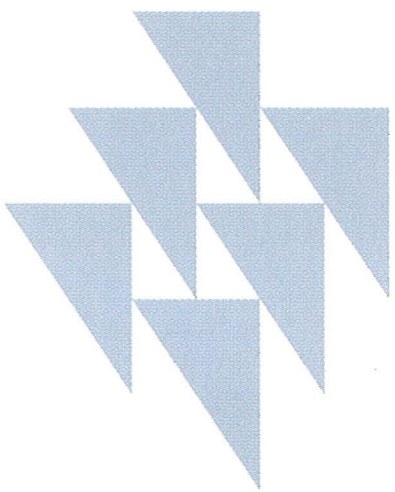
ETLA ELINKEINOELÄMÄN TUTKIMUSLAITOS

Maarit Lindström

LOCATIONAL SOURCES OF COMPETITIVENESS:

Finnish Companies' International Business Operations in the Baltic Sea Region



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Finnish Companies' International Business Operations in the Baltic Sea Region

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TO MY PARENTS AND GRANDPARENTS

Lindström, Maarit, **Locational Sources of Competitiveness: Finnish Companies' International Business Operations in the Baltic Sea Region**. Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 2003. (ISSN 0356-7443; No. A 37) ISBN 951-628-397-7.

ABSTRACT: The study analyses major Finnish companies' international business operations in the Baltic Sea Region with specific focus on locational sources of competitiveness. First, the study concentrates on examining major international business theories' applicability for describing and explaining Finnish companies' operations in the Baltic Sea Region markets in competitiveness perspective. After that volume, direction and structure of Finnish companies' foreign trade and FDI in the Baltic Sea Region are examined at national economy level. The focus of the study i.e. examining locational sources of firm-specific competitiveness of Finnish companies in the region, is then provided to find out what extent competitive advantages of firms stem from the home country and host countries of the Baltic Sea region. The study also seeks to identify the meaning of foreign operations on companies' competitiveness as well as the role of modes of foreign involvement for acquiring foreign sources of core competencies. It also aims to identify which countries provide main access to competitive advantages via foreign direct investment. Some attention is also given to the role of the business environment and to government policy. The analysis of locational sources of competitiveness is based on views of managers responsible for foreign operations in 100 Finnish companies in the framework of a survey and interviews conducted in Finland in the spring of 2002. The analysis of the survey data was mainly implemented with the assistance of statistical analysis.

Empirical evidence supports the claim that a major part of the Finnish companies' created assets, especially technological ones, are of home country origin. Nevertheless, certain other elements, such as consumer demand for upgraded product quality; inter-firm competition; and links with companies operating in the same industry are originating to a significant extent in other Baltic Rim countries, especially the EU member countries. It was also found that technology intensity and the degree of transnationality of the companies are such company characteristics that explain the extent to which companies are taking advantage of foreign sources of competitiveness.

KEY WORDS: The Baltic Sea Region, Finnish companies' foreign operations, foreign trade, foreign direct investment, location, competitiveness, competitive advantage, industrial policy.

Lindström, Maarit **Kilpailukyvyn alueelliset lähteet: Suomalaisten yritysten kansainvälinen liiketoiminta Itämeren alueella**. Helsinki: ETLA, Elinkeinoelämän Tutkimuslaitos, The Research Institute of the Finnish Economy, 2003. (ISSN 0356-7443; no A37). ISBN 951-628-397-7.

TIIVISTELMÄ: Tutkimus tarkastelee suurten suomalaisten yritysten kansainvälistä liiketoimintaa Itämeren alueella. Erityisenä tarkastelun kohteena ovat kilpailukyvyn alueelliset lähteet. Aluksi tutkimuksessa keskitytään arvioimaan eräitä kansainvälisen liiketoiminnan keskeisiä teorioita ja niiden soveltuvuutta kilpailuetujen näkökulmasta selittää suomalaisten yritysten operaatioita Itämeren alueen markkinoilla. Tämän jälkeen tutkitaan suomalaisten yritysten ulkomaankaupan määrää, suuntautumista ja rakennetta kansantalouden tasolla. Tutkimuksen keskeinen kysymyksenasettelu kohdistuu yritysten kilpailuetujen lähteisiin Itämeren alueella. Tutkimuksen tarkoituksena on selvittää, missä määrin kilpailuedut ovat peräisin kotimaasta ja ulkomailta. Työ pyrkii tarkastelemaan myös ulkomaantoimintojen vaikutusta yritysten kilpailukykyyn sekä eri ulkomaantoimintamuotojen merkitystä ulkomailta peräisin olevien kilpailuetujen hankkimisessa. Lisäksi arvioidaan sitä, mihin maihin tehdyt suorat sijoitukset ovat tuottaneet eniten lisäarvoa yritysten kilpailukyvylle. Työssä arvioidaan jonkin verran myös liiketoimintaympäristön ja eri politiikka-alueiden roolia. Kilpailuetujen analyysi perustuu ulkomaantoiminnoista vastaavien johtajien näkemyksiin 100:ssa suomalaisyrityksessä. Postikyselyyn ja henkilöhaastatteluihin perustuva tutkimus suoritettiin Suomessa keväällä 2002. Tulosten analysoinnissa on käytetty hyväksi tilastollisia menetelmiä.

Tutkimustulokset tukevat väittämää, jonka mukaan suurin osa suomalaisten yritysten kilpailueduista, erityisesti ns. teknologisista kilpailueduista on peräisin kotimaasta. Tästä huolimatta tiettyjä muita elementtejä, kuten kulutuskysyntää, tuotteiden laadun parantamista, yritysten välistä kilpailua ja yhteyksiä saman alan muihin yrityksiin, hyödynnetään muissa ja muista Itämeren alueen maista, erityisesti Euroopan unionin jäsenmaista. Tulosten mukaan myös yritysten teknologiaintensiteetti ja kansainvälistymisen taso ovat sellaisia tekijöitä, jotka selittävät yritysten ulkomaisten lähteiden hyödyntämisen määrää ja arvostusta.

ASIASANAT: Itämeren talousalue, suomalaisten yritysten kansainvälinen liiketoiminta, kansainväliset operaatiot, ulkomaankauppa, suorat sijoitukset, sijainti, kilpailukyky, kilpailuetu, teollisuuspolitiikka.

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various enjoyable discussions and debates of multidisciplinary research and problem settings with special characteristics attached to studying Russia and transition countries more widely. At a more pragmatic level, department secretary Essi Lindroos was an irreplaceable help to me to arrange various office tasks at the University of Helsinki.

My doctoral thesis would not have been accomplished without proper finance. The following Finnish Foundations have given their support to my doctoral thesis: They are Helsingin Sanomain 100-vuotissäätiö, Paulon Säätiö, Liikesivistysrahasto and Turun kauppakorkeakoulun tukisäätiö Anja ja Erkki Toivasen rahasto. Also the Academy of Finland and Aleksanteri Institute as well as the Department of Economics in Turku School of Economics and Business Administration have funded my work. These foundations have provided me with the most necessary scholarships and grants to enable me to proceed with my studies. I hope that my thesis has met the goals set for it.

In the final phase of the dissertation, my current employer Etla, The Research Institute of the Finnish Economy, offered me the best possible working environment to analyse Finnish economy. It has been my prerogative to work and discuss various economic research issues together with managing director, professor Pentti Vartia as well as with other staff. My colleagues in the research programme on 'European Integration and the International Economy' have obviously been closest to my study. They are research director Kari Alho, research manager Markku Kotilainen, professor Mika Widgrén and researcher Ville Kaitila, who have commented my work.

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August 2003

Maarit Lindström

Content

List of Established Abbreviations

AC	Accession Countries
APEC	The Asia Pacific Economic Cooperation
BFTA	Baltic Free Trade Area
BSR	Baltic Sea Region
CEEC	Central and Eastern European Countries
CEFTA	Central European Free Trade Area
CIS	Commonwealth of Independent States
CN	Combined Nomenclature
EBRD	European Bank for Reconstruction and Development
EBSR	Eastern Baltic Sea Region
EEA	European Economic Area
EFTA	European Free Trade Association
EU	European Union
FDI	Foreign Direct Investment
FIM	Finnish Markka
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GL	Grubel-Lloyd Index
GNP	Gross National Product
IIT	Intra-Industry Trade
IMF	International Monetary Fund
INTERREG	Interregional
IPS	Intellectual Property Rights
MNC	Multinational Company
MNE	Multinational Enterprise
OECD	Organization for Economic Cooperation and Development
PCA	Partnership and Co-operation Agreement
PHARE	Assistance for Economic Reconstruction
PPP	Purchasing Power Parity

R&D	Research and Development
SCP	Structure-Conduct-Performance Paradigm
SME	Small and Medium Sized Enterprise
TACIS	Technical Assistance to the Commonwealth of Independent States
TC	Transaction Cost
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UK	United Kingdom
USD	United States Dollar
WBSR	Western Baltic Sea Region
WTO	World Trade Organization

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1. Introduction

1.1 Background to the Study

During the past two decades, Finnish companies' internationalisation has greatly accelerated and deepened. At the same time, the Baltic Sea Region has become, to an increasing extent, a major market area for a large number of Finnish companies. Statistics at the end of the 1990s show that the share of the Baltic Sea Rim countries in Finnish exports was 36% while the share in imports was over 40%. At the same time, more than 40% of the stock of foreign direct investments by Finnish companies were realised within the Baltic Sea Region economies.

The Baltic Sea Region unites countries from the European Union, which is deepening its integration as well as embracing the coming enlargement, but also the Baltic Rim transition countries, that have been on a path to create solid, market-based systems for more than ten years now. Most regional economic analysts agree that there will be continuing growth in the Baltic Sea Region in the new millennium. However, few seem to agree on which patterns in trade and foreign direct investment are likely to develop and be sustained in the long run.

Theoretical explanations of foreign trade, foreign direct investments and internationalisation of companies' business are vast, manifold and differ between diverse economic schools of thought. Because of this there is no one generally accepted model or unified theory to explain companies' international operations. While regional economic integration in the Baltic Sea Rim has increased due to a general globalisation tendency in the world economy among other things, a question has emerged whether these heterogeneous markets should be seen as a whole i.e. developed and transition economies together, as their economic system has basically become the same. Traditional theories and empirical studies in the field tend to treat developed or developing countries and transition markets separately.

In the late 1990s and early 2000, research concerning international economic matters in the Baltic Sea Region has mainly touched upon networking, regional and sub-regional integration, macro economical comparison of national economies, transitional matters, firm strategies and adaptation, FDI determinants and enterprise entry mode issues as well as industrial policy matters and barriers to trade and FDI. However, much of the research carried out still separates this market area to Western and Eastern European parts. The present study covers the

whole region and takes into account that major companies trade and undertake FDI all over the region not solely in the Eastern or Western part of the Baltic Sea Rim. Thus it makes possible to compare particular companies' operations, and in this case sources of competitiveness, in different foreign markets of nearby regions.

The aim of the thesis is to analyse locational sources of firm-specific competitiveness. The study concentrates on major Finnish companies, which are already operating and doing business in the region, as they have a unique position to assess and compare not only the home country but also the host country determinants and origins of competitiveness. The study contributes to empirical research by broadening the knowledge of Finnish companies' operations, including the importance of their foreign sources of firm-specific competitiveness. It also analyses modes of foreign involvement in sourcing competitiveness abroad. The study concentrates on competitive advantages from the point of view of technology intensity of the companies and their degree of transnationality. This research also looks at the effects of foreign operations on competitiveness as well as the role of government policy in enhancing competitiveness. Some attention is paid at the business environment as well as the likely changes in the role of different countries in the future development of the Baltic Sea Rim. Theoretical contribution of the research is based on use and assessment of current foreign trade and foreign direct investment theories from the point of view of locational sources of competitiveness and examination of theories' applicability to Finnish companies' international business operations in the Baltic Sea Rim markets.

1.2 Research Questions and Objectives

The study seeks to find out whether firm-specific competitive advantages of Finnish companies operating in international business in the Baltic Sea Region arise from their foreign operations. Additionally, to what extent these competitive advantages are obtained from home country and host countries in the Baltic Sea Region? To answer these questions the objectives of the study are addressed as follows:

1. To examine the theories' applicabilities for describing and explaining Finnish companies' operations in the Baltic Sea Region markets from a competitiveness perspective.

2. To examine volume, direction and structure of Finnish companies' foreign trade and FDI in the Baltic Sea Region.

3. To examine locational sources of firm-specific competitiveness of Finnish companies in the Baltic Sea Region.

4. To analyse the extent to which competitive advantages of firms stem from the home country and host countries.

The first objective is captured by analysing the determinants of competitive advantage identified by literature and then relating these concepts to the empirical design of the study. The objective is also sought by academic discussion founded on earlier and current literature as well as research findings of the present study.

Analysis of the statistics of foreign trade and FDI of Finland based on Eurostat data and Bank of Finland data combined with the author's calculations and analysis attains to the second objective. In addition, empirical and theoretical studies made by other researchers in the field are examined.

The third and fourth objectives are captured by studying the questionnaire survey results. The survey was directed to the major Finnish companies' managers of foreign operations. Questions were asked about foreign operations and sources of competitiveness of the companies. Structured answers were then analysed with the assistance of statistical methods. Some qualitative aspects were also included in the form of open-ended questions in the questionnaire in addition to interviews of certain respondents and analysis of case companies.

In this study, the companies' decision to enter into foreign trade operations are taken as given, therefore the study does not concentrate on organisational or behavioural determinants of the decision-making process related to foreign operations inside the firm. The business environment and its relation to barriers of trade and FDI are touched upon in Chapter 3 in which institutional arrangements in the Baltic Sea Region are also reviewed. Otherwise business environment factors, such as sector specific factors, affecting companies' sources of competitiveness in each target market are also taken as given.

1.3 Positioning of the Study

Most of the theories in international business explaining companies' international operations are partial in nature i.e. unable to provide general theory, model or paradigm for every kind of operation, not to mention to predict these operations (Reinikainen 2001, 174-180). They are often particularly concentrated on developed, developing or transition countries or on global operations in a more general sense, the latter being the case especially in research concentrating on

multinational companies and their operations (see e.g. Aliber – Click, 1993, 5; Borsos-Torstila 1999, 5).

Much fewer studies have been made on certain regions that unite developed and developing economies or developed and transition economies like the Baltic Sea Region, which unites developed market economies as well as former socialist regime countries, usually still called transition countries.

Empirical economic research concerning the Baltic Sea Region has mainly concentrated on the economic region per se, i.e., explaining the diversity of economies in the area and the economic connections and links within the region (Kivikari 1996). A similar kind of research is founded on economic-political topics, such as the Northern Dimension initiative of Finland in the European Union (Alho 2000). Also the effects of economic integration (Säynevirta and Ylä-Anttila 1996), globalisation (Väyrynen 1998; Väyrynen 1999; Ylä-Anttila 1998) and the European Union's eastern enlargement has been subject to observation and analysis from the perspective of Finnish economy (Alho, Kaitila et al. 2001; Alho, Hazley et al. 2001). Furthermore, trade and FDI barriers and the liberalisation of business environment in the area have been the focus of empirical studies (Hernesniemi 1996; Sorsa 1997; Hazley and Hirvensalo 1998).

Notably fewer studies in international business are concentrated on the Baltic Sea Region as the companies' market area. Many studies have then again been made of nearby regions of Russia and the Baltic States as a market area for Finnish companies: For example, Salmi (1995) has analysed network structures of a Finnish company as a case study and Hirvensalo (1996) has studied several Finnish companies' adaptation to the turbulent transitionary markets in the beginning of the 1990s. Borsos-Torstila (1999) has analysed Finnish industrial companies' FDI determinants to a broad selection of Eastern European transition economies. Entry mode issues have also been investigated rather extensively in an Eastern European context by Törnroos and Nieminen (1999) just to mention some of the valuable research done. Organisational and managerial transformation in the turbulent Eastern European business environment in the 1990's has been broadly studied by Liuhto (1999).

Naturally, the EU as a major market area for Finnish companies has inspired a great deal of business research. Especially before the membership of Finland in the European Union in 1995, when the attitudes and views of companies were analysed carefully (e.g. Tolvanen 1993). Also some other major institutional changes like European Union integration and the European Monetary Union have prompted similar kinds of research (e.g. Okko et al.1997; Lehtinen and Vallius 1993).

Otherwise research has tended to orient either to a certain country or countries and specific industrial sector or sectors in the Baltic Sea area.

1.4 Definition of Concepts

The main concepts used in this study are defined as follows:

Baltic Sea Region (BSR) is defined to include the markets and economies, which are immediately located around the Baltic Sea. They are Finland, Sweden, Denmark, Germany, Poland, Estonia, Latvia, Lithuania and Russia, even if in Russia's case only Russian Baltic Rim areas are included in namely Moscow, St. Petersburg and Leningrad region and the Karelian republic as well as Kaliningrad region. *Baltic Sea Rim* is used as a synonym for Baltic Sea Region.

Competitiveness of a firm refers to the competitive advantage or the selection of competitive advantages a company possesses when it competes in markets. Term competitiveness and competitive advantage are used synonymously. Thus high competitiveness means high competitive advantage and vice versa.

Competitiveness of a nation refers to the competitive advantage or the selection of competitive advantages of a nation. In this study the term is used with the same content as Porter (1990) has defined it: "The fourfold diamond of a nation". Competitive advantages of nations are seen as potential locational sources for companies to utilise or to develop their firm-level competitive advantages.

Foreign direct investment (FDI) is defined as investment in which the investor or investors have obtained sufficient stock to have significant management control in a foreign firm or have set up a subsidiary (i.e. greenfield investment) in a foreign country.

International business means business activities, which involve crossing national borders. This definition includes not only international trade and foreign manufacturing but also service industry activities. *Foreign business* denotes the domestic operations within the foreign country. International business and foreign business is used interchangeably.

International production refers to different stages of production in different (foreign) countries.

Multinational company or multinational enterprise (MNE) is a firm, which owns and controls income-generating assets in more than one country. *Transnational company* is used interchangeably with the term multinational company.

Transition country is defined as a country that formerly, before 1989, belonged to the Eastern European socialist society regime. This regime ruled economic and social as well as political systems.

European Union accession country in this study refers to a Baltic Sea Region country, which had applied to become a member in the European Union by the time of the study. Those countries were Estonia, Latvia, Lithuania and Poland.

European Union member country in this study refers to a Baltic Sea Region country, which was a member of the European Union during the time of the study. Those countries were Finland, Sweden, Denmark and Germany. (In the survey, however, Finland i.e. home market is separated from the other European Union member countries for the purposes of the study.)

1.5 Outline of the Study

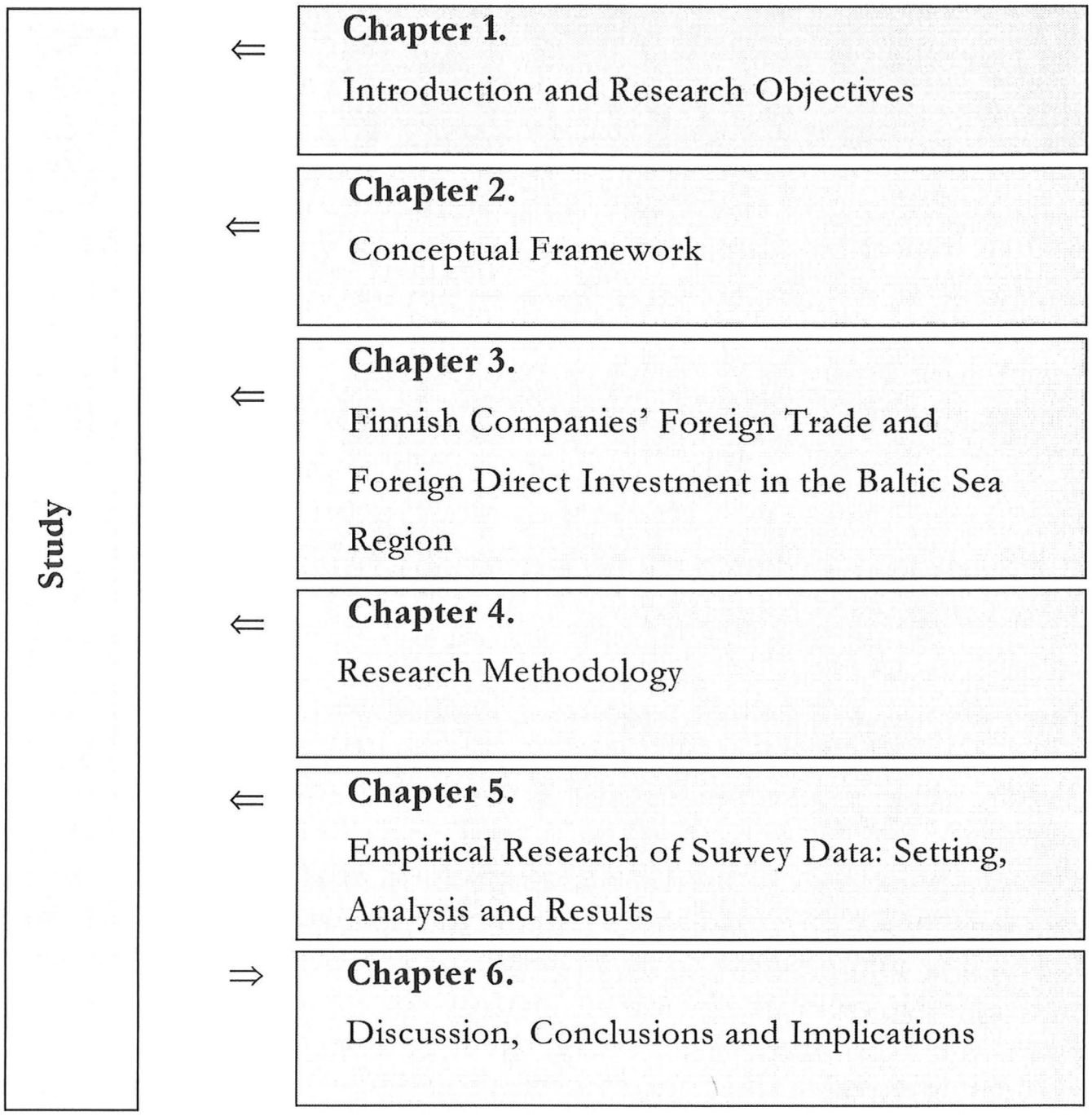
The structure of the study follows from the theoretical and empirical objectives of the research (see Figure 1).

Chapter 1 includes the introduction, which establishes introduction and objectives together with the positioning of the study.

Chapter 2 focuses on the conceptual bases of the research. Various theories are presented and analysed from the point of view of the research questions set. The purpose is not to make a comprehensive overview of the entire field of international business operations of multinational companies from competitiveness perspective. Instead major research areas and key concepts are presented and discussed to be able to apply them to the empirical part of the study.

In Chapter 3, Finnish foreign trade and FDI in the Baltic Sea Region are analysed to understand the relative importance of the area to Finnish companies and to the Finnish national economy. The region is first described from the point of view of volume and direction of trade flows and division of FDI. After that, the position of Finland is analysed in detail. An the end of Chapter 3, relevant institutional framework and general barriers to trade and FDI in the Baltic Sea Rim are also touched upon.

Figure 1. Outline of the Study



Chapter 4 deals with the methodological aspects used in the study. The research design and data are introduced together with choices concerning operationalisation of variables and the analysis of the data. In addition, the chapter considers the validity and reliability of the design. Chapter 4 concludes with the contemplation of the limitations of the study.

The empirical survey findings and interviews are analysed in Chapter 5. The main body of the chapter is taken up by empirical data analyses and conclusions based on them. The final Chapter 6 includes implications of theoretical and empirical findings. Furthermore, suggestions for future study as well as policy implications are addressed.

2. Conceptual Framework for Analysing Locational Sources of Competitiveness of Firms

To begin with, this Chapter discusses the ways in which different theories relevant to analysing companies' international operations have had an impact on the general understanding of international allocation of resources and the exchange of goods and services between countries. Section 2.1 aims to draw a picture of the literature relevant for the positioning of the study. After that several theories are discussed more closely in chapters 2.2-2.6 to create a conceptual framework for the empirical purposes of the study.

2.1 Approaches to Study International Trade and International Production

Most theories and models concerning international economic operations were relatively formal and focused on international trade until the 1950's. There were some theories about capital movements though, but they were much less developed, and mainly complemented trade theories presented. In the 1950's international economists were also not so concerned with explanations of structure of trade. Instead, they were explaining international trade in terms of comparative advantages[1] of participating countries based on perfect competition. Theorising was based on reasoning what would occur if certain assumptions were present in a real world situation. The Hechsher-Ohlin (H-O) model is the most famous of these types of theories.

In the literature, the Heckscher-Ohlin and Hecksher-Ohlin-Samuelson models have been criticised on the grounds of unreality and inapplicability of their assumptions. Most of the criticism is directed to the assumptions that markets function effectively, there are no external economies of production, information is costless, there are no barriers to trade, technologies are similar, products are undifferentiated and the pool of national factors is fixed. Furthermore, skilled labour and capital do not move among nations. All these conditions are considered to have only minor relation to actual competition in most industries.

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[1] According to this principal countries' underlying characteristics shape the pattern of trade. Countries tend to export goods that intensively use their relatively abundant factors, i.e. countries with highly skilled work force tend to export goods that require skill-intensive production and countries with abundant land and favorable climate export agricultural products etc.

However, the enormous post war changes in the structure and pattern of trade and capital exports moved international economists interest on trade patterns such as they were. There began to emerge a growing amount of research, which took advantage of statistical data in purpose to explain trade patterns. The works of MacDougall (1951) and Leontief (1953, 1956) are some of the earliest studies. Since the 1960's one has been able to identify two main streams in international economics. The first one is focused on developing a more realistic Heckscher-Ohlin-Samuelson doctrine and the second one is targeted on explaining the growth and composition of foreign direct investment or production financed by such an investment (Dunning 1988a, 14-15).

Nowadays, traditional models of trade (classical and neo-classical) still have an essential role in international economics and international business research, even though the role of theories that allow imperfections in goods and factor markets, which again allow alternative patterns of ownership of firms or organising transactions, have arisen significantly.[2] Comparative advantage theorists who have made serious efforts in making the H-O-S model more realistic have thus also diversified the international economics paradigm. This can be seen in that there are different theories for example for intra-industry trade (e.g. Grubel and Lloyd 1975; Tharakan 1983) and economies of scale as well as imperfect competition (e.g. Krugman 1979, Lancaster 1980, Helpman 1990).

The second stream of international economics sought reasons first for international capital movement from neo-classical investment theories like Mundell's factor endowment theory (1957). However, soon it became more interesting to study the features and determinants of foreign direct investment in terms of ownership advantages. This strand includes early studies of Hymer (1960), Dunning (1958), Caves (1971) and similar.

In between these two aforementioned main streams of thought, one can find several groups of scholars that have given special effort in forwarding multinational enterprise (MNE) theories. One group has taken a macro economic perspective to MNE activity and has concentrated on the issue of why countries engage in foreign direct investment (FDI). They usually take neo-classical type trade models as their starting point and then broaden them to explain the extent and pattern of foreign production. These studies try to use location-specific variables and explain why firms in particular countries have different propensities to engage in trade and foreign production. This group links closely to developmental cycle theorists such as Vernon (1966), Kojima

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[2] Scientists differ radically in their choice of the unit of analysis though. There are analyses from firm -level decisions up to a system level analysis of capitalism.

and Ozawa (1985) as well as Narula (1995) who are interested in countries path of development in value-added chains based on international trade and international production. Dunning (1981) has also developed a similar type of macroeconomic approach in describing investment development path.

Another group of scholars and analysts are concentrated on why firms of one nationality are better able to penetrate foreign markets than indigenous firms located in those markets. They are also interested in finding out why these firms are interested in controlling value-added activities outside their national borders. Hymer (1960, 1976) with his industrial organisation theory is considered one of the most influential antecedent theory developers of current works of this group.

The last group[3] consists of research, which is interested in the existence and behaviour of an individual enterprise and the growth and expansion of its operations internationally. The scholars of this group include for example Buckley (1990, 1991), Casson (1987,1992), Hennart (1982, 1986, 1989,1991a and 1991b) and Rugman (1980, 1982, 1986). The group has derived from modern transaction cost theories of which Coases' studies (1937,1960) initiated, as well as from organisational theories of which Williamsons' (1975, 1985, 1993) studies represent.[4]

From all this, it can be concluded that there is no all-embracing explanation of international trade or international production, but only partial explanations to certain type of research questions. This means that one variable may be exogenous in one theory and endogenous in another. Therefore, it can be argued that there is no one operationally testable theory that can explain all forms of foreign trade or foreign production nor is there unified theory to explain the behaviour of all kind of firms. However, there is still a need to see these different theories or paradigms more as complements rather than substitute explanations of international business operations.

For the purposes of the present research theme, certain current theories of international economics and international business have to be presented here in more detail (see Table 1). They are divided into

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[3] More marginal groups outside this categorisation considering MNE issues are scientists who study capital markets approaches (e.g. Agmon and Lessard 1977) and exchange rate analysis (e.g. Aliber 1970).

[4] Industrial organisation theory and internalisation/transaction cost theories have developed simultaneously even though independently (Pitelis - Sugden 1991). The views of researchers of internalisation theory do not differ in substance from those of transaction costs economists, but in emphasis: Williamson's arguments focus primarily on market failure because of lock-in effects arising from asset specificity and internalisation theory focuses on market failures in market information (Meyer 1998, 75).

three different main groups that are (1) theories of location of production (2) theories concerning firms and competition and (3) theories concerning scope of the firm.

Table 1. Main Theories and Models Explaining Firm Level Foreign Trade, Foreign Direct Investment and Competition Noticing Locational Perspective

Location of Production	Firms and Competition	Scope of the Firm
Economic Geography	Strategic Competition	Internalisation theory
Theory of Location	Sources of Competitive Advantage	Internationalisation process model
	Modern international trade theory	
Eclectic approach		

Approaches based on economic geography (e.g. Krugman 1991) focus on the reasons of regional concentration of economic activity. Krugman for example focuses on modelling the agglomeration process. Existing industrial structure is seen as a major determinant of inward FDI. Suppliers of intermediate goods and technologically skilled labour force are seen as locational advantages for related firms and competitors. Thus these studies are concentrated on specific externalities. The theory of location on the other hand uses the concept of 'locational advantage' as reviewed by Caves (1982) and Dunning (1993a). The locational advantages may act as a stimulus for undertaking FDI based on considerations of firms' strategies of being market seekers, raw material seekers, production efficiency seekers or knowledge seekers.

Firms and competition literature is divided basically into three different groups, even though the lines between the groups are not clear-cut. The first group is the strategic competition theorists, who analyse strategic competition among MNEs and often uses formal models like game theoretical models as a method of analysis. There are, however, others that use less formal methods, but still focus on competitive push and pull factors related to location. One example of this kind of scholar is Porter (1990) who focuses on push factors arising from the competitive nature of the home market. He sees that domestic competition strengthens firms' competitive advantages, because it creates permanent challenges for improvements.

Another group is the competitive advantage theorists, who seek to distinguish firm-specific ownership advantages. This group is related to a resource-based view of the firm (e.g. Penrose 1959) and includes names like Markusen (1991,1995), Pavitt (1988) and Cantwell (1989). The third group is the modern international trade theorists who take advantage of more realistic neo-classical trade theories and use models for the purpose of describing locational decisions of multinational firms (see e.g. Helpman – Krugman 1985, Horstman – Markusen 1992, Markusen 1995).

When one studies theories of the scope of the firm, one very soon confronts internalisation theories, as mentioned earlier. They explain the emergence of multinational companies from the failure of markets. Other theories grouped under this title are internationalisation theories, which are more dynamic in nature compared to internalisation theories. These include theories like Nordic internationalisation models of Luostarinen (1970,1979) and Johanson – Vahlne (1977) just to mention some of them. Internationalisation theories tend to describe companies' internationalisation as a process and they define different stages companies go through when developing their foreign trade and foreign business.

Under this three-class-categorisation there is also the eclectic paradigm of Dunning (1977), which integrates different elements of various theories into a general paradigm of international production and due to this nature it is here seen as a synthesis theory. This OLI - paradigm of Dunning combines ownership-specific advantages together with locational and internalisation advantages to explain preconditions for foreign production (Dunning 1981,1988a, and later extensions).

This brief literature review serves a theoretical starting point to define the framework for the conceptual analysis. It also builds a background for a frame of reference of theories for the empirical part of the study in the forthcoming chapters.

In the following sections, different theories relevant to the positioning of this study and its question setting are presented in more detail. This means that macro-economic theories such as capital markets approach (Aliber 1970, Agmon - Lessard 1977) and exchange rate analysis (Froot – Stein 1991, Kogut – Kulatilaka 1996) as well as macro econometric analysis (Glegg 1995) are omitted. Also developmental cycles approaches are abandoned in this context (Vernon 1966, Kojima – Ozawa 1984, Dunning 1986, Ozawa 1992, Narula 1995). Other theories irrelevant to the study are institutional analysis approach (Loree – Guisinger 1995) as it mainly concentrates on legal, institutional and general policy environment of host countries. Industrial organisation theory is taken account only to the extent that it studies the sources of

the competitive advantage of a company. Thus, for example, game theories and strategic competition theories are abandoned, as the effect of rival behaviour on an organisation's ability to compete is not in the core of this study.

Behavioural theories (Aharoni 1966) of the firm is neither included as foreign production and foreign trade are taken as given in the study. The study concentrates on companies, which are already involved in one way or another in foreign operations and thus the decision process to undertake an international business operation mode is not the issue here. Neither strategy theories, which study competitive strategies of companies in order to achieve and sustain competitive advantage, are looked at such, but are included as an accepted part of larger concepts.

2.2 Theories Based on Market Imperfections

Theories that are based on market imperfections argue that output and/or factor markets are imperfect. Stephen Hymer (1960,1976)[5] is considered as a forefather of this line of theorising and his works are concentrated on explaining international production rather than foreign trade. The core argument underlying theories based on market imperfections is that foreign firms operating and establishing a production unit in a certain country have a disadvantage compared to local firms. If foreign firms in spite of that make FDI to that country, they have to posses some advantages, which local competitors do not have, or at least they have to have more of those advantages than local competitors have, so that they could compensate the disadvantages they face in that country. Otherwise, it would not be profitable to undertake direct investment but serve these markets in another way.

Disadvantages foreign firms are confronting are related to their ignorance of local customers' tastes, legal system, institutional framework, costs of travelling and communication etc. Among the advantages that foreign firms may have are brand name, patented or non-marketable technology, marketing skills, managerial skills, to name but a few. Market imperfections are necessary, but not sufficient condition for foreign direct investments of a company. Hence a company may have aforementioned advantages and still it would prefer to serve certain foreign markets for example with exports or licensing.

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[5] Charles Kindleberger (1969) refined and publicised Hymer's idea.

2.2.1 Internalisation Theory and Transaction Cost Theory

Internalisation theorists[6] think that the markets for key intermediate products like human capital, knowledge and management expertise, are imperfect and co-ordinating different activities through markets induce notable time lags and transaction costs. Internalisation of markets across national boundaries leads to FDI. The theory of internalisation explains the organisational process by which imperfect markets are internalised by private companies until the benefits and costs of further internalisation are equalised at the margin. In this framework, proprietary know-how can be turned into firm-specific competitive advantage on occasions when the market would fail to develop such knowledge due to the public goods nature of knowledge (Rugman et al. 1995, 107-108).

Certain scientists like Rugman (1980,1985) argue that internalisation itself is sufficient condition for FDI and existence of MNEs. This is however inconsistent with the eclectic paradigm in which three conditions are required to explain FDI. (In this study, the view of the eclectic paradigm is adopted, see Chapter 2.6.) Since the early contributions some strategic aspects have also been added to internalisation theories among the factors that may lead to internalisation and in turn foreign production (See e.g. Buckley 1990, Rugman et. al. 1995).

As already mentioned earlier (Chapter 2.1) internalisation approach and transaction cost approach are very much alike. The difference is found mainly in the stress between them. The internalisation approach emphasises the avoidance of market imperfections, which are imperfect markets and externalities, as a cause for internalisation. The transaction cost approach stresses the transaction costs, which are lock-in effects due to asset specificity, for a reason for internalisation (Williamson 1975,1981,1985).

Even though different scholars in this field have variant opinions about knowledge advantage, product differentiation and horizontal information, many of them agree with importance of integration in internalisation.

The internalisation theories and transaction cost theories are mainly concentrated on vertical integration instead of horizontal integration. Vertical integration means the extent to which successive stages in

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[6] Originally developed by Buckley and Casson (1976). [Rugman (1980,1981,1982,1986) has synthesised much of the literature on the theory of MNE into theory of internalisation, originally developed by Buckley and Casson (1976)]. Other early contributors e.g. Caves (1971), Rugman (1981), Hennart (1982).

production and distribution are placed under the control of a single company. Firms move to integrate either forward or backward by establishing a subsidiary. Vertically integrated companies are seen to use the differences in country-specific factor endowments more eagerly whilst horizontally integrated firms produce the same product in host markets as in the home country (Buckley and Casson, 1976).

Table 2. Forces Encouraging for Corporate and Regional Integration (a Transaction Cost Approach)

Corporate Integration	Integration of Countries
**Basic Motive*: to improve profitability and the long-term competitive position.	**Basic Motive*: to increase efficiency or resource usage and to increase the economic and strategic (including political) strength of region and member countries.
*To exploit economies of the firm.	*To overcome structural market distortions e.g. tariff barriers, subsidies etc. and to encourage competition.
*To reduce risk and uncertainty associated with market transactions.	*To reduce imperfections in foreign exchange, capital and labour markets.
*To protect quality control of intermediate and final products.	*To facilitate the possibility of product and process specialisation of firms within the region, and promote trade in intermediate products.
*To capture the economies of synergy, which result from the common ownership of separate, but interrelated activities.	*To facilitate the conduct of optimal policies and to secure gains from policy co-ordination in circumstances of structural and policy interdependence.
*To protect the value of proprietary assets, e.g. technology, trademarks, management skills etc.	*To develop economic and strategic strength by the adoption of common policy towards non- member countries.
*To overcome the transaction costs of using markets.	*To increase market size and improve the technological capability of member countries.
*To gain competitive strength.	
*To share common overheads.	

Source: Dunning and Robson (1988, 3)

Table 2 outlines the factors that favour corporate and regional integration respectively. Some of these factors encourage either corporate integration or integration of countries, and others support both of them. Certainly, the operation of these factors does not necessarily speak in favour of either corporate or regional integration. It is not certain even when they are of significant weight.[7]

Nevertheless, in general, regional economic integration is aiming at a more efficient and fluid functioning of markets than would be the case without this integration. Whereas corporate and economic integration at company level is aiming at taking advantage of differences of markets by integrating company's functions, horizontally or vertically as the OLI-paradigm points out.

Most of the findings of these newer integration studies suggest that more gains and benefits of economic integration can be expected than the older customs union theory suggested. These benefits include increased FDI flows, lower transaction costs, development of new comparative advantages, gains of transfer of technology etc. Robson (1983) among others also argues that the benefits are greater than those related to trade creation and emphasised by the traditional customs union theory.

However, it does not seem certain whether the motive for bypassing the market is its inefficiency in terms of high transaction costs and longer time lags or anything else as Agarwal (1980, 754) argues. She also claims that the theoretical framework by Buckley and Casson does not apply in the short run or especially to FDI of smaller firms operating in one or two foreign countries.

Internalisation theories are also very difficult to verify empirically (Agarwal 1980, 754) as it is hard to make accurate and separating variables for ownership advantages and internalisation advantages. Still, many empirical tests, which have applied simplifying assumptions, have concluded that internalisation is focused on industries with high R&D expenditure (see for example Heum – Ylä-Anttila 1993).

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[7] Dunning and Robson (1988,3) argue that the position of established multinational producers, or regions or countries may mean that neither corporate, regional nor national interests would be served by either participation in or promotion of regional groupings, especially in the absence of some form of compensation for the adjustment or displacement costs that might be entailed. For similar reasons it is invariably not in the interests of a particular multinational or country to promote regional integration if that would mean subjecting an established market to increased competition from new entrants.

2.2.2 Resource-based view

The resource-based view has been - according to Foss et al. (1995, 6) - developed under industrial organisation in the field of strategic management and it has two sets of roots. Those are (1) seminal writings on business strategy by Andrews (1971) and Chandler (1962) as well as (2) Penrose's (1959) work characterising the firm as a collection of productive resources. According to Andrews, corporate strategy should define the business in which a company will compete, preferably in a way that focuses resources to convert distinctive competence into competitive advantage. The tradition following Penrose has stressed the conception of a firm as a collection of resources rather than a set of product-market positions (Foss et al. 1995, 6).

In the field of industrial organisation, researchers have also concentrated on market imperfections and its effects on companies. Industrial organisation approach recognises market imperfections based on either exogenous variables in a firm's competitive environment (e.g. oligopolistic rivalry or bilateral monopoly) or endogenous variables, meaning firm-specific advantages of companies and companies' ability through these advantages to generate market imperfections (Peteraf, 1993)[8].

The resource-based view tends to see performance differences across firms as a result of differences in efficiency rather than differences in market-power. In explaining these differences, the resource –based view has a tendency to concentrate on resources and capabilities that are long-lived and difficult to imitate (Conner 1991). Barney has addressed competitive imperfections in strategic factor markets and claimed that first mover advantages and entry barriers exist only under conditions of resource heterogeneity and immobility (Barney 1986,1991). Dierickx and Cool (1989) have differentiated between resource stocks and flows and argued that strategic assets which are necessary for sustainable competitive advantage, have to be developed internally and cannot be purchased on the factor markets. Some authors have also applied resource-based view to explain growth and development of multiline firms[9].

The main difference between the internalisation approach and the resource-based approach is that the internalisation approach sees external factors to the company as crucial for foreign operations of companies. On the other hand, the resource-based view sees firm-specific advantages as a more crucial element. For example, Dunning

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[8] Hymer's (1976) work has had influence on the emergence of this field of studies too.
[9] E.g. Montgomery – Hariharan (1991) have shown that a firm's diversified expansion is a function of its wide resource base.

(1993a) distinguishes three firm-specific or ownership advantages (see chapter 2.6):

- resources based on the assets of the firm, including property rights and intangible assets;
- advantages of common governance of the established form over a de novo entrant;
- advantages of common governance arising because of multinationality.

Relevant company assets include physical assets, intellectual property rights and intangible assets embodied in the human capital of the firm, such as management, engineering, marketing and financial capabilities. Also, empirical studies focused on relevant firm-specific advantages indicate that the most important advantages are technology related, including capabilities of generating technological know-how, brand names and marketing knowledge. However, the empirically significant firm-specific advantages vary widely across source countries (Hennart and Park 1994).[10]

2.3 Internationalisation Process Models

While internationalisation and transaction cost theories are often considered too static and do not take changes in the environment into account (Ciborra 1992), internationalisation models have been developed to make a more dynamic approach to describe and explain the companies international operations.

Researchers studying the internationalisation process of companies consider the international business of a firm as a gradual process. Many of the early contributors of this field are of Nordic origin, like Johanson – Wiedersheim-Paul (1975) and Johanson – Vahlne (1977) in Sweden Luostarinen (1979) in Finland and Juul – Walters (1987) in Norway. One can also include American scientists such as Cavusgil – Nevin (1981) and Bilkey – Tesar (1977) in this group.

According to internationalisation models, the gradual or sequential increase of companies international involvement is explained by interaction of experimental information of foreign locations and operations in the countries and, on the other hand, growing resource

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[10] Even though the present study is not focused on analysing the sources of internalisation as such, they have to be referred to at least as far as internalisation is included in the synthesis approach theories, especially the eclectic paradigm of Dunning (see more closely Chapter 2.6).

commitment. This means that companies obtain experience first in economically and culturally near regions[11] before entering further markets. Thus companies enter first to 'closer' markets before entering further. In this manner firms are able to take advantage of early experiences of internationalisation and recognise and avoid possible risks. In addition, entry modes are chosen according to related risks. This refers to the degree of ownership as in the early stages of internationalisation foreign trade is preferred over FDI. In the later stages, ownership degree increases and riskier forms of operations tend to take place.

Past involvement of company-specific and country-specific experiences affect the current and future foreign activities of companies in internationalisation models. Experimental knowledge is highlighted as it is needed to recognise business opportunities and reduce market uncertainty (see f.e. Cavusgil 1980, Reid 1981).

Since the early research, several empirical studies have been made, which imply that small firms are typically more careful in expansion of foreign operations due to more limited resources compared to larger companies (see f.e. Welch – Luostarinen, 1988).[12] It has also been noted that in the 1990s firms moved faster in internationalisation stages than they did before (Nordström 1991, Luostarinen 1994).

In Finnish internationalisation models, environmental push and pull factors are also sought to explain internationalisation (home and host country factors) in addition to company-specific advantages (Luostarinen 1994). See Figure 2. (Luostarinen 1994, 27). The most important home country push factors include small size, openness and peripheric location of the domestic market. Most notable host country pull factors for Finnish companies abroad are recognised to be largeness and openness of host country markets (Luostarinen 1994, 7-8).

Internationalisation models are important in dynamising the basic motive -approach related to companies' international operations. Even so, they are not unattached to more static patterns. For example Luostarinen's push and pull approach can be seen to relate to the eclectic approach of Dunning (Chpater 2.6). (Reinikainen 2001, 193; Okko – Haukioja 2002, 5).

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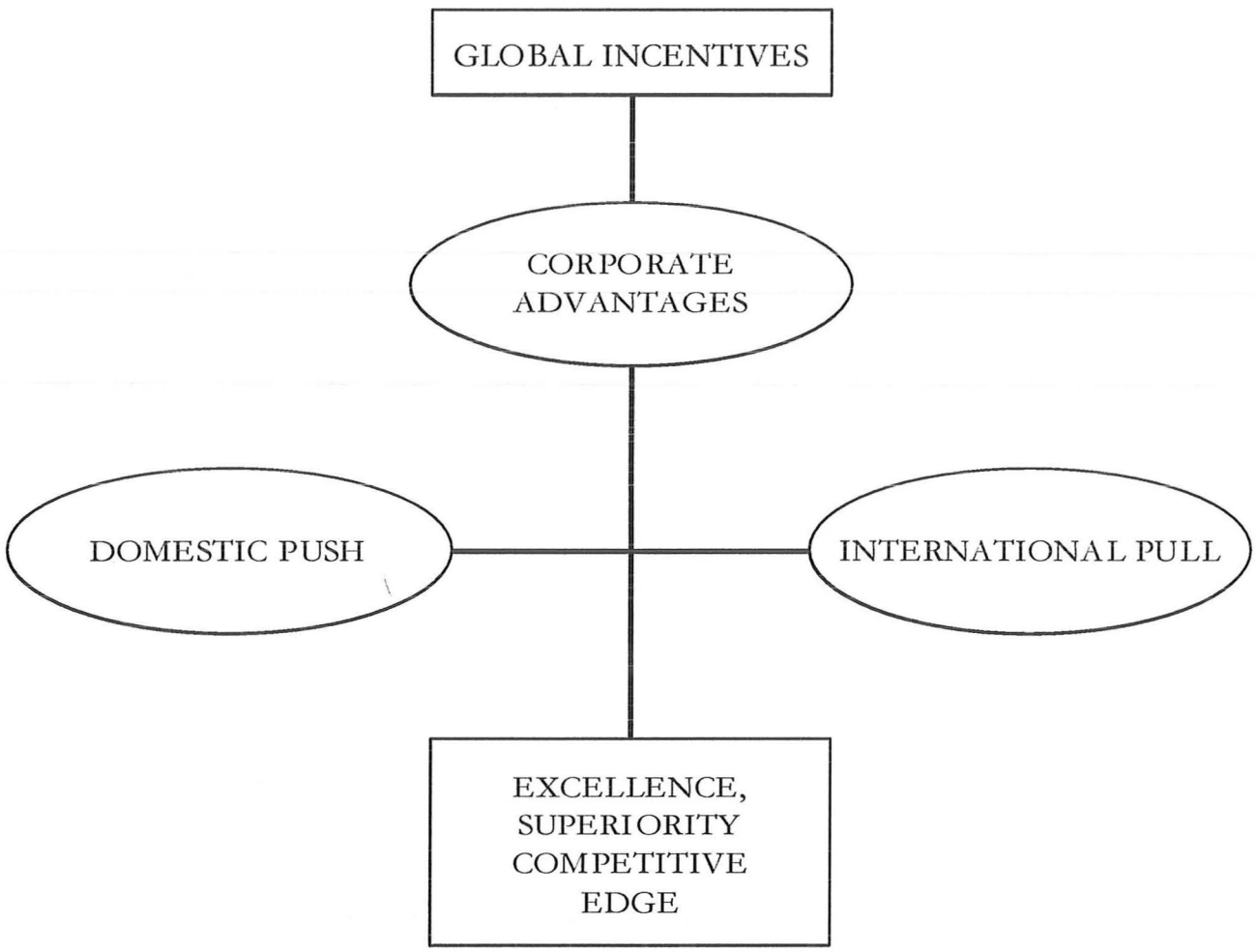
[11] Luostarinen (1979) defines 'business distance' to include physical, cultural and economic distances.

[12] Korhonen (1999) has also emphasised the role of inward internationalisation processes (import processes) as an integral part of internationalisation phenomenon. Finnish SMEs for example have usually favored first inward operations and only after that have they continued by using some outward opearations (export processes) (Korhonen 1999, 186).

Figure 2. Competitive Edge as a Prerequisite for Successful Internationalisation



Source: Luostarinen (1994, 27)

Furthermore, important in process theories from a competitiveness point of view is that to overcome a threshold to enter foreign markets requires competitive advantage of a company, but also operating abroad gradually effects the company resource base and therefore competitiveness via technology, demand and other stimuli. Process views therefore emphasise the advantages that becoming more transnational can bring to a company (see e.g. Kogut 1986).

2.4 Economic Geography and Theory of Location

The location of economic activity has been extensively studied in the field of economic geography[13]. Even though it has happened independently of mainstream economics, economists such as Krugman (1991) have reminded us of the significance of this line of research for

[13] There are many major contributors in the field of economic geography. Names like Roger Hayter (1997) and Michael Storper (1992) belong to this group of researchers.

explaining concentration of regional economic activity. Economic geography has underlined the meaning of agglomeration economies in the location of production i.e. the advantages evolving in aggregation of variant economic units.

Krugman has shown with simulations the agglomeration of economic centres with given economies of scale, transportation costs, immobile farmers, and mobile production workers. The same settles with FDI; International allocation of mobile capital in the presence of immobile workers and complex barriers to trade. He has formalised the tensions between scale-related 'centripetal' and market-related 'centrifugal' forces of location. Similar types of studies, which model agglomeration process usually apply simulation techniques such as Markunsen and Venebles (1996). These studies have pointed out that the existing industrial structure can be a major determinant of inward FDI as suppliers of intermediate goods and technologically specialised labour force are locational advantages for related firms and competitors.

Other research, which is focused on an exchange of knowledge and externalities based on that, argue that innovation processes tend to be localised. Porter, among others, argues that intense innovative activity in the area affect to firms' competitiveness (Porter 1990). Also Cantwell (1989) highlights the importance of localised knowledge for the development of transnational firms' technological competence.

Empirical evidence supports the influence of market size, geographical proximity and the degree of openness on the distribution of FDI (Kravis – Lipsey 1982, Veuglers 1991). Also empirical results of internationalisation models support that physical, cultural and economic distances have influence on FDI (see f.e. Luostarinen 1979).

Theory of location in the field of economic theory traditionally analyses location of production from a comparative advantage point of view, in which such factors as relative wages, market size and economic growth, transportation costs and trade barriers are determinants of the location of foreign production (Vernon 1966, Kravis – Lipsey 1982, Caves 1982, Veugelers 1991). However, empirical evidence indicates that factor costs and trade barriers are not adequate explanation for the location of foreign production. Also empirical results imply that market-related advantages are becoming a more important determinant of FDI compared to production costs even though this depends much of the nature of the particular industry (Brainard 1993).

The concept of 'locational advantages', which Dunning (1993a) and Caves (1982) in particular have developed and advanced, include much broader aspects than the traditional theory of location in economics, and it will be further discussed in Chapter 2.6.

2.5 SCP and Porter's Diamond Revisited

Internationalisation of competition has naturally increased during past decades due to the internationalisation of companies and increases in foreign trade and FDI. Still, analysis of industrial competitiveness is traditionally included in the field of industrial economics unrelated to the previous theories presented. In this section some of the most well-known competitiveness concepts are represented to be able to use and operationalise some variables related to them in the empirical part of the study.

Most important theories of industrial organisation are based on the structure-conduct-performance paradigm (SCP)[14]. The basic idea under the SCP paradigm is that in an industry a particular type of market structure is related to a particular type of market behaviour (Sachwald 1994).[15] The elements of market structure as defined in the SCP paradigm are very close to the factors that Porter (1990, 36-37) defines as competitive determinants of industry structure. These are: bargaining power of buyers, bargaining power of suppliers, threat of substitute product or services and threat of new entrants.

SCP market structure implies certain conduct. It consists of elements such as pricing behaviour; product strategy; advertising and marketing strategy; research and development planning and implementation; legal tactics (Reid, 1987, 12). Market structure and market conduct may be affected by public policy and its measures. Performance i.e. productive and allocative efficiency is a result of certain conduct. International industrial competitiveness is thus defined as performance and the result of certain conduct, which is influenced by basic condition and market structure and through them government policy.

Porter (1990) uses nation as a decisive environment for allowing a firm to develop and sustain competitive advantage in an industry. National characteristics like institutions, cultures, values and economic

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[14] For example Reid (1987) argues that the structure-conduct-performance paradigm developed by Mason (1939,1949) is the most influential of the various theories of industrial organisation.

[15] Basic conditions in the SCP paradigm are divided into demand and supply side factors. These basic conditions affect the elements of market structure which are: the number of sellers and buyers, concentration, product differentiation, economies of scale, barriers to entry, cost structure, vertical integration, diversification (Sachwald 1994, 41-43, Reid 1987, 12). Devine et al. (1985, 57) define market structure as a result of interplay between economies of scale, government policies, market size and growth rate, mergers and chance factors referring to the basic conditions. Dynamics in the market structure over time is due to changes in technology, demand and supply conditions, government policy, chance and corporate policies of established firms and new entrants.

structures have a decisive influence on the competitiveness of companies. Porter's approach is very near Sachwalds's analysis of structural competitiveness. To Sachwald competitiveness is the result of interactions within national economies and thus it has a systemic nature. Some nations are more competitive because the whole system of production is higher. Sachwald argues that companies, which operate in a nation, determine the competitiveness of a nation. However, companies depend on their environment for their development and due to this various structural characteristics of the nation of origin may be essential for firms competitiveness. (Sahwald 1994, 38).

Rugman and Gestrin (1993, 19-22) argue that multinational companies combine firm-specific advantages and country-specific advantages. The former builds up the competitive strength of a company and the latter is related to the nation and government's actions influence on it. According to Rugman and Gestrin a company's international competitiveness is guaranteed if it has strong firm-specific advantages and if it operates under benign country-specific advantages. If firm-specific advantages are weak then country-specific advantages have to be strong for a company to be internationally competitive and vice versa. If both advantages are weak then international competitiveness cannot be sustained.

Porter (1990) applies the terms location-based advantage and system-based advantage instead of country-specific advantage and firm-specific advantage respectively. Location-based advantages may arise from either the firm's home base or from other nations in which the firm locates particular activities.[16] (Porter 1990, 60). In Porter's framework, four broad attributes of a nation[17] shape the environment in which local firms compete that either promote or impede the creation of competitive advantage. These are: factor conditions; demand conditions; related and supporting industries; firm's strategy, structure and rivalry; chance and government. These determinants are included in Porter's 'diamond'[18] (see Figure 3.)

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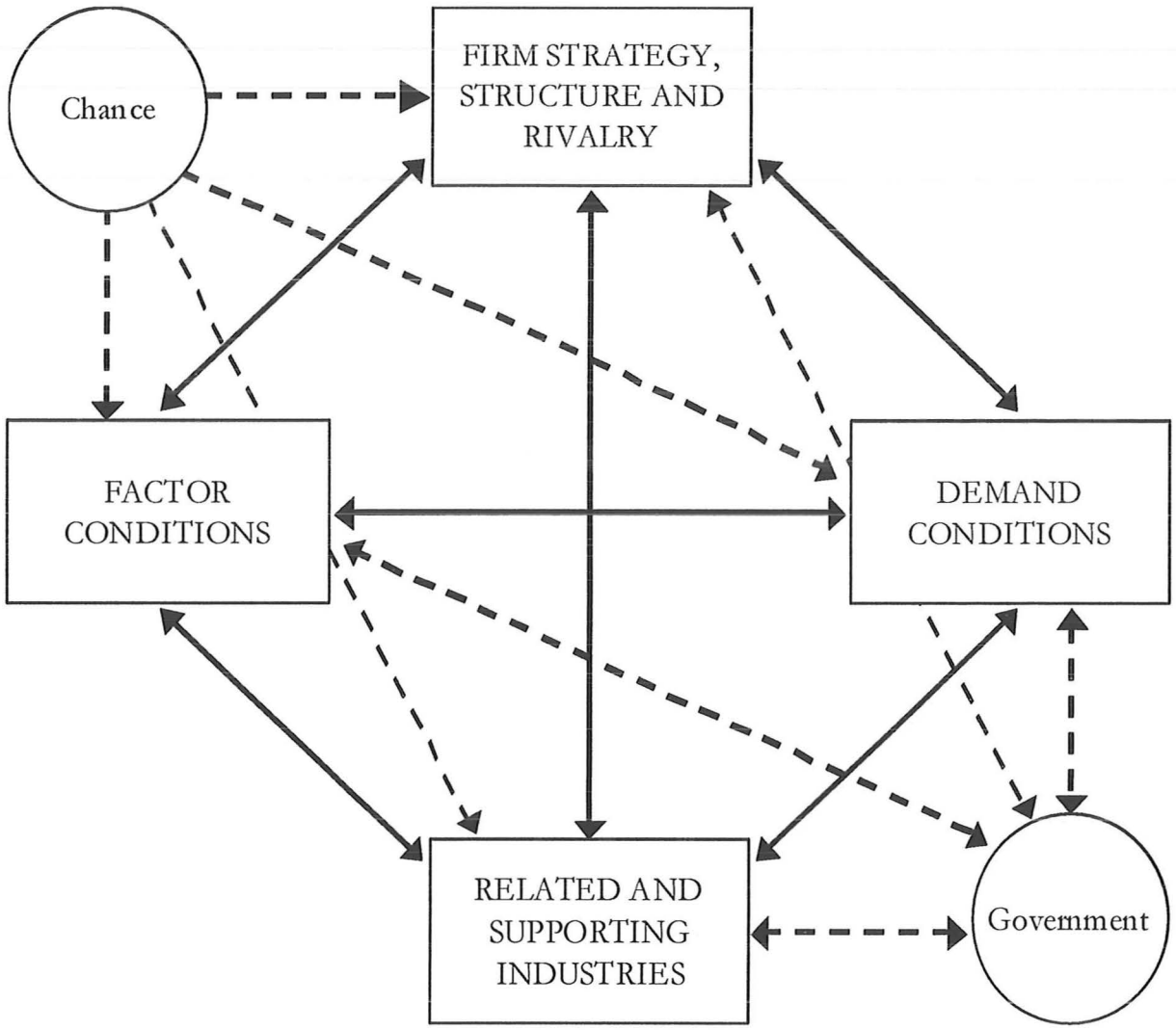
[16] Porter uses a term home base. A transnational firm employs advantages from its home base to penetrate foreign markets. It is also able to seek out location-based advantages in performing particular activities in other nations to reinforce home advantages or offset home disadvantages. However, he sees that home-based advantages are usually more significant to the competitive advantage of a company (Porter 1990, 60-61).

[17] Porter points out that the roots of the productivity lie in the national environment for competition, captured in a diamond framework. However, the same framework can be applied at the regional, state and city level (Steinbock 1998).

[18] Porter emphasises that companies compete in international markets, not nations. Porter suggests abandoning the notion of a competitive nation, as focus should be on industries and segments (Porter 1990).

Porter thus combines company-based determinants with country based determinants of competitiveness.[19] This is the strength of the approach but at the same time criticisms against it is directed to the vagueness of the distinction between these two groups and the inaccuracy of the method. (Hernesniemi et. al. 1995, 61)

Figure 3. Determinants of National Competitive Advantage by Porter



Source: Porter (1990, 127)

According to Porter, in addition to responding and influencing industry structure, firms must choose a position within the industry. Positioning embodies the firm's overall approach to competing. The core in positioning is competitive advantage (Porter 1990, 37). At a firm

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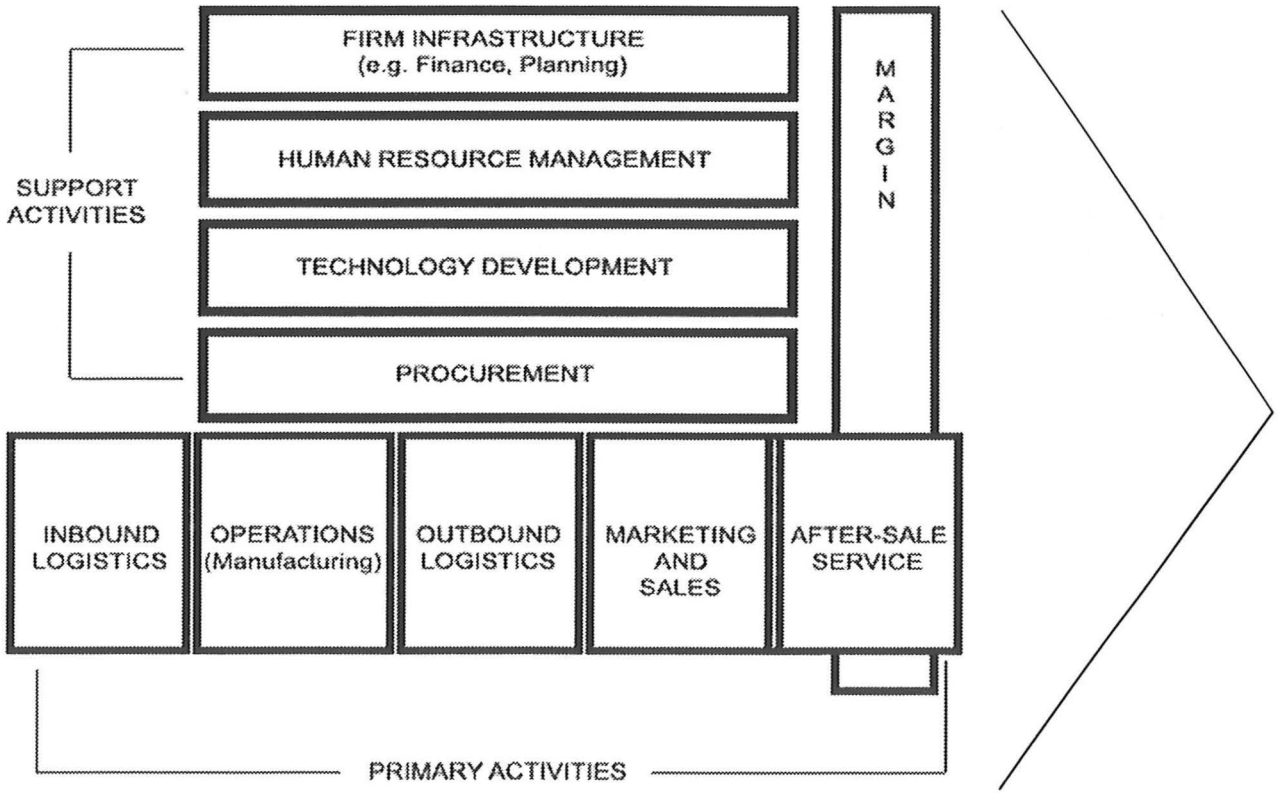
[19] The concept of systemic competitiveness, which Esser et al. (1996) use defines determinants of industrial competitiveness into four analytical categories of micro, macro, meso and meta level. Micro level is firm-specific while others are country specific. Micro level includes determinants like innovation management, firm strategy and interaction between suppliers, producers and users. The macro level includes monetary and financial policy, and competition policy, for example. The meso level consists of government policy and industrial policy like regional policy and technology policy. The meta level includes sosio-cultural factors and the value system, for example. Competition is then created by interaction of these determinants (Esser et al. 1996, 40-41).

level, competitive advantage can be based on two types, which are lower cost and differentiation. Competitive scope, which is the breadth of the firm's target within industry, can be either broad or narrow. By combining the competitive scope and competitive advantage, the notion of generic strategies appears and competitive strategy can be selected. The generic strategies are: cost leadership (lower cost and broad target); cost focus (lower cost and narrow target); differentiation (differentiation and broad target); focused differentiation (differentiation and narrow target).

The choice of competitive strategy is hence a form of conduct, which is influenced by the basic conditions and market structure. The source of competitive advantage grows out of the way firms organise and perform discrete activities. The activities performed in competing in a particular industry can be grouped into categories as shown in Figure 4.

Gaining competitive advantage requires that a firm's value added chain can be managed as a system rather than a collection of separate parts (Porter 1990, 42). Firms gain competitive advantage from conceiving new ways to conduct activities, employing new procedures, new technologies or different inputs.

Figure 4. The Value Chain



Source: Porter (1990, 41)

The management of primary as well as support activities, including the linkages between them, can be a source of competitive advantage to a company. However, linkages not only connect activities inside the

company but also attach a company to outside value chains like suppliers', distributors' and buyers' value chains.

Firms create competitive advantage by perceiving or discovering new and better ways to compete in an industry and bringing them to market. This is ultimately innovation when defined broadly to include improvements in technology and better methods or ways of doing things.[20] Early movers who can take advantage of structural changes can also result in competitive advantage. (Porter 1990, 45-48).

Porter also points out that there is a hierarchy of sources of competitive advantage in terms of sustainability. Higher-order advantage like proprietary process technology, product differentiation based on unique products or services depend on sustained and cumulative investment. Lower order advantages based on lower costs are less sustainable than differentiation. Sustaining competitive advantage needs constant improvement and upgrading as well as several distinct sources (Porter 1990, 49-51).

Also differences in management approach and its applicability to the environment is one factor that can create advantages or disadvantages in competing in different industries. An important thing in this respect is the management's orientation towards competing globally (Porter 1990, 53-68).

The main criticism[21] against Porter's paradigm concerns the question where the industrial competitiveness is really born (see f.e. Dunning 1993b; Rugman – Verbeke 1993). Is it inside the borders of a country or nation that the diamond originates or is it transnational environments that matter in this respect as an increasing amount of multinational companies exploit diamonds of different countries through international business operations, especially FDIs and subsidiaries? Should the latter case be true, the competitiveness of a particular nation and the competitiveness of its companies are harder to equate. This means that the competitiveness of a nation, for example, can decrease without directly decreasing the competitiveness of multinational companies originally from that particular nation.

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[20] Innovations also shift competitive advantage as innovations are typically caused by shifts in changing buyers needs, emergence of new technologies, occurrence of new industry segment, shifting input costs or availability and changes in government regulations. Adjustments in government regulations such as environmental control or trade barriers can encourage innovations and through them competitive advantage.

[21] For a comprehensive view about the critics against Porter's diamond model see Penttinen (1994) and Hernesniemi, Lammi and Ylä-Anttila (1995) among others.

2.6 The Eclectic Approach

J.H. Dunning (1977, and later extensions 1981, 1988a, 1996) has created a theory of the so-called OLI-paradigm or eclectic paradigm, which is considered as a synthesis theory, because it integrates many elements of other theories, also reviewed here, into a general paradigm of international production[22]. It explains the mobility of factors of production and the decision processes of companies in international production and foreign direct investment. From a theoretical point of view it offers an analytical framework for empirical investigations, which draws attention to the most important theories at hand (Cantwell 1991, 27).

The underlying hypothesis, which the eclectic paradigm is leaning on, is that a firm will engage in foreign value-adding activities if and when three conditions are satisfied (Dunning 1988a, 26). These are:

(1) It possesses net ownership (O) advantages vis-à-vis firms of other nationalities in serving particular markets. These o-advantages primarily take the form of the possession of intangible assets or of the advantages of common governance, which are, at least for a period of time, exclusive or specific to the firm possessing them.

(2) Assuming condition 1 is satisfied, it must be more beneficial to the enterprise possessing the advantages to use them (or their output) itself rather than to sell or lease them to foreign firms: this it does through an extension of its existing value-added chains or the adding of new ones. These advantages are called internalisation (I) advantages.

(3) Assuming conditions (1) and (2) are satisfied, it must be in the global interests of the enterprise to utilise these advantages in conjunction with at least some factor inputs (including natural resources) outside its home country; otherwise foreign markets would serve entirely by exports and domestic markets by domestic production. These advantages are termed location-specific (L) advantages.

According to Dunning, the greater the o-advantages of enterprises the more incentive they have to utilise them. The more the economics of production and marketing favour a foreign location, the more likely companies are to engage in foreign direct investment.

Thus, the propensity of a certain country to participate in international production is dependent on the extent to which its enterprises possess these advantages. Also the locational attractions of a

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[22] The theory consists of elements from transaction cost approach, internalisation approach, internationalisation model and theories of location even though presented under different concepts.

country's endowments compared to those offered by other countries or regions define the amount and extent of FDI undertaken.

In Table 3 OLI-advantages are combined with different routes of servicing markets. In each way of servicing markets ownership advantages are necessary condition for foreign involvement. The existence of internalisation advantages suggests that enterprises will choose foreign trade or foreign direct investment rather than contractual resource transfers. The foreign direct investment route is selected when locational advantages favour foreign rather than domestic production facilities.

Table 3. OLI-Advantages and Routes of Servicing Markets

The route of servicing markets	Ownership	Internalisation	Location
Foreign direct investment	yes	yes	yes
Foreign trade	yes	yes	no
Contractual resource transfers	yes	no	no

Source: Dunning (1988a, 28)

As can be seen, the OLI-paradigm does not make any prior predictions, about which countries, industries or enterprises are most likely to engage in foreign production (motives or strategies)[23]. It rather expresses three conditions, which have to be satisfied for international production to appear[24].

This theory accepts very much of the traditional theory explaining spatial distribution of certain kinds of output (Hecksher-Ohlin-Samuelson). But in addition to this, the paradigm says that to explain the ownership of that output and the spatial distribution of other kinds of output, which requires the use of resources that are not equally accessible to all firms, two different market imperfections must be present:

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[23] Criticism against the OLI-paradigm has targeted just to the fact that the paradigm does not refer to motives of a firm investing abroad (Agarwal 1985).

[24] The eclectic paradigm has also been criticised due to the limitations to operationalise complex concepts for variables to empirically test the theory (Helleiner 1989, Melin 1992).

1) Structural failure, which discriminates between firms in their ability to gain and sustain control over property rights or to govern multiple and geographically dispersed value-added activities.

2) Failure of intermediate product markets to transact goods and services at a lower net cost than those which hierarchy might have to incur.

This means that such variables as the structure of markets, transaction costs and the managerial strategy of firms are important determinants of international activity. The consequences of the imperfections also mean that one cannot take enterprises as given and market cannot be considered only as arbiters of transactions. Both the distribution of factor endowments and the modality of economic organisation are relevant to explain the structure of trade and production.

What is important, as Cantwell (1991) analyses is that the eclectic paradigm has no definite view of competition built into it, as it is overall an organising framework rather than a theory. It does not depend on a particular theory of a firm either. Therefore it is capable of acquiring, for example, to the internalisation approach, in which the firm grows by displacing markets, which operate in a costly and imperfect way. It can also rely on the market power theory, in which, it is the growth of the firm that is the essential cause of market imperfections and failure. (Cantwell 1991, 29)[25]. The eclectic paradigm incorporates elements of both these theories of the firm, because it allows ownership advantages to act as barriers to entry or sources of market power. However, Dunning (1988b, 32) himself places emphasis on internalisation and supposes that competition is more important than collusion amongst MNCs.

The theory suggests that given the distribution of location-specific endowments, enterprises which have the greatest opportunities for and derive the most from internalising activities, will be the most competitive in foreign markets. Inter alia these advantages will differ according to industry, country and enterprise characteristics. (Dunning 1981, 33) Although the advantages are enterprise-specific they may differ according to the nationality of the enterprises, which means that such advantages, though endogenous to the individual firms at that time, are not independent of their industrial structure, or the general economic and institutional environment of which they are faced (Dunning 1981, 34-35).

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[25] Market power theory of the firm perceives ownership advantages principally as anti-competitive devices, which act as barriers to entry against other firms. Meanwhile, the competitive international industry approach sees ownership advantages as competitive weapons, which sustain a process of competition between rivals (Cantwell 1991, 28).

For example, Cantwell (1989) claims that innovation is location-specific as well as firm-specific. The scientific and technological traditions of each country, the nature of the educational system and common business practices all contribute to the distinctiveness of the path of technology development undertaken in each location. Actually, two major reasons are presented for growth of international production and its association to the sustained technological competition between MNCs in manufacturing industries.

First, internalisation has supported technological diversification, since the form of technological development varies between locations as well as between firms. By locating production in different centres of innovation in its industry, the MNC gains access to a new but complementary avenue of technological development and integrates it with its existing lines. By increasing the overlap between the technological profile of firms competition between MNCs is raised in each international industry, but also co-operative agreements as the number of technological spillovers between firms increases. Spillovers occur where technologies are created by a firm, which lies outside its own major lines of development, but which may be of greater use within the main traditions of another firm. Second, and partly because of first factor, there are a growing number of connections between technologies which were formerly quite separate. This technological interrelation has brought more firms into competition with one another. These two elements are called 'technological systems' in MNCs. Where MNCs in a competitive international industry are all attracted to certain centres of innovation to maintain their overall strength, then research and research-related production may tend to agglomerate in these locations. (Cantwell 1987, 1991).

As already mentioned in Chapter 2.5. Dunning and some other researchers[26] have criticised Porter's diamond and suggested an extension of the original model, for example through double diamond approach in which multinationality and the origin of competitiveness from other sources than home-base are taken into account more seriously. Dunning (1997) has also extended Porter's diamond of competitive advantage by stressing that inbound FDI may not only affect the four facets of the diamond, but also the actions of host governments as well as the mentality of competitiveness of the constituents in the host country. Dunning has adapted the figure of the diamond as seen in Figure 5.

According to Dunning, the individual attributes of the diamond of competitive advantage may vary between countries or within country over time. Thus the relative importance of the production and efficient

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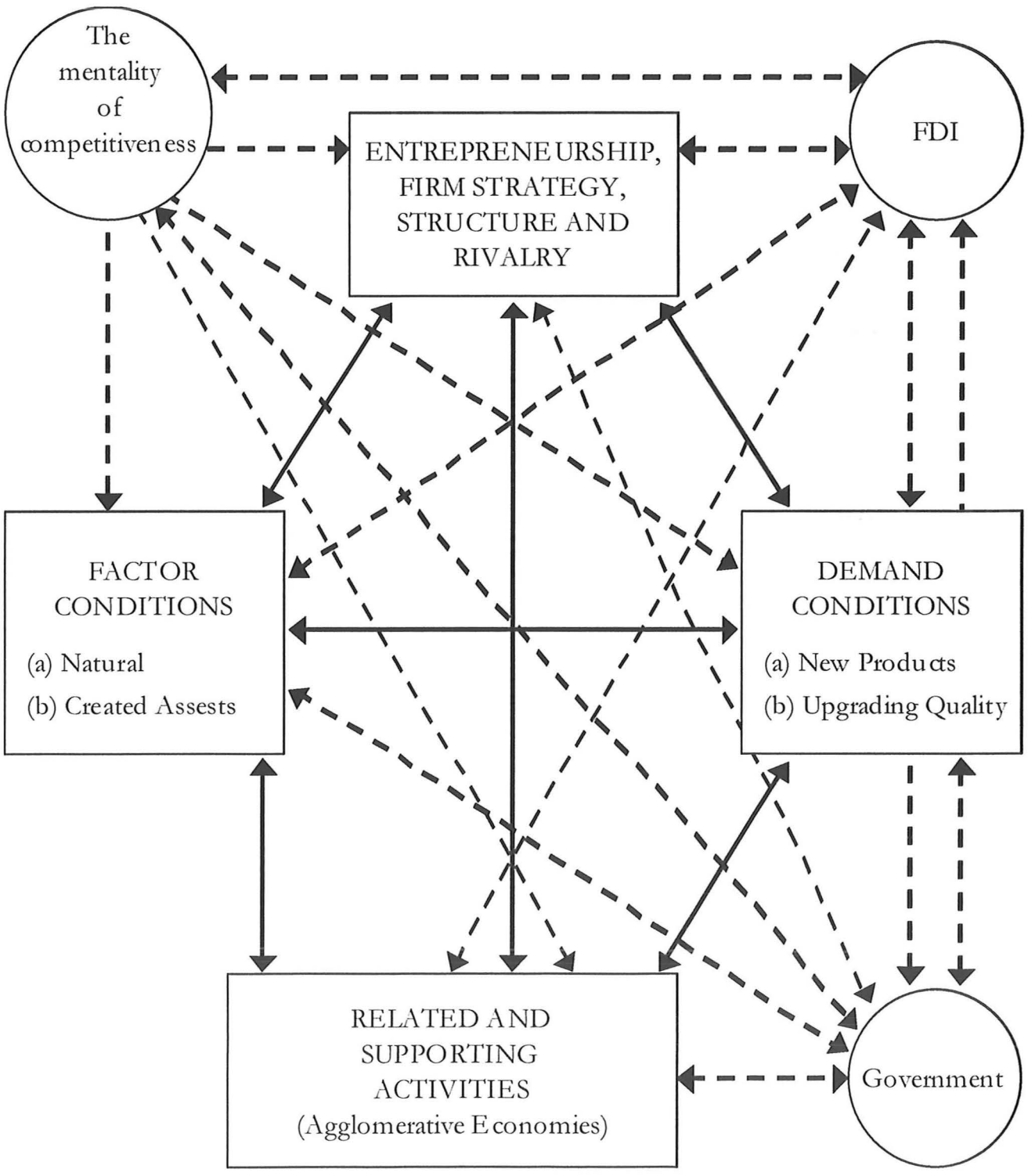
[26] Dunning (1993b), Rugman – D'Cruz (1993), Cartwright (1993), Hodgetts (1993).

deployment of created assets and the means with which these are transmitted over space has increased due to globalisation of the world economy. Likewise the ways in which complementary activities are arranged along the value-added chain or the agglomerative economies are derived from a spatial clustering of these and other related activities are becoming more significant. (Dunning 1997a, 217, Dunning and Lundan 1998). Therefore, any attempt to identify competitive advantages must embrace the diamonds of other countries and particularly those with which the home county firms have the most dealings by trade, foreign direct investment and non-equity co-operative ventures.

Figure 5. The Diamond of Competitive Advantage Modified by Dunning



Source: Dunning (1997a, 216)

Bypassing threshold to international markets requires competitiveness, but operating international markets gradually affects the company's resource base and thus competitiveness. Operating in several countries gives a company versatile demand and technology stimulus at the same time as structure of personnel becomes more diversified and the whole organisation experiences a new kind of learning-by-doing stimulus (Reinikainen 2001, 182). This process view mainly emphasises the advantages that transnationalism offers, but also makes it possible to see the eclectic paradigm in a more dynamic context (see Kogut 1986).

In recent years Dunning (1997) has argued that deepening structural integration of the world economy is widening geographical scope for augmenting competitive advantages. He has therefore extended his paradigm to include features of alliance capitalism to which he refers to the existence of co-operation and competition between institutions and between parties within institutions. In companies' case, alliance capitalism refers more specifically to networks, where companies build firmer coalitions than ordinary long-term treaties i.e. alliances. Overall alliance capitalism purports that pyramidal chains of command are increasingly replaced by relational interplay between the main participants of decision-making. (see Dunning 1997a, 68-90).

According to Dunning, alliance capitalism has several implications for the eclectic paradigm and the determinants of MNE activity. First of all o-advantages of firms need to be broadened to take account of the costs and benefits derived from inter-firm relationships and transactions both home and abroad, not to forget those that arise from strategic alliances and networks. Secondly, the concept of location, (l-advantages) needs to place more weight on the following factors (i) territorial embeddedness of interdependent immobile assets in particular geographical areas (ii) increasing need for the spatial integration of complex and rapidly changing economic activities (iii) conditions under which inter-firm competitive enhancing alliances may flourish and (iv) the role of national and regional authorities in influencing the extent and structure of localised centres of excellence. (Dunning 1997a, 80)

The third implication is that firms internalise intermediate product markets, primarily to reduce the transaction and co-ordination costs associated with them. This needs to be widened to encompass other - particularly, dynamic and competitiveness-enhancing -goals, the attainment of which may be affected by micro-governance structures. (Dunning 1997a, 80).

As the analysis here in Chapter 2 has shown, foreign operations and competitiveness – taken together - in a firm perspective, and even in a

multinational company perspective, as a research area is very broad. In spite of that, it is grounded to make an effort to pick up certain aspects to aim to link research undertaken by studying the underlying concepts or viewpoints chosen. All the same, one has to admit that certain researchers in the field of international business cannot be grouped solely under one angle of research question setting or research approach let alone school of thought as their interests protrude beyond the borders of any conventional grouping principle.

3. FOREIGN TRADE AND FDI IN THE BALTIC SEA REGION

In Chapter 3, the analysis of foreign trade and FDI of Finland are presented, to find direction, structure and magnitude of foreign operations of Finnish companies in the nearby foreign markets. We start with an overall look at FDI and foreign trade flows in the Baltic Sea Region. By concentrating on this data and empirical facts we can elaborate on the necessary background information of national economy level phenomenon and to put the research topic into a wider empirical perspective. We also study the major components of institutional framework in the Baltic Sea Region. After that, barriers to trade and investment are reviewed to show major business environmental operation hindrances for companies.

3.1 Direction of Foreign Trade[27] and FDI in the Baltic Sea Region

Growth of intra-Baltic trade laid ground for the economic region around the Baltic Sea in the 1990s. Immediately after the economic system change in Eastern Europe, strong expectations arose of a rapid increase in foreign trade between the Eastern and Western European countries. Some of these expectations were too optimistic since economic growth in the region was not as fast as was originally anticipated. However, the growth increase between the East and the West was considerable for most countries in the BSR. For example, between 1993 and 1997, trade flows increased with an annual average of more than 30% (see Table 4).

The three Baltic States i.e. Estonia, Latvia, and Lithuania in particular increased their exports remarkably. Finland and Sweden also benefited greatly from the open trade situation. It is noteworthy that Eastern Baltic Rim countries increased exports to the Western Baltic Sea Region more markedly than vice versa.

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[27] In this Chapter all the trade data is on country level as customs maintain trade statistics on country level.

Table 4. Growth Rate in Baltic Sea Region Trade during 1993-1997

Average yearly growth rate to Eastern Baltic Sea Region (EBSR):	
Finland	39.5%
Denmark	33.2%
Germany	20.6%
Sweden	37.9%
Unweighted average WBSR to EBSR	32.2%
Average yearly growth rate to Western Baltic Sea Region (WBSR):	
Estonia	51.5%
Latvia	67.2%
Lithuania	40.6%
Poland	13.5%
Russia	16.1%
Unweighted average EBSR to WBSR	37.8%

Source: Economic Development in the Baltic Sea Region (1998, 37)

Currently, the European Union economic power, Germany, is the most important trading partner to all other Baltic Sea Rim countries, with the exception of Estonia, to which Finland is the primary partner (see Tables 5a and 5b). Thus, Germany's strong role visibly characterises the Baltic Sea Region foreign trade flows. The share of Germany in total export ranges from 7.5% in Estonia to 36.1% in Poland. The respective shares in total imports range from 9.3% to 25.2%.

Sweden has also a prominent role, especially in the foreign trade of Finland, Denmark, Estonia and Latvia. Other Nordic countries of the BSR, i.e. Finland and Denmark, have less notable roles, even though they are well represented in the foreign trade of Sweden. Finland has an exceptional role in Estonian foreign trade and Denmark is a notable export market for Latvian and Lithuanian companies. Russia with its natural resources sector forms an outstanding portion of the Baltic countries imports.

Table 5a. Share of the Baltic Sea Region Countries in Foreign Trade of Finland, Sweden, Denmark, and Germany in 1999

	Share in Fin. exports	Share in Fin. imports	Share in Swe. exports	Share in Swe. imports	Share in Dan. exports	Share in Dan. imports	Share in Ger. exports	Share in Ger. imports
Finland			5.1	4.9	3.2	2.8	1.1	1.0
Denmark	2.9	5.7	5.6	6.1			1.7	1.5
Germany	13.6	15.9	10.6	17.8	20.3	21.9		
Sweden	10.3	14.4			11.6	12.4	2.2	1.8
Estonia	3.1	1.9	0.5	0.8	0.2	0.3	0.06	0.04
Latvia	0.6	0.1	0.2	0.4	0.3	0.3	0.08	0.06
Lithuania	0.4	0.1	0.2	0.2	0.5	0.4	0.1	0.1
Poland	0.4	0.7	1.8	1.0	1.8	1.8	2.4	2.1
Russia	4.2	7.4	0.6	1.2	0.9	0.7	1.0	1.9
BSR	35.5	46.2	24.6	32.4	38.8	40.6	8.6	8.5
EU	59.3	52.6	56.2	56.7	67.1	72.5	56.3	52.5

Source: IMF Direction of Trade Statistics Yearbook (2000)

When the Western market economies are analysed, the BSR forms the most significant shares in the foreign trade of Finland (export 35.5% and import 46.2%) and Denmark (export 38.8% and import 40.6%) Nevertheless, the area is even more important to Eastern economies. Poland and all the Baltic States sell roughly 50-70% of their exports to and buy some 40-60% of their imports from the BSR. Obviously, in the Russian Federation foreign trade, the Baltic Sea region has a less important role, with it forming only one-fifth of Russia's total foreign trade. Recognising the geography of the country and the resource oriented structure of its foreign trade this is to be expected. In contrast, for some Baltic Rim sub-regions of Russia, such as St. Petersburg and Republic of Karelia, the EU countries of the BSR, especially Germany and Finland are major international trade partners (Economic Monitoring of North-West Russia 2000).

Table 5b. Share of the Baltic Sea Region Countries in Foreign Trade of Poland, Estonia, Latvia, Lithuania, and Russia in 1999

	Share in Pol. exp.	Share in Pol. imp.	Share in Est. exp.	Share in Est. imp.	Share in Lat. exp.	Share in Lat. imp.	Share in Lith. exp.	Share in Lith. imp.	Share in Russ. exp.	Share in Russ. imp.
Finland	1.0	1.8	19.4	22.9	1.9	9.1	1.0	3.1	1.6	2.9
Denmark	3.1	1.8	3.9	2.5	6.1	3.9	6.1	3.8	0.3	0.9
Germany	36.1	25.2	7.5	9.3	16.9	15.2	15.8	16.3	8.2	10.3
Sweden	2.5	3.2	18.7	9.3	10.7	7.2	4.2	3.4	3.2	2.3
Estonia	0.3	0.03			4.7	6.4	2.3	1.5	0.9	0.2
Latvia	0.7	0.06	8.7	2.4			12.6	2.0	1.3	0.2
Lithuania	1.9	0.4	3.9	1.9	7.5	7.3			1.5	1.3
Poland			0.6	1.9	1.8	4.4	4.5	5.6	3.5	1.5
Russia	1.6	5.8	9.2	13.0	6.6	10.5	6.9	19.8		
BSR	47.2	38.3	71.9	63.2	56.2	59.6	53.4	55.5	20.5	19.6
EU	70.6	65.0	62.7	58.0	62.6	62.6	49.4	46.0	32.1	38.4

Source: IMF Direction of Trade Statistics Yearbook (2000)

The significance of the BSR in each country's total exports and imports also varies.[28] The region is relatively more important to imports than to exports in Finland, Sweden, and Denmark (see Table 5a). The opposite characterises Poland and Estonia, which export relatively bigger shares to the BSR (see Table 5b). Roughly, for the EU countries, the BSR appears to be a more important import area, and for the transition countries, a more important export area. For Germany and Russia, exports and imports form approximately similar size shares in their total trade.

The BSR consisted of less than 9% of Germany's foreign trade in 1999, the main trading partners being France, Italy, and Netherlands within Europe as well as the United States and Japan outside Europe. Thus, the major foreign trade markets for Germany are located outside the observed region.

All the same, international trade alone cannot unify a market area such as the Baltic Sea Region. The intensification of integration is more

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[28] Paas (2002) has analysed regional integration of the Baltic Sea Region trade flows. The model result supports the statement that the size of economy (population) has statistically significant and positive influence on the bilateral trade flows. Distance, on the other hand, has a negative influence on bilateral trade flows. Paas concludes that distance expresses mainly cultural proximity and historical relationship between the Baltic Sea Rim countries.

typically reflected in the increased internationalisation of companies and deepening forms of companies' foreign operations. Foreign direct investment is one instrument that can significantly promote the formation of new networks and lead to integration of national economies (Kivikari 1998, 87).

On the whole, the Baltic Sea Region is a significant recipient of FDI, although the proportions within the region are allocated unequally. Table 6 displays comparable FDI positions by categorising absolute and relative FDI stocks for each country.

Table 6. Level of Foreign Direct Investment in the Baltic Sea Region Countries in 1999

	Fin	Den	Ger	Swe	Est	Lat	Lit	Pol	Rus
inward FDI stock USD m.	18 315	36 420	284 899	74 018	2 441	1 795	2 063	26 475	16 541
inward FDI stock as a percentage of GDP	14.5	20.9	13.7	32.7	47.9	26.9	19.7	17.2	4.4
inward FDI stock/capita	3198	7089	2748	7659	1122	880	545	518	71
outward FDI stock USD m.	33 849	37 550	394 254	107 331	272	244	26	1 365	8 586
outward FDI stock as a percentage of GDP	26.8	21.5	18.9	47.4	5.3	3.7	0.2	0.9	2.3
GDP/capita USD	25046	33124	25729	27256	3569	2582	2880	3987	1249
GDP/capita USD PPP[29]	21000	23800	22700	20700	5600	4200	4800	7200	4200

Source: Compiled from the World Investment Report 2001, Transition Report 2000, Transition Report Update 2000, and National Accounts of OECD Countries Vol.I (2000). GDP(1) is normal and GDP(2) gives purchasing power -corrected figures.

The share of inward FDI stock of the European Union member countries varies between 15 and 33 per cent of these countries' own GDPs. Germany and Sweden receive the lion's share of all the investments as their inward FDI stocks form 77.5% of the total BSR

[29] Purchasing power parities (PPPs) are the rate of currency conversions, which eliminate the difference in price levels between countries. PPPs are obtained by evaluating costs of a basket of goods and services between countries for all components of GDP. PPPs are given in international currency units per US dollar.

inward stock. Among the Eastern Rim countries, Poland and Russia receive the most of the international direct investments. However, the stock of these countries forms only 10 per cent of that of Germany and Sweden. The outward FDI stock in the Baltic Rim EU countries fluctuates between 19 to 47 per cent of these countries' GDP, while corresponding figures in the transition economies are relatively negligible, as their companies' internationalisation has just recently started.

Differences in the Eastern and Western BSR countries' volume of economic activity are also currently immense. For example, in 1999, Denmark's GDP per capita was eight times larger than that of Poland. Simultaneously, in Finland, the GDP per capita was seven times larger than that in Estonia. If purchasing powers are taken into account, the differences narrow to almost threefold. A huge gap exists between the purchasing powers of the BSR economies and most certainly it will take decades for the Eastern European countries to make up these differences, even if growth rates of their economies would be clearly faster.

Table 7. Foreign Direct Investment in the Baltic Sea Region European Union Countries by Source Country in 1999 (% of Total FDI Stock)

Finland		**Denmark**		**Germany**		**Sweden**	
Sweden	47	USA	34	USA	27	Finland	17
Netherlands	18	Sweden	13	Netherlands	26	Netherlands	15
Denmark	7	UK	10	Switzerland	9	Switzerland	13
USA	6	Netherlands	10	France	8	USA	13
UK	5	Norway	7	UK	8	Germany	10
Norway	4	Germany	6	Japan	4	UK	8
Switzerland	4	Belgium/Luxembourg	4	Austria	3	Norway	8

Source: Suomen Pankki, Danmarks Nationalbank, Deutche Bundesbank, and Sveriges Riksbank (2001)

The major part of foreign direct investment to the Baltic Sea Region European Union countries comes from other European Union member countries. The share of the EU of the individual countries' total FDI stock was 62% in Sweden, 50% in Denmark, 84% in Finland, and 56% in Germany in 1999. The single most important investor country outside the EU for each country was the USA. Table 7 presents the top seven investor countries for each BSR European Union country. The Baltic

Sea Region countries have comprised 19% of these investments in Denmark, 0% in Germany, 54%[30] in Finland, and 27% in Sweden.

The sectors that are the most popular among foreign investors in Finland are finance and insurance as well as traditional metal and engineering. In Germany, manufacturing and its various branches have tempted foreign investors. In Sweden, manufacturing forms the largest sector, with engineering forming its biggest sub-sector. By contrast, in Denmark financial intermediation has attracted the major part of FDI.

Table 8. Division of FDI in Different Sectors of Economy in the Baltic Sea Region EU Countries in 1999 (% of Total FDI Stock)

Finland		Denmark		Germany		Sweden	
Finance and insurance	24	Financial intermediation and business service	41	Manufacturing	18	Manufacturing[31]	63
Metal and engineering	23	Non-financial holding companies	23	Wholesale and retail trade	11	Engineering	29
Trade	18	Financial intermediation	8	Financial intermediation	9	Chemicals and pharmaceuticals	14
Other manufacturing	14	Transport, post, and telecommunication	24	Chemical	5	Trade in goods	11
Other economic activities	13	Trade, hotels, and restaurants	20	Monetary intermediation	4	Other service industries	10
Chemical	9	Manufacturing	10	Other financial intermediation	3	Forest industries	9

Source: Suomen Pankki, Danmarks Nationalbank, Deutche Bundesbank, and Sveriges Riksbank (2001)

Table 9 shows the most important investor countries in the Baltic Sea transition countries in 1999. The neighbouring Baltic Sea countries seem to have actively undertaken foreign direct investments in these countries. They form 16% of the top seven investors in Poland, 77% in Estonia, 29% in Latvia, 53% in Lithuania, and 10% in Russia respectively. The Baltic States again appear to be more Baltic Sea

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[30] The exceptionally high figure for Finland in 1999 arose from some major investments (mergers) from Sweden to Finland.

[31] Swedish direct investment statistics in 1999 were affected by Zeneca's acquisition of Astra, the largest merger ever to have taken place in Sweden. Likewise, Ford's acquisition of Volvo personvagnar dominates the share of the manufacturing figure.

Region-oriented than Poland or Russia in this respect. In addition, foreign direct investment seems to depend upon the geographical position of the countries. The Baltic States tempt investors from neighbouring Nordic countries, while Poland receives relatively more investments from other Western European countries and USA. Russia draws more heterogeneous international capital sources[32] than the smaller Baltic countries. Germany is again a major agent in the field of foreign investment in all of the Baltic Rim transition countries.

Table 9. Foreign Direct Investment in the Baltic Sea Region Transition Countries by Source Country in 1999 (% of Total FDI Stock)

Estonia		**Latvia**		**Lithuania**		**Poland**		**Russia**	
Sweden	39	USA	10	Sweden	22	Germany	16	USA	34
Finland	31	Russia	9	Finland	16	USA	13	Cyprus	22
USA	5	Germany	8	USA	11	France	10	Germany	8
Denmark	4	Sweden	8	Denmark	8	Netherlands	8	U.K.	6
Norway	4	U.K.	6	Germany	7	Italy	8	Netherlands	4
Nerherlands	4	Ireland	5	U.K.	6	International	7	Switzerland	3
Germany	3	Finland	4	Switzerland	5	Great Britain	5	Sweden	2

Sources: Estonian Investment Agency, Latvian Development Agency, Lithuanian Development Agency, Polish Agency for Foreign Investments, and Goskomstat (2001)

As was seen in trade figures, Finland is currently the most important trading partner to Estonia, while simultaneously being amongst the largest investors in Estonia. In Lithuania Finland has been a more important source country of foreign investments than in Latvia. In Russia and Poland, Finnish companies are not included among the top investors.

The division of FDI in different sectors of economic activity differs in the transition countries studied. Foreign direct investment to Poland and Russia is primarily focused on manufacturing, while direct investments to the Baltic States are mainly contained within the transport and telecommunication sectors as well as the financial sector. In Russia, energy and food also form major sectors of FDI (see Table 10).

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[32] Cyprus as a remarkable investor country (22%) in Table 9 is mainly founded on capital flights of Russian origin.

All in all, it can be concluded that the Baltic Sea Rim countries are rather active in WBSR-EBSR trade, but they are also integrated rather smoothly, with Western EU markets leading this development. Nordic companies have been especially active in foreign trade and FDI in the region's Baltic States.

Another inference is that Finnish companies have been more cautious than Swedish and German ones in investing in the Baltic region's transition economies. Swedish companies have invested more heavily in Russia and the Baltic States (taken together) than Finnish companies, although these markets are not as important for Swedish foreign trade as for Finnish foreign trade. Germany has similarly invested much more to the Baltic Rim transition countries than the low shares of foreign trade with these countries would imply.

Table 10. Division of FDI in Different Sectors of Economy in the Baltic Sea Region Transition Countries in 1999 (% of Total FDI Stock)

Estonia		Latvia		Lithuania		Poland		Russia	
Transport, storage, communic.	25	Transport and telecommunic.	31	Tele-communic.	30	Manufac.	45	Manufac.	64
Finance	21	Finance	23	Manufact.	27	Foods, drinks and tobacco products	12	Energy	35
Manufacturing	20	Manufacturing	17	Wholesale and retail trade	21	Transport equipmet	11	Food industry	19
Wholesale, retail trade	16	Wholesale, retail trade	16	Financing services	12	Financial services	20	Trade and catering	13
Others	10	Others	18			Trade and repairs	9	Transport	10
		Telecommunic.	4			Construction	5	Others	8
						Transport, storage and communic.	5		

Sources: Estonian Investment Agency, Latvian Development Agency, Lithuanian Development Agency, Polish Agency for Foreign Investments, and Goskomstat (2001)

3.2 Structure of Finnish Foreign Trade and the Relative Weight of the Baltic Sea Region

An overall trend in Finnish foreign trade in the 1990s has been a large surplus in the balance of trade (the surplus in 1999 was 56808 M. FIM).[33] This surplus also characterises Finnish trade with other Baltic Sea Region countries. The only exception has been Russia, with which Finnish imports have exceeded exports.

Another clear feature[34] of Finnish international trade during the 1990's has been diversification of both the direction and the structure of trade. In 1990, the four largest export partners namely Sweden, the Soviet Union, West-Germany, and the United Kingdom formed 50% of Finland's total export. At the end of the 1990s, the biggest export partners were Germany, Sweden, United Kingdom, and United States; however, their share of the value of Finnish exports consisted of only 40%. Russian export has lost its earlier more important role by some degree. In 1990, the Soviet Union's share of Finnish export was 12.7%, in 1995 it was 4.8 % and in 1999 merely 4.1%. The whole Baltic Sea Region export share of total Finnish export also fell, because the increase in Finnish trade with other Baltic Sea Rim countries was not able to compensate the declining Russian export share and also because of the enlargement of Finnish export markets. The BSR share of Finnish export was 43 % in 1990, 38% in 1995, and 36% in 1999[35].

Throughout the 1990s, Western Europe has been the most important export area for Finnish products and services. The membership of Finland in the EU in 1995 strengthened this development, even if the share of the European Union members of all Finnish foreign export didn't increase in the 1990s (60% in 1990 and 59% in 1999). Instead, Asia and Eastern Europe have assumed more visible roles in Finnish exports. Asia's share increased from 7% till 11% since the beginning of the 1990s until 1999, and in 1997, its share reached 14%. Eastern Europe's share also increased during the 1990s, even though the destruction of the former Soviet Union and the new independence of the Eastern block countries had serious implications on international trade at first. However, in the end of 1999, Finnish exports to Eastern Europe totalled over 12%.

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[33] Indices of imports and exports in 1990-1999 at current prices and at 1980 prices are available in Appendix 1.

[34] For a more detailed analysis of Finnish foreign trade, see Mäkinen (1998).

[35] The value of Finnish export in 1999 was 233 billion FIM.

Table 11. Exports by industry 1997-1999

		FIM million and % of total exports					
	Classes of Goods	**1997**	**%**	**1998**	**%**	**1999**	**%**
	Total exports	212840	100	230569	100	233343	100
A	Products of agriculture and forestry	2588	1.2	2350	1.0	1658	0.7
B	Fish and fishing products	18	0.0	16	0.0	13	0.0
C	Products from mining and quarrying	709	0.3	658	0.3	690	0.3
D	Manufactured goods	207876	97.7	225697	97.9	229067	98.2
DA	Food, beverages and tobacco	5612	2.6	5098	2.2	4373	1.9
DB	Textiles and wearing apparel	3537	1.7	3567	1.5	3369	1.4
DD	Wood and wood products	14187	6.7	14249	6.2	14423	6.2
201	Wood, sawn and planed	8816	4.1	8646	3.7	8815	3.8
202	Plywood, particle board etc.	3358	1.6	3485	1.5	3502	1.5
DE	Pulp, paper and paper products	49847	23.4	54226	23.5	54067	23.2
2111	Pulp	4160	2.0	3770	1.6	4500	1.9
2112	Paper and paper board	39272	18.5	44072	19.1	44031	18.9
DG	Chemicals, chemical products and manmade fibres	12592	5.9	12889	5.6	13020	5.6
DH	Rubber and plastic products	3865	1.8	4121	1.8	4218	1.8
DJ	Basic metals and fabricated metal products	21792	10.2	21630	9.4	20168	8.6
27	Basic metals	16965	8.0	16467	7.1	16143	6.9
28	Fabricated metal products	4827	2.3	5163	2.2	4026	1.7
DK	Machinery and equipment	25414	11.9	26052	11.3	24427	10.5
DL	Electrical and optical equipment	47948	22.5	59548	25.8	65361	28.0
30	Office machinery and computers	5959	2.8	5680	2.5	4901	2.1
31	Electric machinery and apparatus n.e.c	11092	5.2	12271	5.3	12027	5.2
32	Radio, television and communication equipment and apparatus	26067	12.2	36294	15.7	42607	18.3
DM	Transport equipment	12717	6.0	14221	6.2	14422	6.2
34	Motor vehicles	7186	3.4	7747	3.4	8017	3.4
35	Other transport equipment	5531	2.6	6474	2.8	6405	2.7
E	Electrical energy, gas, steam and hot water	228	0.1	63	0.0	15.0	0.0
X	Other activity	1421	0.7	1785	0.8	1900	0.8

Source: Statistical Yearbook of Finland (2000)

Table 12. Imports by industry 1997-1999

		FIM million and % of total imports					
	Classes of Goods	**1997**	**%**	**1998**	**%**	**1999**	**%**
	Total imports	160995	100	172819	100	176536	100
A	Products of agriculture and forestry	6356	3.9	6813	3.9	6436	3.6
B	Fish and fishing products	111	0.1	152	0.1	163	0.1
C	Products from mining and quarrying	15506	9.6	13436	7.8	15697	8.9
D	Manufactured goods	134636	83.6	147614	85.4	148756	84.3
DA	Food. beverages and tobacco	7688	4.8	8142	4.7	8230	4.7
DB	Textiles and wearing apparel	7450	4.6	7889	4.6	7862	4.5
DD	Wood and wood products	1031	0.6	1165	0.7	1286	0.7
201	Wood. sawn and planed	511	0.3	540	0.3	598	0.3
202	Plywood. particle board etc.	231	0.1	302	0.2	330	0.2
DE	Pulp. paper and paper products	3696	2.3	3869	2.2	3971	2.2
2111	Pulp	323	0.2	340	0.2	395	0.2
2112	Paper and paperboard	1518	0.9	1516	0.9	1450	0.8
DG	Chemicals. chemical products and man-made fibres	18092	11.2	18504	10.7	18811	10.7
DH	Rubber and plastic products	4388	2.7	4675	2.7	4612	2.6
DJ	Basic metals and fabricated metal products	13719	8.5	13834	8.0	12481	7.1
27	Basic metals	9960	6.2	9804	5.7	8562	4.9
28	Fabricated metal products	3760	2.3	4030	2.3	3919	2.2
DK	Machinery and equipment	18312	11.4	19468	11.3	18051	10.2
DL	Electrical and optical equipment	33704	20.9	39705	23.0	42119	23.9
30	Office machinery and computers	8265	5.1	9935	5.7	9808	5.6
31	Electric machinery and apparatus n.e.c	8055	5.0	9897	5.7	10613	6.0
32	Radio. television and communication equipment and apparatus	13272	8.2	15536	9.0	17046	9.7
DM	Transport equipment	16146	10.0	20374	11.8	20604	11.7
34	Motor vehicles	12061	7.5	14722	8.5	14937	8.5
35	Other transport equipment	4084	2.5	5652	3.3	5667	3.2
E	Electrical energy, gas, steam and hot water	1100	0.7	1253	0.7	1131	0.6
X	Other activity	3286	2.0	3551	2.1	4353	2.5

Source: Statistical Yearbook of Finland (2000)

Finnish import statistics show a similar kind of diversification development as in exports; the share of total imports by the four most important trade partner countries in 1990 decreased significantly. West-Germany, Sweden, the Soviet Union, and the UK formed 50% of total trade in the beginning of the 1990s. However, in the end of 1999, Germany, Sweden, the UK, and the United States consisted of only some 40% of total Finnish imports.

Export has grown fastest in the electrical and optical equipment sector. For example, in 1997, the value of this class of goods was 47948 million FIM and its share of total exports was 23%, while two years later the corresponding figures were 65361 million FIM and 28%. The subgroup radio, television, and communication equipment has mainly been responsible for this growth. During the 1990s, the export share of Finnish forest cluster diminished. Similarly, the share of basic metals and fabricated metal products showed a declining trend. In the structure of Finnish imports, transport equipment, motor vehicles and other transport equipment have raised their shares. The increase in electrical and optical equipment is also apparent (see Tables 11 and 12).

Prominent feature in the foreign trade of Finland in the late 1990s was the rapid growth of high technology products. In 1999, high technology products formed 21% (31559 million FIM) of total exports and 18% (47406 million FIM) of total imports. Again, telecommunication equipment comprised the majority of this export, with its share being over 15% in exports and 7% in imports in 1999 (see Appendix 1).

3.2.1 Trade Potential and Revealed Comparative Advantage

One method to study foreign trade with partner countries is to use a gravity model as an analytical framework for explaining bilateral trade flows based on GDP, population, and geographical distance between partners. In economics, gravity models are used as a standard method in assessing long-term trade equilibrium between different trading partner countries. A gravity model measures actual trade in relation to its expected level[36]. Expected level is measured by the existing level of trade between two partner countries in relation to the average between countries having similar factors determining the intensity of mutual trade. These factors include – depending on the model used – size of

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[36] Gravity models deal with long-range trade flow equilibrium and as such are a convenient method when comparing two rather different characteristic systems, which in this case are Western and Eastern Baltic rim economies.

the country (population), size of the economy (GDP or GNP) cultural factors (language), and distance between countries. Occasionally, political factors, such as trade agreements, are included in the models.

The arguments for the use of gravity models are rather simplistic as they argue that wealthier, larger, and economically advanced states conduct more foreign trade than smaller, poorer and less advanced ones and increased distance should respectively diminish foreign trade[37]. But even if potential trade models do not find much backing from the economic theory, they nevertheless perform reasonably well when tested empirically.

In Europe, numerous studies have applied this method to analyse trade between different countries and market areas. Trade between the European Union and the Central and Eastern European countries (CEEC) has come under particular scrutiny (Wang-Winters 1991; Hamilton-Winters 1992; Baldwin 1993,1994; Kala-Rajasalu 1995). The general outcome of these studies in the 1990s has been that some untapped potential exists in CEEC export to the EU while the reverse does not seem to hold.

These gravity-based studies have been conducted in Finland as well. Trade between Finland and the Central and East European countries has been reviewed extensively by Erkkilä and Widgrén 1994; Borsos and Erkkilä 1996; Alho et al. 1996; Meronen 1997; Partanen 1998; Partanen and Hirvensalo 1999.

Because the data used in the aforementioned models are already somewhat obsolete or do not include all the Baltic Rim economies, a simple gravity model is stipulated here to describe and estimate expected trade flows between Finland and selected countries in the Baltic Sea Region using 1999 data. Meronen (1997) developed the gravity model that is applied here.[38]

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[37] Linneman (1966) has identified three categories of costs associated with doing business at a distance. They are physical shipping costs, time-related costs and costs of unfamiliarity.

[38] Meronen (1997) argues that this typified, basic model more accurately represents reality and an underlying simplistic theory behind the gravity model approach and is therefore a better vehicle when compared to a Wang and Winters -type model.

The model is based on the following logarithmic equation:

$$t_{ij} = \beta_0 + \beta_1 y_i + \beta_2 y_j + \beta_3 d_{ij} + \mu$$

where

t_i = the value of trade between respective countries.

y_i = the GDP of exporting country.

y_j = the GDP of importing country.

d_{ij} = the distance between two countries.

The following equation shows the values of original coefficients of Meronen (1997) [39]

$$t_{ij} = 6.00 + 0.78\, y_i + 0.80\, y_j - 1.18\, d_{ij} + \mu$$

The model omits population variables, because according to Meronen, in the industrial countries, population variables and GDP figures are too highly correlated and data is overly homogeneous. Thus, with European data, the omission of population variables produces more reliable results. The list of variables used is shown in Table 13.

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[39] Notice: The values of coefficients are not estimated again, but used as such from the original model. Meronen estimated his model by using 1996 data from 14 different European nations and produced a total of 182 observations.

Table 13. List of Variables Used in the Gravity Model Applying Data from 1999

Country	GDP Bio USD	GDP Bio euros*	Distance (km)[40]	GDP National currency Bio	PPP con. rates	GDP/PPP Bio USD	GDP/PPP Bio euros*
Finland	129.4	130.00		722.00	6.15	117.40	117.94
Denmark	176.3	177.11	882	1215.82	8.54	142.37	143.02
Germany	2112.0	2121.72	1105	3877.20	1.98	1958.18	1967.19
Sweden	241.4	242.51	396	1994.85	9.78	203.97	204.91
Estonia	5.2	5.22	87	75.36	6.39	11.79	11.84
Latvia	6.3	6.33	424	3.90	0.244	15.98	16.05
Lithuania	10.6	10.65	614	42.54	1.75	24.31	24.42
Poland	155.5	156.22	783	615.56	1.84	334.54	336.08
Russia	184.6	185.45	381	4545000.00	4456	1042.41	1047.21

*Euro foreign exchange reference rate published by the European Central Bank on 30.12.1999: 1,0046 USD/Euro.

Table 14 displays the actual trade values as well as the expected level trade values using the current and PPP-corrected figures.[41] It reveals that Finland has long-term trade potential in the BSR only in her exports to Poland and Russia when current exports and expected exports are compared at current prices. A gravity model has been also calculated using PPP-corrected levels. PPP-adjusted figures are frequently used in international comparisons of levels of real GDP. The reason for this is that the use of purchasing power parities notices relative price level differences across countries, which can be significant, for example, between developed and less developed market economies.

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[40] The distance between Finland and Russia is calculated here as the distance between Helsinki and the weighted population average (population centroid) for St. Petersburg and Moscow, as these cities together with their surrounding areas account for more than half of the total imports of Russia (Suomen lähialueet 5, 74-79 1999). This region of all Russian subregions is also the most clearly related to the Baltic rim. Distance is measured in sea miles and then converted into kilometers.

[41] PPP refers to purchasing power parity. Sources of data are specified in detail in Appendix 1.

Table 14. Actual and Expected Level Exports from Finland to the Baltic Sea Region Countries 1999

	Actual exports		Expected level exports	
			Current	PPP
	In USD m.	In Euros m.	In Euros m.	In Euros m.
Denmark	1191	1196.48	937.17	732.08
Germany	5518	5543.38	5236.71	4568.24
Sweden	4199	4218.32	3100.13	2511.11
Estonia	1277	1282.87	859.25	1533.51
Latvia	275	276.27	154.73	301.89
Lithuania	166	166.76	151.35	272.48
Poland	765	768.52	974.92	1667.83
Russia	1723	1730.93	2617.98	9692.40

As is anticipated, PPP-correction gives higher values than current values for transition countries and lower values than current values for the developed EU member countries. Expected level exports to the Baltic States show some untapped potential now as PPP-corrected results in Table 14 uncover. Even so, Finnish export has major untapped potential only in its Polish and Russian trade. This result is in accordance with the earlier studies, for example Partanen (1998), where similar conlusions were drawn.

The current disposition of Finnish foreign trade can be studied more closely by analysing the structure of foreign trade based on comparative advantage[42]. This can be done in empirical experiments by means of revealed comparative advantage[43]. Several studies have used this method

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[42]According to the idea of comparative advantage, a nation should produce those goods for which it has the lowest opportunity cost. Nations can reap gains through specialisation according to comparative advantage, which occurs when each nation has different relative costs of production. If nations have different costs of production, which emerge from different resource endowments, one nation can produce more efficiently than another. Thus producing according to comparative advantage increases output through greater efficiency with no additional factor inputs.

[43] In empirical studies, the observation of comparative advantage is based on revealed comparative advantage. The Balassa index is one of the most popular indicators of revealed comparative advantage, and it can be formulated in this context as

for analysis of studying Finnish foreign trade. (see e.g. Erkkilä and Widgrén 1994; Kaitila and Widgrén 1998; Partanen and Widgrén 1999; and Kaitila 1999).

The conclusions have shown divergent results depending on the target market in question. The structure of Finnish exports differs markedly according to whether exports to the European Union or to transition countries are examined. For example, Partanen and Widgrén (1999) have shown that Finnish trade with Poland by sector is very concentrated (biased) as compared with the corresponding EU trade, and it is virtually all based on comparative advantage. Finnish-Russian trade is also very heavily based on comparative advantage (Westin 1998).

Finnish companies' trade with the Baltic States is then again concentrated on products that are not traditionally strong fields of economic activity in Finnish exports to the EU. Calculations based on revealed comparative advantage indicate that only a small fraction of these strong fields of economic activity represented in Finnish exports to the EU are well represented in Finnish exports to the Baltic States (Erkkilä and Widgrén 1995; Kaitila and Widgrén 1998, 1999).

3.2.2 Intra-Industry Trade

Studies of international trade flows of European economies have suggested for some time now that intra-EU trade is largely based on intra-industry trade. However, trade between the European Union and the Central and East European countries is also described by an increasing amount of this type of trade. This trade, known as intra-industry trade (IIT), refers to simultaneous exports and imports of commodities in the same industry or production group in a given time[44].

Intra-industry trade is traditionally observed to be high between developed market economies and fairly low between countries that are at relatively different levels of economic development, like between developed market economies and transition economies or between developed market economies and developing countries (Widgrén 1998, 49; Kaitila and Widgrén 1998, 102). Nevertheless, in the 1990s, it has

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$BI = \frac{x_{ij}^k / X_{ij}}{x^k / X}$ where x_{ij}^k = product k export of country i to country j; X_{ij} = total export of country i to country j; x^k = share of product k in intra-EU export; X = total intra-EU export (Partanen and Widgrén 1999, 35).

[44] Intra-industry trade is often divided into horizontal and vertical intra-industry trade. The former refers to export and import of similar goods and the latter to trade in which products differ in quality.

become typical in Europe that two countries that are in relatively different economic phases conduct a significant amount of intra-industry trade. IIT calculations have uncovered that the share of IIT in total trade has increased incrementally in diverse transition economies as differences in economic structures have been diminishing.

Table 15. Grubel-Lloyd Indices of Intra-Industry Trade between the EU and Poland and the Baltic Countries (1996 data: CN4 level)

Country	Estonia	Latvia	Lithuania	Poland
Finland	28.7	7.4	9.7	8.0
Denmark	20.3	15.7	22.7	24.6
Germany	12.1	16.0	14.9	29.8
Sweden	25.6	11.4	8.6	21.3
France	6.9	4.3	6.5	20.2
Belgium- Luxembourg	3.1	18.1	5.9	20.1
Netherlands	4.3	3.4	10.0	22.8
Italy	7.2	9.9	4.0	18.9
United Kingdom	3.5	6.4	4.0	19.2
Ireland	0.7	0.5	0.3	7.0
Greece	0.0	0.0	0.2	6.0
Portugal	1.9	0.0	5.1	10.0
Spain	1.7	3.5	1.5	19.9
Austria	5.0	3.4	6.0	15.7

Source: Widgrén (2000, 69)

Table 15 reveals that the overall level of IIT between the EU and the Baltic countries and Poland is still rather low even though the IIT of EU countries with Baltic States and Poland have increased since the beginning of the 1990s.[45] EU countries geographically close to the Baltic States and Poland, i.e. Finland, Sweden, Denmark and Germany exhibit by far the highest levels of IIT. Latvia's highest IIT, after Belgium-Luxemburg, is in trade with Germany, Denmark, and Sweden. For Lithuania, the highest levels of intra-industry trade are with Denmark and Germany. Estonia's highest IIT is with Finland and Sweden. Countries located further apart have a lower level of total trade and IIT with each other (Widgrén 2000, 69). Compared with intra-EU levels or

[45] Compare with Erkkilä – Widgrén (1994).

Poland-EU levels, IIT is generally lower between the Baltic countries and the EU countries.

Even though IIT between EU and Poland is greater than between the EU and the Baltic States, it is not as high as between EU and some other transition economies in Eastern Europe, such as Hungary and the Czech Republic (Widgren 2000, 70). Even so, Poland's trade with its biggest and most proximate partners displays considerably high shares, reaching almost 30% in trade with Germany (Table 15).

Intra-industry trade often reflects, in these cases, foreign direct investment made from EU countries to transition countries. The EU country may be using a transition country as a base for production substituting or complementing domestic production.[46] For instance, the high level of IIT in Estonia's trade with Finland and Sweden is matched by the dominance of these countries in the stock of FDI in Estonia as seen earlier. Many Finnish and Swedish firms are engaged in subcontracting in this way with Estonian firms (Borsos and Erkkilä 1995, 17; Lindström 1997).

Empirical research also shows that a large part of intra-EU intra-industry trade is horizontal in nature, more so than is the case in IIT between the EU and Eastern European transition economies. In the latter, intra-industry trade is mainly vertical and thus based on quality differences (Aturupane et al. 1997; Kaitila and Widgren 1998, 1999; Widgrén 2000).

Intra-industry trade creates input-output linkages between countries and is hence relevant for economic geography considerations in the BSR. It also indicates the integration tendency of the national economies in the Baltic Sea Region. IIT and FDI figures verify that the strongest economic links in the Baltic Sea Region are between Finland, Sweden, Estonia, Poland, Germany, and Lithuania. Linkages between Denmark and the Baltic countries and to some extent Sweden and Poland also exist (Widgrén 2000, Lindström 2000).

To exploit novel data, the amount of intra-industry trade between Finland and all the selected countries in the Baltic Sea Region is estimated with 1999 data[47]. The Grubel-Lloyd index is used here as an indicator of IIT. The index is formally written:

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[46] Brenton et al. (1999) and Alho et al. (2001) find evidence of a relationship of complementarity, not substitutability, between FDI and trade between the CEEC and the European Union.

[47] The data used are based on EUROSTAT's CN(4)-digit classes of classification. CN=Combined Nomenclature. See Appendix 1.

$$GL_{ij} = \left[1 - \frac{\sum_{k} \left| x_{ij}^{k} - m_{ij}^{k} \right|}{X_{ij} + M_{ij}} \right] * 100$$

As can be seen in the formula, the Grubel-Lloyd index measures the sum of the absolute differences between the export (x) and the import (m) of commodities k in trade between countries i and j, where k runs through all the products in which the countries are engaged in trade together. In the denominator, the total sum of exports and imports exists between two countries. If the index takes value zero, there is no intra-industry trade between the countries. If the index value is near 100 also IIT is near 100 per cent.

Figure 6. Grubel-Lloyd Indices of Intra-Industry Trade between Finland and the Baltic Sea Region Economies (1999 Data: CN4 level)

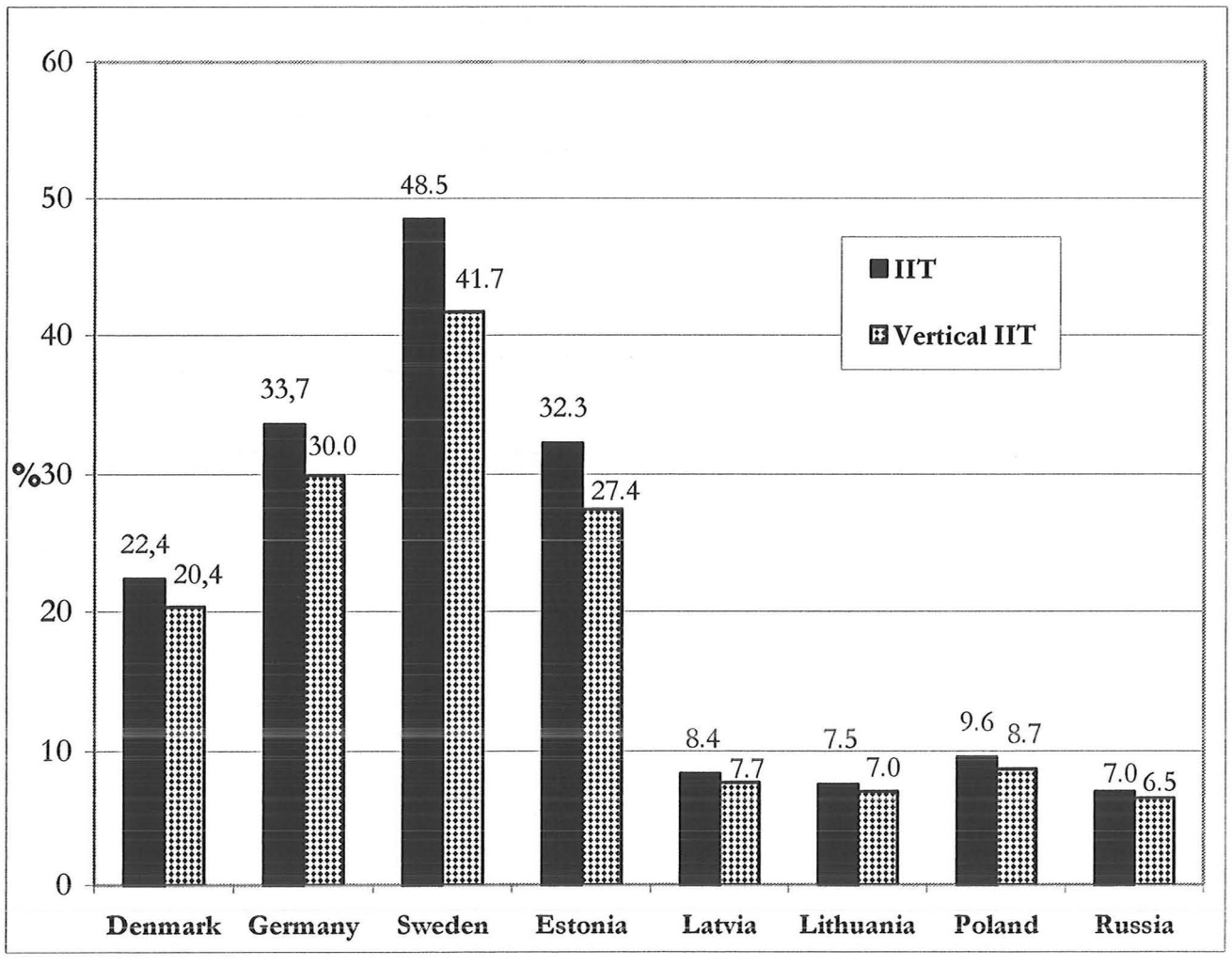


Figure 6 shows that Finland has highest IIT in trade with Sweden. Almost 50% of the trade is intra-industry trade. Germany follows Sweden with almost 34%, but Estonian trade with Finland reaches practically the same level (32%). Other Baltic States have less than 10%

of intra-industry trade with Finland. Russian trade shows only 7% of IIT. Compared with Widgren's results shown in Table 15 the newer data show some increase in intra-industry trade between Finland and Poland as well as Finland and the Baltic States, except Lithuania.

The shares of vertical and horizontal IIT levels between Finland and other Baltic Sea Region countries were also calculated to estimate the internal structure of IIT. The criterion of IIT to be vertical was considered 15% difference in unit prices of export and import products. If the difference was higher than 15%, trade was considerd vertical and if it was lower than 15%, trade was considered horizontal in nature.

Results reveal that the major part of intra-industry trade of Finland is vertical in nature both with Western and Eastern Baltic Rim countries (see Figure 6). Horizontal IIT reaches its highest values in trade with Germany, Sweden and Estonia.

3.3 Finnish FDI in the Baltic Rim Economies

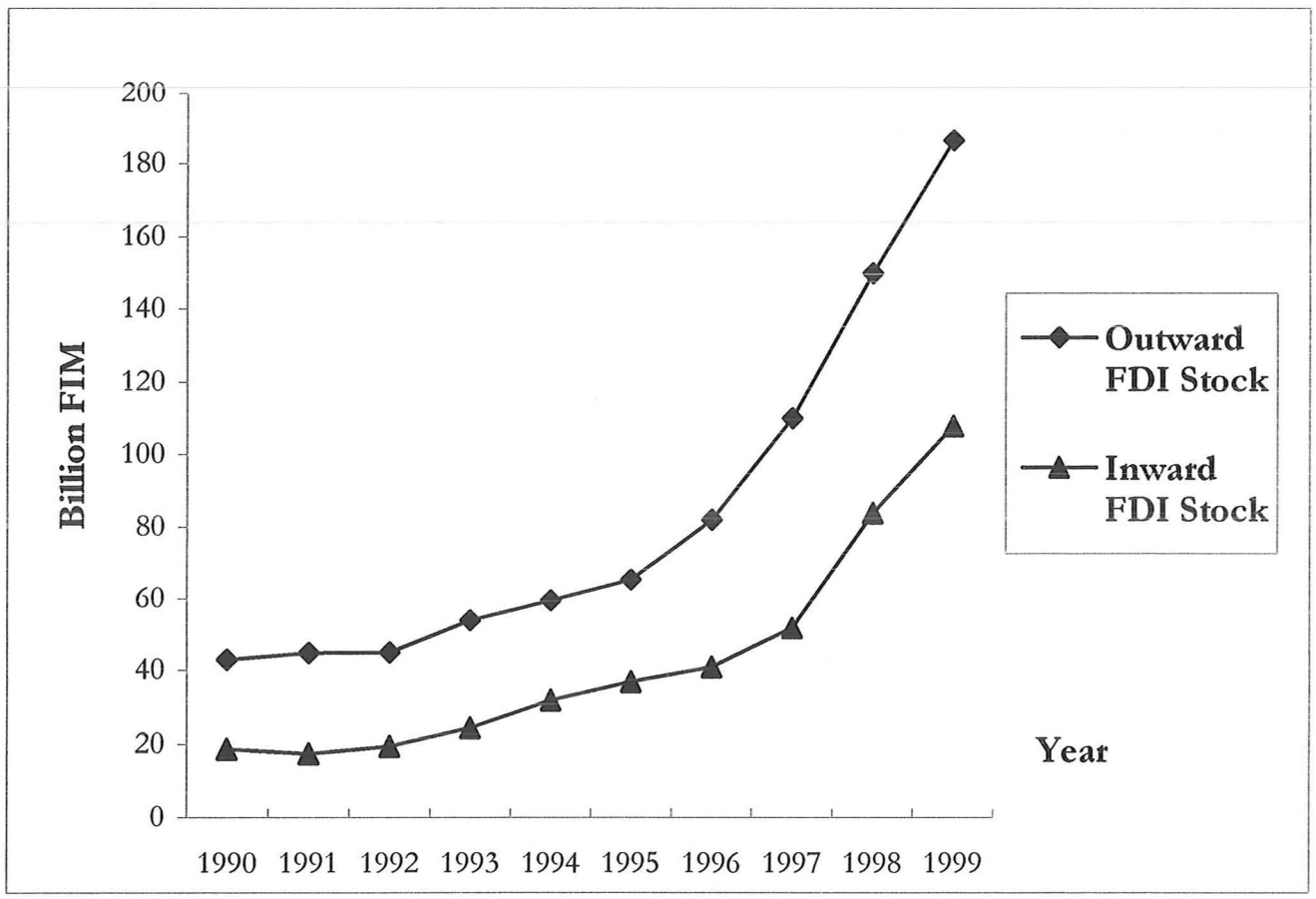
It was not until the 1980s that Finnish firms started to obtain considerable productive assets abroad. At that time, the largest companies were responsible for most of the FDI outflow, with the fifteen biggest investors comprising over 80% of the turnover of foreign subsidiaries (Ali-Yrkkö and Ylä-Anttila 1997, 24).

The real expansion of both outward and inward FDI stocks in Finland started in the second half of the 1980s and intensified rapidly during the 1990s with the exception of some early recession years during the same decade. The stock of investment abroad grew more than fourfold and the stock of investment in Finland grew almost sixfold during the decade (see Figure 7).

Figure 7 presents a distinct imbalance between inward and outward investment throughout the 1990s. In 1999, the investment in stock abroad was nearly two times greater than in domestic stock. Pajarinen et al. (1998, 74) have suggested several reasons for this. First, Finnish companies have invested abroad mostly in manufacturing companies, whilst foreign firms have invested primarily in trade and service sectors in Finland. As the amount of invested capital in manufacturing firms is normally larger than, for instance in sales offices, a difference in the required volumes of FDI is apparent. Second, the average size of acquisitions may have been larger in outward FDI. Third, direct investment capital flow statistics include capital flows related to financial operations between the parent company and foreign affiliates. Because the proportion of intra-group financial flow has been high,

particularly, in the case of capital outflow, this may explain the discrepancy (Ali-Yrkkö and Ylä-Anttila 1997, 37-38).

Figure 7. Inward and Outward Foreign Direct Investment Stocks in Finland



Source: Bank of Finland (2000)

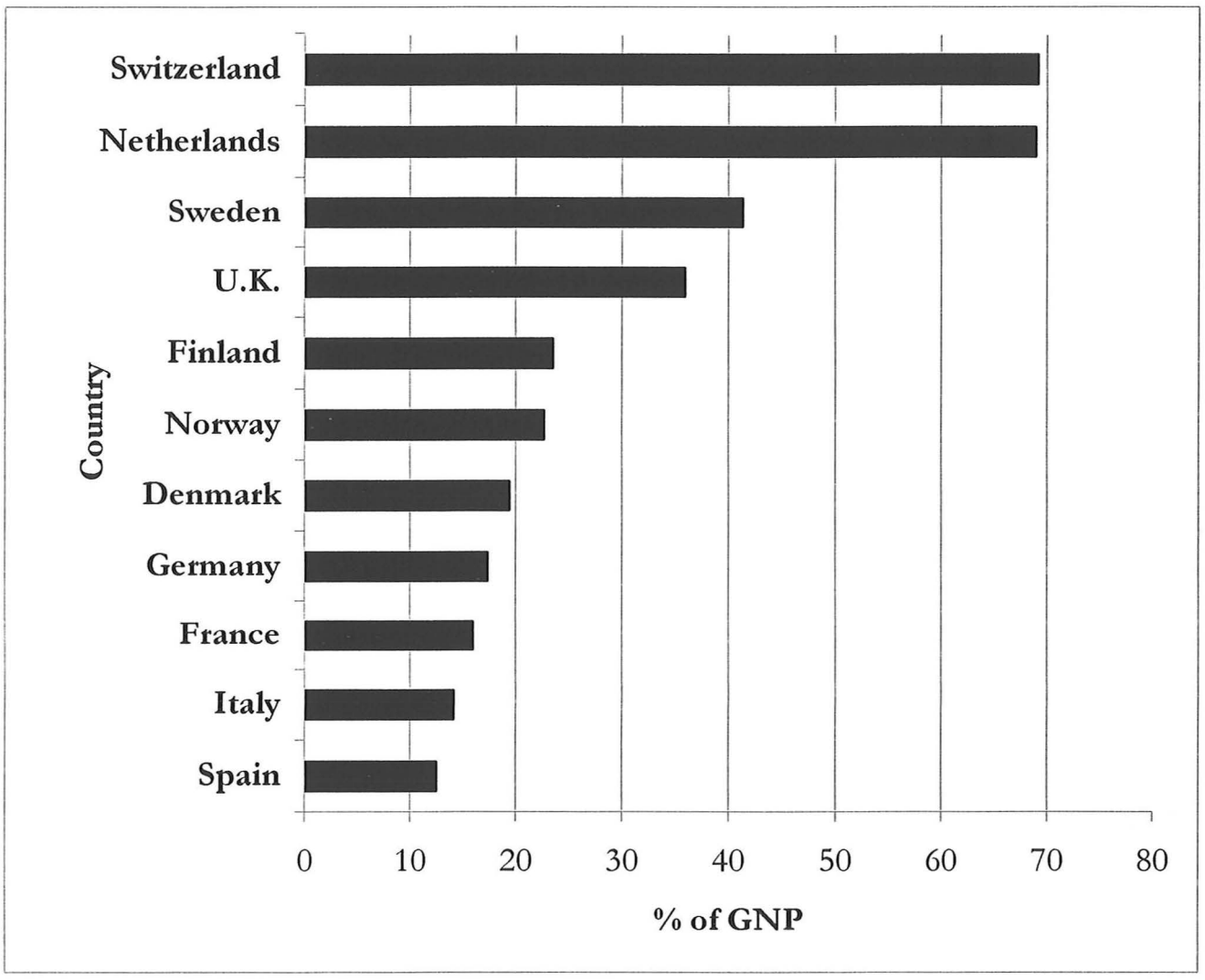
More fundamental reasons for the imbalance and the more modest interest of foreigners to invest in Finland lies elsewhere, the remote location and the small size of Finnish domestic markets standing among the most important determining factors (Kajaste et al. 1992, 47; Puhakka 1994; 1995, 27).

Reinikainen also emphasises Finnish companies' increased internationalisation potential as an important explaining factor for more radical increase in outward investments, not to forget overvaluation of markka in the end of the 1980s as well as companies' increased need to be present in European markets, even though these latter two special reasons disappeared during the 1990s (Reinikainen 2001, 188).

Grounds for the increase in inward FDI flows to Finland in the 1990s are also many-faceted. They are founded on the removal of restrictions on foreign ownership in 1993 as well as increase in technological level of Finnish companies. Furthermore, the deep economic recession in the beginning of the 1990s made Finnish productive assets relatively

cheaper.[48] Finnish membership in the EU in 1995 as well as favourable growth forecasts for Russian and Baltic markets accelerated the flows of FDI to Finland. (Pajarinen et al. 1998, 74). Still, the Figure 8 indicates that the stock of direct investment abroad by Finland is somewhat general level compared with some other Western European economies.

Figure 8. Stock of Investment Abroad in Some European Countries in 1999



Source: World Investment Report (2000)

Table 16 describes the development and increase of the turnover and number of employees for foreign subsidiaries and branches of manufacturing companies resident in Finland during 1990-1999. The number of employees accumulated by 6500 and the turnover expanded more than twofold.

Spatial relationships between countries affect not only trade of goods but also other forms of interaction. Some studies imply that foreign direct investment flows follow a gravity relationship similar to trade

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[48] Because of the depreciation of the markka and the financial difficulties of the companies.

flows (Henderson et al. 2001, 88). Estimates based on Swedish outflows of FDI suggest that the distance coefficient is more negative for FDI than for trade, showing even greater sensitivity to distance (Ekholm, 1998). Finnish FDI is most likely to follow a somewhat similar pattern in this respect.

Table 16. The Number of Employees and Turnover for Foreign Subsidiaries and Branches of Manufacturing Companies Resident in Finland

Year	Turnover, FIM billion	Number of employees
1990	98	141 000
1991	100	136 500
1992	117	133 000
1993	131	130 000
1994	151	138 000
1995	160	140 000
1996	139	116 000
1997	160	115 500
1998	201	140 798
1999	224	147 500

Source: Bank of Finland (2000)

Analysis of the geographical distribution of Finnish FDI reveals that foreign direct investment is mainly concentrated on current member countries of the European Union. Table 17 shows that almost 73% of outward FDI stock is located in European Union countries. Of these Sweden is the single most important host country, followed by the Netherlands and Germany and then Great Britain and Denmark. The Baltic Sea Region economies have absorbed 44% of Finnish foreign direct investment.

Destinations of Finnish exports and FDI showed in Table 17 can be used to compare geographical concentrations or disparities of exports and FDI. Some disparity in distributions is apparent. All in all FDI stock is more concentrated than exports in the EU. For other continents, excluding North America, FDI stock share is clearly lower than exports share in 1999. Country-level analysis indicates that the relative export share is larger than the relative outward FDI share in Germany, the UK, and Denmark. The opposite is true in Sweden, the Netherlands, and the USA. The share of each of the Baltic Sea Region transition countries is clearly greater in exports than in FDI. Their role in Finnish direct

investment is small, namely 1.8% of the total outward FDI stock. As an export market, the share is much more significant, as 9.9% of the export of Finnish companies is directed to this region.

Table 17. Destinations of Finnish Direct Investment[49] and Exports in 1999

	FDI Stock		Exports	
	Million FIM	% of the total	Million FIM	% of the total
European Union	135979	72.9	134990	57.9
of which EURO countries	61141	32.8	80349	34.4
Netherlands	32889	17.6	10130	4.3
Sweden	62275	33.4	23178	9.9
Germany	13439	7.2	30471	13.0
United Kingdom	9939	5.3	21345	9.1
Denmark	2522	1.3	6592	2.8
Other Europe	9279	5.0	30916	13.2
Russia	796	0.4	9550	4.1
Poland	817	0.4	4261	1.8
Estonia	1105	0.6	7058	3.0
Latvia	375	0.2	1527	0.6
Lithuania	348	0.2	922	0.4
North America	28562	15.3	20344	8.7
United States	27435	14.7	18428	7.9
Central and South America	1402	0.8	4642	2.0
Asia	6913	3.7	24973	10.7
Africa	10	0.0	20344	8.7
Total	186511	100.0	233343	100.0

Source: Bank of Finland, Statistics Finland (2000)

Swedes have been the most active direct investors in Finland, with Swedish investment accounting for nearly half of the inward FDI stock. Table 18 illustrates the geographical distribution of FDI in Finland and imports to Finland. Such EU countries as the Netherlands and Denmark have acquired significant productive assets in Finland. Foreign direct

[49] Immediate host country

investments from the European Union form 84% of Finland's total inward FDI stock. The Baltic Sea Region countries' share of the total inward FDI stock was 58% in 1999. On a country-level, UK and German investment shares have been less than these countries' respective import shares. In addition, the Baltic Sea Region transition countries export more to Finland than invest, as their investment and internationalisation capacity is not at the same level as mature European market economies. Their share of Finnish imports is the same as in exports, namely 9.9%.

Table 18. Foreign Direct Investment in Finland by Country[50] and Imports in 1999

	FDI Stock		Imports	
	Million FIM	% of the total	Million FIM	% of the total
European Union	90841	84.3	102230	57.9
of which EURO countries	26034	24.2	60350	34.2
Netherlands	19453	18.1	7213	4.1
Sweden	51141	47.5	19783	11.2
Germany	3221	3.0	26940	15.3
United Kingdom	5671	5.3	11667	6.6
Denmark	7993	7.4	6467	3.7
Other Europe	9460	8.8	20856	11.8
Russia	–	–	12751	7.2
Poland	–	–	1290	0.7
Estonia	–	–	3214	1.8
Latvia	–	–	209	0.1
Lithuania	–	–	212	0.1
North America	6194	5.7	14821	8.4
United States	6100	5.7	13933	7.9
Central and South America	-30		3156	1.8
Asia	1168	1.1	23896	13.5
Africa	-56		1338	0.8
Total	107746	100.0	176536	100.0

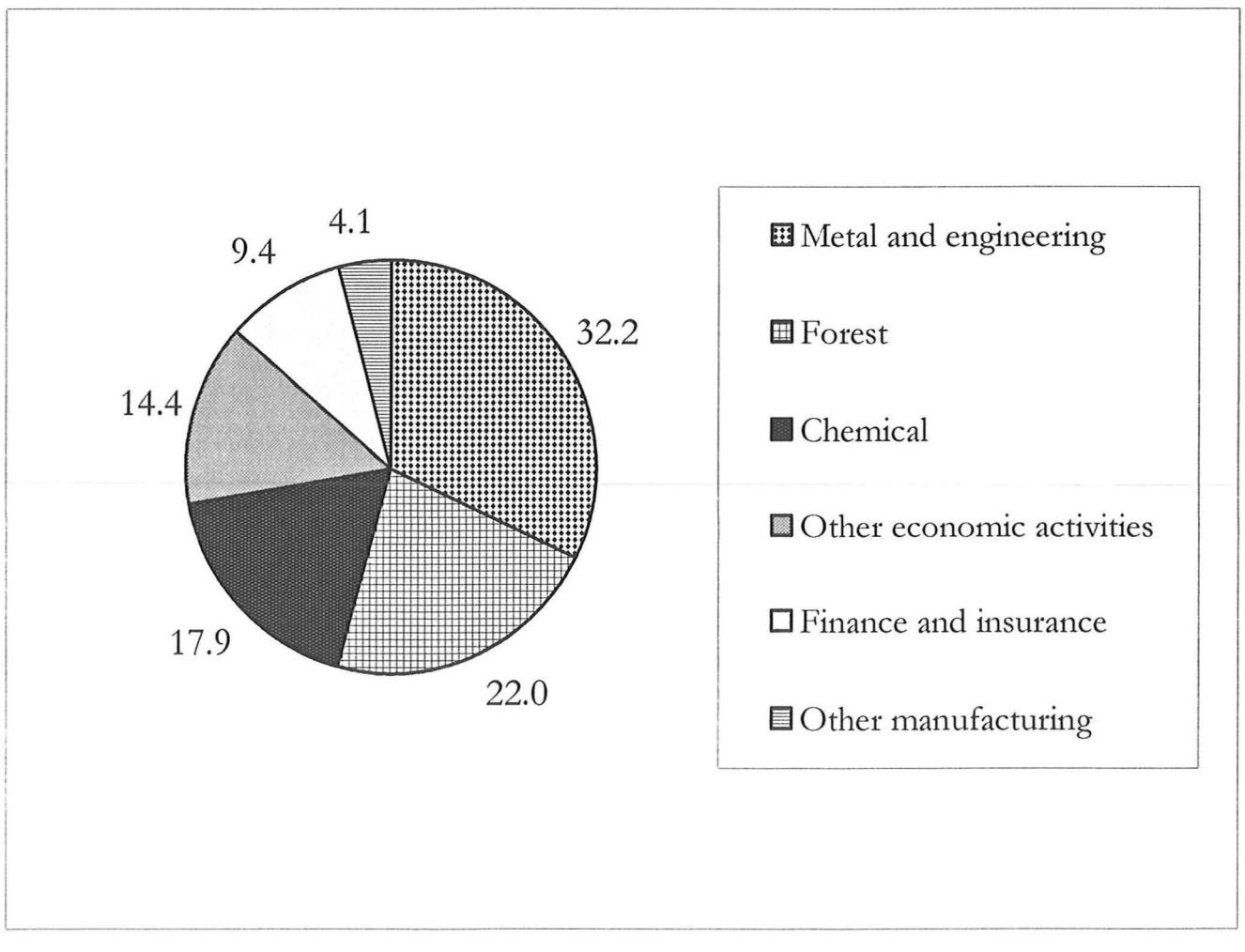
Source: Bank of Finland, Statistics Finland (2000)

[50] Immediate investor country.

According to information provided in Tables 17 and 18, the largest investor countries in Finland and the largest host countries of Finnish FDI are substantially the same. The EU's share both in outward and inward FDI is also roughly the same, even though the absolute amount of the former is one and a half times larger than that of the latter. Furthermore, Finnish companies have tended to invest more in the most important trading partner countries than these countries have invested in Finland. Exceptions include Danish firms, which have been more active in Finland than vice versa, and Swedish companies, which have been almost as active in Finland as Finnish companies in Sweden.

The distribution of foreign direct investment by different economic branches can be analysed by looking at either the economic activity of investor or investee. In Figure 9, Finnish FDI is presented by the economic activity of the investor. It shows that the predominant sector is manufacturing, and especially metal and engineering sector (60.0 billion FIM). The share of metal and engineering of the total amount of FDI undertaken is over 30%.

Figure 9. Finnish Direct Investment Abroad, Stock of Investment by Economic Activity at the End of 1999 (% of Total Outward FDI)



Source: Bank of Finland (2000)

When the economic activity of the investee is studied instead, the picture chances a little. Manufacturing keeps its leading position, but the second position goes to other economic activities. This reflects the sectoral distribution of Finnish direct investment in the Baltic Sea Region European Union member countries as well, to which major FDI flows are directed.

Finnish direct investment to the Baltic Sea Region transition economies follows broadly the same pattern as FDI from other countries to Eastern Europe. The manufacturing sector has a leading position when the value of investment is analysed. Yet, several empirical studies have found that if the number of Finnish companies operating in the Baltic Rim transition economies is considered, the largest economic sector is actually services (50-70%), followed by manufacturing (Laurila 1994; Laurila and Hirvensalo 1996; Rautava 1999).

Companies involved in FDI in the Western and Eastern Baltic Rim host countries also seem to have different size profiles. In the past, large Finnish firms undertook a major part (80%) of all outward FDI (Ali-Yrkkö and Ylä-Anttila 1997). Recently, however, SMEs have been more active in investing in Eastern European markets (Laurila 1994; Laurila and Hirvensalo 1996).

3.4 Institutional Framework in the Baltic Sea Region Markets

Various global and regional international organisations and several international treaties, try to enhance an advantageous competitive business environment for domestic and transnational companies in the Baltic Sea Region countries to create wealth.

Creating effective market economy institutions and a favourable business climate are central to companies' operation possibilities and long-term growth prospects in all countries, but they are particularly relevant for the transition economies, given the inadequacy of their pre-transition institutional arrangements (World Economic Outlook, 2000). The European Bank for Reconstruction and Development (EBRD) regularly calculates indices measuring transition countries' progress from planned to market economy in different core areas of economy. In Table 19, some key indices are gathered to show the status of the observed transition countries. Index scale varies from 1 to 4+ for each index. Estonia and Poland are coping the best, taken altogether (average index is 3.6), while Latvia and Lithuania are coming right after them (average index 3.2 and 3.3). Russia is not progressing quite as well (average index 2.5) as the others, even if its indices have improved over the years.

Table 19. Progress in Transition in the Baltic States, Poland and Russia

	Estonia	Latvia	Lithuania	Poland	Russia
Price liberalisation	3.0	3.0	3.0	3.3	3.0
Forex and trade liberalisation	4.3	4.3	4.0	4.3	2.3
Small-scale privatisation	4.3	4.3	4.3	4.3	4.0
Large-scale privatisation	4.0	3.0	3.0	3.3	3.3
Enterprise reform	3.3	2.7	2.7	3.0	2.0
Competition policy	2.7	2.3	2.7	3.0	2.3
Infrastructure reform	4.0	3.1	2.9	3.7	na
Banking sector reform	3.7	3.0	3.0	3.3	1.7
Reform of non-banking financial institutions	3.0	2.3	3.0	3.7	1.7
EBRD rating of legal extensiveness	3.3	4.0	4.0	3.7	na
EBRD rating of effectiveness	4.0	3.7	3.3	4.0	na

Source: EBRD Transition report (2001)

Table 20 summarises memberships of the BSR countries in certain central international organisations. In terms of regionalism[51] the most influential and comprehensive economic surrounding to the national economies of the Baltic Rim countries is the European Union. Internal markets of the European Union with free movement of goods, services and factors of production have had important effect on business operations of the member states' companies making it easier for them to interact. The completion of the European Union's single market programme in 1992 boosted intra-EU trade, which represents approximately two thirds of the total EU member states' trade. In many fields consolidation is complete; harmonisation and mutual recognition of technical legislation are some of them. However, in trade with both goods and services the EU has continued its reforms. The aim is to enable traders to market their goods in the EU based on one set of rules

[51] Regionalism is hereby defined as a tendency towards some form of preferential trading arrangement between a number of countries belonging to a particular region. (Lahiri, S. 1998).

(<URL:http://europa.eu.int/comm./trade/wto_overview/overview.htm > 23.3.2001).

Table 20. The Baltic Sea Region Economies' Membership in Some International Economic Organisations*[52] (2002)

	IMF	WTO	EBRD	OECD[53]	EU	CEFTA	CIS	APEC
Finland	X	X	X	X	X			
Denmark	X	X	X	X	X			
Germany	X	X	X	X	X			
Sweden	X	X	X	X	X			
Estonia	X	X	X		O			
Latvia	X	X	X		O			
Lithuania	X	X	X		O			
Poland	X	X	X	X	O	X		
Russia	X	O	X				X	X

*X represents full membership and O indicates the country has applied for membership.

EU countries' openness vis-à-vis the rest of the world and non-members has increased according to WTO principles. Since the completion of the single market, the share of imports (goods and services) to GDP has increased more than 2 per cent in its degree of openness (from 10.0% to 12.4%). The euro currency also constitutes a major contribution to the development of the EU's single market. The growth and predictability provided by the internal market have therefore improved access conditions for the EU's trading partners.

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[52] Rose (2003) has estimated the effect of the three multinational organisations intended to increase international trade namely 1) OECD, 2) WTO/GATT and 3) IMF. Rose's findings support the claim that OECD membership has consistently had a large positive effect on trade unlike GATT/WTO and IMF memberships.

[53] The OECD Centre for Co-operation with Non-Members (CCNM) actively promotes and co-ordinates OECD's policy dialogue and co-operation with economies outside the OECD area. The Baltic States and Russia belong to these non-members.

The EU's Market Access Strategy of 1999 is one example of focus on the launch and implementation of a barriers removal programme. Under this the EU supports the access of EU goods and services to markets around the world[54]. (Trade policy review of European union Directorate-General for Trade, Directorated G-WTO, OECD (Brussels, 19 July 2000) (<URL:http://europa.eu.int/comm/trade/pdf/wto_eutpr.pdf> 23.3.2001)

In the matter of trade liberalisation, the growing sector of services is taken into account in the EU as it is the target of the EU to lead in the drive to liberalise trade in services worldwide and remove barriers to the global market in the services sector. The General Agreement on Trade in Services (GATS) establishes a set of rules and obligations regarding world trade in the services sector. Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) concentrates to reduce distortions and impediments of international trade and promoting effective and adequate protection of intellectual property rights. Serious efforts are also made to ensure that measures and procedures to enforce intellectual property rights do not become barriers to legitimate trade.

Table 21. Baltic Sea Region Organisations between Governments (2002)

Organisation	Goal	Members	Founded	Secretary
Council of the Baltic Sea States (CBSS)	Intensified co-operation among the Baltic Sea Region countries: democratic development, economic development	12	1992	Stockholm
Helsinki Commission (HELCOM)	Protection of the marine environment of the Baltic Sea Area	10	1974	Helsinki
Visions and Strategies Around the Baltic 2010 (VASAB 2010)	Intergovernmental programme of the BSR countries on multilateral spatial planning and development.	11	1994	Gdansk

[54] Technical standards are costly and sometimes prohibitive technical barriers to trade for companies that wish to sell their products on foreign markets. The EU has Mutual Recognition Agreements (MRAs) with some third countries like US, Canada and Switzerland. This allows manufactures to have their products assessed for third country criteria by bodies in their own countries, thus reducing cost and time needed to achieve market access.

Table 22. Some Co-operation Organisations in the Baltic Sea Region (2002)

Organisation	Goal	Members	Founded	Secretary when founded
Union of the Baltic Cities	Promote and strengthen co-operation among BSR cities	99	1991	Gdansk
Baltic Sea States Subregional Co-operation (BSSSC)	To promote mainly political level subregional co-operation in the BSR	162	1993	Gdansk
Baltic Sea Chambers of Commerce Association (BCCA)	To promote industry, trade and business among the littoral countries of the Baltic Sea	52	1992	Kiel
Baltic Sea Tourism Commission (BTC)	To promote tourism to and within the Baltic Sea Region	over 150	1983	Norrköping
Baltic Ports Organisation (BPO)	To improve the competitiveness of the maritime transportation	55	1991	Copenhagen
Baltic University Programme (BUP)	A network of universities: Focus on sustainable development, environmental protection and democracy	160	1991	Uppsala
Conference of Pheripheral Maritime Regions of Europe (CPMR) - Baltic Sea Commission	To improve co-operation of authorities in the regional administration	25	1996	Kotka
Trans-Baltic Network (TBN)	A network of organisations of citizens: Focus on security, human rights and environmental matters	40	1994	Riga
Coalition Clean Baltic (CCB)	To improve environmental co-operation between organisations of citizens	24	1990	Stockholm

The EU is committed to an open, equitable and truly multilateral trading system and sustains regional preferential trade agreements as well as other forms of regional co-operation that reinforce the EU's links with the rest of the world. Sub-regional co-operation modes in the BSR have indeed risen enormously during the last decade and now organisations enhance diverse collaboration modes with various

partners[55] in the specific fields of operations. Tables 21 and 22 illustrate a few of the dozens of organisations operating in the area from the grass root level up to the governmental level bodies.

For Finland, the accession to the European Union in 1995 had a limited effect on the operating environment of companies' foreign trade. Total free trade in industrial products between Finland and the EU countries has existed since 1984, when the final customs duties in accordance with the 1973 free trade agreements were eliminated. After the end of bilateral trade with the Soviet Union, Finland's trade policy with respect to third countries has also been largely the same as that of the EU (even before its accession), therefore no significant changes have taken place in this institutional aspect.

At the moment, all the Baltic Rim transition countries except Russia are applicant countries to the European Union. From the Union's part, the accession strategy is based on certain key elements, which are: *Association Agreements* on economic co-operations[56]; the *White Paper* on approximation of laws; the *Phare program* of economic aid to the associated economies; *Structured dialogue* consisting of meeting of heads of state and government and ministerial meeting; and the *Accession partnerships* forming the keystone of the whole accession strategy.

As a steppingstone to membership and in order to boost trade between the Community, the EU compounded an Association agreement (i.e. Europe agreement) with Poland in December 1991 (came into force February 1994) and with Estonia, Latvia and Lithuania a few years later in June 1995 (came into force February 1998). Europe agreements differ a little depending on the country in question, as the agreements are bilateral agreements between the EU and the particular country. However, the aim is the same: to prepare the Central and Eastern European countries to become full members of the EU.

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[55] Member countries of organisations vary considerably. In some organisations members come from a broad geographical area, in which for example Norway or even Iceland are included in the co-operation.

[56] The Europe Agreements with Estonia, Latvia, Lithuania and Poland provide for political dialogue, continued financial support and other forms of co-operation. Association Councils, assisted by Association Committees, manage the implementation. The Accession Partnerships between the EU and the candidate countries set out the priority areas for further work identified in the Commission's opinions, the financial means available to help them implement these priorities and the conditions which will apply to that assistance. On 12 and 13 December 2002, the Heads of State or Government of the EU convened for the meeting of the European Council in Copenhagen, in which European Council announced that membership negotiations can be completed with ten countries among them the Baltic states and Poland. These ten countries are welcomed to become members of the European Union on 1. of May 2004.

Preparation is pre-conditional to get them ready to integrate to a western economic system and its harder competition environment. [57]

Bilateral Europe agreements have, according to Baldwin (1994), a hub-and-spoke nature, so that it is worthwhile for applicant countries to orient to the EU trade. The result is a situation that creates trade between the EU and each applicant country, but at the same time decreases trade between candidate countries. Regional free trade agreements among the Baltic States (BFTA) and among the Central and Eastern European countries (CEFTA) compensate these hub-and-spoke effects[58].

Pautola (2001) has applied theses of new regionalism presented by Ethier (1998) to the Association Agreements between the Baltic States and the EU. Findings support new regionalism hypotheses which are:

- the new regionalism typically involves one or more small countries linking up with a large country,
- regional arrangements are regional geographically,
- the small countries have recently made, or are making, significant unilateral reforms,
- regional arrangements often involve deep integration,
- dramatic moves to free trade between members are not featured, and
- the liberalisation achieved is primarily by the small countries.

However, the future European Union membership of the Baltic States and Poland has relatively little effect on industrial products, because they are already under free trade and Europe agreements have already removed barriers in trade of services. Trade of products have not been totally free, because Europe Agreements have limited the trade of clothing, textile, food products and products of agriculture and fishing

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[57] The Commission gives regular reports to the European Council on progress made by each candidate country in preparations of membership. According to regular country reports of the EU Commission 2000 Estonia, Latvia, Lithuania and Poland are functioning market economies and should be able to cope with competitive pressure and market forces within the Union in the near or medium term, provided that they stay with its present reform path. (Regular reports from the Commission: Progress towards accession: Estonia, Latvia, Lithuania, Poland 2000)

[58] BFTA= Baltic Free Trade Area consisting Estonia, Latvia and Lithuania. CEFTA= Central European Free Trade Area consisting Czeck Republic, Hungary, Poland, Bulgaria, Romania, Slovakia and Slovenia. Furthermore, single applicant countries have made separate free trade agreements with each other, like Lithuania and Poland. Several free trade negotiations are currently proceeding.

industry, which are important sectors of economy to Estonia, Latvia and Lithuania. With regards to the Central and Eastern European Countries, trade has been completely liberalised as from 1 January 1998, and is now governed by WTO rules as well as the respective Europe Agreements.

Indirect consequences of the agreements affect in at least two ways. Firstly, the current applicant countries' tariff levels will equal the EU – level after membership towards third countries and secondly, regulations concerning origins equalises with the current EU member countries. (See e.g. Kaitila – Widgrén 1998, 9, 17-28)

The Common Strategy of the European Union[59] on Russia, which was adapted in 1999, implies the EU trade policy priorities between the EU and Russia. Among the principal objectives is to promote the integration of Russia into a common European economic space and into European and world economy more generally. In order to support this objective the strategy foresees the need for action in number of fields including:

- A major effort by Russia to undertake a comprehensive and sustainable economic programme, under the guidance of the IMF, and put in place an operational market economy;
- Confirmation of the rule of law and establishment of a fair and transparent legislative and regulatory framework, considered essential to attract domestic and foreign investment and satisfy international lenders;
- Encouragement and support for Russia's effort to accede to the WTO, including in undertaking the necessary legislative and institutional reforms;

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[59] The EU Common Strategy on Russia, was adopted in June 1999. It aims to strengthen the strategic partnership with Russia through increased coherence of EU and Member States actions. Its principal objectives are the consolidation of democracy, the rule of law and public institutions in Russia, the integration of Russia into a common European economic and social space, increased co-operation in strengthening stability and security in Europe and beyond as well as addressing common challenges on the European continent. The Common Strategy reinforces the PCA framework by introducing new initiatives such as strengthening of the political dialogue, co-operation in the field of non-proliferation and disarmament and an action plan to fight organised crime in Russia. Bilateral and common measures will be co-ordinated to promote further co-operation with those Russian regions that are of special interest to the Union, such as Northwest Russia including Kaliningrad.

- Progressive approximation of legislation and standards, in accordance with the PCA[60], in order to facilitate the creation of a common economic area, possibly involving in the future - and once the necessary conditions are in place – the creating of an EC/Russia free trade area.

In order to achieve the desired results in these areas, the EU and member states have indicated their readiness to support Russia through a combination of existing instruments and means focused mainly on the PCA and the TACIS programme. The main areas of action identified in the Common Strategy in this respect fall within the trade policy area and the competence of the Article 133 Committee.

In the European Union, the concept of a *Northern Dimension* was first recognised EU-wide at the Luxembourg European Council in December 1997 and was of Finnish proposal. The Vienna European Council in December 1998 adopted a Commission Communication on a '*Northern Dimension for the policies of the Union*'. In November 1999, the Finnish EU Presidency held a Foreign Ministerial Conference on the Northern Dimension, where an *Inventory of current activities under the Northern Dimension* was adopted. It was adopted as a part of the Community's external policy and is now used within the framework of existing contractual relationships[61], financial instruments and regional organisations to provide added value. The ultimate goal of the Northern Dimension is to intensify cross-border co-operation between the EU and its neighbouring countries and regions in northern Europe. It aims to create security and stability in the region, as well as building a safe, clean and accessible environment for all people in the north. The Northern Dimension also has the objectives of addressing the problems related to uneven regional development and avoiding the emergence of new dividing lines as new countries join the Union.

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[60] Partnership and Co-operation Agreement came into force in 1997. The PCA establishes the framework for bilateral co-operation and dialogue in a wide range of areas, notably political and economic affairs. It contains provisions on economic dialogue for example in trade in goods, business and investment (labour conditions, establishment of companies, cross-border supply of services), payments and capital, competition, IPR, approximation of legislation, economic co-operation, cultural and financial co-operation, science and research, energy and transport and co-operation to prevent illegal activities. The EU-Russia Co-operation Council oversees the implementation of the PCA and is assisted by the EU-Russia Co-operation Committee, which has established specialised sub-committees.

[61] It should be based on contractual relationships such as Partnership and Cooperation Agreement with Russia and Europe Agreements with the Baltic countries and Poland. It should also be seen as a means to strengthen the Union's external policies and available instruments in the region. At the same time it should help to create positive interdependence between Russia and the Baltic Sea Region and the Union.

It is also supposed to contribute to strengthening of the Union's external policies and reinforcement of the positive interdependence between Russia and the Baltic Sea Region and the European Union. This includes also economic co-operation fields such as cross border Cupertino, trade and transport as well as telecommunications.

Empirical studies of trade agreements, such as Alho (2003), actually finds evidence for the claim that European trade is significantly influenced by various regional agreements and intensities of trade are strongly asymmetric between the regions. The intensities are asymmetric also both between countries of EU and applicant CEE countries for example. This leads to a conclusion that there is room for further integration to produce an equal standing in trade between countries in the Baltic Sea Region as well.

Since the launching of the idea of the Northern Dimension several steps have been taken. Action Plan for the Northern Dimension with external and cross-border policies of the European Union 2000-2003 was published in Feira in 2000. This Action Plan implements through existing Community instruments, in particular the Association Agreements concluded between the Community and its Member States and the candidate countries: the Partnership and Co-operation Agreement concluded with Russia, and the EEA Agreement concluded with Norway and Iceland, as well as the relevant Community budgetary instruments TACIS, PHARE INTERREG[62] and specific Community programmes which are open to the participation of the aforementioned countries.

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[62] **TACIS** is the financial instrument for the EU activities in Russia. In January 2000 the new TACIS Regulation entered into force. The programming of assistance will be guided by the criteria of partnership as established by the PCA and the Common Strategy. Priorities will be set out as the result of an EU-Russia dialogue reflecting areas of common interest. The focus of **PHARE** is on preparing the candidate countries for accession to the EU by providing assistance on institution building across all sectors and supporting investments in priority accession related areas. Two additional financial instruments support the preparation of the candidate countries from 2000 onwards: SAPARD for future participation in the Common Agricultural Policy and ISPA in the Community's Cohesion policies. All three pre-accession instruments help the candidate countries among the Northern Dimension partners to develop and strengthen the institutions required for adopting and applying the "acquis communautaire". **INTERREG**, the EU **Structural Funds** facility for financing cross-border co-operation activity, is another EU financing instrument relevant to the Northern Dimension. INTERREG is a multiannual framework programme for co-operation between public authorities, firms and associations in border regions as defined in the Structural Funds Regulation. Its aim is to stimulate local and regional economic development through co-operation and better communications, thereby removing barriers to integration and mutual understanding.

The Baltic States' and Poland's forthcoming EU-membership transfers EU's functional focus towards Finland and the Baltic Sea Region and thus strengthens EU's Northern Dimension. For Finland, the European Union enlargement also means that the BSR with its already existing firm economic ties becomes a more unified market area. The major benefits of integration seem to be founded on foreign direct investment. Bevan and Estrin (2000) have identified a dynamic transmission mechanism whereby announcements of progress in EU accession have a direct impact upon FDI, which in turn improves country credit ratings with a one period lag, and hence improves FDI in the next period (Bevan and Estrin 2000, 23). All in all most Eastern enlargement scenarios confirm the result that the incumbent EU countries gain little but new entrants benefit substantially (see e.g. Sulamaa and Widgrén 2003).

3.5 Barriers to Trade and FDI in the Baltic Sea Region

Keeping the amount of trade and investment barriers as low as possible in any market area is one of the most important prerequisites for a steady, attractive and internationally competitive business environment. This idea has been relatively indisputable economic policy advice in the 1990s and early 2000s. Even so, the issue of barriers is all but simple, as any impediment to economic activity in the host country can at least indirectly affect the business operations of local as well as transnational firms.

Institutional efforts and attention have been directed, according to policy recommendations, to the liberalisation of trade and capital movements in the internal markets of the EU and between EU and Eastern Europe's transition countries as well. However, various empirical studies show that for example, Finnish companies perceive more difficulties investing in the Eastern than in the Western BSR. Further, other problems related to business culture and business procedures are more awkward in the transition economies of the BSR than in the EU market economies in the area (Lindström 1996, 1997; Kivikari and Lindström 1999).

Several studies such as Hernesniemi (1996), Sorsa (1997), Kivikari (1998), and Hazley and Hirvensalo (1998), show that trade and FDI barriers in the Baltic Sea Region have not disappeared. Problems in physical infrastructure, institutional infrastructure, structural barriers in national economies, as well as political and economic climate hamper efficient teamwork, co-operation, and trade.

Based on their company survey data, Hazley and Hirvensalo (1998) concluded that firms encounter more trade and investment barriers in

the Russian Federation than in other Baltic Rim transition economies. They also found continual variations in legislation and their retroactive nature in the case of Russia to be significant problems for Finnish companies, particularly in the fields of accounting and taxation. The earlier study of Hernesniemi (1996) revealed similar inconveniences and problems, but also remarked on the high cost or even lack of investment financing for companies back then.

The Bank of Finland has repeatedly conducted extensive surveys among Finnish companies investing in Eastern Europe (Laurila 1994; Laurila and Hirvensalo 1996; Rautava 1999). 544 companies answered to the latest survey (1997) drawn, which had altogether 433 subsidiaries in Russia (169) and the Baltic States (264). Findings reflect that the business environment in Russia has remained more problematic than in the Baltic States, even though the investment climate of both markets has improved when compared with the results of earlier surveys.[63] Parallel conclusions have been drawn in case studies of large Finnish companies and multinational conglomerates (Hirvensalo 1996; Kangas 2000).

According to Kivikari (1998,1999), the barriers encountered in FDI depend strongly on the form of investment (Table 23). A foreign company may be a minority or majority shareholder in a joint venture, which also contains local owners. Problems typically arising in joint ventures include the valuation of ownership shares and cultural differences in company management. Thus, negotiations with the local authorities may, for example, prove problematic.

Following the privatisation of state property in transitional economies, there has been no shortage of companies offered to international investors in the 1990s. Acquisition, which refers to the purchase of an active business as a wholly-owned foreign subsidiary, has thus been a rather common tool used to provide industrial assets. Major potential problems in firm acquisitions include the valuation of the company, its environmental obligations, negotiations with local authorities, and cultural differences. In greenfield investment, i.e. where new businesses are established, the difficulties lie in determining ownership rights for the construction site and in accessing local networks. Which form of FDI is eventually chosen in each case depends on many factors (Djarova 1996, 77-85).

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[63] The Bank of Finland has made a series of these surveys since 1991.

Table 23. Problems Encountered in Different Forms of FDI

	Joint venture	Acquisition	Greenfield
Environmental liabilities	x	X	x
Restructuring costs	x	X	x
Valuation	X	X	x
Negotiation with government agencies	x/X	X	x/X
Ownership status of property	x	x	X
Supply and distribution networks	x	x	X
Integration into local economy	x	x	X
Cultural differences	X	X	x

Source: Kivikari (1998, 92) X=considerable problem; x=small problem/no problem.

All in all, three groups of factors that exert a negative influence on FDI in the Baltic Sea Region's emerging economies can be compiled (Kivikari 1998, 89-90). First, foreign firms tend to be in an inferior position compared to domestic firms (see Chapter 2.2). Among these drawbacks are higher transaction costs and unfamiliarity with language, culture, bureaucracy, networks, etc. Second, some general obstacles exist, which foreign investors come up against with transition countries such as institutional, market or production determinants. Third, Russia, Estonia, Latvia, Lithuania, and Poland have country-specific features that may impede their role as host countries to FDI (for more detailed analysis see Borsos-Torstila 1999,150-164).

Kivikari (1999) concludes that the biggest problem in any FDI project in the Baltic Sea Region, no matter what the form of the company is, are the negotiations with government agencies. Other sources of problems include cultural differences and valuation. (Kivikari 1999, 63)

The severity of barriers in business operations is reflected in investment ratings published by international business analysts. Investment ratings operate as indicators of the level of risk involved in investing these countries. In table 24 estimates by Euromoney magazine are given to illustrate this aspect in the BSR. Economic and political analysts make these ratings based on array of quantitative data (180 countries in 1999). These ratings for Western European Baltic Rim

countries have improved, especially that of Finland, when estimations from 1993, 1997 and 1999 are compared.

For all of the five transition countries, the position improved markedly from 1993 to 1997, most of them climbing from positions over 100 up to the positions of 60-78. Countries other than Russia have also continued to improve their positions as the March 1999 figures indicate. For Russia, the economic slump in August 1998 and its implications caused a serious drop in the investment rating.[64] The investment risk is seen to be lowest for Poland. Among the Baltic States Estonia has the best status.[65]

Table 24. Investment Ratings of the Economies in the Baltic Sea Region

	September 1993	December 1997	March 1999
Finland	21	13	12
Denmark	9	9	9
Germany	13	6	6
Sweden	19	15	14
Estonia	122	60	50
Latvia	132	64	62
Lithuania	130	70	63
Poland	72	48	42
Russia	137	78	161

Source: Euromoney (1993,1997,1999)

All in all economic integration, in the form of trade liberalisation and lower trade barriers, may lead to the result that industrial location will become more dependent on comparative advantage. As trade barriers diminish agglomerative forces weaken, leaving room for other influences on the location of production. Forslid and Wooton (1999) argue that when a pattern of comparative advantage exists, integration

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[64] In September 1998 the Euromoney poll followed August's debt default and devaluation of the ruble and as an outcome of that Russia fell in the poll to the position 127. Since then Russia fallen further to the place 168 as perceptions of its riskiness has increased. In March 1999 Russia was ranked to be a riskier place to invest than Sudan, Armenia and the Central African Republic.

[65] International investment ratings give guidance for those wishing to make direct investments as well as those thinking of portfolio investments. Accordingly, the big drop in Russia's rating in 1999 most probably reflected the disappointment or the dim prospects of the latter rather than that of the former.

may lead to international specialisation of production, which means that peripheral countries in the integrating European market, such as the Baltic countries, which are located away from central markets may be able to retain industry despite of the attraction of the core. They say that rather than being drained of their productive resources by an expanding core, these nations may be able to take advantage of the more liberal trade regime with a re-invigorated manufacturing sector.[66]

After discussing these central institutional aspects of the Baltic Sea Region and after overcoming the national economy level empirics of foreign trade and FDI situation of Finland, the focus turns to the sources of competitiveness of Finnish companies in the Baltic Sea Rim and empirical fieldwork related to it. First, the research methodology is presented (Chapter 4), which is then followed by the analysis of the results (Chapter 5).

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[66] Notice: this model provides a counterexample to a central result of Krugman (1991) that trade liberalisation tends to lead to greater industrial concentration.

4. Research Methodology

The fieldwork conducted in the study represents exploratory research involving quantitative aspects and main empirical results are analysed with the assistance of statistical methods. Exploratory research aims to discover significant variables in a field situation and to identify relationships among variables. It also lays the groundwork for later testing of possible hypotheses (Kerlinger 1986). The main reason for choosing an exploratory approach over hypotheses testing was the purpose of the research to examine the adaptability and suitability of existing theories, concepts and empirical generalisations. In such cases exploratory approach and the methodology supporting it are more suitable than other approaches (Brinberg and McGrath 1985, Emory 1985). In addition to the statistical analysis some qualitative data was used to illustrate the quantitative results.

4.1 Research Design

The design of the empirical part of the study was originally based on the following questionnaire procedure to be sent to managers of foreign operations in major Finnish companies:

1. Formulation of the questionnaire
2. Gathering of contact information of the target companies and respondents
3. Pre-filling the questionnaire: Respondents' point of view
4. Adjusting the questionnaire according to the preconditions of statistical methods
5. Mailing the questionnaire
6. Analysis of the survey data

However, along the planning process it became evident that the case analysis based on expert interviews with some of the participating respondents might bring some extra value to the research. Firstly, by testing if all the essential questions were asked in the questionnaire or should qualitative case analysis based on interviews, annual reports and articles bring up something new that the questionnaire had not been able to reach. Secondly, several case analyses would clarify the survey data as *examples* of participating respondents and companies. Statistical analysis itself leans on the aggregate results and do not recognise the advantages of persuasive and story-like reasoning typically used in case

studies. In this study where opinions and views were asked it was seen important to hear the unstructured voices of individual respondents as well (see Appendix 4).

All the phases were thought through as carefully as possible and the author presented her ideas in several academic forums to obtain feedback and criticism to the design. Statistical consultancy was beneficial for developing the measurability of variables noticing the requirements of methods of analysis. Furthermore, several professionals in the field of international business research gave their contribution to the development of the survey instrument. Experts in the field of qualitative study were also consulted, to obtain useful hints for applying the qualitative method in the research setting.

4.2 Questionnaire Development and Data Collection

The mail questionnaire was seen as the most efficient way to gather the information needed to harness the limited time and financial resources available to the research project. Still, additional information concerning participating companies was extracted from archival sources, annual reports, balance sheets, newspapers and internet to complete insufficiently filled background information in some responses.

Five case companies and their respondents were selected for an interview and further analysis after gathering the survey responses. The possible interviewees were selected among the group of respondents that had informed in the questionnaire that they were willing to participate in such a session.

4.2.1 Questionnaire Development

The questionnaire was designed based on theoretical as well as empirical literature to be able to find the most essential elements for analysis. A major effort was made to pick up the right concepts arising from theories and then to operationalise them to measurable variables.[67] The questionnaire language was Finnish and all of the respondents were Finnish citizens. The questionnaire used is attached to Appendix 2 in English.

In the questionnaire development, special attention was paid to ensure there were no unclear and difficult questions or unambiguous concepts. A test questionnaire was first used on 5-7.12.2001 for three

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[67] Operationalising international competitiveness to a measurable variable is itself found very challenging by various researchers. See for example Blomqvist (1990).

companies to develop and adjust the questionnaire properly. After this some changes were made to wording, order and contents of the questions. The questionnaire was also presented to experts of survey methodology to contemplate the possibilities of the variables for statistical analysis.

The final questionnaire was constructed of three parts namely "Company Information" (questions 1-2), "Business Operations within and to the Baltic Sea Region" (questions 3-11) and "Locational Sources of Competitiveness in the Baltic Sea Region Markets" (questions 12-20). The first part includes background information about a firm and these questions were also used to form some independent variables for the analysis of the data. The second part captures the major characteristics, features and forms of companies business operations in the Baltic Sea Region. These variables are briefly presented in the following paragraphs while the part three variables i.e., dependent variables are analysed more closely in Chapter 5. All variables are firm-specific in nature.

Field of business. Defines the specific field of business such as chemical industry, wholesale trade, pulp and paper industry etc.

Main line of products. Defines a rough field of main line products or services. A distinction was made between four sectors: (1) consumer goods, (2) production goods, (3) services sector and (4) multisector. We assumed that the basic competitive aspects may differ by sector.

Firm size. The study applies the European Union standard of firm classification to avoid any arbitrary categorisation. Here, small companies include less than 50 employees; medium-sized companies 50 or more up to 249 employees and large company more than 250 employees.

Degree of transnationality. A transnationality index was calculated for each company by averaging out for the percentage of a company's (1) capital expenditure (2) turnover and (3) employees abroad. Capability to take advantage of foreign sources of competitiveness was expected to vary according to transnationality of the company. A Baltic Sea Region index was calculated for each company similarly to the transnationality index, but restricted to the Baltic Sea Region foreign markets of these companies.

Technology Intensity. Companies were defined to belong to either (1) low-technology or (2) high-technology categories. This figure was calculated for each company as an average R&D expenditure as a percentage of turnover. Capability to take advantage of foreign sources of competitiveness was expected to vary according to the technology intensity of the company.

Timing of Market Entry in the BSR. Since the market environment has changed radically in the 1990s with ongoing transition from planned to market economy in the transition economies of the BSR and integration of European Union markets, a different strategic behaviour of the companies was anticipated depending on the timing of the market entry to the BSR.

Role of the BSR markets. As BSR markets were anticipated to differ in importance to the companies, the following categories were used (1) the company operates in the BSR casually and it is not a major market for the company; (2) the company operates in the BSR frequently, but is not a major market for the company; and (3) the company operates in the BSR frequently and it is the major market for the company.

Foreign business profitability. This question assessed the foreign business profitability in relation to domestic operations. Respondents were asked to estimate profitability based on the operating margin per cent of the company (1) foreign business in general; (2) the Baltic Sea Region transition economies and (3) the Baltic Sea Region EU countries.

Business links: supply and buy. Respondents were asked to define the basic nature of their business links (question 6) in and with the Baltic Sea Region as well as the character of their transfers with their partners, customers and subsidiaries (question 7-8).

Investment characteristics. Those respondents that represented companies with foreign direct investments in the Baltic Sea Region were asked to inform the mode of their investment (question 9). In addition to the pattern of major foreign direct investment (question 10).

Country contribution to the competitiveness. Companies with several foreign direct investments in different countries were asked to prioritise different host countries based on which locations have had the most positive impact on upgrading the company's competitiveness.

4.2.2 Organisation of Data Collection

The selection of the 400 biggest companies by turnover in Finland was originally founded on Talouselämä magazine's ranking, which is again based on the Etlatieto ltd. database. This list of companies (year 2000) was also available on the Internet in Autumn 2001 (URL:http://www.talouselama.com and http://www.talentum.com) as was data for comparing the balance sheet information of these companies (http://www.talentum.com).

However, to achieve correct respondents' in the selected companies, the services of a company called Micromedia was required. This company was a leading provider of database-driven marketing services in Finland in autumn 2001 and they had an up-to-date register of different employees in various positions in the organisation of these companies.

Nonetheless, it turned out that the Micromedia database was not exactly the same compared with the Talouselämä database.[68] Because of the convenience, the Micromedia® address register was given priority and it was applied to obtain required target company selection. The target respondent group was chosen to be managers of foreign operations, since they were seen to have a correct position in target companies to hold a justified and broad view on matters under study. The possible respondents' job title criterion was following: He or she should be at the level of manager or leader of foreign operations.

The problem with this criterion was that the hierarchy of management in major Finnish companies varies a lot, not to mention job titles. Thus a standard title run from any register would have resulted several possible respondents inside the same company with some of them not necessarily relating to the international operations we were studying. That is the reason why we chose to make a telephone call by Micromedia to each of the companies to locate and identify the correct recipient. Hereby the researcher had a certainty to direct the mail and possible reminders to correct recipients.

The mail survey was launched on 22nd of March 2002 and a reminder to non-responders was sent two weeks after the first mailing. A second reminder was made either via telephone or e-mail during the period of 8th-16th of April 2002.

The result of the data collection allowed statistical analysis of the data as planned and the response rate was considered to be satisfactory. After questionnaire gathering, five companies and their respondents were selected for an interview and further analysis. The interviews were carried out at the end of April 2002 and at the beginning of May 2002.

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[68] The selection of companies was based on the turnover of the companies, not on the turnover of groups (the latter method is used, for example, in the Etlatieto ltd. database of the 500 biggest companies in Finland). Also the selection was not based on the ownership information of the companies as such, but on the fact that the head-office of the company had to be in Finland. (In 1990 about 70 companies of the 500 largest Finnish companies were foreign owned. By 1999 this number had exceeded 150).

4.3 Representativeness of Data

The distribution of the respondents of the survey is shown in Table 25. Altogether, we received 162 answers from the respondents to the enquiry. Part of the respondents replied that their companies did not have business operations in the Baltic Sea Region at all at the given moment or they were said to be very marginal (all together 46 such cases). For the use of statistical analysis there were 100 usable, properly filled questionnaires. It equals 26.3% of the original amount of all sent out questionnaires (380).

However, this figure of 380 for the total number of companies gives a too low image of the response rate, because in some companies, such as certain groups, a parent company had included several daughter companies' operations into one questionnaire of a parent company and this way they gave their responses at the group level. Thus it is was approximately 340 companies or groups instead of 380, which form the compatible target group of the largest Finnish companies potentially having international business operations in the Baltic Sea Region. With this adjustment in the base, we got almost 50% of responses to our mail survey. With this logic, 30% of the total 340 questionnaires sent out could be included into the statistical data analysis.

The response results showed that the extent of the general inconveniences potential respondents sometimes feel when confronted with mailed questionnaires such as: 'not interested', 'no time to answer', 'information hard to get', 'impracticable responses', was relatively small.

Table 25. Questionnaire Response

Response	Number of Companies	%
Not interested	5	1.5
Incorrect company address	4	1.2
No time to answer	9	2.6
Information hard to get	2	0.6
No foreign operations in the BSR at all	39	11.5
Foreign operations in the BSR only marginal	7	2.0
No response	174	51.2
Impracticable responses	0	0.0
Usable responses	100	29.4
Total	340	100.0

The biggest group of returned, but unfilled, questionnaires was 'no foreign operations in the Baltic Sea Region at all, namely 11.5%.[69] This reason was expected to some extent, as the target group of the companies was selected according to the turnover of the companies. Naturally, this measure does not tell about the foreign operations as such, even though the probability to conduct foreign operations, especially FDI is higher among these large companies in Finland.[70]

Non-respondents of the survey constitute 51% of the total. It is of course a relatively high figure, but tolerable in this context. The targeted respondents were hard to reach since they travel a lot, as being in charge of foreign operations. They were often also busy as core business needed rapid responses and they naturally had to prioritise their tasks by skipping to assist research projects, such as this one, based on voluntary action.

An analysis of non-responding companies was carried out to find out if any bias in the results might emerge due to the differences in the structure of the respondents and non-respondents. Information from secondary sources was therefore applied to study if non-responding companies were differing in terms of size, industry classification and the location of their daughter companies and ventures in the Baltic Sea Rim. In this analysis, no systematic bias in common company characteristics was discovered when non-responding and responding companies were compared.

4.4 Analysis of Results

The analysis of the survey data was conducted with the assistance of a statistical programme called SPSS (Statistical Package for Social Sciences). First some descriptive statistics were run to get an overview of key characteristics of companies that answered the questionnaire. The primary analysis of the data was based on such methods as factor analysis and non-parametric tests in addition to descriptive statistics and graphics.

Factor analysis is a generic name given to a class of multivariate statistical methods whose primary purpose is to define the underlying structure of the interrelationships (correlations) among a large number of variables (e.g. test scores, test items, questionnaire responses) by defining a set of common underlying dimensions, known as factors.

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[69] If these 'no foreign operations' responses are not taken into account in the populations of the target companies the share of responses usable for statistical analysis increases to 33%.

[70] Variability in foreign operations in analysed companies was the reason to target the questionnaire to major companies instead of SMEs in the first place.

Factor analysis is an interdependence technique in which all variables are simultaneously considered, each related to all others, and still employing the concept of the variate, the linear composite of variables. However, the factors are formed to maximise their explanation of the entire variable set, not to predict a dependent variable. (Hair et al. 1998, 90-91)[71]

In addition to factor analysis, some non-parametric tests were applied to contemplate certain work hypothesis arising from (1) the conceptual framework of the study and (2) results of earlier empirical research. Their role was not to give support to verification or rejection of certain theory or theories of international business or economics as a whole, but rather to understand and explain the nature of the empirical company survey data at hand in relation to other empirical results in the field.

4.5 Validity and Reliability of Design

The validity of the data refers to the extent to which differences found with a measuring tool reflect true differences among those being tested. The content validity of the measuring instrument is the extent to which it provides adequate coverage of the topic under study (Emory 1985). Since content validity of research is judgmental, the focus has to be on assessing if (1) a conceptual framework of the study and the research questions cover the topic under study fairly enough and (2) if the questionnaire adequately covers the topics which have been defined as the relevant dimensions. In the present study the content validity was secured by carefully determining the topic of concern and the items to be scaled and used. Also, other scholars and statistical experts' opinions were considered to judge how well the measurement instruments met the standards.

By definition, the construct validity refers to the extent to which an observation measures the concept it is supposed to measure. Also this assessment is based on subjective judgment, as it is more conceptual, rather than an empirical issue (Widgor and Garner 1982). This aspect was taken into account by considering theoretical assumptions of the research together with analysing earlier research in the field.

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[71] If an analogy to dependence techniques were drawn, it would be that each of the observed variables is a dependent variable that is a function of some underlying and latent set of factors (dimensions) that are themselves made up of all other variables. Thus, each variable is predicted by all others. Conversely, one can look at each factor as a dependent variable that is a funtion of the entire set of observed variables. Either analogy illustrates the difference in purpose between dependence and interdependence techniques. (Hair et al. 1998, 91)

The survey method's strength is versatility as it is usually the only practical way to gather opinions, intentions, knowledge and similar private behaviour. However, the validity of selecting management perspective instead of other personnel's opinion in the survey was based on the assessment that top management personnel have the right position and correct prerequisites, such as a broad overall view, to evaluate sources of competitiveness of their firm. Therefore, this group was considered to be adequate for the aims of the study. Still, one might question if these views properly describe the real world situation. However, Weick (1979) for example, has argued that a person's perception of reality might be as important a factor as the reality itself, in influencing the person's behavior. This idea has encouraged the researcher to regard the views as a valid source of information despite its limitations.

When the reliability of the study, i.e. the extent to which it supplies consistent results, is assessed, the survey method's (mailed questionnaires) dependency upon the respondent's ability and willingness to co-operate becomes a major concern. Respondents may intentionally give another image of their company than the situation is in reality (Martin 1983). In the present study this kind of systematical incentive is considered highly unlikely, because respondents were made aware of the fact that the information gathered is confidential and information about individual firms would not be published. Also the topic and information gathered was not the most sensitive research issue and hence, it was not considered likely that systematically distorted responses would occur.

As the reliability of exact performance figures given by the company management was not self-evidently exact, the researcher also used other variables that evaluated management's views on performance, instead of exact performance figures as a data source. Even though views on performance and sources of competitiveness lessen the accuracy of the data, at the same time they increase the reliability of the data.

Even if a mail survey was directed to the top managers of companies by their names on the envelopes, there was still a risk that someone else, instead of the intended recipient, would complete the questionnaire form, for example, his or her secretary. To avoid this, the accompanying letter was designed to appeal to the top manager to answer personally. Furthermore, presented questions required information that staff other than management seldom have access to. All these efforts were considered to lessen the risk of unintentional respondents.

4.6 Limitations of the Study

The study is mainly based on quantitative data and quantitative analysis. Chapter three includes data from realisation of volumes and destinations of foreign trade and foreign direct investment in Finland collected by the customs of Finland and Bank of Finland. This is often referred to as so-called hard data. On the other hand, the major contribution of the empirical part of this study is based on so-called soft data. In this case it refers to the survey data, which is, even if numerical, mostly founded on respondents' subjective opinions and views.[72]

The survey has its advantages as described and argued before. These advantages have carried the idea of this study, but the disadvantages and weaknesses are also undeniably apparent in the selected approach. Due to these one has to be cautious in interpretation and in generalisation of the findings.

An important source of bias is the survey respondents' possible inability to understand the key concepts of the study used in the questionnaire in the same way. This bias was taken into account as carefully as possible when the questionnaire was designed and the pilot of the survey was conducted. The reality however is that the intangibles like the concept of competitive advantage itself may differ somewhat in different respondents' images and consideration. A pilot survey helped the researcher to find at least some of these biases.

The researcher planned, conducted and interpreted the interviews herself, which naturally encompasses chances of biases as well. However, the questionnaire survey was completed and the data was tentatively analysed before the interviews, which reduced the risks of such biases. Furthermore, the role of the interviews were not as central in the study as the role of the survey since these were used in an additional role to illustrate certain results and show some characteristics and experiences of single cases included in the survey, in addition to their testing nature (see Chapter 4.1).

The managers of the companies selected to the interview represented different sectors of industry, which restricted the possibilities to compare the views. Also, the survey database was formed from the companies operating in numerous different industries, which made it impossible to conclude sector-specific implications. Either way, the views and opinions of the interviewees expressed cannot be judged based on generalisation but have to be judged by the persuasiveness of the arguments presented and the similarities and differences found in them.

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[72] Empirical material based on qualitative methods is also often referred to as 'soft data'.

The difference between the non-random sample and the active enterprise sector in foreign trade in Finland risks the generalisation of the findings (i.e. external validity) as well. These limitations should be noticed when the empirical findings are evaluated.

5. Finnish Companies' Firm-Specific Competitiveness Based on Locational Sources in the Baltic Sea Region

Chapter 5 deals with the findings related to the collected empirical data. First the representativeness of the survey is analysed after which some characteristics and statistical descriptives concerning the companies' business operations in the Baltic Sea Region are examined. A deeper and more detailed discussion about the locational sources of companies' competitiveness is provided with the assistance of statistical methods, mainly non-parametric tests and exploratory factor analysis, to make a contribution to integrate the empirical findings to the used theoretical framework. Qualitative data is also included and direct references from the interviews are printed in italics to separate them from the other text and analysis of the author.

5.1 Business Operations in and with the Baltic Sea Region

In this section the companies' modes of foreign operations as background variables are looked at. We study modes of operations as categories rather than the volumes of quantities of these operations per se (see the questionnaire in the Appendix 2).

The major part of the companies selected to the analysis, namely 38 per cent (out of 100 responses) represent the *production goods sector*. 16 per cent belong to the consumer goods sector and 15 per cent represent the services sector when the main line of products of the companies are examined. Some 30 per cent of the companies cannot be categorised under only one of the aforementioned groups and is thus here considered as multisectoral companies.[73]

Typically the Finnish companies *started their foreign operations* in and with Sweden at the beginning of the 1970s. In Denmark and Germany firms started those operations ten years later. The next entrance has typically been Estonia and also Poland at the beginning of the 1990s when Estonia regained her independence and Poland got out of the Soviet sphere of influence. Latvian and Lithuanian markets came within reach of Finnish

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[73] It will be taken for granted that certain kinds of large-company bias may emerge due to the nature of the data. This is not, however, disturbing because the aim of the study is not to generalise the results to all Finnish companies operating in the Baltic Sea Region.

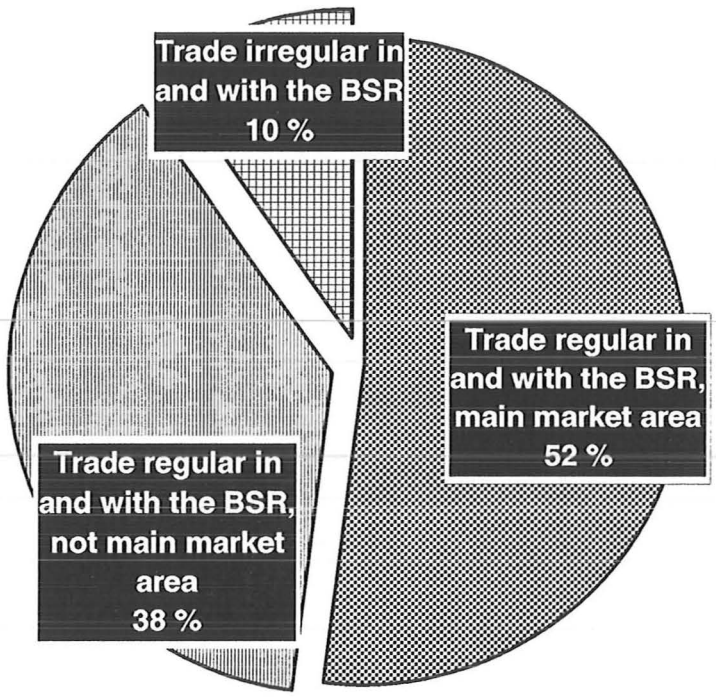
firms a couple of years later. Most Finnish companies in the sample started their operations in Russia in the Soviet era at the end of the 1970s.

These findings are in accordance with the results of several other studies, which argue that Finnish firms have typically followed an entry path in stages, firstly from the neighbouring country, Sweden, to other North and Western European markets (Larimo 1993), and subsequently to the new Eastern European markets. These stages have frequently shown a step-wise pattern in Western European markets as described by the internationalisation theory (Larimo 1993; Luostarinen 1994). However, in transition economies Finnish firms have followed a much less step-wise entry path, due to the restricted operating environment prior to the transition, and the sudden changes in the business environment at the beginning of the 1990s, which enabled more direct entry modes (Borsos-Torstila 1999). In addition to these changes there was a special, one-time opportunity of privatisation of the East European State companies at the time, which also made the situation very different from entry possibilities in the West European markets.

The Soviet Union and her major successor state, Russian Federation, is an exception here as it has usually been on the Finnish companies' agenda longer than the other Eastern European economies. A bilateral trade agreement with the Soviet Union established Finland's position as a strong trading partner through the mechanism of clearing trade all the way after the Second World War up to the 1990s (Kivikari 1997) (see Chapter 3.2). As Chapter 3.2 showed Russia has been among the most important trading partners to Finland also after the economic regime change, especially concerning imports.

Figure 10 characterises the commitment of Finnish companies to the Baltic Sea Region markets. Over half of the companies' representatives defined the BSR as their *firms' main market area with trade on regular basis.* A little bit less than 40 per cent said that they participate in Baltic Sea Rim trade regularly, but that this is not their main market area. And finally, 10 per cent of the companies participating in the analysis have trade in and with the area irregularly.

Figure 10. Character of Trade in the Baltic Sea Rim



One can conclude from this that the managers responding to the survey represent companies which are well committed to the BSR and who know this market area relatively well on behalf of their profession and status in their companies.[74]

The survey results imply that foreign business operations of these firms are generally seen to be almost as *profitable as domestic business operations* (Figure 11). The Baltic Sea Rim EU countries seem to reach out over this general level; however, the Baltic Sea Rim transition countries lag behind: According to the respondents' experience international business operations have been more frequently less profitable or successful there than home country operations.

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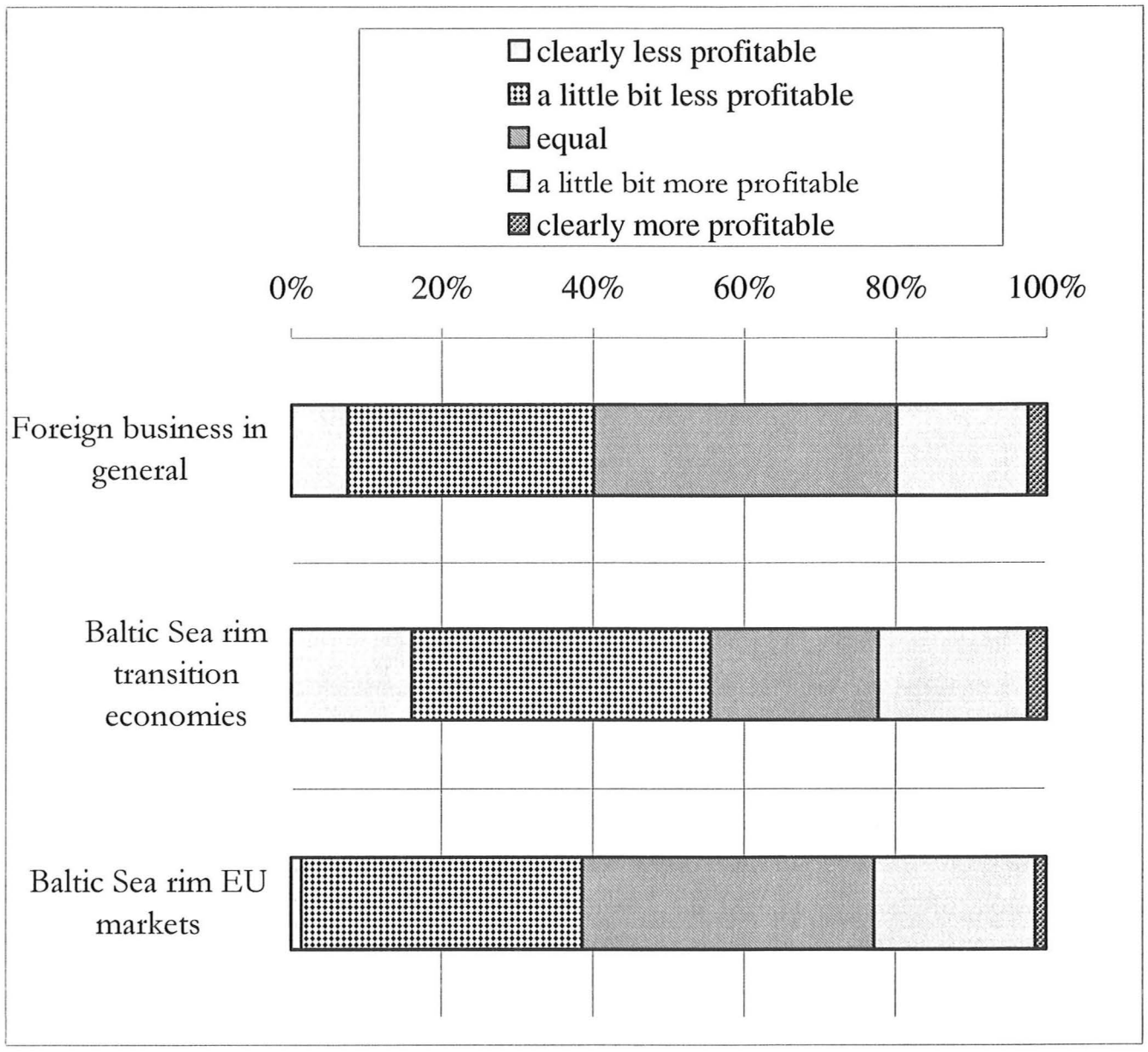
[74] In this way, there is no additional reason to consider their views and opinions unfounded when it comes to the foreign operations and sources of competitiveness in the Baltic Sea Region.

Figure 11. Respondents' View on Profitability of the Foreign Business Operations of Their Company Compared to the Domestic Operations of the Company



Business links of the companies are most commonly based on *traditional trade of products*. As Chapter 3 points out, exports and imports including export and import of services, constitute a major part of Finnish firms' foreign operation modes. Subcontracting is also relatively common all over the BSR, but distinctly so in Sweden, Germany and Estonia in this group of the sample companies, while turnkey project exports seem to be a common mode to operate in the Russian markets.

When analysing transfers that the Finnish companies are supplying to their Baltic Sea Region customers, partners or subsidiaries one finds that these are *mostly made up of final goods*. The second most important class of transfers is intermediate goods, while the third one is raw materials. Technology and marketing know-how are as a rule far less important subjects of transfers. The most often mentioned target markets for technology and marketing know-how transfers are Estonia and Sweden.

The Finnish companies receive mainly final goods from their Baltic Sea Region customers, partners or subsidiaries, even though in the case of Poland and Estonia intermediate products are more often mentioned among the goods delivered than in the case of other transition markets.

Companies can organise their cross-border operations with deeper forms of internationalisation as well, i.e., FDI requiring equity investment. It can be either a joint venture or wholly-owned venture. These modes contain a varying amount of control over the local operations[75]. These large companies under study do not make much use of *minority or majority joint ventures*. Instead, they are heavily relying on *wholly-owned* companies all over the economies in the Baltic Sea Rim. At the beginning of the 1990s joint ventures used to be much more common in Eastern Europe. Borsos-Torstila (1999, 109) found three reasons for companies' favouring wholly owned subsidiaries, instead of joint ventures, in Eastern Europe. (1) relatively well advanced reform processes in the Visegrad countries[76]; (2) various problems that other firms experienced in their joint venture partnerships; (3) difficulty in finding an appropriate partner/acquisition target.

Blomström et al. (2000) have done some econometric tests with the data collected of Swedish multinationals, which support the statement that such companies, which are less insistent on majority ownership are often those lacking long experience abroad and pursuing a strategy of industrial diversification. This in turn, suggests that the companies that would, because of their experience, be the most interest for the host economies appear to be the ones that are least interested in minority ownership. They also found evidence for factors such as firm-specific experience and skills, R&D intensity, degree of product differentiation, size of the project, and host country government regulations to be important in the choice between majority ownership and joint ventures (Blomström et al. 2000, 6).

Meyer (2000), when analysing data of British and German companies, also found empirical evidence for certain business environment variables in the markets of transition economies to be decisive for the choice of entry mode. He found support for the hypotheses that (1) foreign companies are more likely to establish wholly-owned subsidiaries in advanced transition economies, and (2) that those companies originating in closer physical proximity to transition economies are more likely to establish wholly-owned

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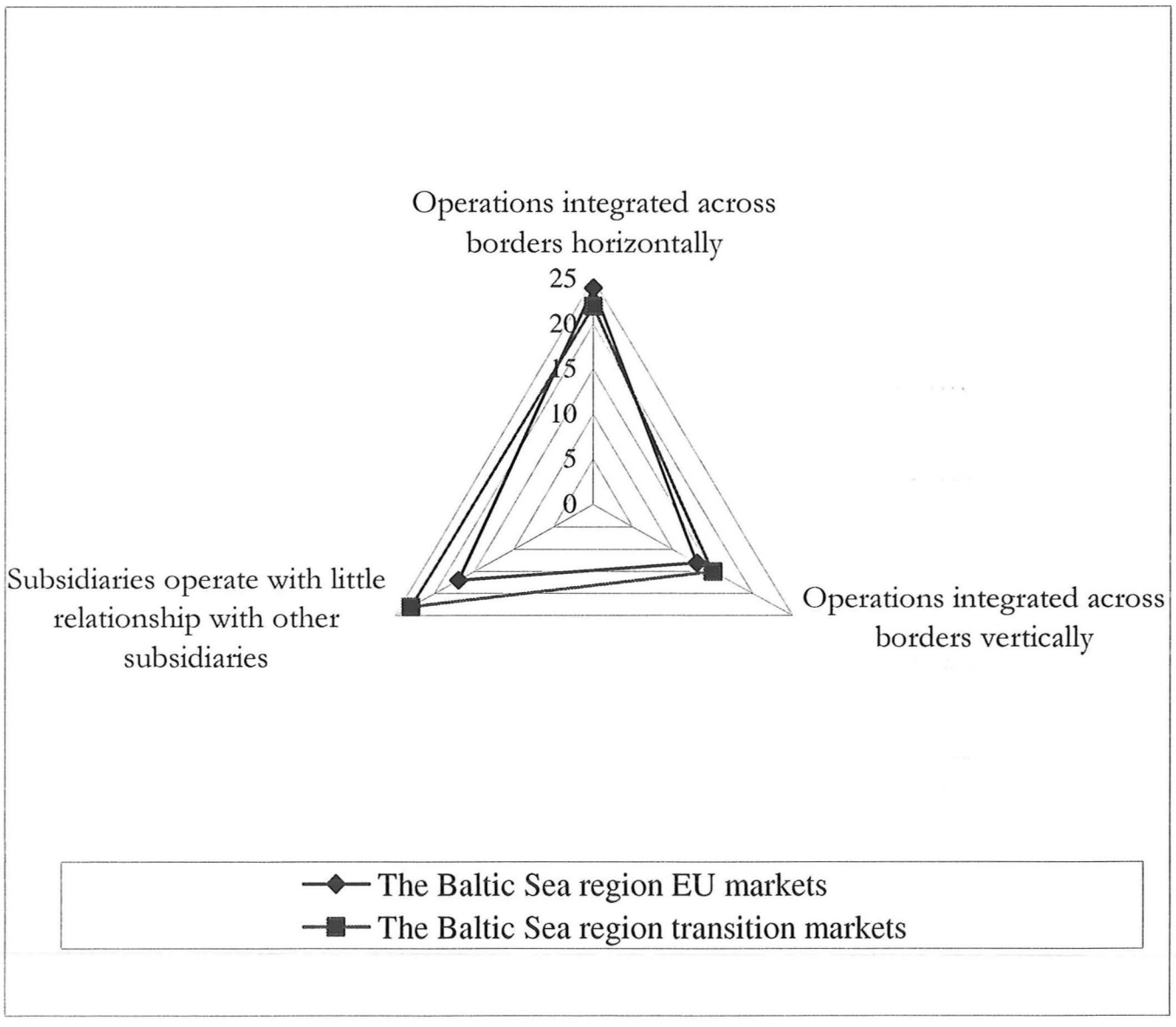
[75] These modes have been analysed using the TC approach by researchers such as Anderson and Gatignon 1986 and Hennart 1991b as well as with the eclectic approach by Hill et al. 1990 and Bell et al. 1997.

[76] Visegrad countries are Poland, Czech republic, Hungary and Slovakia.

subsidiaries.[77] Regardless of these results, some firms' general policy or strategy is in favour of full ownership, regardless of the FDI target region, due to the need to secure and control the involved tacit knowledge.

The cross-border patterns, which the Finnish sample companies follow in their major international foreign direct investment operations in the Baltic Sea Rim are available in Figure 12, which illustrates the percentage frequencies of the patterns (see question 10 in the questionnaire).

Figure 12. Cross-border Pattern of Major International FDI Operations in the Baltic Sea Region (%)



Most of those FDI in the Western BSR markets are *horizontal in nature,* i.e. operations are integrated across borders between different production processes. This means also that the foreign production of products or services tends to be roughly similar in these markets. On the other hand, the

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[77] Many empirical studies have found out that the longer the distance higher the likelihood of low involvement modes (see e.g. Kogut and Singh 1988; Kim and Hwang 1992).

subsidiaries in the Eastern BSR are mentioned most commonly to operate with little relationship with other subsidiaries. This pattern is almost as commonly mentioned among respondents as the horizontal pattern. Operations that are *vertically integrated* across borders, i.e. within certain production process or processes, are the most seldom found characteristic in foreign direct investment both in the Western and the Eastern Baltic Sea Region.

As a matter of fact, fragmenting of production vertically by stages of production in cross-border operations is a less frequently occurring phenomenon than horizontal investment even in foreign direct investment carried out by other nationalities than Finnish companies. Namely, most foreign direct investments are horizontal in the sense that most of the output of foreign affiliates is actually sold in the foreign country. Horizontal investments are also quantitatively more important than vertical investments (Markusen 1995, pp.170-171).

Blomström et al. (2000) have studied this in more detail with intra-industry trade of Swedish multinationals. The results show that the (1) extent of the subsidiaries' imports from their parents increases with the parents' expenditure on R&D and (2) these imports are affected negatively by the parents' degree of multinationality. However, it remains to be seen if the existence of a network of affiliates reduces the extent of the subsidiaries' imports from the parents, as triangular and multilateral trade between related units increase.

5.2 Locational Sources of Competitiveness

This section presents the views of respondents as to what extent they see that their companies' competitive advantages are originating in Finland and foreign locations in the Baltic Sea Region as listed in the questionnaire. The region was divided to four parts: Finland (FIN), the EU countries (EU), the EU applicant countries (EUA) as well as Russia (RUS) due to different characters and development stages of these markets. Respondents were asked to use an evaluation scale of 1 to 5. The scale was defined as follows: 1 indicates that the named competitive asset is not at all important, while 5 indicates that the named competitive asset is very important. Respondents were asked to answer only to those listed items, which they considered relevant to their company.

Table 26. Sourcing of Competitive Advantages by the Sample Companies

	FIN	EU	EUA	RUS
a) Natural resources	2.32	2.00	1.72	1.88
	(1.63)	(1.39)	(1.19)	(1.39)
b) Unskilled labour	2.06	1.80	1.87	1.77
	(1.05)	(0.98)	(1.20)	(1.11)
c) Skilled labour	4.22	3.59	3.45	3.05
	(0.90)	(1.39)	(1.07)	(1.36)
d) Innovatory capacity	3.90	3.37	2.63	2.42
	(1.16)	(1.41)	(0.99)	(1.18)
e) Organisational capacity	4.29	3.58	3.31	2.93
	(0.77)	(1.28)	(1.19)	(1.49)
f) Managerial expertise	4.51	4.01	3.67	3.34
	(0.68)	(1.28)	(1.30)	(1.51)
g) Relational skills	4.02	3.97	3.60	3.74
	(1.04)	(1.09)	(1.18)	(1.58)
h) Upgrading of product quality	4.41	4.30	3.59	3.16
	(0.70)	(0.82)	(1.16)	(1.37)
i) Product innovation	4.26	3.70	3.31	3.02
	(0.87)	(1.06)	(1.22)	(1.40)
j) Inter-firm competition/rivalry	3.77	3.75	3.14	2.89
	(1.10)	(1.15)	(1.07)	(1.23)
k) Sectoral companies	3.19	3.13	2.60	2.28
	(1.14)	(1.24)	(1.29)	(1.34)
l) Related companies	3.36	3.02	2.61	2.34
	(1.06)	(1.17)	(1.15)	(1.09)
m) Universities and other research institutions	3.33	2.86	2.06	1.97
	(1.26)	(1.28)	(1.01)	(1.18)
n) Ministries and other institutions	2.80	2.63	2.32	2.42
	(1.02)	(1.20)	(1.07)	(1.23)

Figures reported are mean values with standard deviations in parentheses.

In Table 26, we show the results for all the sample companies. The figures reported are mean responses with standard deviations in parentheses.

As described and defined in Chapters 2.5 and 2.6, Table 26 considers four groups of competitive advantages, which broadly correspond to Michael Porter's fourfold diamond of competitive advantage of nations, i.e. factor conditions, demand conditions, firm strategy, structure and rivalry, and related and supporting industries[78] (Porter 1990). These groups of competitive advantages, however, were revisited by other scholars' specifications (Dunning 1997a, Rugman – van den Broeck – Verbeke 1995).

Table 26 reveals a clear picture of home country orientation in the groups of competitive advantages. However, certain items are clearly more important than others. Those that are ranked as most important in Finland compared to the other regions are "access to resources and assets" (a-g) as well as "consumer demand" (h-i). In the group "access to resources and assets" these areas are "access to skilled and professional labour", "organisational capacity", "innovatory capacity", and "managerial expertise". In the consumer demand group, both "upgrading of product quality" and "making for more product innovation" get high absolute mean values in Finland.

Respondents of the sample firms thus perceived that their companies' domestic operations and/or indigenous resources and capabilities of the home country provide the main source of competitiveness – and especially so in the case of skilled and professional labour, managerial expertise and organisational capacity.[79]

To analyse the sourcing of competitive advantages more closely several statistical tests were run to see if the valuation of competitive advantages differ statistically significantly from each other in different target areas. First we ran non-parametric tests[80] for several related samples concerning the

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[78] Sectoral companies refer to the links to other companies operating in the same industry as competitors. Related companies refer to the companies operating in the same cluster, not as direct competitors, but more as partners, sub-contractors etc.

[79] In Table 26 the items c)-e) are usually referred to as created assets of technological nature while the items f)-g) as created assets of managerial nature.

[80] Non-Parametric tests are often used in place of their parametric counterparts when certain assumptions about the underlying population are questionable. Non-Parametric tests may be, and often are, more powerful in detecting population differences when certain assumptions are not satisfied. All tests involving ranked data, i.e. data that can be put in order, are non-parametric. See more closely Appendix 3 to get a description of the tests applied.

different sources of competitiveness in different target markets (see questionnaire: question no. 16). Friedman's tests were run for each competitive advantage item a) – n) in Finland (FIN), the EU markets (EU), the EU applicant countries (EUA), and Russia as well as "the other countries". The result showed statistical significance at 0.01 level for each and every item of competitive advantage in the four groups (access to resources and assets; consumer demand; inter-firm competition/rivalry; links with foreign or domestic firms and institutions). This means that the advantages in the different target markets are not from similarly distributed populations.

After this procedure, Wilcoxon signed rank tests were run for two related samples, i.e., the test was carried out between the highest value market and next best value market in each item of competitive advantage to make a pair-wise comparison as shown in Table 27 (and more closely in Appendix 3).

The test results support the finding that Finland is indeed a base for the companies' firm-specific competitiveness in created assets, especially technological ones. Product innovation also mainly happens in Finland as well as linking with universities and other research institutions. To a lesser extent, but still statistically significantly, Finland seems to be a major source of competitiveness compared to neighbouring EU markets in "natural resources", "managerial expertise", "linking with related companies" and "linking with ministries and other institutions promoting trade and FDI".

Further pair-wise comparisons were continued to see if there was still a clear difference between the next best and third best mean values. Most often this comparison happened between the EU countries and the EU accession countries. As Table 28 shows in many items there is a clear difference. Distinctly clear difference is available in "innovatory capacity", "consumer demand" and "inter-firm competition". "Links with other companies" follow the same direction. "Ministries and other institutions promoting trade and FDI" is the only exception here.

Comparison between the third and fourth best mean values in each item of competitive advantage means comparison mainly between the EUA countries and Russia. It does not show statistical significance for different items, except in organisational capacity and managerial expertise as well as skilled and professional labour.

Table 27. Sourcing of Competitive Advantages of the Sample Companies: Wilcoxon Signed Rank Test Results: Statistical Significance*

	Comparison	Statistical Significance
Access to resources and assets		
a) Natural resources	FIN-EU	a
b) Unskilled labour	FIN-EUA	-
c) Skilled and professional labour	FIN-EU	c
d) Innovatory capacity	FIN-EU	c
e) Organisational capacity	FIN-EU	c
f) Managerial expertise	FIN-EU	b
g) Relational skills	FIN-EU	-
Consumer demand		
h) Upgrading of product quality	FIN-EU	-
i) Making for more product innovation	FIN-EU	c
j) **Inter-firm competition/rivalry**	FIN-EU	-
Links with domestic or foreign companies and institutions		
k) Sectoral companies	FIN-EU	-
l) Related companies	FIN-EU	b
m) Universities and other research institutions	FIN-EU	c
n) Ministries and other institutions promoting trade and FDI	FIN-EU	a

*p-value: a=0.05; b=0.01; c=0.001

Table 28. Sourcing of Competitive Advantages of the Sample Companies: Wilcoxon Signed Rank Test Results: Statistical Significance* II

	Comparison	Stat. Sign.	Comparison	Stat. Sign.
Access to resources and assets				
a) Natural resources	EU-RUS	-	RUS-EUA	-
b) Unskilled labour	EUA-EU	-	EU-RUS	-
c) Skilled and professional labour	EU-EUA	-	EUA-RUS	b
d) Innovatory capacity	EU-EUA	c	EUA-RUS	-
e) Organisational capacity	EU-EUA	-	EUA-RUS	a
f) Managerial expertise	EU-EUA	a	EUA-RUS	a
g) Relational skills	EU-RUS	-	RUS-EUA	-
Consumer demand				
h) Upgrading of product quality	EU-EUA	c	EUA-RUS	-
i) Making for more product innovation	EU-EUA	b	EUA-RUS	-
j)**Inter-firm competition/rivalry**	EU-EUA	c	EUA-RUS	-
Links with domestic or foreign companies and institutions				
k) Sectoral companies	EU-EUA	c	EUA-RUS	-
l) Related companies	EU-EUA	b	EUA-RUS	
m) Universities and other research institutions	EU-EUA	b	EUA-RUS	-
n) Ministries and other institutions promoting trade and FDI	EU-RUS	-	RUS-EUA	-

*p-value: a=0.05; b=0.01; c=0.001

5.2.1 Technology Intensity

Data initially analysed in Table 26, was further classified by the technological intensity of the sample companies. The basic categories used were low- and high-technology intensity companies. We defined low-technology (LT) companies as those, in which the average R&D expenditure as a percentage of turnover was under 2 per cent. High-technology (HT) companies embraced those ratios at 2 per cent or more. The reason for taking this rudimentary categorisation was that in the sample

there were only 9 companies in which the R&D ratio was 4% or more - which could be considered as really high-technology companies.[81].

Porter's hypothesis is that high technology firms will obtain their core assets e.g. innovatory capacity (d) in their home countries, while medium technology and low technology companies will tend to assign lower rankings to innovative capacity and related variables. They are also more likely to be natural resource intensive, or influenced by the characteristics of consumer demand. The latter firms also tend to be more internationally oriented with higher rankings for cross-border vis-à-vis domestic, competition.

Table 29 reveals a picture, which generally supports this hypothesis. Natural resources and unskilled labour achieve the highest mean values among representatives of low-technology firms, while representatives of higher technology firms seem to appreciate more those technologically oriented core assets, i.e. c) – e), in Finland and elsewhere in the BSR. Managerial expertise does not show this clear bias. On the other hand, relational skills are slightly more appreciated among higher technology companies than lower technology companies.

In the group "consumer demand", "product innovation" gets higher mean values among HT companies than among LT companies, but for "upgrading the product quality" the situation is the other way round. However, LT companies do not give higher values for "inter-firm competition" than HT companies. "Links with foreign and domestic companies and institutions" also get higher mean values (except for links with sectoral companies) among HT companies.

To ensure that the conclusions from Table 29 are correct the Kruskal-Wallis test for k-independent samples was undertaken to test continuous variables i.e. the ratio of R&D expenditures to turnover for each company as a grouping variable, and sources of competitiveness in different target markets as test variables.

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[81] There is no standard definition for high-technology companies. Government agencies, private companies, and trade associations all define high-technology (HT) depending on their needs and purposes. Maybe the most common meaning for a HT company is that it operates in one of the following industries - biotech, computers, engineering, information technology, semiconductors, or telecommunications, has products with short life cycles, is based on innovation, invests heavily in research, and is knowledge-driven rather than manufacturing-driven. However, in our sample medium and low-technology, manufacturing-companies dominate, which make it hard to tell much about the high-technology companies as a separate group.

Table 29. Sourcing of Competitive Advantages Classified by Technological Intensity of the Sample Companies

	HT				LT			
	FIN	**EU**	**EUA**	**RUS**	**FIN**	**EU**	**EUA**	**RUS**
a) Natural resources	2.00	1.74	1.66	1.91	2.59	2.24	1.75	1.71
	(1.39)	(1.34)	(1.21)	(1.40)	(1.79)	(1.48)	(1.24)	(1.36)
b) Unskilled labour	1.89	1.67	1.91	1.93	1.97	1.73	1.64	1.22
	(0.99)	(0.96)	(1.28)	(1.17)	(0.89)	(0.88)	(0.99)	(0.55)
c) Skilled labour	4.42	3.63	3.73	3.34	4.08	3.74	3.34	2.83
	(0.71)	(1.48)	(0.84)	(1.18)	(1.02)	(1.38)	(1.14)	(1.55)
d) Innovatory capacity	4.38	3.85	2.89	2.84	3.42	2.84	2.43	1.95
	(0.75)	(1.01)	(0.92)	(0.99)	(1.25)	(1.62)	(1.04)	(1.32)
e) Organis. capacity	4.40	3.67	3.46	3.09	4.21	3.42	3.24	2.88
	(0.67)	(1.22)	(1.07)	(1.40)	(0.83)	(1.45)	(1.23)	(1.62)
f) Managerial expertise	4.34	4.09	3.69	3.66	4.66	4.00	3.85	3.13
	(0.85)	(0.98)	(1.21)	(1.33)	(0.48)	(1.59)	(1.25)	(1.63)
g) Relational skills	4.05	4.09	3.76	4.03	3.92	3.83	3.53	3.59
	(0.90)	(0.91)	(1.05)	(1.21)	(1.22)	(1.31)	(1.21)	(1.92)
h) Product quality	4.35	4.22	3.46	3.16	4.42	4.30	3.80	3.18
	(0.59)	(0.87)	(1.09)	(1.13)	(0.79)	(0.82)	(1.13)	(1.65)
i) Product innovation	4.54	3.72	3.36	3.19	3.95	3.59	3.33	2.82
	(0.55)	(0.96)	(1.15)	(1.20)	(1.05)	(1.22)	(1.22)	(1.53)
j) Inter-firm competition	3.85	3.89	3.35	3.21	3.56	3.56	3.00	2.57
	(1.26)	(1.34)	(1.08)	(1.13)	(0.96)	(1.04)	(0.98)	(1.24)
k) Sectoral companies	2.76	3.10	2.37	2.25	3.44	2.88	2.80	2.26
	(1.05)	(1.08)	(1.31)	(1.37)	(1.11)	(1.40)	(1.23)	(1.32)
l) Related companies	3.35	3.20	2.74	2.61	3.29	2.29	2.52	2.00
	(0.89)	(1.06)	(1.08)	(0.99)	(1.23)	(1.49)	(1.20)	(1.15)
m) Univesities and research institutions	3.86	3.43	2.33	2.17	2.91	2.37	1.69	1.59
	(0.98)	(1.22)	(1.19)	(1.23)	(1.33)	(1.11)	(0.59)	(0.91)
n) Ministries and instit.	2.92	2.77	2.47	2.65	2.56	2.37	2.16	2.18
	(1.05)	(1.19)	(1.02)	(1.08)	(0.96)	(1.24)	(1.11)	(1.47)

Figures reported are mean values with standard deviations in parentheses.

The results imply that the appreciation of many competitive assets, especially created assets and consumer demand, in Finland and the named EU countries indeed increase when the technology orientation of the companies increase (see Appendix 3). An interesting phenomenon is that Russia, with its natural resources and labour, tends to be appreciated more when the technology intensity of the companies increases. The reason for this is maybe that the companies operating in Russian trade are mainly manufacturing companies, for example pulp and paper companies, or petrochemical industry companies that use and need relatively much R&D in their operations.

5.2.2 Degree of Transnationality

Rugman, Dunning and some other scholars studying multinational enterprises hypothesise that when firms become more transnational in their value-added activities, they are more likely to derive their core assets outside their national boundaries and may deliberately seek out foreign assets, which they perceive to be supportive to their core competencies (Dunning 1997a, 285; Dunning and Lundan 1998).

To study this aspect a transnationality index was calculated for the sample companies and then the association between the index and sources of competitive advantages in the Baltic Sea Region was investigated. The measurement of transnationality was based on a transnationality index, obtained for each company by averaging out the percentage of their capital expenditure, employment and turnover abroad. Companies were reclassified into two groups, namely those having a transnationality index under 15 per cent (TRANSL), and those having a transnationality index of 15 per cent or more (TRANSH) (see Table 30).

Companies with higher transnationality gave topmost scores for some technically oriented created assets such as "innovatory capacity" and "organisational capacity", which supports the hypothesis spelled out above. However, there do not appear to be large differences between TRANSL and TRANSH when "natural resources" and "unskilled labour" are concerned with average mean value varying around 2. A clear association between transnationality and the importance of foreign sources of competitiveness is not then found in the Baltic Sea Region in these assets. That is also the case with "consumer demand", where only Finland gets clearly higher mean values in TRANSH than in TRANSL. However, TRANSH companies seem to have given higher scores to inter-firm competition and rivalry variables almost all over the Baltic Sea Region, including Finland, than TRANSL companies.

Table 30. Sourcing of Competitive Advantages Classified by Transnationality of the Sample Companies

	TRANSH				TRANSL			
	FIN	**EU**	**EUA**	**RUS**	**FIN**	**EU**	**EUA**	**RUS**
a) Natural resources	2.47	2.16	1.72	1.97	1.75	1.60	1.58	1.74
	(1.65)	(1.49)	(1.28)	(1.53)	(1.26)	(1.06)	(0.97)	(1.05)
b) Unskilled labour	2.07	1.88	1.93	1.79	2.18	1.73	1.77	1.67
	(1.02)	(0.94)	(1.31)	(1.19)	(1.18)	(1.16)	(0.87)	(0.91)
c) Skilled labour	4.17	3.79	3.33	2.95	4.23	2.87	3.56	3.00
	(0.96)	(1.33)	(1.10)	(1.34)	(0.86)	(1.46)	(1.01)	(1.38)
d) Innovatory capacity	3.89	3.33	2.63	2.38	3.79	3.45	2.41	2.31
	(1.23)	(1.46)	(1.02)	(1.23)	(1.08)	(1.51)	(1.00)	(1.03)
e) Organisational capacity	4.31	3.67	3.20	2.92	4.23	2.85	3.30	2.79
	(0.76)	(1.23)	(1.19)	(1.48)	(0.86)	(1.34)	(1.22)	(1.47)
f) Managerial expertise	4.48	3.98	3.57	3.32	4.54	4.00	3.61	3.21
	(0.72)	(1.38)	(1.31)	(1.58)	(0.65)	(1.10)	(1.34)	(1.36)
g) Relational skills	4.02	3.83	3.56	3.68	4.08	4.33	3.79	3.84
	(1.17)	(1.12)	(1.22)	(1.75)	(0.83)	(1.11)	(1.22)	(1.50)
h) Product quality	4.56	4.27	3.33	2.92	4.08	4.25	3.80	3.25
	(0.61)	(0.94)	(1.21)	(1.42)	(0.81)	(0.45)	(1.08)	(1.21)
i) Product innovation	4.35	3.63	3.22	3.05	4.00	3.85	3.23	2.71
	(0.82)	(1.06)	(1.20)	(1.43)	(0.98)	(1.14)	(1.23)	(1.21)
j) Inter-firm competition	3.94	4.02	3.21	2.84	3.40	2.70	3.00	3.00
	(1.06)	(1.03)	(1.15)	(1.24)	(1.27)	(1.25)	(1.05)	(1.31)
k) Sectoral companies	3.04	2.89	2.09	1.97	3.40	3.67	3.38	2.61
	(1.22)	(1.30)	(1.22)	(1.28)	(1.04)	(0.98)	(1.06)	(1.29)
l) Related companies	3.44	3.09	2.47	2.06	3.29	2.80	2.91	2.88
	(1.09)	(1.23)	(1.20)	(1.04)	(1.12)	(1.15)	(1.15)	(1.05)
m) Universities and research institutions	3.57	2.87	2.05	1.78	3.04	2.87	1.90	2.12
	(1.32)	(1.34)	(1.05)	(1.15)	(1.07)	(1.25)	(1.00)	(1.17)
n) Ministries and institute	2.79	2.49	2.27	2.30	2.75	2.93	2.19	2.59
	(1.03)	(1.16)	(1.09)	(1.35)	(1.03)	(1.44)	(1.17)	(1.12)

Figures reported are mean values with standard deviations in parentheses.

The association between links with companies and institutions as sources of competitiveness and transnationality are not straightforward either. Especially in the case of Russia, low transnational companies appreciate more relational skills and links with foreign and domestic firms than more international companies.

To a lesser extent, the same can be seen in the case of EUA countries. It can easily be perceived that for Finnish lower transnational companies the Eastern Baltic Sea Region markets are relatively more important as a source of competitiveness in terms of links with sectoral and related companies, than for more multinational companies. Links with industrial competitors, suppliers, subcontractors etc. seem to benefit them in the neighbouring larger markets. The European Union Accession countries seem to benefit LT companies generally more compared to HT companies in created assets of managerial nature. The situation is similar in "improving product quality" (consumer demand) and "skilled labour" (created assets of technological nature).

Here again the Kruskal-Wallis test for k-independent samples was undertaken using the transnationality index for each company as a grouping variable and sources of competitiveness in different target markets as test variables. The results confirmed the general view obtained from Table 30 (see appendix 3).

5.2.3 Sourcing of Competitive Advantages: Factor Analysis

In order to obtain a more detailed picture of the perceptions of different groups of competitiveness, an exercise of a factor analysis was carried out. Factor analysis is a multivariate method to determine interrelations among a set of variables. Factor analysis can be used as an expedient way of ascertaining the minimum number of hypothetical factors that can account for the observed covariation. It is also a means to explore the data for possible data reduction (Kim – Mueller 1982, 9).

The result of the factor analysis is outlined in Appendix 3. The exercise was done for each of the four major groups of competitive advantages separately[82]. The analysis revealed several categories that illustrate Finnish

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[82] The size of the sample compared to the number of variables would not allow to include all the variables in question 16 of the questionnaire to the one factor analysis (see e.g. Hair et al. 1998, 98-99).

companies' sources of competitiveness in the Baltic Sea Region.[83] Here each group is discussed in detail by combining the survey data and interview data at hand.[84]

Access to resources and assets

In the first group (access to resources and assets) eight factors for competitive advantages were found. These were **organisational and innovatory skills in the Eastern BSR; unskilled labour; relational skills; managerial and organisational expertise in the Western BSR; innovatory capacity in Finland and the Western BSR; natural resources; managerial and organisational expertise in Finland; and skilled labour in Finland.** In this group, Finland is prominently represented by its own factors for competitive advantages with skilled workforce and managerial and organisational capability the way the results of the previous subsections already hinted. Even though these factors don't get the highest factor loadings they are strongly supported by the interviewed persons:

Well, our company is in our group a centre of excellence in life sciences. We produce clinical screening and research instruments for pharmaceutical industries and academic observing purposes. I would say that the very reason why the owners of the company want to keep this place in Finland is the ultimate know-how we have at the relatively moderate cost structure compared to the United States for example. (Field of business: Diagnostic systems: Drug discovery, research and clinical screening)

Our strength is really in project management. It is one of the most important competitive advantages we have in our company in Finland. This is also one reason why in Russian markets most of our clients are foreign-owned companies. We have done a lot of projects for the tobacco industry, beer industry, McDonalds hamburger restaurants etc there. Our customers see it as utterly important that the projects are done in time, also in the Russian markets. (Field of business: Utility production and services)

A Finnish organisation is typically flexible, goes for good quality, and capable of independent decision-making. Finnish leaders act straightforwardly, efficiently and creatively. When one goes to Sweden inefficiency starts to raise its head and further the South you go, the more organisational inefficiency increases... The productivity of organisation...Basically, we get the same result with fewer leaders than many other

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[83] Notice: In question 16 of the questionnaire "other foreign countries than the BSR countries" were mentioned. In factor analysis these "other countries" tend to appear under different factors: sometimes under Eastern BSR oriented factors and sometimes Western BSR oriented factors. However, the role of the other countries is minor in this study, where the focus is on the BSR. The reason to put "other countries" to the questionnaire altogether was to control for the possibility that for some companies the BSR might be an irrelevant market area.

[84] Detailed descriptions of case companies are listed in the Appendix 3.

(foreign) companies. (Field of Business: Engineering, construction and energy equipment)

Competitive advantages stemming from the Eastern BSR and the Western BSR are separated to different factors when organisational, managerial and innovatory capacities are concerned, too. However, relational skills, natural resources and unskilled labour are all grouped according to the substance, not according to the target regions.

Consumer demand

In the second group (consumer demand) four clear factors were found. Those were **consumer demand in the Eastern BSR; consumer demand in the Western BSR and elsewhere; product innovation in Finland; and product quality in Finland.** The Eastern BSR, i.e. Russia, the Baltic States, and Poland are, here again, separated from consumer demand in Germany, Sweden, and Denmark, as well as other foreign markets outside the Baltic Sea Region. For subtitles of consumer demand, namely "making for more product innovation" and "improving product quality" the factor analysis solution created its own, separated factors, for Finland. Below, some experiences of managers of foreign operations in the different fields of industry are summarised to illustrate the demand conditions in different parts of the BSR.

Well, the image of our products is very 'Scandinavian'. We have this Scandinavian design and lightness. Also ergonomics and welfare in office work play a major role in our products. This is also what we want to emphasise and we are really good in this segment. However, there are differences in consumer demand in different target markets in the Baltic Sea Region. For example, in Northern countries we are not very hierarchical in business culture, and thus traditional office furniture for managers has practically almost disappeared. However, office furniture for executives and managers is very much wanted in more conservative societies. I mean in this case the Baltic countries, and especially Russia or even Germany. They need these hierarchical levels, status signs of which have to be seen also in the office furniture. Then, for Poland or other Eastern European countries altogether we sell a lot of so-called volume products. So, really these demand issues have to be seen market by market. (Field of business: Office furniture manufacturing)

For fired heaters and power products like fluidised-bed boilers, pulverised coal boilers, gas fires, heat recovery steam generators etc. we have global markets. We really sell the very same products everywhere. Development and innovations happen basically here at home. We are defined to be a centre of excellence in our group profile, but services, for keeping up and repairing these major products have been heavily localised in target markets. (Field of business: Engineering, construction and energy equipment)

The product we sell is a kind of bulk product or raw material oriented product. We sell this same product as it is to any customer. To some extent it still depends to what

purpose the customer will use it (there are different quality standards for different uses, such as for stuffing or for surfacing material for paper for example), we select the correct deposit for each use but otherwise it is exactly the same base product. For us, cost is the determining factor. This means that from Finland this product can be transferred and sold to other areas only to a limited extent because of the high transfer costs. (Field of business: Producer of limestone-based products)

Inter-firm competition

In the group "inter-firm competition and rivalry" only one factor solution emerged hereby combining all four original variables into a factor called **inter-firm competition.** Still, this does not, in any way, mean that the nature of the competition would necessarily be the same kind in the various markets, as far as sources of competitiveness are considered. In this respect the opinions of the interviewees are revealing:

Actually, we have found out in our field of business that in the Baltic Sea Region differences between EU countries and transition countries occur. That is that in the EU area there is more protectionism inside countries. They protect their technologies and own companies more than other Baltic Sea Region countries, which are more open in this sense. By open I mean that they are more open to new technologies and modern solutions than their Western counterparts. This is our experience. Germany is for example very protectionist. (Field of business: Engineering, construction and energy equipment)

This protectionism occurs amazingly widely at current times when we discuss a lot of such things as European Union integration and global markets. Well, according to our experience, it is a rather 'inward heating' system. For instance, what a surprise that some German cable is not necessarily applicable in Holland... Yes, they are protecting their own companies. (Field of business: Utility production and services)

Still, the pressure of competition from abroad is really important for large companies as enhancing the efficiency of functions, especially in sectors where domestic competition in the small home market Finland is not necessarily that strong:

For us the amount of competing companies elsewhere, like in Germany, is much higher and competition much harder than in Finland. Our company was established in 1945 in Finland and our market share in Finland is about 45% today. We have been a market leader in our home country for long time and we have competed with 2-4 companies here in the domestic markets. I am not saying it is not competition at all, but the major part of competition pressure comes from and in abroad. (Field of business: Office furniture manufacturing)

In Chapter 5.2 we saw that the competition in Finland and the EU countries seems to be a more important source of competitiveness for the Finnish companies than competition in the EU applicant countries or Russia. Some empirical studies concerning Finnish companies' foreign

operations and competition, such as Larimo et al. (2001), have also found that Finnish companies see competition in Eastern Europe increasing, but still weaker than in Western markets. The main competitors in Eastern Europe are other foreign companies and to a lesser extent local private or privatised large companies.

Links with domestic and foreign firms and institutions

The fourth group of competitive advantages addressed by factor analysis, namely "Links with domestic or foreign firms and institutions", brought about five factors. These are **research and related companies in Finland and the Western BSR; supporting contacts in the Western BSR; supporting contacts in foreign markets generally; research in the Eastern BSR; and companies in the Eastern BSR.** This fourth group seems to be the most diverse compared to the other groups mentioned above. Finland is again separated with research and related companies, while both Western and Eastern BSR contacts and links tend to group separately. There is also one factor for supporting links in foreign operations generally independent of the BSR.

The local contacts and links are an important source of competitiveness as already indicated by the fairly high scores in Table 26. Here is one statement concerning the locality and image of company's locality based on experience in the Eastern Baltic Sea Region:

If we cannot be more local in the future, we'll drop off. Let's take an example, we have sometimes thought about our daughter companies' names in Russia (St. Petersburg) and Estonia. Currently, they show our Finnish origin name in them. We have thought that it would have been wiser to give Russian and Estonian names directly in the first place without keeping the connection to the West. Now, a local customer may start to think that she or he is dealing with some foreigner or something. This is a minor problem for us in Estonia, where our company is wholly in the hands of Estonian staff. In Russia, we have a Finnish manager and some Finns in other positions in the organisation, too. So the company is considered a Finnish company. This is a problem there in a society where social, informal, non-transparent networks are really important. For an outsider it seems to be utterly difficult to get into this 'dear old brother' system. (Field of business: Utility production and services)

5.3 Modes of Foreign Involvement

The respondents of the sample companies were asked to estimate on a scale of 1 to 5 the importance of three modes of acquiring or tapping into the resources and capabilities of the Baltic Sea Rim foreign markets. These three modes were (1) foreign direct investment, (2) non-equity co-operative

agreements e.g. strategic alliances, management contracts, licensing and franchising agreements, and (3) arm's length transactions.

The hypothesis frequently set is that deeper forms of international cross-border operations, i.e. FDI and non-equity arrangements, are likely to advance more firm-specific competitive advantages for a company than shallower forms of transactions i.e. arm's length trade. It is usually expected that companies with high transnationality appreciate deeper forms (i.e. here FDI) of foreign involvement, more than those for whose business foreign operations are less significant (Meyer 2000; Kogut and Singh 1988; Dunning 1997a).

The results of our survey show that the managers of foreign operations of the sample companies consider arm's length transactions as the most important mode of operation for acquiring competitive advantages for their companies, after which comes FDI and non-equity transactions (see Table 31). This holds for the whole sample when mean scores are compared, and there is no difference in this respect between less or more transnational companies.

Table 31. Importance of Modes of Foreign Involvement of the Sample Companies

	Mean/(St.dev)	N
Foreign direct investment	3.38 (1.17)	81
Non-equity arrangements	3.14 (1.18)	77
Arm's length transactions	3.61 (1.10)	87

Another hypothesis regularly claimed with respect to modes of foreign involvement is that companies, which are technology-intensive are more likely to internalise their assets compared to those which are not. In our sample, the degree of technology intensity did not change the general result either. Companies with different technology intensity tend to give similar ranking orders for the named modes of foreign involvement.

These results are quite contrary to the expectations and results obtained from other studies such as Dunning (1997). However, the prominent role of trade operations can be explained by the importance of trade in the companies' foreign operations in general. The arm's length operations are after all the most common mode of foreign involvement in the Finnish

economy as was seen in Chapter 3.3 and this is also probably why it gets the highest scores in this question. [85]

5.4 Effects of Foreign Operations on Companies' Competitiveness

Internationalisation has been an important phenomenon in Finland throughout the 1990s. Therefore we also wanted to see if the respondents saw any dynamics in the effect of foreign operations on their companies' competitiveness. We asked respondents (1) what effect foreign operations have had on their companies' overall competitiveness in recent years (1995-2001), and (2) if this effect has decreased, stayed the same, or increased. These questions were asked in the Baltic Sea Region context by grouping countries to categories the EU-countries, the EU accession countries and Russia.

The structure of responses is available in Figures 13 and 14. Figure 13 shows that the EU countries (Germany, Denmark and Sweden) have usually had the most positive effect on companies' competitiveness in recent years. Estonia, Latvia, Lithuania and Poland have had the second largest positive effect on the companies' competitiveness, after which comes Russian nearby regions. Answers concerning Russia show more often than in other markets responses a 'cannot say' or unfilled response. This reflects uncertainty and some sort of unpredictability related to the impact of foreign business operations in and with Russia.

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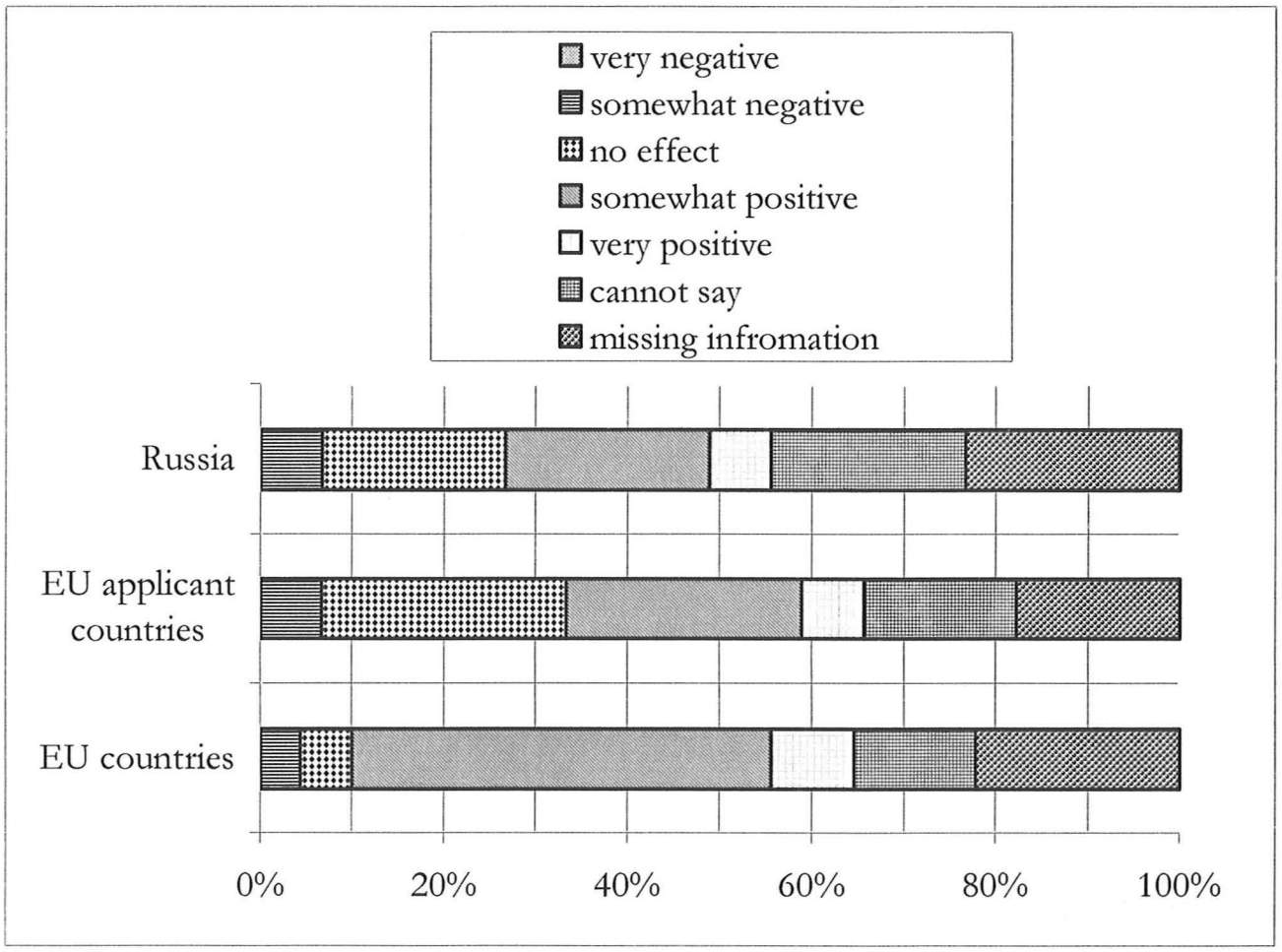
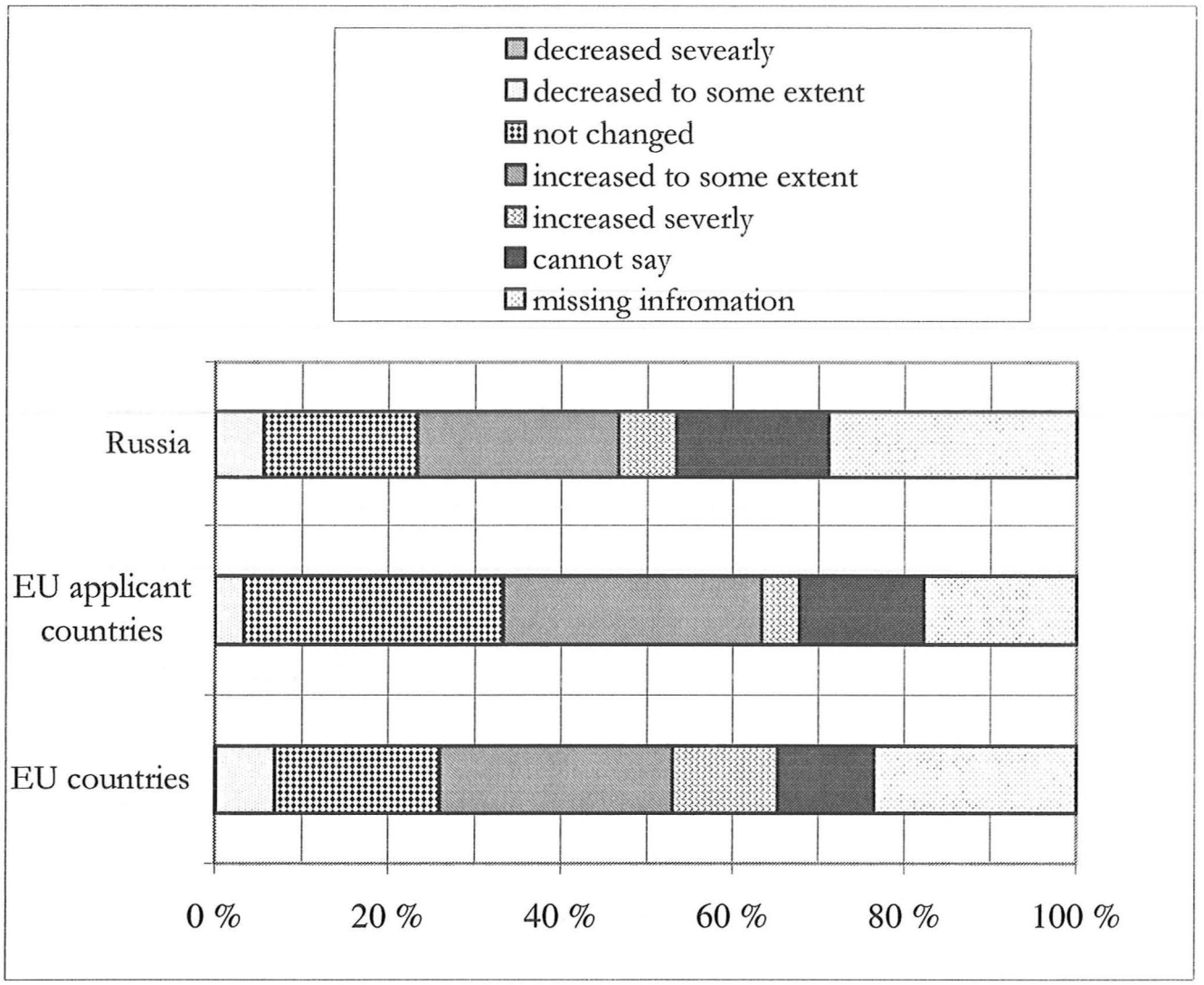
[85] The results of non-parametric tests for k-related samples: Friedman and Kendall's W-test give statistical significance at the 0.05 level, which means that the test gives support (on 5 per cent level of significance) for the claim that there is statistically significant difference in the mean values given to each mode of involvement of foreign operations.

Figure 13. Effect of Foreign Operations on the Competitiveness of the Companies in Recent Years (1995-2001)



If we look at Figure 14 and the responses concerning the change in the effect on competitiveness, we notice that in the EU countries the effect of foreign operations has increased to some extent or severely in 39% of the companies. The same figure for the EU applicant countries is 34%, and for Russia 30%. Again, answers concerning Russian markets display more than in the other two groups those responses, which could not say what kind of changes have actually occurred during the years 1995-2001. Nevertheless, the mean values for different markets in the Baltic Sea Rim do not differ statistically significantly from each other in either question (see the results in detail in Appendix 3). These results do not seem to vary according to the company characteristics, such as transnationality or technology intensity, either.

Figure 14. Change in the Effect of Foreign Operations on the Competitiveness of the Companies in Recent Years (1995-2001)



In the questionnaire, the respondents were also asked to name those specific countries in the Baltic Sea Region *which are hosts to their company's foreign direct investment* and which have had the *most positive impact* on upgrading their company's competitiveness. Most respondents considered Sweden to credit the first position, even if Estonia followed Sweden quite closely. The third position went to Germany.

5.5 Role of Government Policy

Government policy has many channels through which it can affect on companies' abilities to operate at home and in foreign markets. All in all, any action of governments may have some sort of effect on the business environment, and through this, on the business facilities of companies.

However, in the current globalising world with comparatively free movement of factors, competition in the factor markets has become more crucial than before. This situation puts more pressure on decision makers to take account of the effect of different governmental policies

on business environment and investment climate. A big question for any country's (including Finland's) policy makers is therefore, how to make a country an appealing location for internationally competitive companies? (Pajarinen et. at. 1998; Ylä-Anttila 1998)

In our survey, respondents were asked to estimate the influence of government policy of Finland on the companies' international competitiveness in recent years (1995-2001). In the questionnaire we named 11 policies or routes that might channel this kind of positive or negative competitiveness stimuli. Again we used the Likert-scale from 1 to 5 for the evaluation by the respondents: 1 meant very negative effect; 3 no effect; and 5 very positive effect, while CNS meant "cannot say".

Table 32. Influence of Government Policy of Finland on the Companies' International Competitiveness in Recent Years (1995-2001)

	Mean	St.dev.	N	CNS: N
1. Education and training policy	3.80	0.76	88	4
2. Industrial and technology policy	3.62	0.67	90	6
3. Provision and upgrading of infrastructure	3.49	0.70	91	8
4. Trade policy	3.41	0.58	93	6
5. Market-facilitating policy	3.35	0.60	89	7
6. Promoting an ethos of competitiveness	3.26	0.77	89	4
7. Environmental policy	3.21	0.70	90	4
8. Promoting a culture of investment and saving	3.12	0.60	88	10
9. Social policy	3.07	0.56	89	7
10. Corporate taxation	2.87	0.64	90	8
11. Income taxation	2.24	0.86	90	7

In Table 32, policies are ranked in descending order of the mean scores. The table shows that the respondents appreciated the efforts made via education and training policy the most. The mean value for this policy effect is as high as 3.80. The next place goes to industrial and technology policy, which was also considered rather successful. After these two comes provision and upgrading of infrastructure, in which the mean value is approximately 3.50.

The lowest appraisals were given to social policy, corporate taxation and income taxation.[86] Social policy receives a mean value of 3.07 meaning that it is generally considered not having an effect, at all, on enhancing the companies' international competitiveness as such. Thus, the respondents seem to consider the high welfare level and the generous social security system in Finland to be at the level where its positive and negative impacts on companies' international competitiveness are generally even.

There are only two policies where the mean values go under 3. They are income taxation of employees and corporate taxation of companies. This result can be interpreted so that taxation has a negative influence on Finnish companies' international competitiveness. This is in accordance with findings of another empirical study "Suomalaisyritysten ulkomaantoiminta ja sen kehitysnäkymät" [Finnish Companies' International Business Operations and Their Prospects] by TT[87] (2001), which showed that Finnish companies see corporate taxation to be an important factor when they are planning to extend operations in their home country and abroad and that corporate taxation has an effect on decision-making when selecting a location for the company.

In our sample, companies spending more on R&D, i.e. higher technology companies, seem to especially consider that income and corporate taxation have had negative impact on their international competitiveness.[88] This is because international experts engaged in research and development activities with high salaries are comparatively difficult to tempt to come to Finland with current Finnish tax rates on income. Also gross wage levels of some key professions, like engineers, are fairly modest when compared internationally. [89] Naturally, some highly educated Finnish people also move out of the country with various motives and causes, better real income being one of the reasons (see also e.g. another report by TT "Lähtevätkö pääkonttorit Suomesta?" [Are headquarters leaving Finland?] 2002).[90]

Plenty of research has been carried out recently to find out what role the taxation of companies and taxation on labour has on the decision of companies to locate internationally. The results are not uniform or

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[86] Again statistical tests support the hypothesis at 0.001 level that different policies are not from the similarly distributed population (see Appendix 3).

[87] TT is Finnish abbreviation for The Confederation of Finnish Industry and Employers <URL:http://www.tt.fi>

[88] For example, Bloom and Griffith (2001) have found out that investments in R&D are more sensitive to react to changes in taxes per GNP with UK data.

[89] In terms of tax rate on corporations Finland fairs rather well in international comparison, unlike in terms of income taxation. See for example the OECD tax database for the year 1999.

[90] The so-called "key person-law" has improved the situation a little in Finland recently, even if its application directive is considered to be too strict.

consistent. De Mooij and Ederveen (2001) have made a compiled article of 25 empirical experiments in this field. Altogether, out of 371 estimations a little less than half showed that company taxation is a statistically significant variable explaining foreign direct investment. Even so, Finnish companies' data used by Ali-Yrkkö and Ylä-Anttila (2002) didn't find support for the claim that company taxation or income taxation would be among the primary factors to influence the location decision of the headquarters of large Finnish companies.

5.6 Business Environment in the Baltic Sea Region

It is evident that in the course of time various profound changes in the business environment exert an influence in Finland and in foreign areas of operations, which have an effect on the companies' competitive positions as well. These shifts in competitive position may, of course, influence companies' capability to source competitive advantages as well. [91]

With an open-ended question we tried to capture some major overall business environment impacts in the period 1995-2001 on the competitive position of companies, meaning for example EU policies, economic integration development effects, sectoral transformation etc. We formed an open-ended question in order for respondents be able to answer freely to this question, as responses were expected to be diverse and possibly rather sector-specific as well (see question 18 of the questionnaire). Based on the analysis of the received answers, Figure 15 was created.

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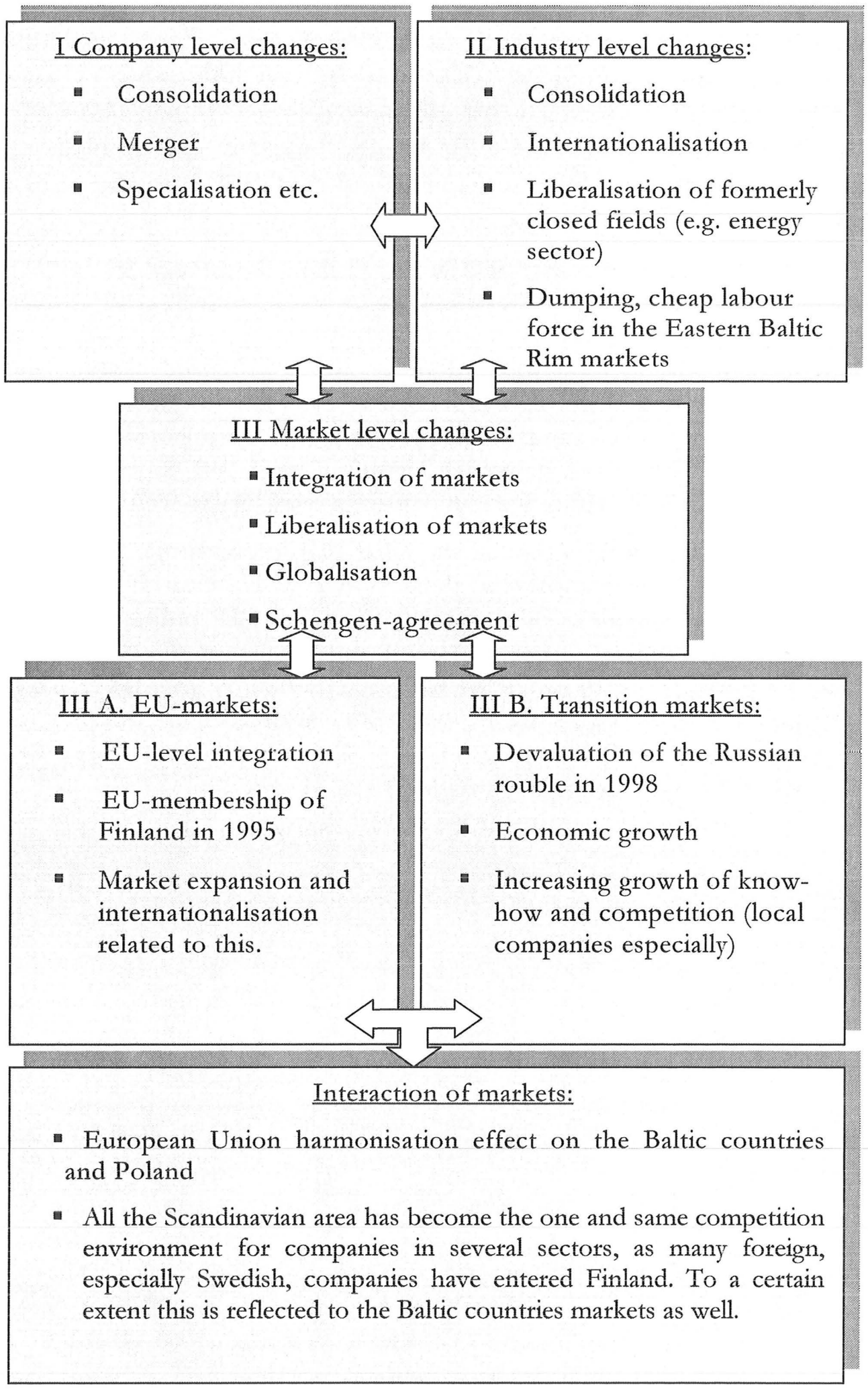
[91] Currently international business environment measures related to country level competitiveness show the following positions for Finland: WEF (World Economic Forum); Finland is no 1. in growth and current competitiveness (2001); IMD (Institute of Management Development): Finland is no 2. in the World and no.1. in Europe (in the group of countries in which population is less than 20 million) (2002).

Figure 15. Competitive Environment Changes Affecting Companies' Competitive Position in Recent Years (1995-2001)



In the answers, several key characteristics emerged, which can be categorised as company-, industry- and market- level changes. Among company level changes several respondents mentioned that a big *merger* in their company had a profound influence on the competitive position in their field of business (often this had happened in the case of mergers including a Swedish competitor). Also *specialisation* related to that merger or otherwise had exceptional impact on the competition field of the companies. On the industrial level, the same tendency of companies to merge to bigger units was mentioned as a major change in the business environment. Altogether, companies' fast *internationalisation* had affected the competition circumstances. Also *liberalisation* of certain industries, like the energy sector and the pharmaceutical sector, has been remarkable affecting not only structurally, but also by increasing competition stimuli in formerly strictly controlled sectors.

D*umping* in some raw material oriented and low-value added sectors were mentioned a couple of times having profound effects on competition in certain industries as *cheap labour force* was also mentioned. The emergence of both these phenomena was felt in the Eastern Baltic Rim markets.

At the market level some general tendencies of the world economy such as *globalisation* and *internationalisation* were mentioned by the respondents. When it comes to the Baltic Sea Region the membership of Finland in the European Union was seen as one of the most important steps in entering and integrating into the Western European markets. In the EU the deepening and further *integration* processes *of markets* were also emphasised in the responses. The EU has naturally had significant effects on the transition countries, especially EU-applicant countries, by including the harmonising of market mechanisms and legislation there. Implications of market expansion and integration therefore spillover to the Eastern Baltic Rim countries as well.

Economic growth in different sectors in the Baltic countries and Poland seem to have been a remarkable factor of changing the competitive position of the Finnish firms. In Russia, the *devaluation of the Russian rouble* in 1998 did serious harm to some of the Finnish companies. The ensuing economic recovery and growth during the past few years have compensated this effect and has given a new positive boost to the competitive environment in Russia. Even though the competition in the Baltic countries, Poland and Russia was not considered as strong as it has been in the EU-markets in recent years, it has been recognised in the companies that competition in the former markets has generally increased, and the *know-how and management skills* in the local companies have substantially *improved*. As one interviewed respondent put it:

In the EU our strongest competitors are local companies. If we talk about the Baltic countries our strongest competitors are local or multinational companies. In Russia our

competitors mainly come from elsewhere than Russia. However, more and more Russian companies are rising to become real competitors for us…Actually, they have made progress really rapidly lately. (Field of business: Utility production and services)

5.7 Likely Changes in the Role of the Baltic Sea Region Countries

How about the future role of the Baltic Sea Region countries for the Finnish companies? The enquiry found out that the managers of Finnish companies responsible for foreign operations have a similar type of response structure in their answers concerning the likely changes in the role of Finland, Sweden, Denmark and Germany in their companies' strategies by the year 2010, while Estonia, Latvia and Lithuania have also some similarities. The third group includes Poland and Russia, where the responses tend to be alike as well. The factor analysis also confirms the result by three factors grouped according to grouping mentioned above (see Appendix 3).

Finland, Sweden, Denmark and Germany typically get replies such as values implying "stays mainly the same" or "increases somewhat" while in the case of the Baltic countries there is a shift to a larger share of these responses saying "increases somewhat" or even "increases strongly". Expectations towards the improvement of Polish markets are even higher as 60 per cent of respondents (N=71) say that it will increase somewhat or strongly. The same figure for Russian markets is as high as 73 per cent (N=83).

Other recent research and surveys have found similar results. According to the survey of the Central Chamber of Commerce of Finland (2002): Finnish corporate experiences in Latvian and Lithuanian markets (in Finnish: Latvian ja Liettuan liiketoimintaympäristöt – suomalaisten yritysten näkökulma) seven companies out of ten expected these markets to become more important for their business operations over the next five years. Similar results are available for Estonian and Polish markets (the Central Chamber of Commerce of Finland, 2001). Furthermore, companies see that integration development[92] of the EU strengthens the Baltic Sea Region as a united market and business area.

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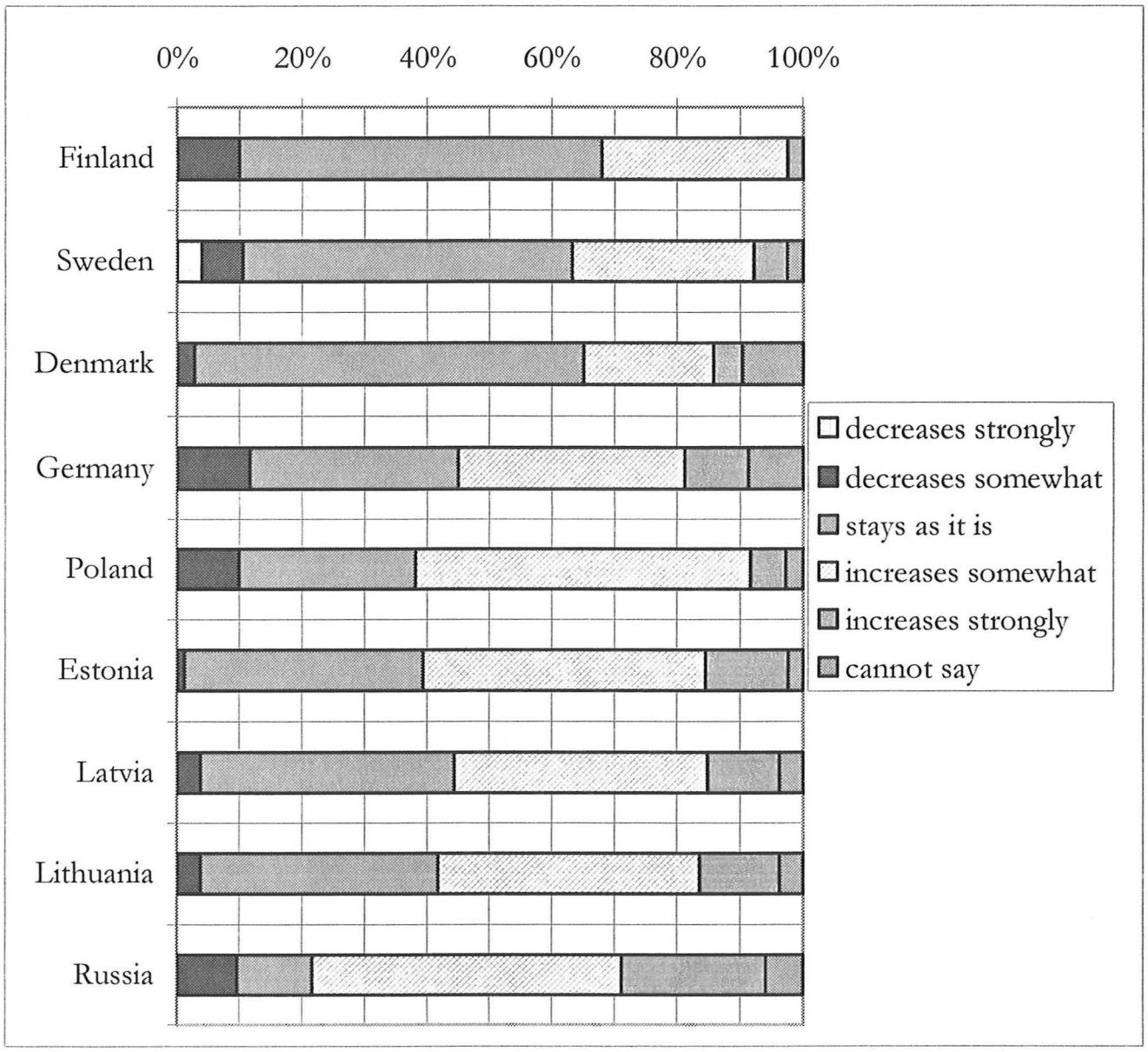
[92] On the other hand, if accession countries have difficulties in applying the requirements of the internal markets of the EU, it will have a negative effect on internal markets and especially the unity of the Baltic Sea Region (Central Chamber of Commerce of Finland 2001, 16)

Figure 16. Likely Changes in the Role of Different BSR Countries up to Year 2010 by the Sample Companies



The growth expectations concerning Russia are the highest ones in our study (see other similar results e.g. TT, 2001). In the last couple of years the growth rate of the Russian economy has been high. In the year 2000, for example, the growth rate of real GDP was 6.3%, which belonged to the highest rates among the Baltic Sea countries. This development has created a base for relatively high future expectations as well.

However, many respondents still feel certain uneasiness and uncertainty when Russian markets are concerned. As some interviewed mangers of foreign operations in the Finnish companies mentioned, certain signs of stability and prospects for long-term economic development are still lacking:

When considering the future of the Baltic Sea Region there is a rather important role for Russia - how it will develop in the long run - certain positive signs are in sight. The

question is how and when the money and capital flows, which once vanished from Russia, return to the home country. I mean when will a Russian manager or businessman think about investing the profits to his own company, instead of buying expensive Mercedes Benz cars, building fancy houses or making portfolio investments abroad? When will that come? (Field of business: Utility production and services)

Furthermore, the underlying infrastructure is seen as such that it needs urgent renewals also in traditionally strong sectors of Russian industry:

Russia has to resolve her energy production. All the production units are, according to Western thinking and standards in such conditions, that they need to be rebuilt, renewed and modernised. Russia has not been able to do these things in the 1990s because the economy has gone down, but now, when the economy has started to grow again, the demand for energy grows too and that puts even more pressure on the infrastructure. Even though Russia has enormous resources in gas and oil, huge coal and forest assets etc., the rational exploitation of natural resources is one of the most essential things for that economy to be able to confront its demanding future challenges. (Field of business: Engineering construction and energy equipment)

6. Conclusions

This conclusion chapter recapitulates the main results of the study and draws together the findings related to the research questions and research objectives set. The final chapter also discusses the theoretical implications of the thesis and provides suggestions for further research. Section 6.1 is dedicated to the research questions and findings. Section 6.2 discusses the theoretical implications in more detail and suggests future research. The last Section 6.4 outlines certain policy implications.

6.1 Research Questions and Findings

A research question for this study was whether or not firm-specific competitive advantages of major Finnish companies operating in international business in the Baltic Sea Region arise from their foreign operations. Another research question was to what extent these advantages are obtained from the home country and host countries in the Baltic Sea Region.

To answer these research questions the objectives of the study were addressed as follows (1) to examine the theories' applicability for describing and explaining Finnish companies operations in the Baltic Sea Region markets in a competitiveness perspective; (2) to examine direction, volume, and structure of Finnish companies' foreign trade and FDI in the Baltic Sea Region; (3) to examine locational sources of firm-specific competitiveness of Finnish companies in the Baltic Sea Region; (4) to analyse the extent to which competitive advantages of firms stem from the home country and host countries of the Baltic Sea Rim.

The first objective was captured by analysing the concepts and determinants of competitive advantages identified in the international business literature and then applying them to the empirical part of the study based on company survey. The second objective was attained by analysing the statistics of foreign trade and foreign direct investment of Finland in the Baltic Sea Region with Eurostat and Bank of Finland data. The business environment in the BSR was studied from an institutional as well as trade and FDI hindrances point of view. In addition, relevant empirical and theoretical studies made by other researchers in the field were examined. The third and fourth objectives were achieved with the empirical company survey data and case interviews to find out to what extent foreign countries or areas in the Baltic Sea Region provide access to competitive advantages of Finnish

companies outside their domestic markets. Objective one is discussed in the next section 6.2 while objectives two, three and four are discussed in this section.

Empirical findings related to the objective (2) (Chapter 4) reveal that the Baltic Sea Region is a significant market area for Finnish companies when the volume of the foreign trade and FDI are analysed. Foreign trade statistics[93] from the year 1999 show that the share of the Baltic Sea Region countries in Finnish total exports was 36% and in total imports over 40%. At the same time, approximately 44% of the foreign direct investment was realised within the Baltic Sea Region economies. The share of the Baltic Sea Region in Finnish foreign trade is also much more prominent than this region's share in Swedish foreign trade, not to mention German foreign trade.

Naturally, the role of the EU countries is far more important in Finnish foreign trade and FDI than the Baltic Sea Rim transition countries, if volumes are observed. In the year 1999 the share of Sweden, Germany and Denmark in Finnish exports was 26% in imports 30%. Approximately 42% of the total Finnish FDI stock was located to those countries in 1999. The share of the Baltic States, Poland and Russia were 10% in exports and 10% in imports respectively. Less than 2% of the total Finnish FDI stock was located to those countries in 1999.

Structural analysis of Finnish foreign trade revealed that there is still unused trade potential in Finnish trade in the Baltic Sea Region. This concerns mainly the Eastern economies, of which Poland and Russia show major untapped potential.

Structural analysis also showed that intra-industry trade is highest with the Western Baltic Sea Region economies. Intra-industry trade between Finland and the transition countries is low, because foreign trade is still mainly based on comparative advantage, even if Estonia forms an exception. Estonia is reaching the level of Germany in intra-industry trade with Finland (more than 30% of foreign trade is intra-industry trade). Intra-industry trade between Finland and Estonia is highly correlated with foreign direct investment of Finnish companies in Estonia. Currently, approximately 30% of foreign direct investment located in Estonia is of Finnish origin.

Business environment conditions for Finnish companies operating in the Baltic Sea Region have improved during the past few years. European Union institutional development and a deeper focus on integration has created better facilities for companies who wish to conduct business operations in Sweden, Denmark and Germany. At the

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[93] Statistics Finland

same time, the Baltic States, Poland and Russia have been moving to create new market-based systems from former planned economies to market economies for over ten years now. On the whole, this has led to a situation where a well functioning market economy system is the target of each and every country in the region. The Baltic States and Poland are also set to be welcomed as members of the European Union in spring 2004, thereby further harmonising the area of business for companies. Challenges for harmonisation are significant, because barriers of foreign trade and foreign direct investment have not yet been overcome, as Chapter 3.5 showed.

Since the early 1990s, Finnish companies' internationalisation has greatly accelerated and deepened. Due to this, major Finnish companies operate all over the nearby Baltic Sea Region today. Some companies even define this area to be their "home market area". Therefore a question has emerged whether and to what extent Finnish companies that operate in the Baltic Sea Region source their competitive advantages from home country and abroad? (objectives (3) and (4)).

To answer these questions and to better understand the significance of foreign sources of competitiveness, this study focused on the views of managers of foreign operations in major Finnish companies concerning such issues as: importance of foreign involvement; effects of foreign operations on companies' competitiveness; locational sources of competitiveness and their importance in the Baltic Sea Region. Furthermore, the study tried to highlight such features in the business environment in the past few years that have had a significant influence on companies' competitive position. In addition, such Finnish government policies that have facilitated or hindered the competitiveness of the companies during 1995-2001 were touched upon. These views and opinions of managers were collected via targeted mailed questionnaires. Furthermore, five case companies were interviewed and studied in detail.

The analysis of the empirical material collected from the largest Finnish companies showed that ***arm's length transactions still play a major role as an operation mode in the Finnish companies' foreign business, regardless of the fast internationalisation process.***

The business operations in the Baltic Sea Region are diverse and manifold, but still mainly founded on arm's length transactions. This characteristic feature is reflected in the analysis of sources of competitiveness as well. Major Finnish companies' managers of foreign operations considered arm's length transactions the most important modes of involvement in acquiring foreign resources and capabilities for their companies. Only after this comes FDI and non-equity arrangements, which are usually considered as deeper forms of international cross-border

operations and thus likely to advance more firm-specific competitive advantages to the company than shallower forms of transactions.

Most of those foreign direct investments made by sample companies in the Western Baltic Sea Region markets, are horizontal in nature, i.e. operations are integrated across borders between different production processes. This also means that the foreign production of products or services tends to be roughly similar in these markets. On the other hand, the subsidiaries in the Eastern Baltic Sea Region are mentioned most commonly to operate with little relationship with other subsidiaries. This pattern is almost as commonly mentioned among respondents as the horizontal pattern. Operations that are vertically integrated across borders, i.e. within certain production process or processes, are the most seldom found characteristic in foreign direct investment in the Baltic Sea Region.

The survey results also showed that foreign business operations are generally seen as almost as profitable as domestic business operations in the sample companies. The Baltic Sea Rim EU countries seem to reach out to this general level; the Baltic Sea Rim transition countries lag somewhat behind: according to the respondents' experience international business operations have been more frequently less profitable or less successful in the past few years.

Finnish companies have strong roots in created assets, especially technological created assets at their domestic location.

The investigation of locational sources of competitiveness of Finnish companies in the Baltic Sea Region gives support to the hypothesis that Finland is indeed a base for the companies' firm-specific competitiveness in created assets, especially technological ones. Product innovation mainly happens in Finland as well as linking with universities and other research institutions. Similarly, Finland seems to possess a major source of competitiveness in natural resources, managerial expertise and linking with related companies and trade supporting organisations compared to the neighbouring Baltic Sea Region markets. However, certain other locational elements, like consumer demand for upgrading product quality, inter-firm competition, and links with companies operating in the same industry are taken advantage of a significant amount from other Baltic Rim countries, especially EU countries.

Technology intensity and transnationality of the companies explain to some extent the intensity of foreign sourcing of competitiveness.

Technology intensity and the degree of transnationality of the companies proved to be such company characteristics, which explain to what extent the sample companies' respondents appreciated foreign sources of competitiveness. Particularly so-called created assets and consumer demand seemed to be more highly valued and also more often foreign sourced in higher technology companies than in lesser technology oriented companies.

In terms of companies' source of competitiveness the Baltic Sea Region is fragmented.

It became evident that the Baltic Sea Region markets differ from each other when it comes to the importance of different country groups as a source of competitiveness for Finnish companies. In most competitive advantage areas the division seemed to be (1) Finnish markets i.e. the home country markets, (2) the Baltic Sea Region EU countries' markets, and (3) the Baltic Sea transition countries' markets, in this order of magnitude. However, independent, single countries that have contributed most to the companies' competitiveness via foreign direct investment were named to be (1) Sweden, (2) Estonia and (3) Germany.

The overall taxation in Finland seems to have had a negative influence on companies' international competitiveness in the recent years.

The role of government policy and business environment has an essential impact on companies' operational conditions, competitiveness and ability to create competitive advantages. In this study, the respondents considered education and training policy, industrial and technology policy as well as the provision and upgrading of the infrastructure to be those policy areas that have been most successful from a competitiveness point of view during the last few years in Finland. At the same time, income taxation and corporate taxation were considered to be the most unfavourable domestic policy elements as these policies were considered to have been negative impact on Finnish companies' international competitiveness.

The concentration of markets has been the most profound change in the business environment in the Baltic Sea Region in recent years.

In the business environment profound changes were found at three levels: firm-level, industry-level and market-level. The most distinct features have been, on one hand, the consolidation and concentration of the companies and industries, and on the other hand, the integration and liberalisation of the markets in the Baltic Sea Region.

Growth expectations are highest for Russia and Poland in the Baltic Sea Region.

Finnish companies expect the role of the various Baltic Sea Rim countries to change at their companies by the year 2010 so that the economies of Finland, Sweden, Denmark and Germany are anticipated to stay at the same level as at time of the study (2002) or to grow somewhat, while in the Baltic countries they expect growth to some extent or even strongly. Expectations towards the growth of the roles of Polish and Russian markets are the highest ones.

6.2 Theoretical Implications and Suggestions for Further Research

One of the objectives of this study was to examine theories' applicability for describing and explaining Finnish companies' operations in the Baltic Sea Region markets in a competitiveness perspective (Objective 1). Theories selected to the analytical framework were limited to the main theories and models explaining firm level foreign trade, foreign direct investment and competition noticing locational perspective (see Chapter 2). Literature related to these matters is vast and manifold and the author selected such an approach as to first discuss the main approaches in theorising the foreign operations of multinational companies (Section 2.1) and then focus on a more limited amount of approaches that have the most relevance when considering and positioning the empirical research questions set (Sections 2.2-2.6).

International economics and international business as well as regional science include several focal sub-areas relevant to the study, but which have been developed independently of each other. Here it was seen profitable to include several theories, or field of theories, to the analysis as a single and overall fitting model does not exist (see Chapter 2.1). The selected theories based on market imperfections; internationalisation process models; economic geography and theory of location; the structure-conduct-performance paradigm and Porter's diamond model and its revisions in addition to the eclectic approach.

Theories based on market imperfections were first examined. Internalisation and transaction cost models as well as resource-based models provide valuable partial rationalisation for the study as they imply that the market imperfections – external or internal to the company – determine the mode of foreign operations of the companies abroad in the first place. These approaches can be also seen as a part of the eclectic approach used in the study.

Internationalisation often follows a sequential pattern, where exports to neighbouring markets precede the establishment of foreign affiliates to more distant markets. This is described in the internationalisation process theories in the Chapter 2.3. This kind of development has been very typical in Finnish companies (Larimo 1993; Luostarinen 1994). It is also a representative feature in our sample companies. Geographical proximity with historical and cultural ties have exerted a strong influence on the regional distribution of foreign operations and foreign production of Finnish companies favouring neighbouring markets of the Baltic Sea Rim.

The following approaches have typically been disjointed from the aspects of location theory, an area of research usually named under the

sub-disciplines of regional science and urban economics. Economic geography and theory of location is mostly concentrated on such issues as location of individual firms, transport costs, agglomeration of economic activity etc., but the relation to trade and FDI as such has not generally been the focus. In this study, economic geography was able to give partial explanation to the general theoretical framework by highlighting the undisputed fact of concentration of regional economic activity in the studied Baltic Sea Region.

As the aforementioned theories give additional value to understanding the factors and features of foreign operations of Finnish companies in the Baltic Sea Region, the eclectic approach links many of them under the so called OLI-paradigm. It explains international production and determinants of foreign direct investment as well as the dynamics related to it. This approach was therefore given more emphasis than others.

To understand the rationale behind companies' foreign operations was still not enough, but theories about competitiveness were naturally required. To this end, the SCP theory and Porter's diamond theory were selected. The operationalisation of the competitiveness approach used in the empirical part of the study was based on Porter's diamond model, which broadly defines the components of locational sources of competitiveness, even if those components were revisited with other scholars' specifications. Dunning's research concerning foreign operations, foreign direct investment especially, was linked to Porter's competitiveness approach as Dunning has made an effort to link these matters as explained in Chapter 2.6 (Dunning 1997a). As a result of these categorisations, the survey directed to the major Finnish companies' managers of foreign operations tried to capture the importance of the sources of listed competitive advantages relevant to the responding companies in the Baltic Sea Rim.

The findings indicate that the theories and concepts used in this study are feasible in explaining and understanding the Finnish companies' foreign operations or the results of those operations in the Baltic Sea Region. Although according to the main results the extent of the foreign sourcing of competitiveness did not appear to be tremendous since Finland seems to be the most important base of origin for competitive advantages in general. However, if internationalisation and concentration of major Finnish companies continues together with networking with subcontractors and other co-operators, different elements of competitive advantages sourced from various regions that do not necessarily follow the borders of the countries in the Baltic Sea Rim, may be seen.

The analytical framework selected provides a relatively flexible starting point for further studies. It allows not only qualitative, but also

quantitative approaches to go deeper into studying sources of competitive advantages, for example, in different industries.

One important line of research based on the results found would be to further analyse the determinants of technological competitive advantages Finnish companies seem to source in Finland as well as to study the determinants of innovation capacity altogether.

Another interesting line of future research would be to study how traditional industrial production within the companies has been, to an increasing extent, replaced by linkages between companies, such as networks and technological systems and alliances. These structures are featured by mutual close co-operation and mutual interdependence, which blurs the conventional concept or notion of a company. It would be worth examining thoroughly how these changes affect the foreign trade and arrangements of domestic and foreign production within transnational companies. Conceivably, it could result in an increase in foreign sourcing from independent firms and a decrease of actual production and trade within transnational companies. This evidently has implications on competitiveness formation and sustainability of competitiveness of companies.

Despite the fact that there are interesting studies going on in the field of international business research, there is an obvious lack of research that concentrates on studying multinational companies in Finland. What is missing is detailed information on multinationals and transnational companies on a regular basis (longitudinal data in the same format). It has already complicated the growth of rigorous empirical analysis and theory testing. This flaw does not concern only Finland though as very few countries actually collect data on multinationals on a regular basis. Those countries, which do, rarely incorporate information about the features and extent of foreign activities. Apparently the shortage of this knowledge does not only prevent new theories to confront empirical facts, but it also has an effect on proper policy design and implementation towards transnational firms. Obviously, any policy planning needs thorough information on the causes and effects of transnational activity.

6.3 Policy Implications

One of the features of increasing internationalisation of companies, and of globalisation, has refocused scholarly attention on the respective roles of companies and governments in advancing the competitiveness of a country or a region. In this respect, a distinction between locationally mobile and immobile assets has to be made. In an innovation-driven economy, like Finland, the competitiveness of companies increasingly depends on their

ability to create and efficiently arrange the use of core competencies of their business. Although once produced, these assets or their rights are often transferable across national boundaries, their initial creation requires a strong home base. (see e.g. Dunning 1997b, 128).

However, while the possession of these core assets is required, it is not enough in itself. To be used efficiently, they need to be combined with other assets, which are sourced from other companies or governmental institutions. Frequently, these complementary assets are location bound. For example, in the case of educated labour force and efficient transportation as well as communication networks, their ability and quality are strongly influenced by the actions of national and sub-national governments. By the same token, in conducting economic policies, it should be kept in mind that private enterprises are the major source of economic wealth and development in society, which inevitably unites the interests of public and private agents, even if one has to admit at a moment's notice that the tasks of governments are very different from those of firms including security and social welfare issues, for example.

The aforementioned international features and tendencies related to companies' foreign operations and their broadening business environment have triggered changes in scholarly thinking and the development of industrial policy in Finland as well. After an era of interventionist policy-orientation of the 1970s, the policy changed in the 1980s to give emphasis on new and promising technologies and the firms utilising them. In the 1990s, in turn, a shift from this type of 'picking the winners' to 'let the market pick the winners' policies was seen. Industrial policy, which aimed at improving framework conditions or the operational environment of firms therefore prevailed. In this setting, direct investment subsidies were seen harmful on the grounds that governments were not seen to be the ones with superior knowledge over private firms in foreseeing the future success of business. Still, industrial policies play an important role. First of all to secure efficient functioning of the market and second to create advanced factors of production. Industrial policies are taking a broad scope in modern policy thinking including several sectors such as educational, trade, energy, environmental, and competition policies, which also overlap with each other. (Ylä-Anttila 1998; Pajarinen et al. 1998, 103-104)

In Finland the cluster approach by Porter was introduced by the cluster study co-ordinated at ETLA in the early 1990s. The approach dominated the design of the policy guidelines outlined in 1993 in the White Paper (*National Industrial Strategy*) by the Ministry of Trade and Industry. The cluster approach has been clearly reflected in subsequent government actions emphasising inter-organisational co-operation as well as accumulation and transfer of know-how.[94]

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[94] See more close analysis of it in Jääskeläinen (2001).

Implementation of government policies is now considered through policies concerning technology, education and competition policies, which form the core of the new Finnish industrial policy.[95] Those are in accordance with the modern growth literature, which underlines the roles of technology and knowledge as the main determinants of economic growth. Consequently, R&D will remain one of the major public sector activities and major policy instruments in Finland in future as well.

Policy towards foreign direct investment is another important, also internationally related, policy area. Many countries in the Baltic Sea Region have liberalised policies regarding FDI and foreign companies and as a consequence FDI flows have increased significantly. Even though national policies towards FDI are converging, some differences between countries remain. This is apparent, just as other government goals in these countries vary. On the other hand, multinational co-ordination is to some extent necessary to avoid unfair practices.[96] When sufficient co-ordination of FDI policies is gained, the attractiveness of countries tend to determine international direct investment flows. In Finland, controls of capital movements were lifted gradually in the late 1980s and early 1990s, and the remaining restrictions of foreign ownership were removed in 1993 as part of Finland's European Union integration process as was mentioned already earlier.

In spite of the fact that a lot has already been done in the government policy field to take account of and keep up the attractiveness of business environment of Finland, several policy implications for national as well as international level seem warranted based on the findings of the study:

- Pan-European integration and the effect on the European Union in the Baltic Sea Region will increase as the Baltic countries and Poland are set to join the European Union in the year 2004. This development gives even more tools than before to improve the institutional, political and overall business environment in the Baltic Sea Region and pays attention to the European Union regarding the possibilities of further generation of the Northern Dimension policy. The study showed that even if the business environment has improved in the Baltic Sea Rim, in the sense that barriers for trade and FDI have dismantled, there is still a lot to be done at the transnational level.[97] Results imply that the full advantage of trade

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[95] For example, Paija (2001) has analysed it in the Finnish ICT cluster context.

[96] For example UN (1996) World Investment Report: Investment, Trade and International Policy Arrangements expresses three commanding principles in the formulation of FDI policy, which are market contestability, modal neutrality and policy coherence (UN 1996, 164).

[97] Many studies confirm that functioning institutional basis plays a major role in determining the location of manufacturing subsidiaries (Borsos-Torstila 1999; Meyer 2000)

potential has not taken between Finland and the transition economies.

- The overall mechanisms behind rapid internationalisation of Finnish companies in terms of multinational production in the 1990s have been to a large extent attributed to the aforementioned dismantling of trade barriers, but also to the deregulation of capital markets together with the advances of information technology that have facilitated the co-ordination and monitoring of internationally dispersed foreign operations. This kind of development carries two major implications: First, firms operate in markets characterised by tougher competition than before and second, countries and regions are involved in competition for production to a much larger extent than before. Consequently, integration of markets means that the business environment is uniting intensively at the same time as competition is increasing. This signifies that specialisation will still increase in many industries and companies' production is located to an increasing extent according to a set of locational factors affecting companies' competitiveness.

- Described development challenges decision makers in small and open economies, such as Finland. Finland has taken care of its business environment relatively well as international competitiveness indicators by World Economic Forum and International Management Development among others indicate.[98] In spite of this, research results imply that certain policy sectors are much more inclined to notice or to take account of the effect on competitiveness issues among the operating companies managers (see Chapter 5.6). Education and training policy as well as industrial and technology policy are the policies that have had the most positive impact on companies' competitiveness according to the results of this study. On the other hand, taxation seems still to be somewhat problematic. Altogether, the competitiveness issues have to be given more credence in many areas of policy making, as do those areas that have an indirect effect on companies' business environment. It is evident that countries in the Baltic Sea Region, Finland as one of them, compete with each other as potential locations for internationally competitive firms and their headquarters.

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[98] See e.g. Suomi taloudellisena toimintaympäristönä. Arvio Suomen kilpailukyvyn vahvuuksista ja heikkouksista. Valtiovarainministeriö (1998).

Literature

Agarwal, J. (1980) Determinants of Foreign Direct Investments: A Survey. *Welwirtschaftliches Archiv* 116, 739-7

Agarwal, J. (1985) *Pros and Cons of Third World Multinationals: A Case Study of India.* Tübingen: Kieler Studien 195.

Agmon, T., & Lessard, D. R. (1977) Investor Recognition of Corporate International Diversification. *Journal of Finance* 32, 1049-55.

Aharoni, Y. (1966) *The Foreign Investment Decision Process.* Boston: Harvard Business School.

Alho, K. E. O. (Ed.) (2000) *Economics of the Northern Dimension.* Helsinki: Taloustieto Oy.

Alho, K. E. O. (2003) *The Impact of Regionalism on Trade in Europe.* ETLA The Research Institute of the Finnish Economy, Discussion Papers No. 843. Helsinki: ETLA.

Alho, K., Erkkilä, M., & Kotilainen, M. (1996) *The Economics and Policies of Integration: a Finnish Perspective.* ETLA The Research Insitute of the Finnish Economy, A 22. Kluwer: Dordrecht.

Alho, K., Hazley, C., Hernesniemi, H., & Widgrén M. (2001) *EU:n itälaajenemisen vaikutukset Suomen tuotantorakenteeseen.* ETLA Elinkeinoelämän tutkimuslaitos, Keskusteluaiheita no. 752. Helsinki: ETLA.

Alho, K., Kaitila, V., & Widgrén, M. (2001) The Effects of EU Eastern Enlargement on Finnish Firms. In K. Liuhto (Ed.), *Ten Years of Economic Transformation. Volume I – The Economies in Transition and the EU Enlargement* (pp. 275-283). Lappeenranta University of Technology, Studies in Industrial Engineering and Management No:16. Lappeenranta: Lappeenranta University of Technology.

Aliber, R. Z. (1970) A Theory of Direct Foreign Investment. In C. Kindleberger (Ed.) *The International Corporation: A Symposium* (pp. 17-34). Cambridge, Massachusets: MIT Press.

Aliber, R. Z., & Click, R. W. (Eds.) (1993) *Readings in International Business: A Decision Approach.* Cambridge Massachusets: MIT Press.

Ali-Yrkkö, J., & Ylä-Anttila, P. (1997) *Yritykset kansainvälistyvät - katoavatko työpaikat? [Internationalization of Large Industrial Firms – Implications for Domestic Employment]* ETLA Elinkeinoelämän tutkimuslaitos, B 130. Helsinki: Taloustieto Oy.

Ali-Yrkkö, J., & Ylä-Anttila, P. (2002) *Pääkonttorien sijainti, kansainvälistyminen ja verotus. [Location of Headquarters, Internationalisation of Business and Taxation]* ETLA Elinkeinoelämän Tutkimuslaitos, Keskusteluaiheita no. 831. Helsinki: ETLA.

Anderson, E. M., & Gatignon, H. (1986) Modes of Foreign Entry: A Transaction Cost Analysis and Propositions. *Journal of International Business Studies* 17, 3, 1-26.

Andrews, K. R. (1971) *The Concept of Corporate Strategy.* Homewood, IL: Irwin.

Aturupane, C., Djankov, S., & Hoekman, B. (1997) *Determinants of Intra-Industry Trade between East and West Europe.* CEPR Centre for Economic Policy Research, Discussion Papers Series No. 1721. London: CEPR.

Baldwin, R. E. (1993) *The Potential for Trade between the Countries of EFTA and Central and Eastern Europe.* EFTA European Free Trade Association, Economic Affairs, Occasional Paper No 44. Geneva: EFTA.

Baldwin, R. E. (1994) *Towards an Integrated Europe.* CEPR Centre for Economic Policy Research. London: CEPR.

Bank of Finland (2000) Statistics Department, Information Services 24.11.2000.

Barney, J. B. (1986) Strategic Factor Markets. *Management Science* 32, 1231-1241.

Barney, J. B. (1991) Firm Resources and Sustained Competitive Advantage. *Journal of Management* 17, 99-120.

Bell, J., Barkema, H. G., & Verbeke, A. (1997) An Eclectic Model of the Choice between Wholly-Owned Subsidiaries and Joint-Ventures as Modes of Foreign Entry. In P.W. Beamish, & J.P. Killing (Eds.) *Cooperative Strategies: European Perspectives* (pp. 128-157). San Francisco: Lexington.

Bevan, A. A., & Estrin, S. (2000) *The Determinants of Foreign Direct Investment in Transition Economies.* CEPR Centre for Economic Policy Research, Discussion Papers Series No. 2638. London: CEPR.

Bilkey, W.J., & Tesar, G. (1977) The Export Behaviour of Smaller Sized Wisconsin Manufacturing Firms. *Journal of International Business Studies*, Spring/Summer, 93-8.

Blomström, M., Kokko, A., & Zejan, M. (2000) *Foreign Direct Investment: Firm and Host Country Strategies.* New York: St. Martin's Press.

Blomqvist, H. C. (1990) *Operationalizing International Competitiveness - What Are We Really Measuring?* Proceedings of the University of Vaasa, Discussion Papers 109. Vaasa: University of Vaasa.

Bloom, N. & Griffith, R. (2001) The Internationalisation of R&D. *Fiscal Studies* 22, 3, 337-355.

Borsos, J., & Erkkilä, M. (1995) *Foreign Direct Investment and Trade Flows between the Nordic Countries and the Baltic States.* ETLA the Research Institute of the Finnish Economy, Discussion Papers No. 540. Helsinki: ETLA.

Borsos, J., & Erkkilä, M. (1996) Regional Integration in the Baltic Rim: FDI and Trade-Based Integration in Finland, Estonia and St. Petersburg. In *Regional Integration and Transition Economies: The Case of the Baltic Rim.* Centre for Co-operation with the Economies in transition. OECD Proceedings. Paris: OECD.

Borsos-Torstila, J. (1999) *The Determinants of Foreign Direct Investment Operations of Finnish MNCs in Transition Economies 1990-1995.* ETLA the Research Institute of the Finnish Economy, A 28. Dissertation. Helsinki: Taloustieto Oy.

Brainard, S. L. (1993) *A Simple Theory of Multinational Corporations and Trade with a Trade-Off between Proximity and Concentration.* NBER National Bureau of Economic Research, Working Papers No. 4269, February. Cambridge: NBER.

Brenton, P., Di Mauro, F., & Lücke, M. (1999) Economic Integration and FDI: an Empirical Analysis of Foreign Investment in the EU and in Central and Eastern Europe. *Economica* 26, 95-121.

Brinberg, D., & McGrath, J. (1985) *Validity and the Research Process.* Beverly Hills, CA: Sage Publications.

Buckley, P. (1990) Problems and Developments in the Core Theory of International Business. *Journal of International Business Studies* 21, 657-665.

Buckley, P. (1991) Developments in International Business Theory in the 1990's. *Journal of Marketing Management* 7, 15-24.

Buckley, P., & Casson, M. (1976) *The Future of Multinational Enterprise.* London: MacMillan.

Cantwell, J. A. (1987) The Reorganization of European Industries after Integration: Selected Evidence on the Role of Multinational Enterprise Activities. *Journal of Common Market Studies* 26, 127-151, reprinted in J. Dunning, & P. Robson (Eds.) Multinationals and the European Community. Oxford: Blackwell.

Cantwell, J. A. (1989) *Technological Innovation and Multinational Corporations.* Oxford: Basill Blackwell.

Cantwell, J. A. (1991) A Survey of Theories of International Production. In C. Piteris, & R. Sugden *The Nature of the Transnational Firm* (pp.16-63.) London: Routledge.

Cartwright, W. R. (1993) Multiple Linked "Diamonds" and the International Competitiveness of Export-Dependent Industries: The New Zealand Experience. *Management International Review* 33, Special Issue 1993/2. 55-70.

Casson, M. (1987) *The Firm and the Market.* Oxford: Basil Blackwell.

Casson, M. (1992) Internalization Theory and Beyond. In P. Buckley (Ed.) *New Directions in International Business* (pp.4-27). Aldershot, Hants: Edward Elgar.

Caves, R. E. (1971) International Corporations: The Industrial Economics of Foreign Investment. *Economica* 38, 1-27.

Caves, R. E. (1982) *Multinational Enterprise and Economic Analysis.* Cambridge: Cambridge University Press.

Cavusgil, S. T. (1980) On the Internationalization Process of Firms. *European Research* 8, November, 273-81.

Cavusgil, S. T., & Nevin, J.R. (1981) Internal Determinants of Export Marketing Behaviour: An Empirical Investigation, *Journal of Marketing Research* 18, February, 114-19.

Chandler, A. (1962) *Strategy and Structure*: Cambridge, Massachusets: MIT Press.

Ciborra, C. U. (1992) Innovation, Networks and Organizational Learning. In C. Antonelli (Ed.) *The Economics of Information Networks* (pp. 91-102). Amsterdam, Netherlands: Elsevier Science Publishers B.V.

Coase, R. H. (1937) The Nature of the Firm. *Economica* 4, 386-405.

Coase, R. H. (1960) The Problem of Social Cost. *Journal of Law and Economics* 3, 1-10.

Conner, K. (1991) A Historical Comparison of Resource-Based Theory and Five Schools of Thought Within Industrial Economics: Do We Have a New Theory of the Firm? *Journal of Management* 17, 121-54.

Danmarks Nationalbank<URL:http://www.nationalbanken.dk/13.03. 2001>

Deutche Bundesbank <URL:http://bundesbak.de/ 13.03.2001>

Devine, P. J., Lee, N., Jones, R.M., & Tyson, W.J. (1985) *An Introduction to Industrial Economics.* London: Unwin Hyman.

Dierickx, I., & Cool, K. (1989) Asset Stock Accumulation and Sustainability of Competitive Advantage. *Management Science* 3, 1504-1511.

Djarova, J. (1996) Foreign Investments in Central and Eastern Europe. In J. Djarova (Ed.) *Foreign Direct Investment in Central and Eastern Europe.* Rotterdam: Erasmus University.

Dunning, J. H. (1958) *American Investment in British Manufacturing Industry.* London: George Allen Unwin (reprinted by Arno Press, New York 1976).

Dunning, J. H. (1977) Trade, Location of Economic Activity and MNE. A Search for an Eclectic Approach. In B. Ohlin, P-O. Hesselborn, & P. Wijkman (Eds.) *The International Allocation of Economic Activity* (pp. 395-418). New York: Proceedings of a Nobel symposium held at Stockholm. London: MacMillan.

Dunning, J. H. (1981) *International Production and the Multinational Enterprise.* London: George Allen & Unwin.

Dunning, J. H. (1986) The Investment Development Cycle and Third World Multinationals. In K. M. Khan (Ed.) *Multinationals of the South: New Actors in the International Economy.* London: Croom Helm.

Dunning, J. H. (1988a) *Explaining International Production.* London: Unwin Hyman.

Dunning, J. H. (1988b) The Theory of International Production. *International Trade Journal* 3, 21-67.

Dunning, J. H. (1993a) *Multinational Enterprises and the Global Economy.* New York: Addison Wesley.

Dunning, J. H. (1993b) Internationalizing Porter's Diamond. *Management International Review* 33. Special issue 1993/2, 7-15.

Dunning, J. H. (1997a) *Alliance Capitalism and Global Business.* London: Routledge.

Dunning, J. H. (Ed.) (1997b) *Governments, Globalization, and International Business.* New York: Oxford University Press.

Dunning, J. H., & Lundan, S. M. (1998) The Geographical Sources of Competitiveness of the Multinational Enterprises: An Econometric Analysis. *International Business Review* 7, 115-133.

Dunning, J. H., & Robson, P. (1988) Multinational Corporate Integration and Regional Economic Integration. In J. Dunning & P. Robson (Eds.) *Multinationals and the European Community,* 1-23. Oxford: Basil Blackwell.

Economic Development in the Baltic Sea Region (1998) Ministerial Meeting on Trade and Investments of SMEs in the Baltic Sea Region. 9-10 July 1998, Vilnius.

Economic Monitoring of North-West Russia (2000). Coordination of the Finnish-Russian Project by Center for Markets in Transition at Helsinki School of Economics and Business Administration. <http://www.hkkk.fi/~vbi/reports.html 02.02.2001>

Ekholm, K. (1998) Proximity Advantages, Scale Economies and the Location of Production. In P. Braunerhjelm & K. Ekholm (Eds.) *The Geography of Multinational Firms.* Boston: Kluwer.

Emory, C. W. (1985) *Business Research Methods.* Homewood: Richard D. Irwin Inc.

Erkkilä, M., & Widgrén, M. (1994) *Suomen ja Baltian kaupan potentiaali ja suhteellinen etu.* ETLA Elinkeinoelämän tutkimuslaitos, B 101. Helsinki: Taloustieto Oy.

Erkkilä, M., & Widgrén, M. (1995) Baltian maiden ja EU-maiden kauppa: todellisuuden ja mahdollisuuksien vertailua. *Kansataloudellinen aikakauskirja* 91, 188-196.

Esser, K., Hillebrand, W., Messner, D., & Meyer-Stamer, J. (1993) *International Competitiveness in Latin America and East Asia.* London: Frank Cass & Co.

Estonian Investment Agency (2000) <URL:http://www.eia.ee 16.12.2001>

Ethier, W. (1998) The New Regionalism. *The Economic Journal. The Journal of the Royal Economic Society* 108, 1149-1161.

Euromoney (1993) September, Special IMF/World Bank issue, Country Risk: "United States Back on Top", 363-366.

Euromoney (1997) December, Country Risk: "It Could Be Worse", 60-65.

Euromoney (1999) March, Country Risk: "In Search of a Safe Heaven", 97-102.

Forslid, R. & Wooton, I. (1999) *Comparative Advantage and the Location of Production.* CEPR Centre for Economic Policy Research, Discussion Papers No. 2118. London: CEPR.

Foss, N. J., Knudsen, C., & Montgomery, C. A. (1995) An Exploration of Common Ground: Integrating Evolutionary and Strategic Theories of the Firm. In C. A. Montgomery (Ed.) *Resource-Based and Evolutionary Theories of the Firm* (pp. 1-17). Dordrecht: Kluwer Academic Publishers.

Froot, K., & Stein, J. (1991) Exchange Rates and Foreign Direct Investment: An Imperfect Capital Markets Approach. *Quaterly Journal of Economics* 106, 1191-1217.

Glegg, J. (1995) The Determinants of United States Foreign Direct Investment in the European Community: A Critical Reappraisal. In R. Schiattarella (Ed.) *New Challenges for European and International Business* (pp. 465-484). EIBA Conference Proceedings. Rome: Confindustria.

Goskomstat <http://www.gks.ru/eng/bd.asp 12.01.2001>

Grubel, H. G., & Lloyd, P.J. (1975) *Intra-Industry Trade: the Theory and Measurement of International Trade in Differentiated Products.* London: MacMillan.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998) *Multivariate Data Analysis.* 5th edition. New Jersey, Upper Sadle River: Prentice-Hall International Inc.

Hamilton, C. B., & Winters, A. L. (1992) Opening up International Trade with Eastern Europe. *Economic Policy* 14, 77-116.

Hayter, R. (1997) *The Dynamics of Industrial Location: the Factory, the Firm and the Production System.* Chichester: Wiley.

Hazley, C., & Hirvensalo, I. (1998) *Barriers to Foreign Direct Investment in the Baltic Sea Region.* ETLA the Research Institute of the Finnish Economy, Discussion Papers No. 628, Helsinki: ETLA.

Helleiner G.K. (1989) Transnational Corporations and Direct Foreign Investment. In H. Chenery, & T.N. Srinivasan (Eds.) *Handbook of Development Economics*, vol. II (pp. 1441-1480). Amsterdam: Elsevier Science Publishers B.V.

Helpman, E. (1990) *Monopolistic Competition in Trade Theory.* Princeton University, Special Papers in International Finance No. 16. Princeton N.J: Princeton University.

Helpman, E., & Krugman, P. (1985) *Market Structure and Foreign Trade.* Cambridge, Massachusets: MIT Press.

Henderson, J. V., Shalizi, Z., & Venables, A. J. (2001) Geography and Development. *Journal of Economic Geography* 1, 81-105.

Hennart, J-F. (1982) *A Theory of Multinational Enterprise.* Ann Arbor, MI: University of Michigan Press.

Hennart, J-F. (1986) What is Internalization? *Weltwirtschaftlisches Archiv* 122, 791-804.

Hennart, J-F. (1989) Can the New Forms of Investment Substitute for the Old Forms: A Transaction Cost Perspective. *Journal of International Business Studies* 20, 211-233.

Hennart, J-F. (1991a) The Transaction Cost Theory of the Multinational Enterprise. In C. Pitelis, & R. Sugden *The Nature of the Transnational Firm* (pp.81-116). London: Routledge.

Hennart, J-F. (1991b) The Transaction Cost Theory of Joint Ventures: An Empirical Study of Japanese Subsidiaries in the United States. *Management Science* 37, 483-97.

Hennart, J-F., & Park, Y-R. (1994) Location, Governance and Strategic Determinants of Japanese Manufacturing Investments in the United States. *Strategic Management Journal* 15, 419-436.

Hernesniemi, H. (1996) *Barriers to Economic Cooperation of Baltic Rim Countries.* ETLA the Research Insitute of the Finnish Economy, Discussion Papers No. 555. Helsinki: ETLA.

Hernesniemi, H., Lammi, M., & Ylä-Anttila, P. (1995) *Kansallinen kilpailukyky ja teollinen tulevaisuus.* Helsinki: Taloustieto Oy.

Heum, P., & Ylä-Anttila, P. (1993) *The Internationalization of Industrial Firms – Foreign Production and Domestic Welfare in Finland, Norway and Sweden.* ETLA The Research Institute of the Finnish Economy, Discussion Papers No. 555. Helsinki.

Hill, C. W. L., Hwang, & Kim, W. C. (1990) An Eclectic Theory of the Choice of International Entry. *Strategic Management Journal* 11, 117-128.

Hirvensalo, I. (1996) *Strategic Adaptation of Enterprises to Turbulent Transitionary Markets: Operative Strategies of Finnish Firms in Russia and the Baltic States During 1991-95.* ETLA The Research Insitute of the Finnish Economy, A 24. Dissertation. Helsinki: Taloustieto Oy.

Hodgetts, R. M. (1993) Porter's Diamond Framework in a Mexican Context. *Management International Review*, Special Issue 1993/2, 41-54.

Horstman, I., & Markusen, J. R. (1992) Endogenous Market Structures in International Trade: Natura Facit Saltum. *Journal of International Economics* 32, 109-129.

Hymer, S. H. (1960) *The International Operations of National Firms: A Study of Direct Foreign Investment*, Ph.D Thesis, MIT: published by MIT Press under the same title in 1976.

Hymer, S. H. (1976) *The International Operations of National Firms: A Study of Direct Foreign Investment*, Ph.D Thesis 1960 New York: MIT Press.

IMF Direction of Trade Statistics Yearbook (2000) IMF International Monetary Fund. Washington, DC.: IMF

Johanson, J., & Vahlne, J-E. (1977) The Internationalisation Process of the Firm: a Model of Knowledge Development on Increasing Foreign Commitments. *Journal of International Business Studies* Spring-Summer 1977, 23-32.

Johanson, J. & Wiedersheim-Paul, F. (1975) The Internationalization of the Firm – Four Swedish Cases. *Journal of Management Studies* 12, 305-322.

Juul, M., & Walters, P. (1987) The Internationalization of Norwegian Firms – A Study of the U.K. Experience. *Management International Review*, 27, 1, 58-66.

Jääskeläinen, J. (2001) *Klusteri tieteen ja politiikan välissä. Teollisuuspolitiikasta yhteiskuntapolitiikkaan.* ETLA Elinkeinoelämän tutkimuslaitos, A 33. Helsinki: Taloustieto Oy.

Kaitila, V. (1999) *Trade and Revealed Comparative Advantage: Hungary, the Czech Republic and the European Union.* Bank of Finland. Institute for Economies in Transition, BOFIT Discussion Papers No. 8. Helsinki: BOFIT.

Kaitila, V., & Widgrén, M. (1998) *Baltian maiden EU-jäsenyys ja Suomi.* ETLA Elinkeinoelämän tutkimuslaitos, B 139. Helsinki: Taloustieto Oy.

Kaitila, V., & Widgrén, M. (1999) *Revealed Comparative Advantage in Trade between the European Union and the Baltic Countries.* ETLA Research Institute of the Finnish Economy, Discussion Papers No. 697. Helsinki: ETLA.

Kajaste, I., Parviainen, S., & Ylä-Anttila, P. (1992) *Foreign Direct Investment of Finland in the 1990s.* VATT Discussion Papers No. 28. Helsinki: VATT.

Kala, A., & Rajasalu, T. (1995) *Economic Integration and Subregional Cooperation in the Baltic States.* Estonian Academy of Sciences, Discussion Paper No. 2. Tallinn: Estonian Academy of Sciences.

Kangas, K. (2000) *Five Stories on IT and Russian Trade: a Resource-Based View to Information Resources Management in Finland-Based Multinational Conglomerates.* Turku School of Economics and Business Administration, A8. Dissertation. Turku: Turku School of Economics and Business Administration.

Kerlinger, F. (1986) *Foundations of Behavioural Research.* 3rd ed. Harcourt Brace College Publishers: Fort Worth, Tx.

Kim, J-O., & Mueller, C. W. (1982*) Introduction to Factor Analysis: What It Is and How to Do It.* Series: Quantitative Applications in the Social Sciences. University of Iowa. Beverly Hills: Sage University Papers. Sage Publications ltd.

Kim, W. C., & Hwang, P. (1992) Global Strategy and Multinationals' Entry Mode Choice. *Journal of International Business Studies* 23, 29-53.

Kindleberger, C. (1969) *American Business Abroad: Six Lectures on Direct Investment.* New Haven, Connecticut: Yale Universtiy Press.

Kivikari, U. (1996) *The Legacy of the Hansa: The Baltic Economic Region.* Helsinki: Otava.

Kivikari, U. (1997) Finland. In P. Desai (Ed.) *Going Global: Transition from Plan to Market in the World Economy* (pp. 273-313). Masschusets: MIT Press.

Kivikari, U. (1998) Foreign Direct Investment: Problems in Deepening the Integration of the Baltic Sea Region. In L. Hedegaard, & B. Lindström (Eds.) *The NEBI Yearbook 1998: North European and Baltic Sea Integration* (pp. 87-98). Berlin: Springer.

Kivikari, U. (1999) FDI Deepens Baltic Integration. *Report on Europe: Northern Dimension 2/1999*, 62-64. International Business Statistics. Helsinki: Statistics Finland.

Kivikari, U., & Lindström, M. (1999) *Suomenlahden kasvukolmio Suomen, Viron ja Pietarin alueen integraation väline.* Turun kauppakorkeakoulu. Yritystoiminnan tutkimus- ja koulutuskeskus, Sarja B 10/1999. Turku: Turun kauppakorkeakoulu.

Kogut, B. (1986) Foreign Direct Investment as a Sequential Process. In C.P. Kindleberger, & D. B. Audretsch (Eds.) *The Multinatitonal Corporation in the 1980's* (pp. 38-56). Cambridge, Mass: MIT Press.

Kogut, B., & Kulatilaka, N. (1996) Direct Investment, Hysteresis, and Real Exchange Rate Volatility. *Journal of Japanese and International Economics* 10, 12-36.

Kogut, B., & Singh, H. (1988) The Effect of National Culture on the Choice of Entry Mode. *Journal of Interantional Business Studies* 19, 3, 411-432.

Kojima, K., & Ozawa, T. (1984) Micro- and Macro-Economic Models of Direct Investment: Towards a Synthesis, *Hitotsubashi Journal of Economics* 25, 1-20.

Kojima, K., & Ozawa, T. (1985) Towards a Theory of Industrial Restructuring and Dynamic Comparative Advantage. *Hitotsubashi Journal of Economics* 26, December, 135-145.

Korhonen, Heli (1999) *Inward-Outward Internationalization of Small and Medium Enterprises.* Helsinki School of Economics and Business Administration. Acta Universitas Oeconomicae Helsingiensis A-147. Doctoral thesis. Helsinki: Helsinki School of Economics and Business Administration.

Kravis, I. B., & Lipsey, R. E. (1982) The Location of Overseas Production and Production for Export by US Multinational Firms. *Journal of International Economics* 12, 201-223.

Krugman, P. (1979) Increasing Returns, Monopolistic Competition, and International Trade. *Journal of International Economics* 9, 469-479.

Krugman, P. (1991) *Geography and Trade.* Cambridge, MA: MIT Press.

Lahiri, S. (1998) Controversy: Regionalism versus Multilateralism. *The Economic Journal. The Journal of the Royal Economic Society.* 108, 449, 1126-1127.

Lancaster, K. (1980) Intra-Industry Trade under Perfect Monopolistic Competition. *Journal of International Economics* 10, 151-175.

Latvian Development Agency <URL:http://www.lda.gov.lv 16.12.2001>

Latvian ja Liettuan liiketoimintaympäristöt –suomalaisten yritysten näkökulma [Business Environment in Latvia and Lithuania – Finnish Companies Experiences](2002) Helsinki: Keskuskauppa-kamari.

Larimo, J. (1993) *Foreign Direct Investment Behaviour and Performance – An Analysis of Finnish Direct Manufacturing Investments in OECD Countries.* Doctoral Thesis, Vaasa: University of Vaasa.

Larimo, J., Nieminen, J., & Springer, R. (2001) *Competitive and Marketing Strategies of Foreign Companies in Eastern Europe: Empirical Evidence from Finnish and Austrian Companies* (Paper presented at the 6th Workshop in International Business at the University of Vaasa, August 2001).

Laurila, J. (1994) Direct Investment from Finland to Russia, Baltic and Central Eastern European Countries, Result of Survey by the Bank of Finland. Bank of Finland. *Review of Economies in Transition* 3/1994. Helsinki: Bank of Finland.

Laurila, J., & Hirvensalo, I. (1996) Suorat sijoitukset Suomesta Itä-Eurooppaan, Suomen Pankin vuonna 1995 tekemän kyselyn tulokset. Suomen Pankki. *Idäntalouksien katsauksia* 6/96. Helsinki: Suomen Pankki.

Lehtinen, U., & Vallius, R. (1993) *Yritysten kansainvälistymisstrategiat ja Euroopan integraatio.* Suomen metalliyrityksiä koskeva case-tutkimus. Helsinki: Metalliteollisuuuden kustannus Oy.

Leontief, W. (1953) Domestic Production and Foreign Trade: The American Capital Position Re-Examined. *Proceedings of the American Philosophical Society* 97.

Leontief, W. (1956) Factor Proportions and the Structure of American Trade; Further Theoretical and Empirical Analysis. *Review of Economics and Statistics* 38, 386-407.

Lindström, M. (1996) *Venäjän-kaupan henkilöstöresurssit suomalaisissa, ruotsalaisissa ja italialaisissa yrityksissä.* Turun kauppakorkeakoulu. Yritystoiminnan tutkimus- ja koulutuskeskus ja Itäkaupan tutkimus- ja koulutusyksikkö, sarja B1/1996. Turku: Turun kauppakorkeakoulu.

Lindström, M. (1997) *Itämeren talousalue Turun seudun yritysten markkina-alueena.* Turun kauppakorkeakoulu. Yritystoiminnan tutkimus- ja koulutuskeskus ja Itäkaupan tutkimus- ja koulutusyksikkö. Turku: Turun kauppakorkeakoulu.

Lindström, M. (2000) *Globalization and Economic Integration – What Challenges Economies in Transition?* University of Helsinki, Kikimora Publications, Working Paper C2. Helsinki. Available in <URL:http://www.helsinki.fi/aleksanteri/english/index_engl.htm 15.05.2000>

Linnemann, H. (1966) *An Econometric Study of International Trade Flows.* Amsterdam: North-Holland.

Lithuanian Development Agency (2000) <URL:http://www.lda.lt 16.12.2001>

Liuhto, K. (1999) *The Organisational and Managerial Transformation in Turbulent Business Environments –Managers' Views on the Transition of Their Enterprise in Some of the European Former Soviet Republics in the 1990's.* Turku School of Economics and Business Administration A-9. Doctoral thesis. Turku: Turku School of Economics and Business Administration.

Loree, D., & Guisinger, S. E. (1995) Policy and Non-Policy Determinants of US Equity Foreign Direct Investment. *Journal of International Business Studies* 26, 281-300.

Luostarinen, R. (1970) *Foreign Operations of the Firm.* Helsinki School of Economics. Helsinki: Helsinki School of Economics.

Luostarinen, R. (1979) *Internationalization of the Firm.* Helsinki School of Economics and Business Administration. Dissertation. Acta Academiae Oeconomicae Helsingiensis A:30. Helsinki: Helsinki School of Economics and Business Administration.

Luostarinen, R. (1994) *Internationalization of Finnish Firms and Their Response to Global Challenges.* UNU/WIDER The United Nations University World Institute for Development Economics Research. Helsinki: WIDER.

Lähtevätkö pääkonttorit Suomesta? ['Are headquarters leaving Finland?'] (2002) TT Teollisuus ja Työnanatajat [Confederation of Finnish Industry and Employers]. <URL:http://www.tt.fi/ 01.10.2002>

MacDougall, G.D.A. (1951) British and American Exports. A Study Suggested by the Theory of Comparative Costs. Part I. *Economic Journal* 61, 697-724.

Main Economic Indicators (2000) Paris: OECD.

Markusen, J. R. (1991) The Theory of Multinational Enterprise: A Common Analytical Framework. In E. D. Ramstatter (Ed.) *Direct Foreign Investment in Asia's Developing Economies and Structural Change in the Asia-Pacific Region* (pp. 11-32). Westview Press: Boulder, CO.

Markusen, J. R. (1995) The Boundaries Multinational Enterprises and the Theory of International Trade. *Journal of Economic Perspectives* 9, 2, 169-189.

Markusen, J. R., & Venebles, A. J. (1996) The Increased Importance of Multinationals in North Atlantic Economic Relationships: A Convergence Hypothesis. In M. B. Canzoneri, W. J. Ethier, & V. Grilli (Eds.) *The New Transatlantic Economy* (pp. 169-190). London: Cambridge University Press.

Martin, E. (1983) Surveys as Social Indicators – Problems in Monitoring Trends. In P. H. Rossi, J. D. Wright, & A. B. Anderson (Eds.) *Handbook of Survey Research* (pp. 677-743). New York: Academic Press.

Mason, E.S. (1939) Price and Production Policies of Large-Scale Enterprise. *American Economic Review* 29, 61-74.

Mason, E.S. (1949) The Current State of the Monopoly Problem in the United States. *Harvard Law Review* 62, 1265-1285.

Melin, L. (1992) Internationalisation as a Strategy Process. *Strategic Management Journal* 13, 99-118.

Meronen, J. (1997) *Gravitaatiomalli kansainvälisen kaupan tutkimuksessa – Baltia avautuu länteen.* Helsingin yliopisto. Kansantaloustieteen pro gradu –tutkielma. Helsinki: Helsingin yliopisto.

Meyer, K. (1998) *Direct Investment in Economies in Transition.* Glos: Edward Elgar Publishing Ltd.

Meyer, K. (2000) *Institutions, Transaction Costs, and Entry Mode Choice in Eastern Europe.* Center for East European Studies, Copenhagen Business School. Working Paper No. 34. Copenhagen: Copenhagen Business School.

Montgomery, C. A., & Hariharan S. (1991) Diversified Expansion by Large Established Firms. *Journal of Economic Behavior and Organization* 15, 71-89.

Mooij de, R. & Ederveen, S. (2001) Taxation and Foreign Direct Investment: A Synthesis of Empirical Research. CPB Discussion Paper 003/2001, Hague: Netherlands Bureau for Economic Policy Analysis.

Mundell, R. (1957) International Trade and Factor Mobility. *American Economic Review* 47, 321-335

Mäkinen, M. (1998) *Suomen viennin rakennemuutos ja klustereiden vientimenestys 1990-luvulla.* ETLA Elinkeinoelämän tutkimuslaitos, Keskusteluaiheita no. 643. Helsinki: ETLA.

Narula, R. (1995) *Multinational Investment and Economic Structure: Globalisation and Competitiveness.* London: Routledge.

National Accounts Statistics. Vol. 1, Aggregates (2000) National Accounts of OECD Countries. Vol. 1, Main aggregates OECD. Paris: OECD.

Nordström, K. A. (1991) *The Internationalisation Process of the Firm – Searching for New Patterns and Explanations.* Stockholm School of Economics. Institute of International Business. Dissertation. Stockholm: Stockholm School of Economics.

Okko, P., Arponen, J., & Ollila-Pettersson, O. (1997) *Varsinaissuomalaisten yritysten EMU-näkemykset syksyllä 1996.* Turun kauppakorkeakoulu, Yritystoiminnan tutkimus- ja koulutuskeskus, Eurooppa-Instituutin keskusteluaiheita 1/97. Turku: Turun kauppakorkeakoulu.

Okko, P., & Haukioja, T. (2002) Globalisation and Governance Structures of the Firm – Reconsidering the OLI Approach. In N. Nummela (Ed.) *Viewpoints on the Economic Dimension of Globalisation* (pp. 47-60). Turku School of Economics and Business Administration A-8. Turku: Turku School of Economics and Business Administration.

Ozawa, T. (1992) Foreign Direct Investment and Development, *Transnational Corporations* 1, 27-54.

Paas, T. (2002) *Regional Integration and EU Eastward Enlargement Processes: Modelling Bilateral Trade Flows of The Baltic Sea Region.* A paper presented in the 7th Nordic –Baltic Conference in Regional Science Association, October 2-5, 2002, Ystad, Sweden.

Paija, Laura (2001) The ICT Cluster in Finland –Can We Explain it? In L. Paija (Ed.) *Finnish ICT Cluster int he Digital Economy.* ETLA The Research Institute of the Finnish Economy B 176 (pp. 9-70). Helsinki: Taloustieto Oy.

Pajarinen, M., Rouvinen, P., & Ylä-Anttila, P. (1998) *Small Country Strategies in Global Competition: Benchmarking the Finnish Case.* ETLA the Research Insitute of the Finnish Economy, Series B 144. Sitra 203. Helsinki: ETLA.

Partanen, A. (1998) *Trade Potential Around the Baltic Rim: A Two-model Experiment.* ETLA The Research Institute of the Finnish Economy, Discussion Papers No. 645. Helsinki: ETLA.

Partanen, A., & Hirvensalo, I. (1999) *North and Westbound Foreign Trade Potential of the Baltic Rim.* ETLA The Research Institute of the Finnish Economy, Discussion Papers No. 678. Helsinki: ETLA.

Partanen, A., & Widgrén, M. (1999) *Puolan EU-jäsenyys ja Suomi.* ETLA Elinkeinoelämän Tutkimuslaitos, B 153. Helsinki: Taloustieto Oy.

Pautola, N. (2001) *The Baltic States Integration into the European Union – Institutional Approach*. Helsinki School of Economics and Business Administration. Acta Universitas Oeconomicae Helsingiensis A-196. Doctoral thesis. Helsinki: Helsinki School of Economics and Business Administration.

Pavitt, K. (1988) International Patterns of Technological Accumulation. In N. Hood, & J-E. Vahlne (Eds.) *Strategies in Global Competition* (pp. 126-157). Croom Helm: London.

Penrose, E. (1959) *The Theory of the Growth of the Firm*. 3rd Edition with New Preface, London: Oxford University Press. 1995.

Penttinen, R. (1994) *Summary of the Critique on Porter's Diamond Model: Porter's Diamond Model Modified to Suit the Finnish Paper and Board Machine Industry*. ETLA Research Institute of the Finnish Economy, Discussion Papers No. 462. Helsinki: ETLA.

Peteraf, M. A. (1993) The Cornerstones of Competitive Advantage: A Resource-Based View. *Strategic Management Journal* 14, 179-191.

Pitelis, C. N., & Sugden, R. (1991) On the Theory of Transnational Firm. In C. Pitelis and R. Sugden (Eds.) *The Nature of the Transnational Firm*. London: Routledge.

The Polish Agency for Foreign Investment (PAIZ)<URL:http://www.paiz.gov.pl/ 14.03.2001>

Porter, M. (1990) *The Competitive Advantage of Nations*. London: MacMillan.

Puhakka, M. (1994) *Euroopan integraatio ja yritysstrategiat*. ETLA Elinkeinoelämän tutkimuslaitos, B 92. Helsinki: Taloustieto Oy.

Puhakka, M. (1995) *Ulkomaisten yritysten suorat sijoitukset Suomeen: kyselytutkimuksen tuloksia*. ETLA Elinkeinoelämän tutkimuslaitos, Keskusteluaiheita no. 530. Helsinki: ETLA.

Puola ja Viro matkalla EU-jäsenyyteen – suomalaisten yritysten kokemuksia hakijamaiden markkinoilla [Poland and Estonia on the Road to the EU Membership: Finnish Companies' Experiences in Accession Countries' Markets]. Keskuskauppakamari [The Central Chamber of Commerce of Finland] 2001. <URL:http:// www.keskuskauppakamari.fi/ 08.09.2002>

Rautava, J. (1999) Suorat sijoitukset Suomesta Venäjälle ja Baltian maihin vuonna 1997. Suomen Pankki. Siirtymätalouksien tutkimuslaitos, *BOFIT Online Publications* No. 1. Helsinki. Available in <URL:http://www.bof.fi 03.04.2002>

Reid, S. R. (1981) The Decision-Maker and Export Entry and Expansion, *Journal of International Business Studies*, 12, 101-112.

Reid, G. C. (1987) *Theories of Industrial Organization*. Oxford: Basil Blackwell Ltd.

Reinikainen, V. (2001) *Kansainvälinen talous: teoria, puitejärjestelmät ja muutospaineet*. Helsinki: Taloustieto Oy.

Robson, P. (1983) *Integration, Development and Equity*. London: Allen and Unwin.

Rose, A. K. (2003) *Which International Institutions Promote International Trade?* CEPR Centre for Economic Policy Research, Discussion Papers No. 3764. London: CEPR.

Rugman, A. M. (1980) Internalisation as a General Theory of Foreign Direct Investment. *Weltwirtschaftlisches Archiv* 116, 365-379.

Rugman, A. M. (1981) Inside Multinationals: The Economics of Internal Markets. London: Croom Helm.

Rugman, A. M. (1982) *New Theories of Multinational Enterprise*. London: Croom Helm.

Rugman, A. M. (1985) Internalisation is Still a General Theory of Foreign Direct Investment. *Weltwirtschaftliches Archiv,* 570-575.

Rugman, A. M. (1986) New Theories of the Multinational Enterprise: An Assessment of Internalisation Theory. *Bulletin of Economic Research* 38, 101-118.

Rugman, A. M., & D'Cruz, J. R. (1993) The "Double Diamond" Model of International Competitiveness: The Canadian Experience. *Management International Review* 33, Special Issue 1993/2, 17-39.

Rugman, A., & Gestrin, M. (1993) The Strategic Response of Multinational Enterprises to NAFTA. *Columbia Journal of World Business*, Winter 1993, 33, 4, 18-29.

Rugman, A., & Verbeke, A. (1993) Foreign Subsidiaries and Multinational Strategic Management: An Extension and Correction of Porter's Single Diamond Framework. *Management International Review*, Special Issue 1993/2, 71-84.

Rugman, A., Verbeke, A., & D'Cruz, J. R. (1995) Internalisation and De-internalisation: Will Business Networks Replace Multinationals? In G. Boyd (Ed.) *Competitive and Cooperative Macromanagement: The Challenges of Structural Interdependence* (pp. 107-127). Hants: Edward Elgar Ltd.

Rugman, A., Van den Broeck, J., & Verbeke, A. (Eds.) (1995) *Beyond the Diamond: Research in Global Management*, vol 5. Greenwich, CT: JAI Press.

Sachwald, F. (1994) Competitiveness and Competition: Which Theory of the Firm? In F. Sachwald (Ed.) *European Integration and Competitiveness: Acquisitions and Alliances in Industry* (pp. 31-55). Hants: Edward Elgar.

Salmi, A. (1995) *Institutionally Changing Business Networks and Analysis of a Finnish Company's Operations in Exporting to the Soviet Union, Russia and the Baltic States.* Helsinki Universitas Oeconomicae Helsingiensis. Doctoral Thesis. Helsinki: Helsinki School of Economics and Business Administration.

Sorsa, P. (1997) *Regional Integration and Baltic Trade and Investment Performance.* IMF International Monetary Fund, Working Paper 167. Washington, DC: IMF.

Statistical Yearbook of Finland 2000 (2000). Statistics Finland. Keuruu: Otava

Statistics Finland (2000) Exports and Imports Statistics, National Board of Customs, Statistics and Information Service.

Steinbock, D. (1998) *The Competitive Advantage of Finland: From Cartels to Competition.* Helsinki: Taloustieto Oy.

Storper, M. (1992) *Pathways to Industrialization and Regional Development.* London: Routledge.

Sulamaa P., & Widgrén M. (2003) *EU Enlargement and Beyond: A Simulation Study on EU and CIS Integration.* CEPR Centre for Economic Policy Research, Discussion Papers Series No. 3768. London: CEPR.

Suomalaisyritysten ulkomaantoiminta ja sen kehitysnäkymät [Finnish Companies International Business Operations and Their Prospects] (2001) Teollisuus ja Työnantajat. Confederation of Finnish Industry and Employers TT. <URL http://www.tt.fi/ 08.09.2002>

Suomen lähialueet 5 (1999), Trendit: Venäjän 1990-luku 5/99, 74-79. Helsinki: Tilastokeskus.

Suomen Pankki <URL:http://www.bof.fi/13.03.2001>

Suomi taloudellisena toimintaympäristönä. Arvio Suomen kilpailukyvyn vahvuuksista ja heikkouksista.(1998) Helsinki: Valtiovarainministeriö.

Sveriges Riksbank <URL:http://www.riksbank.com/default.asp 13.03.2001>

Säynevirta, M. & Ylä-Anttila, P. (1996) *Integraatio ja yritysten kansainvälistyminen – vaikutuksia kotimaan talouteen.* ETLA Elinkeinoelämän tutkimuslaitos, Keskusteluaiheita no. 548, Helsinki: ETLA.

Tharakan, P.K.M (1983) *Determinants of Intra-Industry Trade between the Industrial Countries and the Developing World.* European Institute for Advanced Studies in Management, Working Paper 83. Brussels: European Institute for Advanced Studies in Management.

Tolvanen, J. (1993) *Suurten suomalaisten lihateollisuusyritysten kilpailustrategiat Euroopan liiton jäsenyyden toteutuessa.* Helsingin yliopisto, Pro gradu , EKT-sarja no 948. Helsinki: Helsingin yliopisto.

Transition Report 2000 (2000): Employment, Skills and Transition. Economic Transition in Central and Eastern Europe, the Baltic States and the CIS. EBRD European Bank for Reconstruction and Development. London: EBRD.

Transition Report Update: May 2000 (2000) Economic Transition in Central and Eastern Europe, the Baltic States and the CIS. EBRD European Bank for Reconstruction and Development:. London: EBRD.

Transition Report 2001 (2001) Energy in Transition. Economic Transition in Central and Eastern Europe, the Baltic States and the CIS. EBRD European Bank for Reconstruction and Development: London: EBRD.

2000 Regular Report: From the Commission on Estonia's Progress Towards Accession. 8 November 2000. URL:http://europa.eu.int/comm /enlargement/dwn/report_11_00/pdf/en/es_en.pdf 03.04.2001 tai enlargement/estonia/index.htm.

2000 Regular Report: From the Commission on Latvia's Progress Towards Accession. 8 November 2000. <URL:http://europa.eu.int/comm /enlargement/dwn/report_11_00/pdf/en/lv_en.pdf 03.04.2001>

2000 Regular Report: From the Commission on Lithuania's Progress Towards Accession. 8 November 2000. <URL:http://europa.eu.int/

comm/enlargement/dwn/report_11_00/pdf/en/lt_en.pdf 03.04.2001>

2000 Regular Report: From the Commission on Poland's Progress Towards Accession. 8 November 2000. <URL:http://europa.eu.int/comm /enlargement/dwn/report_11_00/pdf/en/pl_en.pdf 03.04.2001>

Törnroos J-Å., & Nieminen, J. (1999) (eds.) *Business Entry in Eastern Europe. A Network and Learning Approach with Case Studies.* Kikimora Publications, B4, Helsinki: Kikimora Publications.

UN (1996) *World Investment Report 1996: Investment, Trade and International Policy Arrangements.* New York: United Nations.

UN (2000) *World Investment Report 2000*: *Cross-border Mergers and Acquisitions and Development.* United Nations Conference on Trade and Development. New York: United Nations.

Vernon, R. (1966) International Investment and International Trade in the Product Cycle. *Quaterly Journal of Economics* 80, 190-207.

Veugelers, R. (1991) Locational Determinants and Ranking of Host Countries: An Empirical Assessment. *Kyklos* 44, 363-382.

Väyrynen, R. (1998) *Globalisaatio: Uhka vai mahdollisuus.* Sitra 183. Juva: Ateena Kustannus.

Väyrynen, R. (1999) (ed.) *Suomi avoimessa maailmassa – Globalisaatio ja sen vaikutukset.* Sitra 223. Helsinki: Taloustieto Oy.

Wang, Z. K., & Winters, A. L. (1991) *The Trading Potential of Eastern Europe.* CEPR Centre for Economic Policy Research, Discussion Papers Series No. 610. London: CEPR.

Weick, K. E. (1979) *The Social Psychology of Organizing.* Second Edition. Addison-Wesley: Reading, MA.

Welch, L. S., & Luostarinen, R. (1988) Internationalisation: Evolution of a Concept. *Journal of General Management*, 14 (2) 36-64.

Westin, P. (1998) Comparative Advantage and Characteristics of Russia's Trade with the European Union. Bank of Finland. *Review of Economies in Transition* 2/98. Helsinki: Bank of Finland.

Widgor, A., & Garner, W. (1982) *Ability Testing: Uses, Consequences, and Controversies.* Washington, D.C.: National Academy Press.

Widgrén, M. (1998) KIE-maiden ulkomaankauppa muistuttaa jo täysjäsenyyttä. *Eurooppa-raportti: Euroopan kilpailukyky 6/98*, 48-51. Helsinki: Tilastokeskus.

Widgrén, M. (2000) Comparative Advantage, Intra-Industry Trade and Location in the Northern Dimension. In K. E. O. Alho (Ed.) *Economics of the Northern Dimension* (pp. 59-78). ETLA the Research Insititute of the Finnish Economy, Series B 166. Helsinki: Taloustieto Oy.

Williamson, O. E. (1975) *Markets and Hiearchies: Analysis and Antitrust Implications.* New York: Free Press.

Williamson, O. E (1981) The Modern Corporation: Origins, Evolution, Attributes. *Journal of Economic Literature* 19, 1537-68.

Williamson, O. E. (1985) *The Economic Institutions of Capitalism.* Free Press: New York.

Williamson, O. E. (1993) *The Economic Analysis of Institutions and Organizations – In General and with Respect to Country Studies.* OECD Working Papers No 133. Paris: OECD.

World Economic Outlook: *A Survey by the Staff of the International Monetary Fund*, October 2000 (2000) Series: World Economic and Financial Surveys. International Monetary Fund: Washington: IMF.

The *World Fact Book* 2000 (2000) <URL:http://www.odci.gov/cia/publications/factbook/indexgeo.html> 15.04.2001.

Ylä-Anttila, P. (1998) Teknologia, globalisaatio ja kansallinen kilpailukyky [Technology, Globalization and Competitive Advantage] *Kansantaloudellinen aikakauskirja* 1/1998, 98-108.

Appendix 1.

Indices of Finnish Imports and Exports 1990-2000:

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
General Indices of Imports											
1980=100											
Unit value index (Laspeyres)	128	131	145	163	158	157	160	165	162	160	187
Volume index (Paasche)	138	115	112	109	131	141	152	167	182	185	196
General Indices of Exports											
1980=100											
Unit value index (Laspeyres)	154	154	164	172	175	186	186	189	192	184	213
Volume index (Paasche)	125	114	124	147	167	179	189	213	226	235	243

Source: National Board of Customs, Statistics and Information Service (2001)

Foreign Trade of High Technology Products, 1996-2000:

Exports as % of Finland's Total Exports

Export of high technology products 1996-2000	**1996**	**1997**	**1998**	**1999**	**2000**
Space and aviation	0.0	0.2	0.2	0.1	0.2
Computers and office machinery	2.4	2.7	2.4	2.0	0.9
Telecommunication equipment	9.1	10.7	13.9	15.4	19.5
Medicines	0.1	0.1	0.1	0.1	0.1
Scientific instuments	1.5	1.7	1.7	1.8	1.7
Electrical machines and equipment	0.1	0.2	0.3	0.5	0.4
Chemicals	0.1	0.1	0.1	0.1	0.1
Non-electrical machines and equipment	0.3	0.3	0.4	0.3	0.3
Weapons	0.1	0.1	0.1	0.2	0.1
Total	**13.7**	**16.1**	**19.2**	**20.5**	**23.3**

Source: National Board of Customs, Statistics and Information Service (2001)

Imports as % of Finland's Total Exports

Import of high technology products 1996-2000	1996	1997	1998	1999	2000
Space and aviation	0.9	0.4	0.7	0.9	1.0
Computers and office machinery	4.3	4.6	5.3	5.0	3.7
Telecommunication equipment	5.7	6.0	6.8	7.3	9.6
Medicines	0.5	0.4	0.4	0.5	0.3
Scientific instruments	1.5	1.5	1.5	1.6	1.5
Electrical machines and equipment	0.7	0.9	1.2	1.7	1.8
Chemicals	0.5	0.5	0.5	0.4	0.4
Non-electrical machines and equipment	0.7	0.4	0.5	0.5	0.4
Weapons	0.5	0.6	0.1	0.1	0.1
Total	**15.3**	**15.3**	**17.0**	**18.0**	**18.8**

Source: National Board of Customs, Statistics and Information Service (2001)

Sources of Economic, Statistical Information:

I Sources of Information in Gravity Model

Statistics Used in Gravity Model were gathered from several sources:

1) Actual exports: Actual export figures in USD were drawn from the IMF Direction of trade statistics yearbook 2000. Those figures were converted to euros by using an exchange rate of 1.0046 USD/Euro.

2) Current export potential: The GDP figures in USD were drawn from the OECD statistics: Main economic indicators 2000 and for the non-OECD members i.e. Baltic countries and Russia from their national statistical offices. Those figures were converted to euros by using an exchange rate of 1.0046 USD/Euro.

3) PPP corrected export potential: GDP figures of local currencies were drawn from national statistical offices of the countries in question. PPP conversion rates GDP-PPPs (per USD) were drawn from OECD statistics: Main economic indicators 2000 and for non OECD-members from OECD statistical service.

Also PPP corrected GDP figures in USD were converted to euros by using an exchange rate of 1.0046 USD/Euro.

4) Distance: Calculation unit kilometre.

Meronen estimated his model by using 1996 data from 14 different European countries and produced a total of 182 observations.

II Sources of Information in Intra-Industry Trade Calculations:

Eurostat Comext database acquired via Statistics Finland (5/2001).

- Year 1999
- Reporting country: Finland
- Partner countries: Denmark, Germany, Sweden, Estonia, Latvia, Lithuania, Poland and Russia
- Tariff Number: Combined Nomenclature (CN) 4-digit classes of classification
- Export and Import: currency FIM

Notices of Statistical information of Russia:

The analysis concerning the Russian economy is based on the official statistical information of the Russian Federation. The author is aware of the major shortcomings in the statistical information available. These include among others, unavailable or deficient information on foreign trade due to transit trade or practices aimed at avoiding customs duties. Distortions are also created by barter trade, which is not fully recorded in the statistics. Finally, transactions of the so-called black or unofficial economy are not accounted for in the statistics and estimates vary. However, the official statistics are the only sources available in a systematic and similar format. It can be assumed that the above-mentioned distortions affect them more or less equally. Therefore, they can be used as relatively reliable indicators for development of trends over time.

Appendix 2.

TURKU SCHOOL OF ECONOMICS
AND BUSINESS ADMINISTRATION
Department of Economics 2002

FINNISH COMPANIES' INTERNATIONAL OPERATIONS IN THE BALTIC SEA REGION AND LOCATIONAL SOURCES OF COMPETITIVENESS

GUIDELINES FOR RESPONDENTS

Companies:

This questionnaire enquires abour characteristics of enterprises in Finland and their business activities in the Baltic Sea region. The countries considered are: Sweden, Denmark, Germany, Poland, Estonia, Latvia, Lithuania and Russia (with respect only to the Moscow, St. Petersburg and Leningrad regions and the Karelian republic as well as the Kaliningrad region).

If your company does not have foreign business operations (trade or foreign direct investment) in the Baltic Sea region, or if you cannot answer the questionnaire for some other reason, we kindly ask you to return the empty questionnaire and tell the reason for returning it so that we will not disturb you further.

Company:_____

Unfilled questionnaire; reason for return:_____

Respondents:

This questionnaire is intended for company directors or management responsible for foreign operations. **Even if you feel it more appropriate for different sector managers to fill in the form, we kindly ask that company management would answer at least part three of the questionnaire.**

The questionnaire has three sections:
Part 1. Company Information
Part 2. Business Operations within and to the Baltic Sea Region
Part 3. Locational Sources of Competitiveness in the Baltic Sea Region markets

Guidelines to answer the questions are given together with each question. Most of the answers are given either by ticking the correct box or circling the correct alternative. In this way answering will be easy. It will take approximately 25 minutes to fill in the form.

Returning the questionnaire:

Please return the questionnaire by **8 March 2002 at the latest** in the envelope provided.

Handling the answers:

All information gathered via the questionnaire will be handled **in the strictest confidence. The answers of any one particular questionnaire will not be revealed when data is analysed or when research results are published, as the data will be analysed with statistical methods.**

Enquiries:

Researcher Ms. Maarit Lindström will answer any enquiries related to this questionnaire.
Contact information:
Tel. +358 9 191 24217; e-mail: maarit.lindstrom@tukkk.fi

Part 1. Company Information

Company/Group:_____

Respondent(s):_____

Position of respondent(s):_____

Number of employees:_____

Main line of business:_____

Main products of Company/Group:

Please tick:

- Consumer goods ☐
- Production goods ☐
- Services ☐
- Multisector company ☐

NB: If the respondent is the parent company of a Group, please respond with Group figures.

1. Please give your company's approximate division of employees, capital expenditure and turnover <u>by market area</u> (%). Give an estimated percentage for 2001.

	Finland	**Baltic Sea Region** (=Sweden, Denmark, Germany, Poland, Estonia, Latvia, Lithuania, Russia: Baltic rim areas)	**Other countries**	
<u>Employees:</u>	_____%	_____%	_____%	**Total 100%**
<u>Capital expenditure:</u>	_____%	_____%	_____%	**Total 100%**
<u>Turnover:</u>	_____%	_____%	_____%	**Total 100%**

2. How much does your company spend on research and development? Give an estimated percentage of turnover for 2001.

<u>Research and development</u> _____% of turnover

Part 2: Business Operations within and to the Baltic Sea Region

Please respond to the following questions in respect to your business operations (trade and foreign direct investment) in Sweden, Denmark, Germany, Poland, Estonia, Latvia, Lithuania and Russia's Baltic rim areas. Please write your response under the heading "other" when necessary.

3. When did your company establish business links with the Baltic Sea region? Please give year or decade.

Sweden	Denmark	Germany	Poland	Estonia	Latvia	Lithuania	Soviet Union/Russia
_____	_____	_____	____	_____	_____	_____	_____

4. What is the nature of your company's trade in the Baltic Sea region? Please tick.

- ☐ We trade in and with the Baltic Sea region regularly and the area is our company's main market area.
- ☐ We trade in and with the Baltic Sea region regularly, but the area is not our company's main market area.
- ☐ We trade in and with the Baltic Sea region irregularly.

5. Is your company's foreign business <u>more profitable on average (operating margin%) than its domestic business</u>? On a scale of 1-5 (1 = clearly less profitable, 2 = a little less profitable, 3 = equally profitable, 4 = a little more profitable, 5 = clearly more profitable) CNS = cannot say. Please circle the correct alternative.

a. Foreign business in general	1	2	3	4	5	CNS
b. In the Baltic Sea region transition markets (if operations there): Baltic countries, Poland, Russia	1	2	3	4	5	CNS
c. In the Baltic Sea region EU markets (if operations there): Sweden, Denmark, Germany	1	2	3	4	5	CNS

6. What kind of business links does your company have with/in the Baltic Sea region? Please tick:

	Sweden	Denmark	Germany	Poland	Estonia	Latvia	Lithuania	Russia
1. Exporting products	☐	☐	☐	☐	☐	☐	☐	☐
2. Exporting services	☐	☐	☐	☐	☐	☐	☐	☐
3. Importing products	☐	☐	☐	☐	☐	☐	☐	☐
4. Importing services	☐	☐	☐	☐	☐	☐	☐	☐
5. Selling licences	☐	☐	☐	☐	☐	☐	☐	☐
6. Buying licences	☐	☐	☐	☐	☐	☐	☐	☐
7. Franchising contract selling	☐	☐	☐	☐	☐	☐	☐	☐
8. Franchising contract buying	☐	☐	☐	☐	☐	☐	☐	☐
9. Subcontracting	☐	☐	☐	☐	☐	☐	☐	☐
10. Selling know-how contracts	☐	☐	☐	☐	☐	☐	☐	☐
11. Buying know-how contracts	☐	☐	☐	☐	☐	☐	☐	☐
12. Project export								
13. Project import	☐	☐	☐	☐	☐	☐	☐	☐
14. Minority share in joint-venture	☐	☐	☐	☐	☐	☐	☐	☐
15. Majority share in joint-venture	☐	☐	☐	☐	☐	☐	☐	☐
16. Wholly owned subsidiary or branch	☐	☐	☐	☐	☐	☐	☐	☐
17. Other, specify								

7. What kind of goods and services does your company supply to its Baltic Sea region customer, partner or subsidiary? Please tick:

	Sweden	Denmark	Germany	Poland	Estonia	Latvia	Lithuania	Russia
1. End Products	☐	☐	☐	☐	☐	☐	☐	☐
2. Intermediate goods	☐	☐	☐	☐	☐	☐	☐	☐
3. Raw materials	☐	☐	☐	☐	☐	☐	☐	☐
4. Technology transfer	☐	☐	☐	☐	☐	☐	☐	☐
5. Marketing know-how	☐	☐	☐	☐	☐	☐	☐	☐
6. Other, please specify								

8. What kind of goods and services does your company buy from its Baltic Sea region customer, partner or subsidiary? Please tick:

	Sweden	Denmark	Germany	Poland	Estonia	Latvia	Lithuania	Russia
1. End Products	☐	☐	☐	☐	☐	☐	☐	☐
2. Intermediate goods	☐	☐	☐	☐	☐	☐	☐	☐
3. Raw materials	☐	☐	☐	☐	☐	☐	☐	☐
4. Technology transfer	☐	☐	☐	☐	☐	☐	☐	☐
5. Information regarding local business environment (culture, legal matters)	☐	☐	☐	☐	☐	☐	☐	☐
6. Other, please specify								

9. What characterises the nature of your foreign direct investment (FDI) projects at the current time?
Please give the number of projects in each country. If you do not have investments in the country in question, please tick the appropriate box. If you do not have investments at all, please continue to question 12.

	Sweden	Denmark	Germany	Poland	Estonia	Latvia	Lithuania	Russia
1. No investment	☐	☐	☐	☐	☐	☐	☐	☐
2. Greenfield (Start-up venture, more than 95% foreign owned)								
3. Acquisition (purchase of all or part of an existing enterprise)								
4. Joint-venture (where new entity was set up with one or more local partners)								
5. Joint-venture acquisition								
6. Representative office								
7. Investment (other than any above)								

10. Which pattern does your company follow for its major international FDI in the Baltic Sea region?
Please tick:

A. Baltic Sea region EU markets (Sweden, Denmark, Germany)

a. Operations are integrated across borders:

- Horizontally (between different production processes) ☐
- Vertically (within different production processes) ☐

b. Subsidiaries operate with little relationship to other subsidiaries: ☐

B. Baltic Sea region transition markets (Baltic states, Poland and Russia)

a. Operations are integrated across borders:

- Horizontally (between different production processes) ☐
- Vertically (within different production processes) ☐

b. Subsidiaries operate with little relationship with other subsidiaries: ☐

11. Please name those foreign countries in the Baltic Sea region which are hosts to your firm's foreign direct investments and which have had most positive impact on upgrading your company's competitiveness. Please number 1=first, 2=second etc. CNS=Cannot say. Please tick if necessary.

a. Sweden____ e. Estonia____
b. Denmark____ f. Latvia____
c. Germany____ g. Lithuania____
d. Poland____ h. Russia___ CNS ☐

Part 3: Locational Sources of Competitiveness in the Baltic Sea Region Markets

EFFECT OF INTERNATIONAL OPERATIONS ON COMPANY'S COMPETITIVENESS:

12. What has been, in your opinion, the effect of foreign operations in the Baltic Sea region on your company's overall competitiveness in recent years (1995-2001)? On a scale of 1-5 (1 = very negative, 2 = somewhat negative, 3 = no effect, 4 = somewhat positive, 5 = very positive) CNS = Cannot say. Please circle the correct alternative.

Host Country: Sweden, Denmark, Germany	Host Country: Estonia, Latvia, Lithuania, Poland	Host Country: Russia
1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS

13. In your opinion, has the effect of foreign operations on your company's overall competitiveness decreased or increased in recent years (1995-2001)? On a scale of 1-5 (1= decreased severely, 2 = decreased to some extent, 3 = not changed, 4 = increased to some extent, 5 = increased severely) CNS = Cannot say. Please circle the correct alternative.

Host Country: Sweden, Denmark, Germany	Host Country: Estonia, Latvia, Lithuania, Poland	Host Country: Russia
1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS

14. What effect have foreign operations in the Baltic Sea region had on the following functions in your company (1995-2001)? On a scale of 1-5 (1 = very negative, 2 = somewhat negative, 3 = no effect, 4 = somewhat positive, 5 = very positive) CNS = Cannot say. Please circle the correct alternative.

	Host Country: Sweden, Denmark, Germany	Host Country: Estonia, Latvia, Lithuania, Poland	Host Country: Russia
a. Used capacity	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS
b. Production specialisation	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS
c. Product development	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS
d. Division of risks	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS
e. Tolerance of cyclical fluctuation	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS
f. Increasing know-how:			
-In marketing	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS
-In management	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS
-In technological or technical processes	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS
g. Availability of capital	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS
h. Availability of raw-material	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS
i. Availability of work-force	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS
j. General cost level of production	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS
k. Utilisation of economies of scale	1 2 3 4 5 CNS	1 2 3 4 5 CNS	1 2 3 4 5 CNS

COMPETITIVENESS AT THE MOMENT:

15. On what <u>factors is your company's competitiveness</u> in the Baltic Sea region foreign markets (not Finland) mainly based at the current time? Please mention the three most important alternatives 1= first, 2=second etc. CNS = Cannot say.

a. Effective sales and marketing____
b. Low cost structure____
c. Financing____
d. Effectiveness in production, organisation and processes____
e. Products and product development____
f. Management____
g. Purchase function and materials control____
h. Good logistics____
i. Other: _____

CNS □

COMPETITIVE ADVANTAGES: HOME COUNTRY VS. HOST COUNTRIES:

16. <u>How important do you consider such competitive advantages of your company which stem from the home country (Finland) and/or foreign locations in the Baltic Sea region to be?</u> On a scale of 1-5 (1 = not at all important, 2 = a bit important, 3 = somewhat important, 4 = rather important, 5 = very important) CNS = Cannot say. ***<u>Please give a correct value for each cell.</u>*** Please answer those items that are relevant for your company.

	A **Finland**	**B** **EU countries: Sweden, Denmark, Germany**	**C** **EU applicant countries: Baltic countries and Poland**	**D** **Russia**	**E** **Other foreign countries (not the Baltic Sea rim)**
Access to resources and assets a. Natural resources					
b. Unskilled labour					
c. Skilled and professional labour					
d. Innovation capacity					
e. Organisational capacity					
f . Managerial expertise					
g. Networking and PR					
Consumer demand h. Upgrading of product quality					
i. Innovation related to product/service					
Competition j. Inter-firm competition/rivalry					
Links with foreign or domestic firms and institutions k. Companies in sector					
l. Related companies					
m. Universities and other research institutions					
n. Ministries and other institutions promoting trade and FDI					

17. In your opinion, what is the importance to your company of each of the <u>following modes of involvement</u> in acquiring and/or tapping into the resources and capabilities of foreign countries?
On a scale of 1-5 (1 = not at all important, 2 = a bit important, 3 = somewhat important, 4 = rather important, 5 = very important) CNS = cannot say. Please circle the correct alternative.

1. foreign direct investment	1	2	3	4	5	CNS
2. non-equity arrangements (strategic alliance, franchising contracts etc.)	1	2	3	4	5	CNS
3. export/import	1	2	3	4	5	CNS

COMPETITIVE ENVIRONMENT:

18. Have there been any profound changes in any aspects of <u>the competitive environment</u> in Finland, elsewhere in the Baltic Sea region or in other international markets that have had an effect on your company's competitive position in recent years? Please specify:

_____

_____

_____

_____

19. How would you estimate the influence of Finnish <u>government policy</u> on your company's international competitiveness in recent years (1995-2001)? On a scale of 1-5 (1 = very negative, 2 = somewhat negative, 3 = no effect, 4 = somewhat positive, 5 = very positive). CNS = cannot say. Please circle the correct alternative.

a. Provision and upgrading of infrastructure	1	2	3	4	5	CNS
b. Social policy	1	2	3	4	5	CNS
c. Trade policy	1	2	3	4	5	CNS
d. Industrial and technology policy	1	2	3	4	5	CNS
e. Education and training policy	1	2	3	4	5	CNS
f. Environmental policy	1	2	3	4	5	CNS
g. Development of business environment	1	2	3	4	5	CNS
h. Promoting an ethos of competitiveness	1	2	3	4	5	CNS
i. Promoting a culture of investment and saving	1	2	3	4	5	CNS
j. Corporate taxation	1	2	3	4	5	CNS
k. Income taxation	1	2	3	4	5	CNS

20. Among other things, for example, the EU's Eastern enlargement will most likely have an effect on the role of different countries' markets in the Baltic Sea region. Please evaluate how, in your own company's business, <u>the role of different countries will change by the year 2010</u>? On a scale of 1-5 (1 = decrease strongly, 2 = decrease somewhat, 3 = stay as it is, 4 = increase somewhat 5 = increase strongly) CNS = Cannot say. Please circle the correct alternative.

a. **Finland**	**1**	**2**	**3**	**4**	**5**	**CNS**	e. **Poland**	**1**	**2**	**3**	**4**	**5**	**CNS**
b. **Sweden**	**1**	**2**	**3**	**4**	**5**	**CNS**	f. **Estonia**	**1**	**2**	**3**	**4**	**5**	**CNS**
c. **Denmark**	**1**	**2**	**3**	**4**	**5**	**CNS**	g. **Latvia**	**1**	**2**	**3**	**4**	**5**	**CNS**
d. **Germany**	**1**	**2**	**3**	**4**	**5**	**CNS**	h. **Lithuania**	**1**	**2**	**3**	**4**	**5**	**CNS**
							i. **Russia**	**1**	**2**	**3**	**4**	**5**	**CNS**

Would you be willing to participate in an interview related to this research?

Yes □ No □

We appreciate your cooperation very much!

Appendix 3.

Test Results and Key Characteristics of the Case Companies

Non-parametric tests:

1. Kruskal-Wallis test: A non-parametric equivalent to the one-way ANOVA process. It tests whether several independent samples are from the same population. It assumes that the underlying variable has a continuous distribution, and requires an ordinal level of measurement.
2. Wilcoxon Signed Rank test: A non-parametric procedure used with two related variables to test the hypothesis that the two variables have the same distribution. It makes no assumption about the shapes of the distributions of the two variables. This test takes into account information about the magnitude of differences within pairs and gives more weight to pairs that show large differences than to pairs that show small differences. The test statistic is based on the ranks of the absolute values of the differences between the two variables.
3. Friedman test: Tests the null hypothesis that k related variables come from the same population. For each case, the k variables are ranked from 1 to k. The test statistic is based on these ranks.
4. Kendall's W test: A non-parametric test of the hypothesis that several related samples are from the same population, which measures the agreement of raters. Each case is a judge or rater and each variable is an item or person being judged. For each variable the sum ranks is computed. Kendall's W ranges between 0 (no agreement) and 1 (complete agreement)

1. Friedman test: Question 16:

Target: Finland, EU, EUA, RUSSIA other than BSR

Natural resources:

N	40	N	39
Chi-Square	15.835	Chi-Square	147.485
df	4	df	5
Asymp. Sig.	0.003	Asymp. Sig.	0.000

Skilled labour:

Innovatory capacity:

N	41	N	38
Chi-Square	52.879	Chi-Square	68.693
df	4	df	4
Asymp. Sig.	0.000	Asymp. Sig.	0.000

Organisational capacity:

Managerial expertise:

N	38	N	40
Chi-Square	60.141	Chi-Square	62.933
df	4	df	4
Asymp. Sig.	0.000	Asymp. Sig.	0.000

Networking and Pr:

Product quality:

N	37	N	41
Chi-Square	18.184	Chi-Square	74.343
df	4	df	4
Asymp. Sig.	0.001	Asymp. Sig.	0.000

Product innovation:

Competition:

N	40	N	37
Chi-Square	57.082	Chi-Square	43.708
df	4	df	4
Asymp. Sig.	0.000	Asymp. Sig.	0.000

Sectoral companies

Related companies

N	39	N	39
Chi-Square	42.533	Chi-Square	43.806
df	4	df	4
Asymp. Sig.	0.000	Asymp. Sig.	0.000

Universities:

Ministries

N	39	N	40
Chi-Square	58.896	Chi-Square	26.707
df	4	df	4
Asymp. Sig.	0.000	Asymp. Sig.	0.000

2. Wilcoxon Signed Rank test: Question 16:

I

Natural resources FIN - Natural resources EU:

Z	-2.053
Asymp. Sig. (2-tailed)	0.040

Unskilled labour FIN - Unskilled labour EUA:

Z	-1.520
Asymp. Sig. (2-tailed)	0.129

Skilled labour FIN - Skilled labour EU:

Z	-3.964
Asymp. Sig. (2-tailed)	0.000

Innovatory capacity FIN - Innovatory capacity EU:

Z	-3.796
Asymp. Sig. (2-tailed)	0.000

Organisational capacity FIN - Organisational capacity EU :

Z	-4.153
Asymp. Sig. (2-tailed)	0.000

Managerial expertise FIN - Managerial expertise EU :

Z	-3.031
Asymp. Sig. (2-tailed)	0.002

Networking and pr FIN - Networking and pr EU :

Z	-1.262
Asymp. Sig. (2-tailed)	0.207

Product quality FIN - Product quality EU:

Z	-1.736
Asymp. Sig. (2-tailed)	0.083

Product innovation FIN – product innovation EU:

Z	-3.823
Asymp. Sig. (2-tailed)	0.000

Competition FIN - Competition EU:

Z	-1.231
Asymp. Sig. (2-tailed)	0.218

Sectoral companies FIN - Sectoral companies EU :

Z	-0.367
Asymp. Sig. (2-tailed)	0.714

Related companies FIN - Related companies EU:

Z	-3.165
Asymp. Sig. (2-tailed)	0.002

Universities FIN - Universities EU:

Z	-4.116
Asymp. Sig. (2-tailed)	0.000

Ministries FIN - Ministries EU:

Z	-2.160
Asymp. Sig. (2-tailed)	0.031

II

Natural resources EU - Natural resources RUS:

Z	-0.060
Asymp. Sig. (2-tailed)	0.952

Unskilled labour EUA - Unskilled labour EU:

Z	-0.601
Asymp. Sig. (2-tailed)	0.548

Skilled labour EU - Skilled labour EUA:

Z	-1.532
Asymp. Sig. (2-tailed)	0.126

Innovatory capacity EU - Innovatory capacity EUA:

Z	-3.303
Asymp. Sig. (2-tailed)	0.001

Organisational capacity EU - Organisational capacity EUA :

Z	-1.586
Asymp. Sig. (2-tailed)	0.113

Managerial expertise EU - Managerial expertise EUA:

Z	-2.501
Asymp. Sig. (2-tailed)	0.012

Networking and pr EU - Networking and pr RUS :

Z	-1.350
Asymp. Sig. (2-tailed)	0.177

Product quality EU - Product quality EUA:

Z	-4.251
Asymp. Sig. (2-tailed)	0.000

Product innovation EU – product innovation EUA:

Z	-2.937
Asymp. Sig. (2-tailed)	0.003

Competition EU - Competition EUA :

Z	-3.364
Asymp. Sig. (2-tailed)	0.001

Sectoral companies EU - Sectoral companies EUA :

Z	-3.726
Asymp. Sig. (2-tailed)	0.000

Related companies EU - Related companies EUA:

Z	-2.738
Asymp. Sig. (2-tailed)	0.006

Universities EU - Universities EUA:

Z	-2.965
Asymp. Sig. (2-tailed)	0.003

Ministries EU- Ministries RUS:

Z	-0.585
Asymp. Sig. (2-tailed)	0.559

Natural resources RUS - Natural resources EUA:

Z	-1.633
Asymp. Sig. (2-tailed)	0.102

Unskilled labour EU - Unskilled labour RUS:

Z	-3.51
Asymp. Sig. (2-tailed)	0.725

Skilled labour EUA - Skilled labour RUS:

Z	-2.641
Asymp. Sig. (2-tailed)	0.008

Innovatory capacity EUA - Innovatory capacity RUS:

Z	-1.539
Asymp. Sig. (2-tailed)	0.124

Organisational capacity EUA - Organisational capacity RUS:

Z	-2.414
Asymp. Sig. (2-tailed)	0.016

Managerial expertise EUA - Managerial expertise RUS:

Z	-2.013
Asymp. Sig. (2-tailed)	0.044

Networking and pr RUS - Networking and pr EUA:

Z	-1.180
Asymp. Sig. (2-tailed)	0.238

Product quality EUA - Product quality RUS:

Z	-1.670
Asymp. Sig. (2-tailed)	0.095

Product innovation EUA – product innovation RUS:

Z	-1.363
Asymp. Sig. (2-tailed)	0.173

Competition EUA - Competition RUS:

Z	-1.889
Asymp. Sig. (2-tailed)	0.059

Sectoral companies EUA - Sectoral companies RUS:

Z	-1.871
Asymp. Sig. (2-tailed)	0.061

Related companies EUA - Related companies RUS:

Z	-0.231
Asymp. Sig. (2-tailed)	0.218

Universities EUA - Universities RUS:

Z	-0.565
Asymp. Sig. (2-tailed)	0.572

Ministries RUS - Ministries EUA:

Z	-1.789
Asymp. Sig. (2-tailed)	0.074

3. Kruskal-Wallis test: Question 16:

3a. Grouping variable: Technology intensity:

	FIN			EU			EUA			RUSS			Other countries		
	Chi-S.	df	A. Sig.	Chi-S.	df	A. Sig.	Chi-S.	df	A.Sig	Chi-S.	df	A.Sig.	Chi-S.	df	A. Sig.
Access to natural resources and assets															
Natural resources	15.494	9	0.078	11.170	8	0.192	8.897	8	0.351	15.965	8	**0.043**	27.781	8	**0.001**
Unskilled labour	24.002	9	**0.004**	13.263	7	0.066	12.539	7	0.084	19.705	7	**0.006**	15.595	7	**0.029**
Skilled and professional la	20.596	10	**0.024**	24.318	8	**0.002**	13.826	7	0.054	14.649	7	**0.041**	19.696	8	**0.012**
Innovatory capacity	23.002	9	**0.006**	20.138	7	**0.005**	10.604	7	0.157	11.985	7	0.101	16.405	8	**0.037**
Organisational capacity	23.319	10	**0.010**	22.952	9	**0.006**	12.101	7	0.097	10.250	8	0.248	14.359	8	0.073
Managerial expertise	22.559	10	**0.012**	23.421	9	**0.005**	14.611	8	0.067	13.525	8	0.095	13.950	8	0.083
Relational skills	13.620	10	0.191	14.689	9	0.100	16.675	7	**0.020**	10.847	6	0.093	23.003	8	**0.003**
Consumer demand															
Upgading of product qual	18.605	10	**0.046**	18.196	9	**0.033**	26.736	8	**0.001**	14.506	8	0.069	12.324	8	0.137
Making for more produc	19.727	10	**0.032**	17.991	9	**0.035**	17.438	8	**0.026**	15.390	8	0.052	9.573	9	0.386
Inter-firm competition	23.110	10	**0.010**	17.941	8	**0.022**	19.133	8	**0.014**	19.054	8	**0.015**	27.130	8	**0.001**
Links with foreign or domestic firms and institutions															
Sectoral companies	17.060	10	0.073	7.110	8	0.525	9.208	8	0.325	8.395	8	0.396	6.897	8	0.548
Related companies	14.151	10	0.166	5.611	8	**0.048**	20.351	8	**0.009**	17.834	8	**0.023**	12.405	8	0.134
Universities and other res	26.129	10	**0.004**	22.090	8	**0.005**	28.090	7	**0.000**	20.185	7	**0.005**	19.623	8	**0.012**
Ministries and other inst	23.563	10	**0.009**	14.181	8	0.077	12.992	8	0.112	13.806	8	0.087	11.062	8	0.198

3b. Grouping variable: Transnationality index:

	FIN			EU			EUA			RUSS			Other countries		
	Chi-S.	df	A. Sig.	Chi-S.	df	A. Sig.	Chi-S.	df	A. Sig.	Chi-S.	df	A. Sig.	Chi-S.	df	A. Sig.
Access to natural resources and assets															
Natural resources	39.883	33	0.191	31.480	27	0.252	45.359	31	**0.046**	39.381	27	0.058	32.637	23	0.088
Unskilled labour	44.637	31	0.054	37.406	27	0.088	42.188	29	0.054	39.518	26	**0.043**	39.641	23	**0.017**
Skilled and professional labour	56.851	34	**0.008**	51.326	28	**0.005**	40.319	34	0.211	41.758	30	0.075	33.619	24	0.092
Innovatory capacity	45.204	30	**0.037**	43.828	25	0.011	37.461	27	0.087	36.542	25	0.064	34.088	23	0.064
Organisational capacity	53.407	35	**0.024**	55.306	28	**0.002**	43.533	31	0.067	44.488	29	**0.033**	26.919	23	0.259
Managerial expertise	51.778	37	0.054	46.935	29	**0.019**	41.608	32	0.119	43.004	29	**0.045**	31.579	23	0.109
Relational skills	59.400	33	**0.003**	43.513	28	**0.031**	43.382	31	0.069	41.153	26	**0.030**	38.565	22	**0.016**
Consumer demand															
Upgading of product quality	39.329	33	0.207	38.836	27	0.066	42.427	33	0.126	40.785	27	**0.043**	31.484	23	0.111
Making for more product innovatio	53.902	32	**0.009**	32.890	27	0.201	43.538	31	0.067	42.154	28	**0.042**	34.384	23	0.060
Inter-firm competition/rivalry	51.762	31	**0.011**	41.723	25	**0.019**	39.163	29	0.099	40.217	28	0.063	36.470	23	**0.037**
Links with foreign or domestic firms and institutions															
Sectoral companies	42.318	34	0.155	40.627	27	0.054	41.923	31	0.091	43.023	28	**0.035**	40.559	23	**0.013**
Related companies	43.508	32	0.084	43.399	26	**0.022**	41.324	30	0.082	33.794	27	0.172	40.000	23	**0.015**
Universities and other research inst	52.079	32	**0.014**	43.361	27	**0.024**	46.999	29	**0.019**	46.031	27	**0.013**	40.204	24	**0.020**
Ministries and other institutions pro	49.751	31	**0.018**	30.717	27	0.283	48.903	30	**0.016**	41.665	28	**0.047**	41.734	25	**0.019**

4. Factor analysis: Question 16: Results are based on rotated component matrices. Method: Principal component; Rotation method: Varimax with Kaiser Normalisation*

Access to resources and assets	
Factor 1: Organisational and innovatory skills in the Eastern BSR	
Organisational capacity: Russia	0.916
Skilled labour: EU applicant countries	0.908
Managerial expertise: Russia	0.888
Organisational capacity: EU applicant countries	0.878
Skilled labour: Russia	0.872
Managerial expertise: EU applicant countries	0.866
Innovatory capacity: Russia	0.812
Innovatory capacity: EU applicant countries	0.809
Skilled labour: other countries	0.757
Organisational capacity: other countries	0.681
Managerial expertise: other countries	0.665
Factor 2: Unskilled labour	
Unskilled labour: Russia	0.900
Unskilled labour: EU applicant countries	0.886
Unskilled labour: Finland	0.793
Unskilled labour: EU countries	0.780
Unskilled labour: other countries	0.747
Factor 3: Relational skills	
Relational skills: Finland	0.848
Relational skills: EU countries	0.807
Relational skills: Russia	0.743
Relational skills: EU applicant countries	0.741
Relational skills: other countries	0.686

* In inter-firm competition, the rotation method was not used, because there was only one component to be extracted. This means that the solution cannot be rotated.

4. continues: Access to resources and assets

Factor 4: Managerial and organisational expertise in the Western BSR	
Managerial expertise: EU countries	0.865
Organisational capacity: EU countries	0.842
Skilled labour: EU countries	0.779
Factor 5: Innovatory capacity in Finland and the Western BSR	
Innovatory capacity: Finland	0.944
Innovatory capacity: EU countries	0.897
Innovatory capacity: other countries	0.648
Factor 6: Natural resources	
Natural resources: EU applicant countries	0.906
Natural resources: EU countries	0.832
Natural resources: Russia	0.767
Natural resources: Finland	0.689
Natural resources: other countries	0.669
Factor 7: Managerial and organisational expertise Finland	
Managerial expertise: Finland	0.756
Organisational capacity: Finland	0.713
Factor 8: Skilled labour Finland	
Skilled labour: Finland	0.645
Total variance explained: 92.595	

Consumer demand:	
Factor 1: Consumer demand in the Eastern BSR	
Upgrading of product quality: EU applicant countries	0.889
Making for more product innovation: EU applicant countries	0.851
Making for more product innovation: Russia	0.767
Upgrading of product quality: Russia	0.744
Factor 2: Consumer demand in the Western BSR and elsewhere	
Upgrading of product quality: other countries	0.884
Making for more product innovation: other countries	0.841
Upgrading of product quality: EU countries	0.679
Making for more product innovation: EU countries	0.608
Factor 3: Product innovation in Finland	
Making for more product innovation: Finland	0.903
Factor 4: Product quality in Finland	
Upgrading of product quality: Finland	0.958
Total variance explained: 89.084	

Inter-firm competition rivalry:	
Factor 1: Inter-firm competition	
Inter-firm competition Finland	0.870
Inter-firm competition Russia	0.865
Inter-firm competition other countries	0.838
Inter-firm competition EU applicant countries	0.805
Inter-firm competition EU countries	0.773
Total variance explained: 69.043	

Links with domestic or foreign firms and institutions:	
Factor 1: Research and related companies in Finland and the Western BSR	
Universities and other research institutions Finland	0.946
Universities and other research institutions EU countries	0.855
Related companies Finland	0.712
Related companies EU countries	0.698
Ministries and other institutions promoting trade and FDI	0.565
Factor 2: Supporting contacts in foreign markets generally	
Sectoral companies other countries	0.839
Related companies other countries	0.808
Ministries and other institutions promoting trade and FDI other countries	0.666
Ministries and other institutions promoting trade and FDI EU applicant countries	0.651
Sectoral companies Russia	0.621
Ministries and other institutions promoting trade and FDI Russia	0.539
Factor 3 Research in the Eastern BSR	
Universities and other research institutions Russia	0.889
Universities and other research institutions EU applicant countries	0.880
Universities and other research institutions other countries	0.692
Factor 4: Companies in the Eastern BSR	
Related companies EU applicant countries	0.863
Sectoral companies EU applicant countries	0.830
Related companies Russia	0.810
Factor 5: Supporting contacts in the Western BSR	
Sectoral companies Finland	0.828
Sectoral companies EU countries	0.808
Ministries and other institutions promoting trade and FDI EU countries	0.789
Total variance explained: 88.949	

5. Friedman test and Kendall's W test: Question 17

Friedman:

N	77
Chi-Square	7.114
df	2
Asymp. Sig.	0.029

Kendall's W:

N	77
Kendall's W (Kendall's coefficient of concordance)	0.046
Chi-Square	7.114
df	2
Asymp. Sig.	0.029

6. Friedman test and Kendall's W test: Question 12

Friedman:

N	42
Chi-Square	5.820
df	2
Asymp. Sig.	0.054

Kendall's W:

N	42
Kendall's W (Kendall's coefficient of concordance)	0.069
Chi-Square	5.820
df	2
Asymp. Sig.	0.054

7. Friedman test and Kendall's W test: Question 13

Friedman:

N	40
Chi-Square	0.409
df	2
Asymp. Sig.	0.815

Kendall's W:

N	40
Kendall's W (Kendall's coefficient of concordance)	0.005
Chi-Square	0.409
df	2
Asymp. Sig.	0.815

8. Friedman test and Kendall's W test: Question 19

Friedman:

N	73
Chi-Square	218.208
df	10
Asymp. Sig.	0.000

Kendall's W:

N	73
Kendall's W (Kendall's coefficient of concordance)	0.299
Chi-Square	218.208
df	10
Asymp. Sig.	0.000

9. Factor analysis: Question 20

Factor 1: The role of the Baltic countries	
Estonia	0.914
Latvia	0.907
Lithuania	0.884
Factor 2: The role of the EU countries	
Denmark	0.798
Sweden	0.685
Finland	0.657
Germany	0.619
Factor 3: The role of Russia and Poland	
Russia	0.829
Poland	0.653
Total variance explained: 67.855	

Some Key Characteristics of the Case Companies:

Company 1:	
Field of business:	Utility production and services
Main products or services:	The construction, operation, and maintenance of mechanical and electrical installations, including: electrical installations; plumbing and heating; air-conditioning and ventilation; security; audio-visual; surveillance and control systems; fire detection and extinguishing systems
Transnationality index:	4.3
Baltic Sea Region index:	4.3
Foreign target countries in the BSR:	Russia and other CIS-countries, Baltic countries
Main modes of foreign operations:	Project and turnkey deliveries: Offers complete service from initial design to post-installation maintenance in the construction of mechanical and electrical installations, process electrification, air-conditioning and electrification projects
FDI:	Greenfield investments: Estonia and Russia
Respondent's title:	Leader, International Operations

Company 2:	
Field of business:	Producer of limestone-based products
Main products or services:	The products are mainly used in the steel, building material, pulp and paper industries as well as environmental care and agriculture
Transnationality index:	20.0
Baltic Sea Region index:	20.0
Foreign target countries in the BSR:	Sweden, Estonia, Poland, Russia, Lithuania, Germany
Main modes of foreign operations:	Trade, FDI and some alliances
FDI:	Wholly-owned subsidiaries: Sweden, Germany, Poland, Estonia, Russia
Respondent's title:	Marketing Director

Company 3:	
Field of business:	Office furniture manufacturing
Main products or services:	Office furniture solutions and related services
Transnationality index:	34.6
Baltic Sea Region index:	30.6
Foreign target countries in the BSR:	All the Baltic Sea Region countries
Main modes of foreign operations:	Trade and FDI, licensing
FDI:	Wholly-owned subsidiaries in Sweden, Germany and Poland
Respondent's title:	Export Manager

Company 4:	
Field of business:	Engineering, construction and energy equipment
Main products or services:	Engineering services and products primarily for the oil, gas, petrochemical, chemical, pharmaceutical and power generation industries as well as environmental services. The group produces power plants, steam boilers, power generation and process boilers and auxiliary equipment for the utility and industrial markets.
Transnationality index:	40.0
Baltic Sea Region index:	36.0
Foreign target countries in the BSR:	All the Baltic Sea Region countries
Main modes of foreign operations:	Trade and FDI
FDI:	Wholly-owned subsidiaries in Sweden, Germany and Poland
Respondent's title:	Chief Financial Officer (CFO)

Company 5:	
Field of business:	Diagnostic systems: Drug discovery, research and clinical screening
Main products or services:	Provider of drug discovery, research, and genetic disease screening solutions for customers in a variety of businesses, including the academic, biotechnology, clinical, and pharmaceutical industries.
Transnationality index:	56.3
Baltic Sea Region index:	13.7
Foreign target countries in the BSR:	All the Baltic Sea Region countries
Main modes of foreign operations:	Trade and FDI, many strategic alliances
FDI:	Wholly-owned daughter companies in Sweden, Denmark, Germany
Respondent's title:	Regional Sales Director

Appendix 4.

Guiding Questionnaire for the Case Company Interviews Carried Out during April and May 2002

1. What role or meaning do the Baltic Sea Region's markets have on your company? (Background information: questionnaire question 1. Sales? Investments? Etc.)

2. Is the Baltic Sea Region trade of your company profiled, in some way, to be separately East oriented business, or West oriented business, or is it the same kind all over the region?

3. Does your company have plans to widen or integrate its business in the Baltic Sea Region? Why?

4. Competitive advantages of the company: Home country, host countries? Analyse your answers in the questionnaire question 16. Please give further details, what are these answers based on?

5. How do you see the role of the neighbourhood Baltic Sea Region in the future? Why? What is it based on?

6a. What do you see as a major challenge or challenges for your company in operating in the Baltic Sea Region?

6b. Does it/Do they differ from challenges in foreign operations in general?

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