, and their reasons through industry and case-level analyses to achieve better understanding of these matters and relevant results.

## Acknowledgment

The author would like to thank several colleagues and students from the Turku School of Economics and Business Administration for their contributions to this paper. Also the comments from the editor of this special issue, Professor Junmo Kim, and the anonymous referees, as well as the cooperation from the case companies, are highly appreciated. Financial support from the Finnish Foundation for Economic Education and the Jenny and Antti Wihuri Foundation is gratefully acknowledged.

#### References

- Anand, J. and Delois, A. (2002) 'Absolute and relative resources as determinants of international acquisitions', *Strategic Management Journal*, Vol. 23, No. 2, pp.119–134.
- Arbnor, I. and Bjerke, B. (1997) *Methodology for Creating Business Knowledge*, Thousand Oaks: Sage Publications Inc.
- Ashkenas, R.N. and Francis, S.C. (2000) 'Integration managers: special leaders for special times', *Harvard Business Review*, Vol. 78, No. 6, pp.108–116.
- Barney, J.B. (1988) 'Returns to bidding firms in mergers and acquisitions: reconsidering the relatedness hypothesis', *Strategic Management Journal*, Vol. 9, Special Issue, pp.71–78.
- Baroncelli, A. (1998) 'Telecom Italia: merging five companies into one', *Long Range Planning*, Vol. 31, No. 3, pp.377–395.
- Birkinshaw, J., Bresman, H. and Håkanson, L. (2000) 'Managing the post-acquisition integration process: how the human integration and task integration processes interact to foster value creation', *Journal of Management Studies*, Vol. 37, No. 3, pp.395–425.
- Bower, J.L. (2001) 'Not all M&As are alike and that matters', *Harvard Business Review*, Vol. 79, No. 3, pp.92–101.
- Bowersox, D.J., Closs, D.J. and Helferich, O.K. (1986) Logistical Management: A Systems Integration of Physical Distribution, Manufacturing Support and Materials Procurement, New York: Macmillan.
- Bresman, H., Birkinshaw, J. and Nobel, R. (1999) 'Knowledge transfer in international acquisitions', *Journal of International Business Studies*, Vol. 30, No. 3, pp.439–462.
- Brouthers, K., van Hastenburg, P. and van den Ven, J. (1998) 'If most mergers fail why are they so popular?', *Long Range Planning*, Vol. 31, No. 3, pp.347–353.
- Buono, A.F. (1997) 'Technology transfer through acquisition', *Management Decision*, Vol. 35, No. 3, pp.194–204.
- Capron, L. (1999) 'The long-term performance of horizontal acquisitions', *Strategic Management Journal*, Vol. 20, No. 11, pp.987–1018.

- Capron, L. and Hulland, J. (1999) 'Redeployment of brands, sales forces and general marketing expertise following horizontal acquisitions', *Journal of Marketing*, Vol. 63, No. 2, pp.41–54.
- Capron, L. and Pistre, N. (2002) 'When do acquirers earn abnormal results?', *Strategic Management Journal*, Vol. 23, No. 9, pp.781–794.
- Capron, L., Dussauge, P. and Mitchell, W. (1998) 'Resource redeployment following horizontal acquisitions in Europe and North America, 1988–1992', *Strategic Management Journal*, Vol. 19, No. 7, pp.631–661.
- Capron, L., Mitchell, W. and Swaminathan, A. (2001) 'Asset divestiture following horizontal acquisitions: a dynamic view', *Strategic Management Journal*, Vol. 22, No. 9, pp.817–844.
- Chapman, K. and Edmond, H. (2000) 'Mergers/acquisitions and restructuring in the EU chemical industry: patterns and implications', *Regional Studies*, Vol. 34, No. 8, pp.753–767.
- Chatterjee, S. (1992) 'Sources of value in takeovers: synergy or restructuring implications for target and bidder firms', *Strategic Management Journal*, Vol. 13, No. 4, pp.267–286.
- Christensen, C.M., Suárez, F.F. and Utterback, J.M. (1998) 'Strategies for survival in fast-changing industries', *Management Science*, Vol. 44, No. 12, pp. 207–220.
- Datta, D. (1991) 'Organizational fit and acquisition performance: effects of post-acquisition integration', *Strategic Management Journal*, Vol. 12, No. 4, pp.281–298.
- Deans, G.K., Kroeger, F. and Zeisel, S. (2002) 'The consolidation curve', *Harvard Business Review*, Vol. 80, No. 12, pp.20–21.
- Dranikoff, L., Koller, T. and Schneider, A. (2002) 'Divestiture: strategy's missing link', *Harvard Business Review*, Vol. 80, No. 5, pp.74–83.
- Eccles, R.G., Lanes, K.L. and Wilson, T.C. (1999) 'Are you paying too much for that acquisition?', *Harvard Business Review*, Vol. 77, No. 4, pp.136–146.
- Eisenhardt, K.M. (1989) 'Building theories from case study research', *Academy of Management Review*, Vol. 26, No. 4, pp.532–550.
- Foss, N.J. (1999) 'Networks, capabilities, and competitive advantage', *Scandinavian Journal of Management*, Vol. 15, No. 1, pp.1–15.
- Garette, B. and Dussauge, P. (2000) 'Alliances versus acquisitions: choosing the right option', *European Management Journal*, Vol. 18, No. 1, pp.63–69.
- Häkkinen, L. (2003) 'Achieving synergies in logistics from horizontal M&A: a literature review', Proceedings of The 15th Annual Conference for Nordic Researchers in Logistics (NOFOMA), Finland: Oulu, pp.42–56.
- Häkkinen, L., Norrman, A., Hilmola, O.-P. and Ojala, L. (2004) 'Logistics integration in horizontal mergers and acquisitions', *International Journal of Logistics Management*, Vol. 15, No. 1.
- Hamel, G. and Prahalad, C.K. (1989) 'Strategic intent', *Harvard Business Review*, Vol. 67, No. 3, pp.63–76.
- Harding, D. and Yale, P. (2002) 'Discipline and the dilutive deal', *Harvard Business Review*, Vol. 80, No. 7, pp.18–20.
- Harrison, J.S., Hitt, M.A., Hoskisson, R.A. and Ireland, R.D. (1991) 'Synergies and post-acquisition performance: differences versus similarities in resource allocation', *Journal of Management*, Vol. 17, No. 1, pp.173–190.
- Harrison, J.S., Hitt, M.A., Hoskisson, R.A. and Ireland, R.D. (2001) 'Resource complementarity in business combinations: extending the logic to organizational alliances', *Journal of Management*, Vol. 27, No. 6, pp.679–690.
- Haspeslagh, P.C. and Jemison, D.B. (1991) Managing Acquisitions: Creating Value Through Corporate Renewal, New York: Free Press.
- Havila, V. and Salmi, A. (2000) 'Spread of change in business networks: an empirical study of mergers and acquisitions in the graphic industry', *Journal of Strategic Marketing*, Vol. 8, No. 2, pp.105–119.

- Helfat, C.E. and Peteraf, M.A. (2003) 'The dynamic resource-based view', *Strategic Management Journal*, Vol. 24, No. 10, pp.997–1010.
- Hodge, B.J. and Anthony, W.P. (1988) Organisation Theory, Allyn and Bacon, Needham Heights.
- Hodgson, G.M. (1998) 'Evolutionary and competence-based theories of the firm', *Journal of Economic Studies*, Vol. 25, No. 1, pp.25–56.
- Hoopes, D.G., Madsen, T.L. and Walker, G. (2003) 'Why is there a resource-based view? Toward a theory of competitive heterogeneity', *Strategic Management Journal*, Vol. 24, No. 10, pp.889–902.
- Hopkins, H.D. (1999) 'Cross-border mergers and acquisitions: global and regional perspectives', *Journal of International Management*, Vol. 5, No. 3, pp.207–239.
- Jansen, S.A. (2002) 'Pre- and post merger-integration in cross border transactions', *Paper Presented at European M&As, Corporate Restructuring and Consolidation Issues*, Barcelona, Spain, March 16, 2002, pp.1–28.
- Jemison, D.B. and Sitkin, S.B. (1986) 'Corporate acquisitions: a process perspective', *Academy of Management Review*, Vol. 11, No. 1, pp.145–163.
- Kaplan, S.N. (Ed.) (2000) *Mergers and Productivity*, Chicago: National Bureau of Economic Research.
- Kearney, A.T. (2002) Merger Endgames Industry Consolidation and Long-Term Strategy, Chicago: Kearney, A.T.
- Kitching, J. (1967) 'Why do mergers miscarry?', *Harvard Business Review*, Vol. 45, No. 6, pp.84–101.
- Larsson, R. (1990) Coordination of Action in Mergers and Acquisitions, Lund: Lund University Press
- Larsson, R. and Finkelstein, S. (1999) 'Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: a case survey of synergy realization', *Organization Science*, Vol. 10, No. 1, pp.1–26.
- Levitt, T. (1983) 'The globalization of markets', *Harvard Business Review*, Vol. 61, No. 3, pp.92–102.
- Light, D.A. (2001) 'Who goes, who stays?', Harvard Business Review, Vol. 79, No. 1, pp.35–44.
- Makadok, R. (2001) 'Towards a synthesis of the resource-based and dynamic-capability views of rent creation', *Strategic Management Journal*, Vol. 22, No. 5, pp.387–402.
- Meyer, K.E. and Estrin, S. (2001) 'Brownfield entry in emerging markets', *Journal of International Business Studies*, Vol. 32, No. 3, pp.575–584.
- Nupponen, P. (1995) *Post-Acquisition Performance*, Helsinki: Helsinki School of Economics and Business Administration.
- Parvinen, P.M.T. (2003) Towards a Governance Perspective to Mergers and Acquisitions, Helsinki: Helsinki University of Technology.
- Penrose, E. (1959) The Theory of the Growth of the Firm, Oxford: Basil Blackwell.
- Prahalad, C.K. and Hamel, G. (1990) 'The core competence of the corporation', *Harvard Business Review*, Vol. 68, No. 3, pp.79–91.
- Ranft, A. and Lord, M.D. (2002) 'Acquiring new technologies and capabilities: a grounded model of acquisition implementation', *Organization Science*, Vol. 13, No. 4, pp.420–441.
- Salter, M.S. and Weinhold, W.A. (1979) Diversification Through Acquisition: Strategies for Creating Economic Value, New York: Free Press.
- Seth, A. (1990) 'Sources of value creation in acquisitions: an empirical investigation', *Strategic Management Journal*, Vol. 11, No. 6, pp.431–446.
- Seth, A., Song, K.P. and Pettit, R.R. (2000) 'Synergy, managerialism or hubris? An empirical examination of motives for foreign acquisitions of U.S. firms', *Journal of International Business Studies*, Vol. 31, No. 3, pp.387–405.

- Seth, A., Song, K.P. and Pettit, R.R. (2002) 'Value creation and destruction in cross-border acquisitions: an empirical analysis of foreign acquisitions of U.S. firms', *Strategic Management Journal*, Vol. 23, No. 10, pp.921–940.
- Shelton, L.M. (1988) 'Strategic business fits and corporate acquisition: empirical evidence', *Strategic Management Journal*, Vol. 9, No. 3, pp.279–287.
- Shrivastava, P. (1986) 'Postmerger integration', *Journal of Business Strategy*, Vol. 7, No. 1, pp.65–76.
- Stank, T.P. and Goldby, T.J. (1998) 'Bridging the gap between academic responsibilities and practical application in logistics', *Journal of Transportation Management*, Vol. 10, No. 1, pp.1–9.
- Subramaniam, M. and Venkatraman (2001) 'Determinants of transnational new product development capability: testing the influence of transferring and deploying tacit overseas knowledge', *Strategic Management Journal*, Vol. 22, No. 4, pp.359–378.
- Taqi, S.J. (1991) 'Catching shadows: success and failure in the search for synergies', *Journal of European Mergers and Acquisitions*, Vol. 3, No. 5, pp. 24–37.
- Teece, D.J., Pisano, G. and Shuen, A. (1997) 'Dynamic capabilities and strategic management', *Strategic Management Journal*, Vol. 18, No. 7, pp.509–533.
- United Nations Conference on Trade and Development (2001) World Investment Report 2001 Promoting Linkages, New York: United Nations.
- Utterback, J. (1994) Mastering the Dynamics of Innovation, Boston: Harvard Business School Press
- Vaara, Eero (1999) Towards a Rediscovery of Organizational Politics: Essays on Organizational Integration Following Mergers and Acquisitions, Helsinki: Helsinki School of Economics and Business Administration.
- Wernerfelt, B. (1984) 'A resource-based view of the firm', *Strategic Management Journal*, Vol. 5, No. 2, pp.171–180.
- Zollo, M. (1997) 'Strategies or routines? Knowledge codification, path-dependence and the evolution of post-acquisition integration practices in the U.S. banking industry', *The Wharton Financial Institutions Center: Working Papers*, Philadelphia: University of Pennsylvania.
- Zollo, M. and Leshchinkskii, D. (2000) 'Can firms learn to acquire? Do markets notice?', *The Wharton Financial Institutions Center: Working Papers*, Philadelphia: University of Pennsylvania.

### PAPER 4

Häkkinen, Lotta (2004) Mergers and acquisitions in the logistics service industry: case study findings. In: *Proceedings of the 2nd IASTED International Conference on Alliances, Mergers, and Acquisitions*, MIT, Cambridge, USA, November 8-10, ed. by M. H. Hamza, 158-168.

Republished with permission, ACTA Press / IASTED. http://www.actapress.com

Proceedings of the Second IASTED International Conference ALLIANCES, MERGERS, AND ACQUISITIONS November 8-10, 2004, Cambridge, MA, USA

# MERGERS AND ACQUISITIONS IN THE LOGISTICS SERVICE INDUSTRY: CASE STUDY FINDINGS

Lotta Häkkinen
Turku School of Economics and Business Administration
Rehtorinpellonkatu 3, FIN-20500 Turku
Finland
lotta.hakkinen@tukkk.fi

#### ABSTRACT

New challenges and opportunities in the contemporary business environment have triggered a wave of mergers and acquisitions (M&A) in numerous industries as companies have sought ways to enhance their capabilities. This development has also affected to organizational structure of companies in industries, where maximizing organizational learning and flexibility have become critical organizing imperatives rather than economizing on transaction costs. This paper presents case study findings on several M&A deals completed by a pan-European logistics service provider. Results illustrate that general network theory can provide a fruitful basis for examining company growth strategies. Research implications suggest that M&A driven growth may generate a rapid increase in revenues due to e.g. network effects. However, this positive effect is challenging to replicate in the development of profitability.

### **KEY WORDS**

Mergers & acquisitions, logistics service industry, general network theory, and case study

### 1. Introduction

During the past decade, several industries have been reshaped as a result of technological and social developments, which have led to high interconnectedness of organizational systems and people. The trends of globalization, market liberalization and technologic development have forced companies to re-examine their operations in order to answer to these challenges and growing customer expectations. These new challenges and opportunities have triggered a wave of mergers and acquisitions (M&A) within a number of industries as companies have sought efficient ways to enhance their business capabilities and to restructure themselves to better adapt to the new business environment.

This evolution has also raised projections that highly competitive corporations are forming more complex organizational structures, which can be described as networks. These organizational networks include e.g. horizontal corporations, which are organized as networks rather than vertical bureaucracies, and are characterized by decentralization, autonomy, and the coordination of

business components. [1-2] The rise of network forms of organization, particularly all-channel networks built on mediating technologies, in which every node can communicate with every other node, is seen as one of the most important effects of the information revolution on economies [3]. As many others, the logistics service industry has been affected by these trends, which can be seen, for example, in the increased amount of M&A and alliances in the industry and the formation of horizontal networks [4-6]. For example, alliances have become pervasive in the airline industry and have mainly been motivated by economies of scope [7].

Although M&A activity, as its research, is by no means a new phenomenon, the phenomenon itself has evolved since the first M&A wave, which took place in the late 19th century. Changes in the business environment, M&A motives, and the international aspect of M&A have also affected the requirements for company management to successfully carry out the M&A process [8-9]. This evolution of M&A practices may also call for a re-examination of the theoretical basis of M&A motives and related value creation. This paper combines views from general network and resource-based theory and argues that these perspectives can provide a more valid theoretical basis for examining M&A activity in certain business environments than, for example, traditional industrial organization economics.

The purpose of this paper is to describe and explain the M&A driven growth and development of one case company representing the logistics service industry building upon the above mentioned theoretical perspectives. For the past five years, the case company has pursued a growth strategy primarily combining M&A and organic growth, but also forming horizontal alliances. The case represents an industry which has grown substantially during the past decade and has been showing signs of consolidation. The study aims at answering three research questions: 1) how are M&A perceived as a part of company growth strategy as opposed to other methods of expansion in the examined industry, 2) how do the different theoretical perspectives succeed in explaining M&A motives in the examined industry, and 3) how do the different theoretical perspectives succeed in explaining M&A related value creation in the examined industry.

435-021 158

This paper begins with a brief literature review of the theoretical background of M&A research. Specific emphasis is given to the presentation of general network theory and its connection to M&A integration and value creation. This is followed by a presentation of recent development in the logistics service industry in terms of industry consolidation and growth strategies. This development is then elaborated through the presentation of a case study covering a number of related M&A performed by a single logistics service provider (LSP). The case study findings are then compared with literature, and the paper ends with concluding remarks and some suggestions for avenues for further research.

### 2. Literature Review

### 2.1 Theoretical Background of the Strategic Management Stream in M&A Research

Of the numerous streams that have been identified within M&A research, this paper primarily represents the strategic management stream, which adopts the perspective of an individual company and discusses motives for different M&A types and related value creational effects (see e.g. [10-12]). In the context of intra-industry M&A, studies have traditionally concentrated on explaining value creation through increased market power and efficiency gains through scale economies, which represent the tradition of industrial organization economics [10; 13-14] (see also e.g. [15]). However, the related arguments are most relevant in stable industries and modern businesses that operate within dynamic environments may view M&A in a different manner. Sustaining market power or gained scale efficiencies for long periods in such conditions may be impossible, and researchers have therefore argued that companies increasingly use M&A to restructure their businesses as a response to environmental change rather than to reap scale benefits. [16-17] This development underlines the importance of adopting also other complementary theoretical perspectives when examining contemporary M&A.

One complementary perspective is offered by the resource-based view (see e.g. [18-21]), which views M&A as a means to respond to changes in the firm's external environment by acquiring valuable resources and transferring capabilities from other firms to sustain and renew the sources of competitive advantage. Value is created through the integration of existing company resources to form a new complementary resource bundle with superior customer value. Empirical studies in this field have typically used the level of post-acquisition resource redeployment to explain subsequent outcomes [16; 22], which is defined as the use by a target or acquiring business of the other's resources either through the physical transfer of resources to new locations, or through the sharing of resources without physical transfer [16].

General network theory provides another theoretical viewpoint in explaining M&A activity in dynamic industries, where offering a comprehensive product or service portfolio, maintaining wide geographical presence and tapping into knowledge-based resources are crucial (cf. [1-2]). From this perspective, M&A can provide means to build a flexible network design to better manage knowledge-based resources, as well as to acquire and transfer intangible assets through horizontal patterns of exchange to benefit the whole network. Such aspects have not yet received much attention in the field of M&A research but would provide useful insights into understanding M&A related value creation in dynamic business environments. The background of this theoretical approach as well as its implications towards M&A motives and related value creation are presented in more detail in the following.

## 2.2 General Network Theory and Post-acquisition Integration

Networks have been examined in business studies from a variety of perspectives and thus the concept itself also has a number of meanings. [1] The general network approach originates from the observation that value is increasingly created by intangibles that are loaded with knowledge resources (e.g. [23]). Therefore, organizational design has to respond to the requirements of information and knowledge as central drivers. Especially in turbulent business environments, maximizing organizational learning and adaptive flexibility has become the critical organizing imperative rather than economizing on transaction costs. [1]

In contemporary literature, networks are often referred to as inter-organizational structures. However, the concept can also be used to describe the functioning of one individual company (e.g. [24]). On a general level, Omta, Treinkes and Beers [25, p. 2] define networks as the total of actors within one industry and/or related industries, which can potentially work together to add customer value. Actors can either be viewed on a micro-level as human individuals, or on a meso-level, where actors are aggregations of individuals working together for a common goal. More specifically, e.g. Achrol and Kotler [1, p. 148] describe four different kinds of networks: internal, vertical, inter-market, and opportunity networks. This paper focuses specifically on internal networks, which are designed to reduce hierarchy and open firms to their environment leading to better adaptation skills due to better information processing capabilities.

Regardless of the actual definition of the network, it is its features, which distinguishes it from traditional organizational models. For one, network studies suggest alternative sources of value creation compared to traditional value chain analysis [26]. While traditional views building on Porter's [27] value chain define the core sources of value to be the optimization of production and operations, reduction of transaction costs, and appropriation of property rights, the three core sources of

value in network analysis are social structure, learning, and network externalities. [28] (see also [29])

Social network approaches stress the influence of social structure on individual or collective behavior and performance. Different strands of social network analysis have different views on what type of relationship encourages cooperative behavior and performance. Other studies emphasize the density of the network as a whole; others focus on individual relationships and their so-called strength. Yet another view argues that sparse networks with several nonredundant ties connected by structural holes and so-called weak ties are essential in generating new information and diversity (e.g. [30-31]). For example, Allen [32] finds that top-performing teams in companies were 20 times more likely to reach outside the organization to other disciplines for knowledge and information than their lower-performing counterparts (cf. weak ties). In terms of value creation, two main types of learning can be identified. The first type of learning occurs when autonomous agents or groups develop local knowledge and thus to specialize in a particular field. This type of learning enables specialization and favors knowledge diversity in a network (cf. [32]). An essential ability from a network perspective would be to summarize and transfer these particular skills through the interaction with other agents. Learning of the second type is more systematic and involves joint efforts to create and refine knowledge through co-operation. [28-29]

Finally, *network externalities* (also referred to as network effects or Metcalfe's law) are typically linked to networks built on mediating technologies, such as

telephone or fax systems, where end-users join a system that allows them to exchange information and other resources with one another. The value of network membership in such a system is strongly dependent on the total number of members. [33] Expressed in mathematic terms: as the number of nodes in a network increases arithmetically, the value of the whole network increases exponentially. In early phases, such networks experience small gains, but once the network has a critical amount of members, value may increase rapidly in proportion to relative structural growth. [23] For example, corporations such as Federal Express have experienced exponential revenue growth after years of steady, but moderate, increase [34]. In the case of FedEx, network externalities have accrued as more and more distribution nodes have joined the company network, thus making the overall service that the company provides more valuable. While the previous case illustrates direct network externalities, the computer hardware and software industries experience indirect network externalities, where value can be generated through inter-firm coordination [33]

The importance of each of the presented value sources will depend on the nature of interdependence of the examined units [28]. By drawing from the work of Thompson [24], two interdependency types can be identify, which are of relevance in examining non-vertical M&A from a network perspective: pooled and reciprocal interdependence. Figure 1 presents the sources of value and coordination mechanisms corresponding to these types.

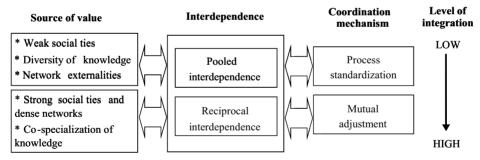


Figure 1. Network Interdependencies and Related Level of Integration (cf. [28])

Pooled interdependence involves loosely coupled units, where each network member gives their own, more or less autonomous, contribution to the whole [24; 28]. The network structure typically includes weak ties and structural holes. This type of structure supports knowledge diversification [28] and tends to be related to mediating technologies [24], which can exhibit network externalities [26]. Thompson [24] suggests that such organizations should be managed using standardized rules to coordinate the various flows between numerous customers, which are distributed in space and time. In

contrast, reciprocal interdependence entails that the output of on a certain network member is the input of another, and vice-versa [24]. Due to this mutual dependence, relationships are often intertwined and require stronger ties and denser networks. Knowledge is typically developed through cooperation rather than within autonomous units. [28] According to Thompson [24], reciprocal interdependencies should be coordinated through mutual adjustment, which involves a constant feedback process between network members.

This discussion on interdependencies can be related back to M&A literature on post-acquisition integration and resource redeployment. Typically, in related M&A some degree of inter-organizational integration is necessary in the post-acquisition period. Integration involves actions taken to secure the efficient and effective direction of organizational activities and resources to accomplish a set of goals [35]. Thus, the adopted type and level of integration is determined by various strategic and organizational factors and is considered critical to the deal outcome [11; 35-37]. Previous authors have identified multiple integration types (e.g. [10-11; 37]), and integration levels (e.g. [35; 38]). Basically, the level of integration refers to the degree of post-acquisition change in the organizations' structural, administrative, and cultural configuration, and can be seen as ranging from autonomy to total absorption [35; 38]. High levels of integration improve the coordination of knowledge flows, which can increase e.g. potential benefits of joint product development and commercialization projects, but at the same time it will cause significant organizational disruption. Low levels of integration respectively will cause less disruption and will support e.g. autonomous knowledge creation. [38-39] (cf. autonomous and dependent subsidiaries as explained by Prahalad and Doz [40]) Thus, high levels of integration would seem to indicated the reciprocal use of resources, while low levels of integration would imply the use of pooled resources, which might not require active resource redeployment. The adopted strategy will also have implications on the sources of value creation (see Figure 1).

## 3. Research Environment: M&A Trends in the Logistics Service Industry

Regardless of the industry in question, consolidation has been shown to follow a similar pattern. According to the analysis of Deans, Kroeger and Zeisel [41], industry development progresses through four phases, which differ in terms of e.g. the magnitude and type of M&A activity. An industry will take on average 25 years to pass through the four stages, after which it will continue to defend its gained position in the final phase. This so-called consolidation curve can be used to explain the logic behind changes in M&A, alliance, and divestiture activity in different industries. According to recent studies (e.g. [42-43]), the logistics service industry is currently in accumulation or scale phase and gradually reaching the initial stages of maturity. In the accumulation phase, markets become less fragmented, and size begins to matter. Rapid non-organic growth is driven by two main motives: to reduce costs through greater economies of scale, and to prevent hostile takeovers. When reaching the subsequent focus phase, M&A will typically involve the selective exchange of business units to strengthen core competencies and mega-mergers become rarer.

M&A activity in the logistics service industry has accelerated dramatically during the past five years [44-47]. This can be seen e.g. by examining the development

of foreign ownership in certain markets. In regional markets in the outskirts of European, such as in Finland, in the beginning of the 1980s 80-90 % of LSPs were domestically owned: currently the clear majority of operating companies is under foreign ownership. Although the recent past has experienced a downturn in the number and magnitude of completed deals, in a long term perspective, the number of completed transactions is still high and the number has actually been picking up since late 2002 [46; 48-50]. During the most vigorous years of M&A activity, a number of mega-mergers were completed. In the land transportation dominant European market, especially formerly state-owned postal companies made good use of the situation and currently they have a significant market share in a number of transportation and logistics segments in Europe. However, acquirers are currently less willing to gain market share at the expense of profits. Instead, deals focus more on profitable companies that serve selected markets, as buying large competitors to gain scale would cause an overlap in service offerings and operational synergies would be limited. [48; 50-51]

During these years, the logistics industry has been going through tough times. With the simultaneous trends of increasing customer expectations [47] and customers reducing the number of service providers due to vendor consolidation [48], there has been increasing demands for integrated cross-border logistics solutions [52]. At present, the number of deals driven by purely financial motives is quite low amounting to 6 % in Europe during 2000/2001. Thus, the majority of deals are related. [45] Currently the main rationales behind M&A activity in the industry are to expand the geographical reach of the company, to enhance the current service portfolio, and to acquire specific capabilities or knowledge outside the current core competencies (e.g. 4PL related) (cf. [46-47]). When adding the motives behind past mega-mergers, a connection can be seen between these four types with the strategic fit framework by Shelton [53] (see also [54]) (see Figure 2).

Probably the most common motive contemporary M&A deals in the LSP industry has been connected to geographical reach. For example in Europe, approximately half of all transactions in the industry are currently cross-border deals growing almost three times as fast as domestic deals in 2000 [44-46]. Cross-border M&A in Europe are expected to increasingly focus on CEE and new EU member countries, which offer promising economic growth perspectives [46]. Also, a large number of deals are aimed at enhancing the service portfolio in order to provide a more comprehensive service package to existing customers. Buyers are therefore still looking for acquisition targets to fill service gaps also in terms of competencies, not only in terms of geographical reach. [49] Due to competitive pressure, many LSPs have also broadened their service portfolios to include e.g. contract manufacturing, financial services, and purchasing support to their clients. [47] For example, the number of acquired IT service and consultancy

#### M&A MOTIVES IN THE LSP INDUSTRY Geographical Filling gap in Acquiring Mega-mergers expansion service portfolio new capabilities Gaining scale Creating a more Creating a more Moving into new economies & comprehensive comprehensive capability areas operational geographical service portfolio, portfolio, but synergies, 'going but focusing on global' focusing on core core competencies markets •Exel - Mark VII •Fiege - Kalf •BTL - Air •GeoLogistics (3 •Deutsche Post -•Havs - DUN Contact Cargo LSPs, investment AEI, ETD, Danzas, Urgente company. DHL etc. consultancy group) Identical Related Related Unrelated supplementarity complementarity

Figure 2. Overview of M&A types in the LSP industry and linking to strategic fits between target and acquirer firm

companies has increased in past years, but still represents quite a small percentage of all completed deals. These types of deals are often related to gaining new capabilities and service offerings [45], or building 4PL companies (cf. industry convergence M&A, see [55]).

It should be noted, that apart from M&A, LSP companies have also used other types of contractual agreements to reach to above mentioned objectives in recent years. Recent case studies reveal that LSPs typically use more than one expansion mode to gain e.g. geographic coverage [4-6]. A number of studies have aimed at finding the determinants of each entry mode. Building on eclectic theory (see e.g. [56]), Lemoine [57] proposes that the reinforcement of core markets and core competencies will typically be achieve using greenfield operations or wholly owned subsidiaries. M&A are preferred in highly competitive markets with low environmental and cultural uncertainties, but they can also be driven by the need to develop new core competencies or to follow the requirements of large customers. Nonequity modes, such as working partnerships and strategic alliances, are favored in more turbulent and unfamiliar environments. [5; 57]

Recent signs concerning M&A activity in the industry would thus seem to fit the characteristics of the focus phase: the era of mega-mergers has more or less come to an end and M&A activity is becoming more selective by nature. This is supported by the results of a recent survey of a number of CEOs from large logistics providers. While M&A are still an important part of the companies' growth strategy, it is projected that revenue growth in the

upcoming years will largely come from organic development. This seems to indicate that as M&A activity is currently living a downturn while companies are focusing on the post-acquisition integration of past targets. [47] The study by Stone [58] on UK-based logistics service provides presents similar results. When comparing these trends to Figure 2, it can be proposed that while the motives pictured in the middle of the figure are currently dominant, fewer deals will represent megamergers in the future and capability-seeking deals will become more frequent.

### 4. Research Approach and Data Collection

The empirical part of this paper presents an embedded case study [59] from the logistics service industry. The case represents an industry which has grown substantially during the past decade and has been showing signs of early consolidation. The case company can be described as a pan-European freight forwarding and logistics service provider. It has grown rapidly during the past fifteen years and especially during the late 1990s and early 2000s and currently governs an extensive decentralized network. The company has been chosen based on its versatile growth strategy, in which M&A have played a key role but which also has involved organic growth and a number of horizontal alliances. During the years 1999-2002, the case organization acquired over ten European freight forwarders and LSPs.

For this study, both qualitative and quantitative data concerning these completed deals was gathered covering both pre-acquisition and the post-acquisition information on each deal. Empirical data was collected from several types of sources in order to enhance understanding by examining the research object from various perspectives. This study mainly builds on primary data gained from an in-depth interview with a key informant representing senior management in the case company. The informant was chosen based on his broad knowledge on company actions and conducted M&A deals during the period under examination. (e.g. [60-61]) In addition, a number of industry reports published by independent consultancies were examined in order to get information on both the industry and case company backgrounds. A vast amount of PR-material (e.g. press releases, annual reports, presentations produced by the case company) was also covered relating to overall company strategy and features of individual deals. The collected data has been analyzed primarily using the principals of pattern-matching and explanation-building [62].

### 5. Case Study Findings

The case company's strategy is to become a leading niche player in key industries by serving both large multinational companies as well as small and medium sized enterprises. Therefore, it has built a network which can deal with a small number of shipments from a large number of customers, but which can also provide tailormade services to dedicated customer. The core service offerings of the case company consist of international freight forwarding, public storage, shared user distribution centers and dedicated logistics services. Thus, the portfolio ranges from standardized commodity type services to more complex and customer specific services, such as supply chain management or multi-site inventory management. The company states its strengths to be its extensive network, with which it can provide services to pan-European customers, and local entrepreneurship, which is enforced by the company's decentralized structure

Company management has pursued this strategy through organic growth and selective M&A. During the past years, M&A has been an important part of the growth strategy. Despite this, the company does not typically target specific companies. Rather, it constantly surveys a number of potential acquisition targets meeting certain requirements, and deals can be sometimes be circumstantial. The general M&A strategy is to build a complete pan-European network through acquisitions. This particularly applies to market entry in European countries where the companies is not yet present. This has led to a number of acquisitions in CEE countries during past years. The company has preferred M&A over greenfield investment in this area, because this rapidly provides the acquirer with a fixed setup and financially motivated management in the market. The company also

has been interested in completing its service portfolio through M&A in countries, where it is already reasonably established. The focus has primarily been on air and sea freight activities. However, in principal the case company prefers to grow organically in market segments where it is already established in order to avoid overlaps. Outside Europe, the company has expanded solely through exclusive partnerships as its own volumes are insufficient to maintain fully-owned operations.

From all the M&A deals completed by the case company during 1999-2002, five case deals were selected for closer examination in this paper. These deals have been chosen in order to illustrate the variety of M&A types but also to profile general trends in M&A activity. Table 1 summarizes the background of each of the selected cases.

All of the acquired companies were relatively small in terms of their turnover as compared to that of the acquiring company (see Target size, Table 1). Case Alpha represents a typically market entry acquisition (cf. supplementary fit in Figure 2). The deal was motivated largely by the geographical location of the target, but also by its capabilities in air freight services. The acquired company was loosely integrated to the acquiring organization; integration consisted mainly of the transfer of financial procedures to the target (cf. [37], 1986, procedural integration). The acquirer also gave financial support to the target and redeployed some of its marketing knowledge in order to strengthen the target's ability to serve pan-European customers. Apart from these actions, the acquired organization has remained relatively autonomous. It has gained from active support, but chiefly from the new linkage to the whole network and related services, which it can now offer to its customers. The potential related to this network position has not yet been fully realized as local customers do not yet acknowledge or require all the offerings available. This situation is likely to change as the economy develops in the local market in question. Company management describes the outcome of the deal to be extremely positive.

Deal Beta, in turn, is primarily related to the third M&A type pictured in Figure 2 (complementary fit). The deal comprised of a number of shared-user distribution facilities and related resources, which were acquired from a company, which no longer considered logistics activity to belong to its core business. The target directly filled a strategic gap in the acquirer's service portfolio and did not create any overlaps with the acquirer's operations; rather, it has complemented them. Due to the acquisition, the case organization is able to provide a wider array of services to a large base of its existing customers regardless of their own geographical location. The target has continued to operate autonomously, although some restructuring has been done to the acquired facilities. This is also perceived in the case company as a highly successful deal. Case Gamma can be seen as a variation of the two previously presented deals combining both geographical and service-related aims. At the time of the

deal, the case organization was already present in the national market of the target, but its presence was not extensive and its service portfolio was not complete. Therefore, the deal was driven by the prospect of gaining new customers and providing enhanced services to existing ones. As the acquirer had existing operations in the market, overlaps were integrated. When comparing the post-acquisition management actions of deals Gamma

and Alpha, it should be noted that target Gamma received a lot more managerial, financial, and information systems support and knowledge redeployment from the acquirer than target Alpha did. This was largely due to organizational factors (e.g. personnel skills) rather than the M&A objectives and required post-acquisition measures.

Table 1. Cross-case Comparison of Selected M&A Deals

Case	Alpha	Beta	Gamma	Delta	Epsilon
Target size	< 1%	~ 5%	< 1%	~ 5%	1 - 5%
Acquirer's market presence	New	Existing	Existing, but limited	Existing	Existing
Target's service portfolio	Logistics services and freight forwarding	European shared-user logistics servives	Logistics services and freight forwarding	Local transport and distribution	Logistics services and freight forwarding
		Not part of target's core business			
Integration	Independent company, but linked to the network	Operates more or less autonmously, but is linked to the network	Operations integrated with existing ones	Fully integrated, currently no separate locations	Operates more or less autonmously
		Some restructuring		Some activities have been discontinued (app. 50 %)	Some restructuring
Target strenghts to joint entity	Geographical market entry	Filled a strategic gap in the comapny's service portfolio	Good combination of logistics services, strong in air freight	Local distribution in a significant market	Specific customer relationship
	Strong in air freight and logistics services		Interesting geographical location		
Acquirer strenghts to joint entity	Financial support	Int. freight forwarding network	Managerial, financial & IS support	-	-
	Some marketing & logistics knowledge				
Outcome	Extremely positive	Extremely positive	Very positive	Medium to negative	Mixed

Deals Alpha, Beta and Gamma profile the general M&A strategy of the case organization and the objectives concerning these deals have been more or less met. Deals Delta and Epsilon, on the other hand, represent rather unique deal types with more mixed outcomes. Deal Delta involved the acquisition of transport-oriented company located in an area where the case organization was already well established. The rationale was to improve the organization's local distribution resources in a key market area, and this acquisition presented means to do so. The target was fully integrated into the acquirer, which involved substantial restructuring and divestitures of the target's operations. Despite major post-acquisition actions, the deal has not succeeded in meeting its expectations. The restructuring process in the postacquisition phase was mainly the responsibility of the target company management, and would have probably required more involvement from the acquirer's management. Thus, the deal had 'complementary' motives, but also involved 'identical' features (cf. Figure 2). Finally, deal Epsilon was driven by the prospect of acquiring a certain customer account through the deal, rather than gaining certain proprietary resources of the target. Thus, post-acquisition integration was minimal. The customer relationship was successfully transferred, but subsequent development has moved these customerspecific activities away from the original target facilities to other network locations. Due to this still ongoing reorganization process, the current outcome of the deal could be described as mixed.

### 6. Discussion

When comparing the empirical findings to the common motives in the industry (Figure 2), it can be seen that the case company has primarily followed an M&A strategy related to complementary and supplementary fits. None of the deals were directly related to motives common in mega-mergers or cases of identical fit. This may just portray the strategy of certain medium-sized niche player in the logistics service industry, but it also may depict the

current industry trend. None of the of the deals purely represented capability M&A either, which entails the movement to new, unrelated, capability areas (cf. [53]). Deal Gamma featured similar qualities, but though the M&A brought a number of new customers to the acquirer from the target company, the received service capabilities can hardly be seen as unrelated.

During the period under examination, the geographical focus of supplementary deals had been towards CEE countries in particular, where good flows are likely to develop in the future. Outside Europe, geographical connections were formed using alliances. This supports the research results of Lemoine and Dagnæs [5] who find that the reinforcement of core markets (i.e. Europe) and capabilities is commonly done using equity-based modes such as acquisitions, while in the process of entering more unfamiliar markets and gathering new capabilities modes such alliances are preferred. In terms of complementary services, the focus had been on filling gaps in air and sea freight in certain geographical areas, but as a whole the trend has also been to develop the company's competencies in offering different types of value added logistics services in addition to traditional freight forwarding.

In terms of M&A related value creation, industry organization theory based argumentation would seem to offer limited applicability in examining the case in question. However, general network theory and resource-based theory offer a fruitful point of view to this

discussion. As can be seen from Table 1, most of the examined deals, with the exception of deal Delta, did not involve high levels of integration. Though the acquisition targets have legally become under the governance of the case organization, several of them continue to operate relatively autonomously, but at the same time benefiting from being linked to an extensive network (i.e. weak ties). Thus, the interdependencies between network members can be described as pooled, rather than as reciprocal; each adds its own tangible and intangible resources (e.g. area service specific capabilities) to the network. Knowledge is diversified, though some generic knowledge can be transferred from the acquirer to target organizations, and joint learning and knowledge creation is not pursued systematically. Direct network externalities are visible in the revenue development of the case organization though it does not perfectly follow Metcalfe's law. However, this revenue growth can partly be explained by economic growth during this period and although revenue has grown substantially, the development of operating profit and return on investment has been rather the opposite (see Figure 3). Despite these recent figures, network externalities may take effect in its full potential with a time delay. At the moment, customers that have been linked to the network through M&A are not using the possibilities of the network to its full extent. However, as volumes in these areas grow and customer requirements increase, network effects may become more visible.

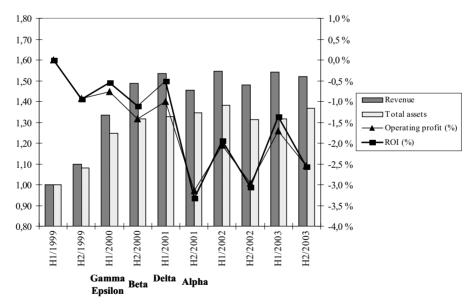


Figure 3. Development of revenue, total assets, operating profit and return on investment (ROI) in the case company compared to figures in the first half of 1999

A linkage can also be seen to resource-based theory. By adding on additional geographical locations and capabilities through M&A, the case organization has succeeded in improving customer service possibilities for its whole customer network. This has rarely involved any resource redeployment from the target to the acquiring company, and redeployment in the other direction has been typically limited to procedural integration [37] and managerial skill transfer [11]. Such findings are common in service industries (cf. [35]). The extent of these integrative actions has depended largely on organizational factors in addition to matters of strategic fit. Pablo [35] actually argues that when making integration decisions, managers will weight organizational task needs more heavily than other characteristic (e.g. strategic task needs). Thus, the need for eliminating overlaps and consequently causing organization disruption has been quite minimal. None of the examined cases portray traditional arguments related to industrial organization theory (i.e. market power and operational synergy motives and identical fit). Deal Delta had some overlapping features but neither the M&A motives nor the actual outcome supports this argumentation. Thus, the case findings argue in favor of revenue-based rather than costbased synergies (cf. [63]).

### 7. Conclusions

Despite the recent downturn, M&A activity is still exceeding long-term historic levels and continues to reshape several industries. This paper has aimed at describing and explaining the development of one case company from the logistics service industry, which has grown through completing a large amount of relative small, related M&A during a short period of time. This growth has been accompanied by organic growth and the forming of horizontal alliances. Theoretical implications of the study argue that general network theory can provide a fruitful basis for examining company growth strategies, especially in industries which rely on mediating technologies, such as information or transportation sectors. In addition, the study underlines the importance of resource complementary and supplementary when examining the motives and value creation effects of contemporary M&A. Managerial implications suggest that M&A driven growth may generate a rapid increase in revenues due to e.g. direct network effects. However, this positive effect is challenging to replicate in the development of profitability due to problems in integrating overlapping resource and delays in realizing the full potential of the created network. Therefore, it would be interesting to continue research in other industries using case studies to compare the effects of similar M&A strategies in different environments. Another avenue for further research would be to examine learning effects in post-integration management through longitudinal case studies.

### References:

- [1] R. Achrol & P. Kotler, Marketing in the network economy, *Journal of Marketing*, 63(Special Issue), 1999, 146-163.
- [2] M. Castells, *The rise of the network society* (Malden, MA: Blackwell Publishers, 1998).
- [3] J. Arquilla, & D. Ronfeldt, Preparing for informationage conflict: Part 1 Conceptual and organizational dimensions, *Information, Communication & Society*, 1(1), 1998, 1-22.
- [4] S. Hertz, *The internationalization processes of freight transport companies* (Stockholm: Stockholm School of Economics, 1993).
- [5] W. Lemoine & L. Dagnæs, Globalisation strategies and business organization of a network of logistics service providers, *International Journal of Physical Distribution and Logistics Management*, 33(3), 2003, 209-228.
- [6] J. Ludvigsen, *The international networking between European logistics operators* (Stockholm: Stockholm School of Economics, 2000).
- [7] E. Vaara, B. Kleymann & H. Seristö, Strategies as discursive constructions: The case of airline alliances, *Journal of Management Studies*, 41(1), 2004, 1-35.
- [8] J. Katz, A. Simanek & J. Townsend, Corporate mergers and acquisitions: One more wave to consider, *Business Horizons*, 40(1), 1997, 32-40.
- [9] UNCTAD, World investment report 2001 Promoting Linkages (United Nations, New York: United Nations Conference on Trade and Development, 2001).
- [10] J. Birkinshaw, H. Bresman & L. Håkanson, Managing the post-acquisition integration process: How the human integration and task integration processes interact to foster value creation, *Journal of Management Studies*, 37(3), 2000, 395-425.
- [11] P. Haspeslagh & D. Jemison, *Managing acquisitions:* Creating value through corporate renewal (New York: Free Press, 1991).
- [12] R. Larsson & S. Finkelstein, Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: A case survey of synergy realization, *Organization Science*, 10(1), 1999, 1-26.
- [13] D. Dranove & M. Shanley, Cost reduction or reputation enhancement as motives for mergers: The logic of multihospital systems. *Strategic Management Journal*, 16(1), 1995, 55-74.
- [14] F. Scherer & D. Ross, *Industrial market structure* and economic performance (Boston, MA: Houghton Mifflin Company, 1990).
- [15] J. Woodward, *Industrial organization: Theory and practice* (New York: Oxford University Press, 1980).
- [16] L. Capron, P. Dussauge & W. Mitchell, Resource redeployment following horizontal acquisitions in Europe and North America, 1988-1992, *Strategic Management Journal*, 19(7), 1998, 631-661.
- [17] A. Seth, Sources of value creation in acquisitions: an empirical investigation, *Strategic Management Journal*, 11(6), 1990, 431-446.

- [18] E. Penrose, *The theory of the growth of the firm* (Oxford: Basil Blackwell, 1959).
- [19] C. Prahalad & G. Hamel, The core competence of the corporation, *Harvard Business Review*, 68(3), 1990, 79-91.
- [20] D. Teece, G. Pisano & A. Shuen, Dynamic capabilities and strategic management, *Strategic Management Journal*, 18(7), 1997, 509-533.
- [21] B. Wernerfelt, A resource-based view of the firm, *Strategic Management Journal*, 5(2), 1984, 171-180.
- [22] L. Capron, W. Mitchell & A. Swaminathan, Asset divestiture following horizontal acquisitions: A dynamic view, *Strategic Management Journal*, 22(9), 2001, 817-844
- [23] K. Kelly, New rules for the new economy (New York: Viking Penguin, 1998).
- [24] J. Thompson, *Organisations in action: Social science bases of administrative theory* (New York: McGraw-Hill, 1967).
- [25] S. Omta, J. Treinkes & G. Beers, Chain and network science: A research framework, *Journal of Chain and Network Science*, 1(1), 2001, 1-6.
- [26] C. Stabell & Ø. Fjeldstad, Configuring value for competitive advantage: On chains, shops, and networks, *Strategic Management Journal*, 19(5), 1998, 413-437.
- [27] M. Porter, Competitive advantage: Creating and sustaining superior performance (New York: Free Press, 1985).
- [28] S. Lazzarini, F. Chaddad & M. Cook, Integrating supply chain and network analyses, *Journal of Chain and Network Science*, 1(1), 2001, 7-23.
- [29] C. Beckman & P. Haunschild, Network learning: The effects of partners' heterogeneity of experience on corporate acquisitions, *Administrative Science Quarterly*, 47(1), 2002, 92-124.
- [30] A-L Barabási, *Linked: The new science of networks* (Cambridge, MA: Perseus Publishing, 2002).
- [31] M. Granovetter, The strength of weak ties, *American Journal of Sociology*, 78(6), 1973, 1360-1380.
- [32] T. Allen, *Managing the flow of technology* (Cambridge, MA: MIT Press, 1995).
- [33] M. Katz & C. Shapiro, Systems competition and network effects, *Journal of Economic Perspectives*, 8(2), 1994, 93-115.
- [34] J. Hagel & A. Armstrong, *Net gain: Expanding markets through virtual communities* (Boston, MA: Harvard Business School Press, 1997).
- [35] A. Pablo, Determinants of acquisition integration level: A decision-making perspective, *Academy of Management Journal*, 37(4), 1994, 803-836.
- [36] J. Kitching, Why do mergers miscarry?, *Harvard Business Review*, 45(6), 1967, 84-101.
- [37] P. Shrivastava, Postmerger Integration, *Journal of Business Strategy*, 7(1), 1986, 65-76.
- [38] S. Lees, Global acquisitions Strategic integration and the human factor (New York: Palgrave Macmillan, 2003).
- [39] P. Puranam, H. Singh & M. Zollo, A bird in the hand or two in the bush? Integration trade-offs in technology-

- grafting acquisitions, European Management Journal, 21(2), 2003, 179-184.
- [40] C. Prahalad & Y. Doz, An approach to strategic control in MNCs, *Sloan Management Review*, 22(4), 1981, 5-13.
- [41] G. Deans, F. Kroeger & S. Zeisel, The consolidation curve, *Harvard Business Review*, 80(12), 2002, 20-21.
- [42] A.T. Kearney, Merger endgames Industry consolidation and long-term strategy (Chicago: A.T. Kearney, 2002).
- [43] M. Berglund, P. Van Laarhoven, G. Sharman & S. Wandel, Third-party logistics: Is there a future, *International Journal of Logistics Management*, 10(1), 1999, 59-70.
- [44] Arthur Andersen, European deal survey 2000 Logistics (Arthur Andersen Corporate Finance Group, 2000).
- [45] Arthur Andersen, European deal survey 2001 Logistics (Arthur Andersen Corporate Finance Beratung GmbH, 2001).
- [46] Ernst & Young, European deal survey 2002 Logistics (Ernst & Young Corporate Finance, 2002).
- [47] R. Lieb & M. Hickey, The year 2002 survey: CEO perspectives on the current status and future prospects of the third party logistics industry in the United States. (Accenture and Northeastern University, http://www.accenture.com/xdoc/en/services/scm/scm\_thought\_ceo\_survey.pdf, 2002).
- [48] USBX, Logistics industry report (Santa Monica, CA: USBX Advisory Services, 2003).
- [49] USBX, Mid-year logistics report (Santa Monica, CA: USBX Advisory Services, 2003).
- [50] USBX, Logistics industry report (Santa Monica, CA: USBX Advisory Services, 2004).
- [51] USBX, Mid-year logistics report (Santa Monica, CA: USBX Advisory Services, 2002).
- [52] R. van Hoek, Global and pan-European Logistics?, *International Journal of Physical Distribution and Logistics Management*, 30(5), 2000, 454-460.
- [53] L. Shelton, Strategic business fits and corporate acquisition: Empirical evidence, *Strategic Management Journal*, 9(3), 1988, 279-287.
- [54] M. Salter & W. Weinhold, *Diversification through acquisition: Strategies for creating economic value* (New York: Free Press, 1979).
- [55] J. Bower, Not all M&As are alike and that matters, *Harvard Business Review*, 79(3), 2001, 92-101.
- [56] J. Dunning, The eclectic (OLI) paradigm of international production: Past, present and future, *International Journal of the Economics of Business*, 8(2), 2001, 173-190.
- [57] W. Lemoine, Towards a model of organizational modal choice in LSPs foreign operations, *Proc. ACS-CISIM (Advanced Computer Systems & Computer Information Systems and Industrial Management Applications) 2004 Conf, vol. 2.*, Elk, Poland, 2004, 271-284.

- [58] M. Stone, European expansion of UK third-party logistics service providers, *International Journal of Logistics: Research and Applications, 4*(1), 2001, 97-115. [59] R. Yin, *Case Study Research: Design and methods* (Newbury Park, CA: Sage Publications, 1989).
- [60] D. Cowles, P. Kiecker & M. Little, Using key informant insights as a foundation for e-retailing theory development, *Journal of Business Research*, 55(8), 2002, 629-636.
- [61] N. Kumar, L. Stern & J. Anderson, Conducting interorganizational research using key informants, *Academy of Management Journal*, 36(6), 1993, 1633-1651.
- [62] R. Yin, The case study crisis: Some answers, *Administrative Science Quarterly*, 26(1), 1981, 58-65.
- [63] L. Capron, The long-term performance of horizontal acquisitions, *Strategic Management Journal*, 20(11), 1999, 987-1018.

### TURUN KAUPPAKORKEAKOULUN JULKAISUSARJASSA A OVAT VUODESTA 2004 LÄHTIEN ILMESTYNEET SEURAAVAT JULKAISUT

A-1:2004 Sakari Lehtiö Suomen pankkikriisin taustatekijät, luonne ja kriisinhoito erityisesti säästöpankeissa A-2:2004 Seppo Ristilehto Liiketoimintashokki Tapaustutkimus laivanrakennus- ja autoteollisuusalan yritysten kriisiratkaisuista ja ohjaustoimenpiteistä A-3:2004 Tomi J. Kallio Organisaatiot, johtaminen ja ympäristö. Organisaatiotieteellisen ympäristötutkimuksen ongelmista kohti yleistä teoriaa yritys-luontosuhteesta Zsuzsanna Vincze A-4:2004 A Grounded Theory Approach to Foreign-Market Expansion in Newly-Emerging Markets. Two Finnish Companies in the Visegrád Countries Anni Paalumäki A-5:2004 Keltaisella johdetut. Artefaktit, johtaminen ja organisaation kulttuurinen identiteetti A-6:2004 Eila Heinonen Aktiivinen harrastus työn siirtymän ja kompensaation ilmentymänä. Case matkailuoppaat Eija Koskivaara A-7:2004 Artificial Neural Networks for Analytical Review in Auditing Karin Holstius and Pentti Malaska A-8:2004 Advanced Strategic Thinking. Visionary Management A-9:2004 Jari Hvvärinen Empirical Evidence on International Outsourcing in Production Esa Puolamäki A-10:2004 Strategic Management Accounting Constructions in Organisations. A Structuration Analysis of Two Divisional Strategy Processes A-11:2004 Jani Erola A Remedy with Rationalities. Improved Rational Action Theory with Empirical Content as a Solution to the Fallacies in Sociology

A-12:2004 Tomi Viitala Tax Treatment of Investment Funds and Their Investors within the European Union A-13:2004 Jonna Järveläinen Online or Offline: Motives behind the Purchasing Channel Choice of Online Information Seekers A-14:2004 Aapo Länsiluoto Economic and Competitive Environment Analysis in the Formulation of Strategy. A Decision-Oriented Study Utilizing Self-Organizing Maps Pekka Stenholm A-15:2004 Maantiekuljetusyrityksen ympäristölähtöinen kilpailukyky A-16:2004 Juha Kontio Diffusion of Database Innovations. A Multiple Case Study in Six Finnish Organizations A-1:2005 Satu Rintanen The Establishment and Development Directions of Corporate Environmental Management – Case Studies in Italian and Finnish Meat Processing Sector A-2:2005 Seppo Määttä Strategian ja strategisen informaation tulkintahorisontteja. Case Valtiovarainministeriö Olli Järvinen A-3:2005 Privacy Management of e-Health. Content Analysis of 39 U.S. Health Providers' Privacy Policies Markus Orava A-4:2005 Internationalisation Strategies of Knowledge-Intensive Professional Service Firms in the Life Sciences A-5:2005 Birgitta Sandberg The Hidden Market – Even for those who create it? Customer-Related Proactiveness in Developing Radical Innovations A-6:2005 Lotta Häkkinen Operations Integration and Value Creation in Horizontal Cross-**Border Acquisitions** 

Kaikkia edellä mainittuja sekä muita Turun kauppakorkeakoulun julkaisusarjoissa ilmestyneitä julkaisuja voi tilata osoitteella:

KY-Dealing Oy Rehtorinpellonkatu 3 20500 Turku Puh. (02) 481 4422, fax (02) 481 4433 E-mail: ky-dealing@tukkk.fi

All the publications can be ordered from

KY-Dealing Oy Rehtorinpellonkatu 3 20500 Turku, Finland Phone +358-2-481 4422, fax +358-2-481 4433 E-mail: ky-dealing@tukkk.fi