

Trade and foreign direct investments as measures of spatial integration in the Baltic Sea rim region

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1. Introduction

Before 1989 the iron curtain was the divide between the communist dominated command economies and the western pluralistic democracies with the market as the dominating economic system. Nevertheless, the latter was not a homogeneous block. Some countries belonged to the European Community; others stood at the sideline of the mainstream of European integration, linked to the EU through trade agreements between the EU and the European Free Trade Agreement, EFTA. Politically, Sweden and Finland were non-aligned while Denmark, Norway and West Germany were members of NATO.

The main purpose of the current paper is to provide a closer look at the processes of economic transition and integration in the Baltic Sea Region since the early 1990s. Focal points are regional and sub-regional integrative processes with regard to trade and foreign direct investment. The crucial issue is to analyse three complementary aspects of integration of the BSR. The first is a critical assessment of the BSR as a region within the European economic system, as it has been sketched in various publications from the European Commission (i.e. European Commission 1994 & 2001). Secondly the paper tries to evaluate whether the BSR constitutes a coherent functional economic region based on the analysis of economic flows within the region and to the outside. Finally, an attempt is made to identify sub-regional economic units within the BSR.

In post-Soviet time, Nordic trade with the Baltic countries has increased substantially. The three small countries of Estonia, Latvia, and Lithuania have been ahead of Russia and other republics in their movement toward western style government and business (Mygind, 1995). In the post-Soviet era, we can expect some possible conditions of Scandinavian firm entry and location selection criteria (see Johansen, Snickars & Steinbuka, 1998). Foreign direct investment may lead to trade between the countries in the region. Trade can also start the process and subsequently lead to further integration through firm acquisition or plant establishment.

A company may buy an existing plant in the Baltic countries either as a joint venture or independently. This company is essentially buying a location along with the plant. Locations will be outside the capital city in many cases, in relatively unknown cities. The location might have influenced the decision to bid or the amount or conditions of the bid, depending on the bidder's evaluation of the relative importance of the plant location in their plan for operation and production. The plant will typically need modernization, including equipment and communications systems, and alterations in production scale and labour force allocation (see Henning & Ramström, 1997). Any

disadvantages in location may be viewed as relatively minor in contrast to the other problems facing the new plant owner.

A company may enter the area with a new plant either with or without a joint venture partner. This situation involves the selection of a location and should follow normal patterns of site selection within the limitations of data and knowledge of the area. Here the bias is expected to be toward the capital city in each country because of the advantages of communications and transportation, and a general awareness of presence of other western firms here. Capital city locations have been common in other developing nations leading to core/periphery contrasts over time. The plant location will be made without influence of land costs, because land cannot be purchased, only leased in the Baltic countries and in Russia. Lease fees may vary however and this should be considered.

Companies of the first type are probably most common during the first period time of time after the lifting of the iron curtain, but labour cost savings have influenced companies to move operations to the Baltic countries from either Nordic or third world settings because of the proximity to home based operations and to the European market. These companies will be expected to enter new regions in the Baltic countries outside the capital cities. They will bring western technology and management to the more rural settings, where the western rush has lagged behind the capital cities. Here we might expect some spread of western business practices to entrepreneurs either in connection to the western company providing services or products, or unrelated in product but in style of business. We also might expect an introduction of other western firms into the area, following the lead of the first ones.

Some companies of this type in the Baltic area would be Kellogg Latvia Ltd., and Phillip Morris Inc., in Lithuania. Both are American companies with production cost advantages close to the eastern European market. Regional development of the periphery in each Baltic country will depend on the balance of privatisation between the capital cities and the outlying towns. One unique condition within the former Soviet setting is the existence of large production units outside the main cities. This remnant of Soviet planning could enhance the distribution of development if privatisation proceeds with large numbers of these plants involving western joint ventures.

2. The concept of integration

Regional integration has altered the spatial dimensions of regional activities, but the concept of regional integration is not unequivocal. At least theoretical aspects of integration are relevant as conceptual anchors for the empirical analysis of integrative processes.

- political integration;
- economic integration;
- social integration.

The three types of integration are essentially non-spatial in nature. However, they will all contribute, and be conditioned by the processes of spatial integration across the full

range of political, economic and social life that the dismantling of the iron curtain has enabled.

2.1 Political, economic and social integration

The theoretical foundation of the processes of regional integration can be found in economic and political theories of integration, but as stated above the social and to a substantial extent the spatial dimension has to be added.

Theoretically, the first two approaches are distinctly based in economics, in particular concept from the field of international economics and trade theory, and various branches of political science. The economic concepts of regional integration were originally introduced by Viner (1950), in his analysis of customs unions. The concepts have been expanded in scope to cover most aspects of regional economic cooperation. The purpose of the current paper is not to provide an overview of the history and the development of economic concepts of regional integration, or of the theoretical and technical refinements of the discipline, but to give an assessment of various aspects of integration in a particular region, the Baltic Sea rim region.

There are several reasons for extending the analysis beyond the traditional economic and political aspects of integration, when dealing with processes of transition and reintegration simultaneously. The relationship between macroeconomic integration and the necessity of providing instruments to cover specific areas or sectors from significant adverse effects of this process is given special attention in the analysis. In particular, the political approaches to integration are useful when focusing on the needs for restructuring of the existing EU-policies to meet the challenges of the enlargements with former CMEA-countries. The theoretical concepts will be used for a principal evaluation of the needs for a future policy for the Baltic Sea rim region as well as for the policy of the European Union toward the Baltic Sea area in the process of forming an enlarged community with regard to the three sector perspectives of regional integration included in this study. For the specific purpose of this analysis, to identify specific regional functional linkages, it seems sufficient to focus on the most comprehensive notion of integration, spatial integration, as a super-ordinate concept.

2.2 Spatial integration

Political, economic and social integration has altered the spatial dimensions of regional activities. This study attempts to discuss the impacts of regional integration frameworks on the regional division of labour and on the economic potentials of the involved countries and regions. The aim of this section is to integrate aspects of three different approaches in order to form an explicit spatial perspective on economic, social and political integration. Indirectly this constitutes a kind of networking approach to the theories of integration. It is used to develop an approach for a comprehensive analytical framework of understanding change and development in the regional system.

Usually, there is a correlation between geographic adjacency and strong economic ties, often observed in the analysis of international trade within the tradition of gravity models. In economic theory this has not always been part of mainstream economic

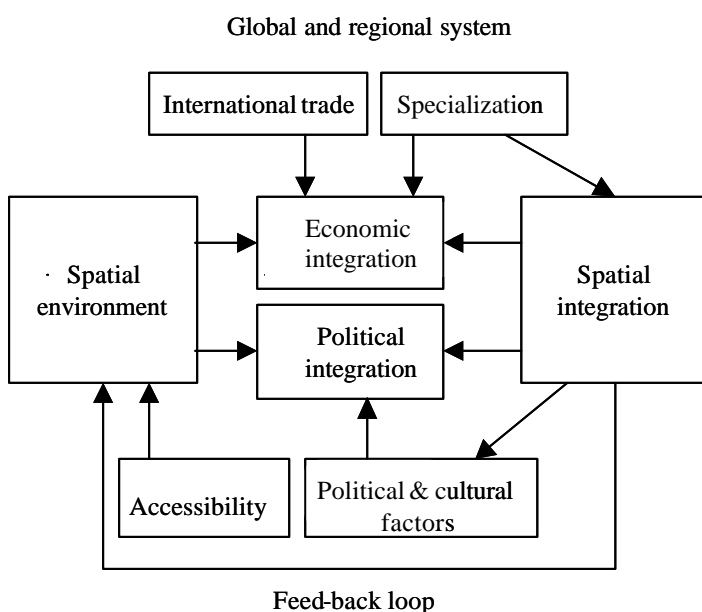
thinking and analysis (Tichy, 1998). Any empirical application of concepts developed in a different environment requires an outline of the basic assumption and axioms of the involved theories and approaches. In many respects regional integration is an ambivalent notion, varying from a very general concept that describes cooperation between nations or regions, to very specific social theories of human or organizational behaviour.

Spatial integration is not a commonly used phrase, but rather a kind of summarizing description of a comprehensive notion dealing with an overall assessment of regional changes. Spatial integration includes features like:

- The development of specific, geographically defined systems of production such as industrial districts, clusters of industries, or systems of innovation;
- A system of urban networks defined according to specific functional links;
- The availability of a regional infrastructure linking the analysed areas together;
- The intensity of intraregional flows relative to the outside flows considered the reason that we talk about a spatially integrated area.

In particular, the last condition is restrictive, see also Eskelinen & Snickars (1996). In this notion the concept of spatial integration has to be understood as the most far-reaching concept of integration. In such an analysis the spatial concept is not merely a consequence of the physical environment, but also the result of economic and political integration. In a continental or regional perspective we have strong evidence that political and economic integration is powered by spatial proximity and adjacency, but at the same time political, economic and social integration reinforce the central aspect of spatial integration, accessibility.

Figure 1: Illustrating the concept of spatial integration.



Source: Adapted from Cornett (2001a).

Figure 1 provides a brief summary of the analytical approach focusing on the main factors leading toward spatial integration, and the impact of this process on future development through a feedback mechanism reinforcing accessibility. The final result could be a network-based spatial theory of integration (see for instance Gidlund, 1990).

3. Economic links between and within the Baltic Sea Region (BSR)

Trade is usually the first type of link between independent economic units, and therefore it is often the most sensitive indicator of changes in the economic environment. Trade flows in the Baltic Sea rim region have suffered from the artificial economic borders between economies in the area. This does not mean that the region historically - at least not for the last hundred years - has constituted a functional internal coherent region. The eastern part of the Baltic Sea rim region has historically retained ties in both east and west directions politically, economically and socially. In fact, in a longer-term historical context, the Baltic countries have had much stronger ties to the east than the Nordic countries. The latter countries are as a matter of fact of more crossroad nature than the former.

3.1 Main trends of trade in the Baltic Sea rim region

Before the 1990s the region belonged to three different economic associations, the market based EU, EFTA, and the CMEA, the latter based on non-market principles. The economic border between the two former did not have major importance for trade flows of most groups of commodities. The division between market and non-market based trading frameworks was much more important. The redirection of trade flows took mainly place with regard to trade between the countries belonging to the former East Block, the Nordic countries, and Germany (Cornett & Iversen, 1993).

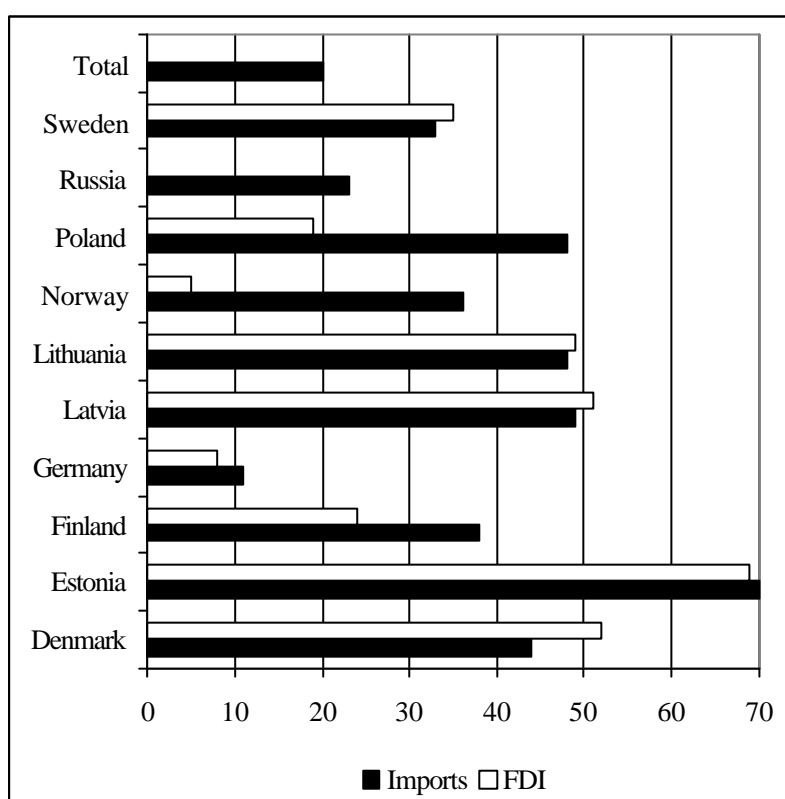
Figure 2 illuminates the pattern of trade in the late 1990s. Only Estonia imported more commodities from the Baltic Rim countries than from countries outside the region. However, the external linkages are more important than intra-regional links for Baltic countries in general. Therefore, it must be stressed from a trade perspective that the Baltic Sea region is a subsystem of a larger economic and political system rather than a functional economic system of its own. Most integrated in BSR are the three Baltic countries, followed by the Nordic countries and Poland. For in deep analysis of foreign direct investment see the survey reported later in the paper.

The figures reported in Figure 2 are collected from various sources, but provide at least a survey of trade and FDI data based on national and international statistics. The crucial issue is now how these general trends in trade and FDI affect the BSR. Three questions are of particular importance in this regard.

The first question concerns bilateral trade and FDI flows within the region and between the regions and the external partners. An evaluation of these patterns can contribute to shedding light on the issue whether the region is developing toward a comprehensive functional economic system within the European trading area. Secondly, independently from the findings of the investigation of the first issue, it seems relevant to have a closer look on the processes of specialisation taking place between branches of industries in

the region. Thirdly, the analysis of specialisation in the production system has to be supplemented by information regarding the development of formal linkages between industries and firms. This will be done by data from a survey of Nordic firms' investment patterns in the Baltic countries.

Figure 2: Trade and FDI of the Baltic Sea rim countries according to origin 1997 (Baltic Sea rim share as percent of total imports and FDI received).



Note: No FDI for Russia available, figures for Poland are 1995, Lithuania 1996.

Source: Quoted from Cornett (2001a), figures according to NEBI Yearbook (1999) and Deutsche Bundesbank (1993ff).

An investigation of these three issues will provide a sound basis to address the key question of the current analysis to identify current patterns and trends of regional and sub-regional integration in the BSR. Since it is a well-known fact that all of the countries in the eastern part of the Baltic Sea region are aspiring to become members of NATO, and of the European Union, it would seem reasonable to assume that linking up with the western economies through both trade and investment would be promoted both by industry and by the political system.

3.2 Trade and specialization

Trade flows in the Baltic Sea rim have suffered from the artificial economic borders between economies in the area. This does not mean that the region historically - at least not for the last hundred years - has constituted a functional internal coherent region. Table 1 shows that only for the smaller economies, the Baltic Sea rim region has a dominant position with regard to foreign trade. Taking the nature and the size of the

German economy into account, the importance of the Baltic Sea rim as a geographical region diminishes further. In the long run the Baltic countries will probably move towards a trade pattern more similar to the Nordic countries, and find their historical place in the regional trading system (Laaser & Schrader, 1992).

The purpose of this analysis is to extend the estimations of the overall trade potential of the region into an in-depth investigation of specialization patterns. Usually, international trade is divided into at least two major groups of trade according to the nature of the traded commodities with regard to a country's imports and export. According to classical theory of international trade, trade flows and the commodity trade are determined by comparative advantages based on factor endowments. Nevertheless, these approaches have not been able to explain real world trade flow. The most well known example is the so-called Leontief paradox.

Table 1: Share of intraregional trade as percent of total trade of Baltic Sea rim countries 1992-97.

Country	1992	1993	1994	1995	1996	1997
Denmark	48,7	44,3	45,4	41,5	42,5	43,7
Estonia	92,0	66,8	74,1	68,0	68,8	69,8
Finland	41,7	37,5	39,4	36,5	35,2	38,0
Germany	8,6	8,8	9,1	9,4	9,3	10,3
Latvia	61,8	46,1	48,0	60,3	48,8	49,6
Lithuania	57,8	45,5	50,1	48,8	46,1	48,9
Norway	35,9	32,4	37,0	37,1	36,9	36,4
Poland	47,4	47,1	50,2	51,6	48,2	47,9
Russia	18,9	24,8	23,5	20,9	21,5	22,7
Sweden	35,5	32,6	33,1	32,7	32,2	32,9
Baltic Sea Rim	17,9	18,0	19,0	18,9	18,9	20,1

Note: Figures based on exports to Baltic Sea rim countries as percent of total exports. All figures are based on reported imports from receiving countries. Danish exports to Sweden 1992-94 are based on Danish exports. For 1992 and 1993 some figures are missing for former state-trade countries.

Source: IMF (1998).

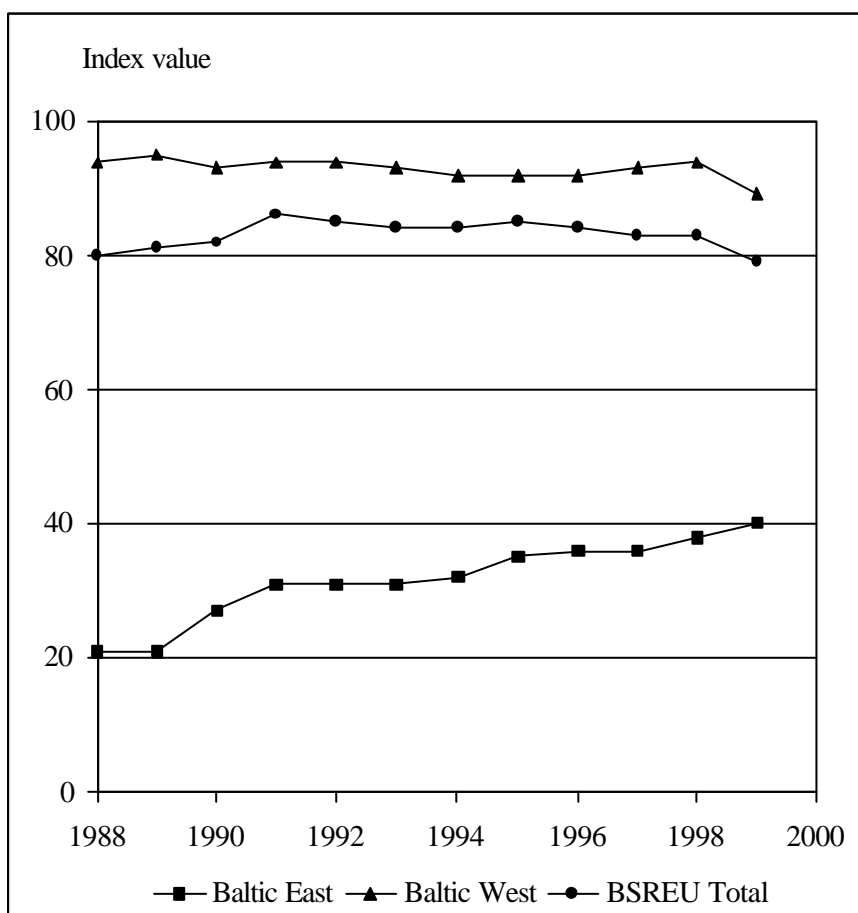
An examination of foreign trade in the industrialized world adds to the weakness of classical trade theory with regard to how to explain actual trade patterns. Already a cursory inspection of the commodities actually traded between the developed parts of the world shows that comparative advantages cannot fully explain the pattern trade flows. This leads to the next step in the analysis of the factors determining international trade, often labelled as competitive advantages.

From integration point of view trade based on competitive advantage seems to be of particular interest in an analysis of the future potentials of the BSR. The dismantling of the earlier political barriers has opened up a new economic landscape in the immediate vicinity of the Nordic countries. Since there would seem to be substantial differences in the production costs of many manufactured goods, whose production demands unskilled labour, a situation of competitive advantage might exist, at least for a substantial period of time, for the countries on the eastern side of the Baltic Sea.

4. Regional integration and specialization

The analysis of intra-industry trade in the Baltic Sea rim region (see Cornett, 2001b) has proved a tendency toward normalization of the composition of trade, but still on a lower level, between the former state-trade economies and the old market economies in the BSR, measured at a rather rough level of classification. Using this aggregated data has both advantages and disadvantages. The main advantage is that similarities are identified within the same branch or group of data. The result is that emerging joint systems of production become visible. The obvious disadvantage is that the high level of aggregation of the trade data disguises persistent significant differences in imports and exports. For the purpose of this analysis the former aspects are the most important. Figure 3 provides a brief overview of intra-industry trade between the old and the new market economies.

Figure 3: Intra-industry trade of the old market economies in the Baltic Sea rim region divided into the eastern part, BSR East, and the western part, BSR West. BSREU Total denotes the total for the EU member countries among the BSR countries.



Note: Data according to EU harmonized system, revision 1 1988-99, Grubel Lloyd index estimated on 2-digit level (100 commodities), Figures based on values in US\$ 1999 not including trade figures reported from Sweden. For details see Cornett (2001b).
Source: OECD-ITCS (1998 & 2000).

According to the European agreements between the EU and the applicant countries, market access for merchandise trade for the east European partner countries is one of

the principal objectives within the pre-accession strategy. The development of sustainable economies is another. In particular, the latter is highlighted in the latest reforms of the EU structural policy and in particular the ISPA (European Commission, 2000a). The problems and the often built-in contradictions of this policy are the topics of the subsequent analysis.

Trade figures between the eastern and western parts of the BSR indicate a move toward intensified commercial relations. Nevertheless almost all countries maintain stronger links to the outside world than within the area. The purpose of the following sector is to address this topic in some more detail based on an empirical investigation of sectorial and sub-regional integration.

4.1 Inter- and intra-regional specialisation – the case of the Danish textile industry

Traditionally, the textile industry has been protected against external competition in most industrial countries for many years. The so-called multi fibre agreements (MFA, for details see Kenis & Schneider, 1987) are the best example. The policy is continued in the above-mentioned agreements, where textile, steel and agriculture got the major exemptions from free trade.

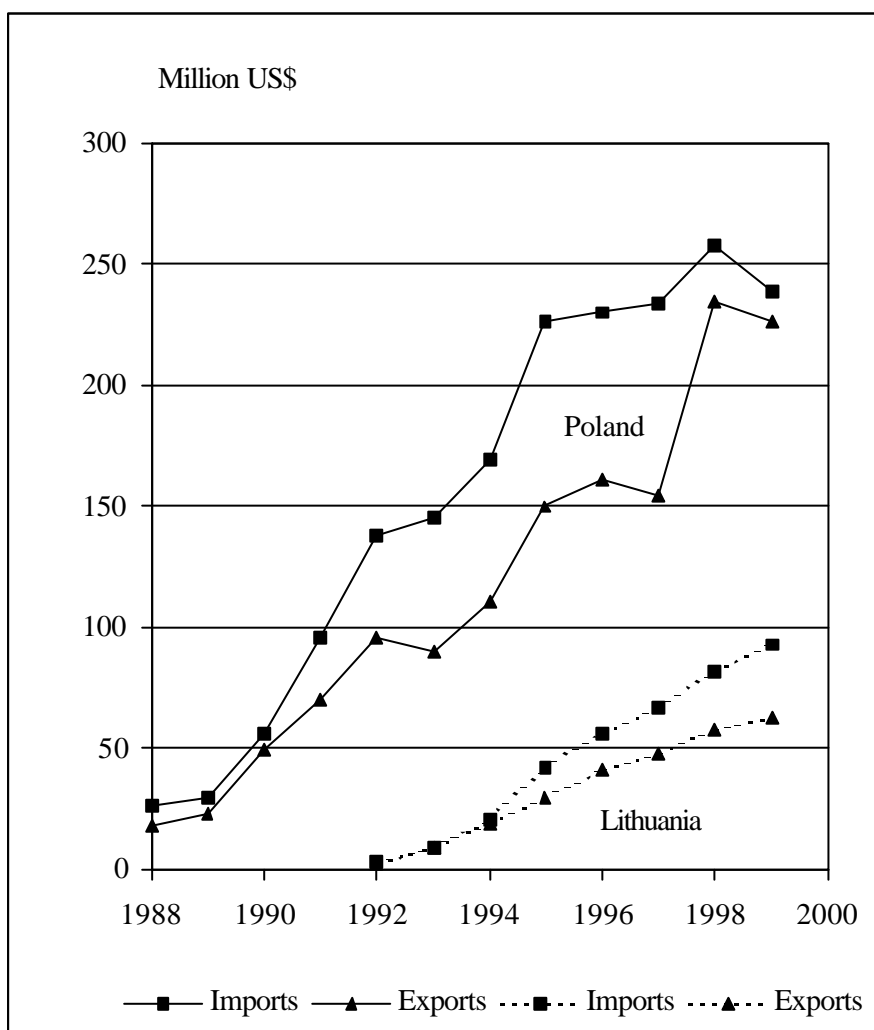
In spite of the exemptions for textile, trade with textile products plays an important role in some of the bilateral trade relations within the BSR. The reasons are many (see Illeriis, 2000), but most important are low production costs due to low wages, the availability of a skilled labour force, and probably most importantly the closeness to the markets and the outsourcing firms in western Europe. The latter proximity factor is the main competitive edge of the east European transition economies compared to low-cost producers in southeast Asia. Due to fast changes in fashion, short delivery time is essential for competitiveness.

This unique combination of advantages is one reason for choosing the textile sector as an illuminative case for the analysis of the impacts of the reintegration of east and central European countries into the traditional western European system of production. The second is the geographical concentration of the Danish textile industry. The case study on the structural changes in Danish textile industry in the aftermath of the breakdown of the iron curtain illuminates how the adaptation process takes place not only in the transition economies, but also in Denmark. The particular structure of the Danish apparel and textile business and the geographic concentration (about 50 percent of the industry is located in few municipalities in central Jutland) enables us to analyse not only overall changes but also the regional impacts of changes in the competitive environment.

The outsourcing of production from the Danish core region of the textile industry accelerated from the beginning of the 1990s (Illeriis, 2000). The impact on employment and structure of the textile industry in the Herning-Ikast area, the closest Denmark comes to an industrial district (see Hansen, 1991) was tremendous (see Cornett, 2001b). Figure 4 summarizes the development of textile trade between Denmark and the two most important target countries for the outsourcing of Danish textile industry, Poland and Lithuania.

The impressive growth in the textile trade reflects the outsourcing of production as well as the change in the international division of labour taking place in the north European textile business. A closer look at the composition of the trade flows can shed new light on the nature of the restructuring process. The analysis of textile trade between Denmark and Poland reported in Figure 4 proves an extensive growth.

Figure 4: Trade in textiles (million US\$) between Denmark, and Poland and Lithuania.



Source: OECD-ITCS (1998 & 2000).

The trends reported in Table 4 show that the textile trade has only increased its share of total trade in a more modest scale, due to the increase of east-west trade in the BSR. Nevertheless, textile is still an important factor in the bilateral trade between Denmark and Poland. With regard to Lithuania, the same takes place, but at a much higher level. Half of the Danish imports from Lithuania in 1999 were textiles, and more than 27 percent of the exports belonged to the textile sector. Textile is the single most important commodity in the bilateral trade between Denmark and Lithuania.

Table 2: Danish textile trade with selected BSR partners (million US\$ and percent).

Industry category	1992	1995	1999	1992	1995	1999
Commodity group	Denmark's imports from Poland:			Denmark's imports from Lithuania:		
Largest	94,1 (62)	116,7 (62)	103,7 (61)	9,6 (61)	29,1 (61)	57,7 (61)
Second largest	35,3 (61)	88,5 (61)	103,0 (62)	6,1 (63)	10,9 (62)	30,9 (62)
Share of textile trade	93	93	87	64	95	97
Textile share of trade	31	30	35	4	44	50
Commodity group	Denmark's exports to Poland:			Denmark's exports to Lithuania:		
Largest	23,6 (55)	25,3 (60)	39,3 (60)	2,8 (62)	3,6 (55)	26,2 (61)
Second largest	14,5 (61)	20,7 (55)	35,1 (61)	1,6 (54)	14,5 (61)	10,9 (55)
Share of textile trade	39	31	43	25	63	58
Textile share of trade	19	23	22	4	21	28

Note: Data according to EU harmonised system, 100 commodity groups (Man-made filaments, Man-made staple fibres, Knitted or crocheted fabrics, Art of apparel & clothing access knitted or crocheted, Art of apparel & clothing access not knitted/crocheted, Other made up textile articles including sets and worn clothing).

Source: OECD-ITCS (1998 & 2000).

Comparing imports and exports between Denmark and Poland there was a slightly higher concentration of commodity groups in Danish exports than imports. The most interesting observation is that the latest figures for 1999 seem to reflect a change with respect to the dominating commodity groups. In 1999 the same groups "Art of apparel & clothing access" dominate import as well as export, but with significant higher share in exports. This can be taken as a sign of further integration of the two systems of production compared with the previous reported years. In 1992 and 1995 "Man made stable fibres" played a major role in Danish exports to Poland. In many respects the trade figures illuminate the point made by Illeriis (2000):

"It is primarily the sewing work which has been outsourced: This means that the Danish firm typically still buys woven cloth or carries out the knitting work, organizes the dying and cutting operations in Denmark, ships the pieces to Poland or another transition country where they are sewn (but remain the property of the Danish firm), and has the clothes transported back to Denmark where they are quality controlled, finished and marketed." (p 60)

Without overstating the statistics it seems as if the pattern has changed with regard to Poland toward a more balanced system of trade, measured by group of commodity. This could be taken as an indication that Danish companies are still doing the marketing, design and control work, but that many of the raw materials are no longer shipped from Denmark. The Danish-Lithuanian trade follows the same pattern, but the dominance of textile is much higher, and the dominance of the two most important commodity groups is significantly higher than in the Polish case. The content of semi-manufactures is still much higher in this case than in the Polish one, reflecting a cost-advantage of Lithuania compared not only to Denmark, but also to Poland.

Overall, the analysis of the textile trade between Denmark and the two BSR countries seems to support the tendency mentioned in the introduction that the Danish textile industry has undergone a significant structural change toward a more high value-added industry, and less labour intensive. This process is often based on a formal system of co-operation between firms and subcontractors, leading to the establishment of a subsidiary

in the partner country. The next section tries to shed some light on this process based on a general survey of firms in the BSR.

4.2 FDI as an indicator for sub-regional integration

The economic units in the previous section are the countries in the BSR. To identify sub-regional patterns it is necessary to dig deeper into the systems of economic interaction. As shown in Table 3 the percentage of FDI received from countries within the BSR vary from one country to another. Due to data limitations, it has not been possible to fully examine the origins of FDI received and the targets of FDI.

Table 3: Targets and origins of FDI in the BSR (1997).

Countries	Dominating targets in the BSR	Dominating sources in the BSR
Germany		
Denmark	Sweden 28%, Germany 16%	Sweden 31%
Norway		
Sweden	Finland 9%	Finland 11%
Finland	Sweden 27%	Sweden 21%
St Petersburg		Germany 18%
Estonia	Latvia 46%, Lithuania 25%	Finland 31%, Norway 20%
Latvia		
Lithuania	Estonia 50%	Sweden 13%, Estonia 11%, Germany 8%, Denmark 7%
Belarus		
Poland	Germany 14%	Germany 13%

Source: NEBI Yearbook 1999.

The economic units in this section are the nodes (countries, regions or cities). Trade and capital investment relations, measured by imports and exports as well as foreign direct investment, make up the links. These investments are measures involving the buying and selling of companies, mergers and investments in new plants or transactions involving segments of plants. Thus, FDI often can be used as a measure of industrial relations between the investing and receiving countries, regions or cities. Business and related networks cover a wide range of relations, e.g. subcontracting, service provision, and strategic alliances. All the direct company relations are facilitated by business service activities. For an overview of Nordic companies in the eastern BSR see Table 4 below.

Table 4: Number of Nordic companies in the Baltic countries and St Petersburg 1999.

	Finland	Sweden	Denmark	Norway	Total
Estonia	367	121	72	28	588
Latvia	180	203	148	19	550
Lithuania	130	130	210	63	533
Russia	258	108	32	31	429
Total	935	562	462	141	2100

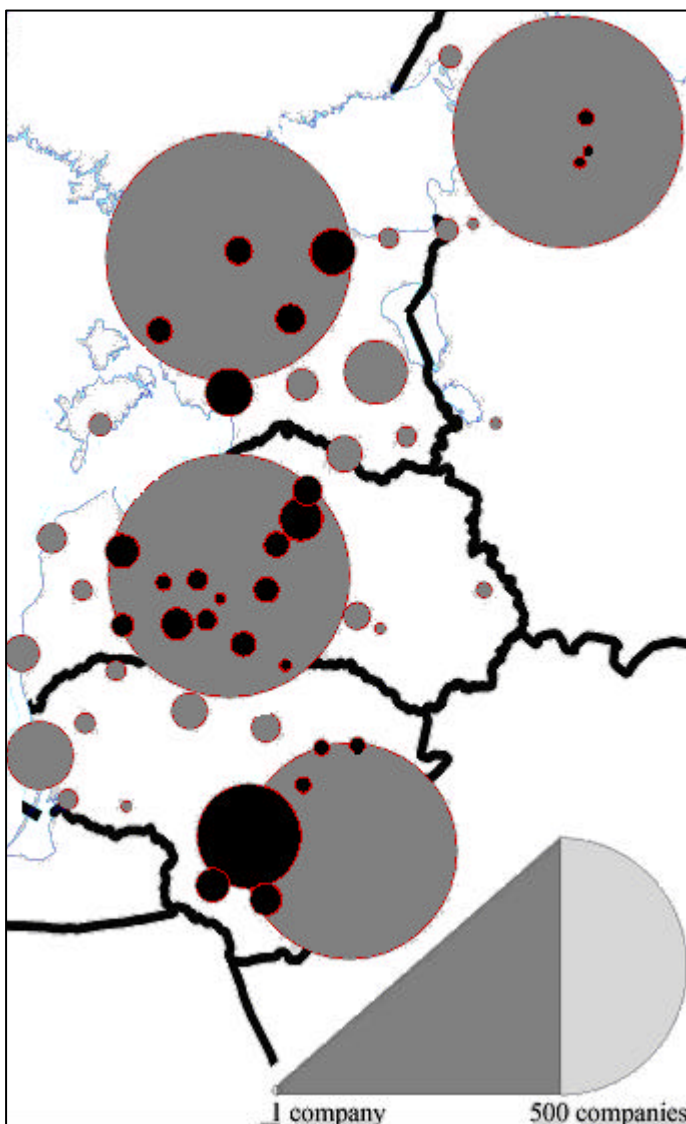
Note: Address lists provided by embassies.

Source: Quoted from Snickars & Bourennane (2000).

Table 4 indicates that western countries are large investors in some countries in the eastern part of the BSR. The hubs of investments seem to be the capitals and the largest

cities, see also Figure 5. They provide the business services needed and they usually are the prime location of company headquarters. Data available from the three Baltic countries indicate the role of the capitals as hubs for foreign direct investments is decreasing with decreasing primacy of the capital. Thus, the primacy of Riga, Tallinn and Vilnius is 40 percent, 31 percent and 22 percent in terms of national population share and the corresponding shares of total national foreign direct investments are 82 percent, 72 percent and 66 percent, respectively. The figures of Lithuania show that Kaunas and Klaipeda are receiving relatively important shares of FDI also, indicating the impacts of the more decentralized urban system in Lithuania as compared to Estonia and Latvia.

Figure 5: Total number of Nordic companies operating in Estonia, Latvia, Lithuania and St Petersburg in 1999.



Source: Quoted from Snickars & Bourennane (2000).

We can notice that most of the Nordic firms are located in the large cities. This is most likely due to the presence of infrastructure as transport networks, telecommunication

services and business service facilities in these regions. All these factors are providing firms with significant location advantages. The capital regions can be used as bases for further expansion, and represent risk-minimizing strategies from the point of view of the foreign investors. We can see also that there are a few companies located in small villages out of the big cities. One important reason for choosing these locations is the distribution of multi-establishment companies in the country. Examples of these companies are food store chains and banks. The map in figure 6 indicates the distribution of each Nordic country's companies among Baltic cities see also Table 5.

Table 5: FDI hubs in Estonia, Latvia and Lithuania, and in the St Petersburg region.

Country	Cities	Companies	Percent
Estonia	Tallinn	473	81
	Tartu	31	5
	Pärnu	17	3
	Others	66	11
	Total	587	100
Latvia	Riga	455	83
	Cesis	14	3
	Liepāja	10	2
	Others	71	13
	Total	550	100
Lithuania	Vilnius	362	68
	Kaunas	83	16
	Klaipėda	37	7
	Others	51	10
	Total	533	100
Russia	St Petersburg	417	97
	Vyborg	4	1
	Others	8	2
	Total	429	100

Source: Quoted from Snickars & Bourennane (2000).

The number of inhabitants is one of the traditional indicators for the presence of a market. The number of companies per inhabitant is very high in the important cities. It may be noted that the presence of Nordic companies in the St Petersburg region is much smaller than in the other cities even when we compensate for the population size of the region. It appears that the internationally owned companies are spreading along the proposed corridor of the Via Baltica. There is a higher density in the northern part of the Baltic region than in the south.

As a part of the study to study potentials and hindrances for Nordic firms in the BSR, questionnaires were sent out to 2100 Nordic firms currently represented in Estonia, Latvia, Lithuania and the St Petersburg region. The share of useful answers received was 19 percent with a 4 percent return rate because of address problems. Table 6 below indicates the response rate pattern of the questionnaire study. The addresses were received from a number of different sources in the countries in the whole BSR area. In some cases embassies were used, whereas in other cases information was gathered through the Central Bureaus of Statistics. Also commercially available registers of private firms were used to collect address information.

The experience of the survey work was that there is still no strictly comparable system for keeping record of the dynamics of firm formation, and firm restructuring in the BSR. Seen in this perspective an effective response rate of around one fifth is reasonable. The sample obtained was not large enough to draw conclusions for sectors of the economy, for instance, to relate the analysis of changes in the Danish textile industry to the survey of FDI developments. Some Danish textile industry actors were members of the sample but they were too few to compare their actions to the ones of textile industry investors from other countries.

Table 6: Response rates by country of the questionnaire study.

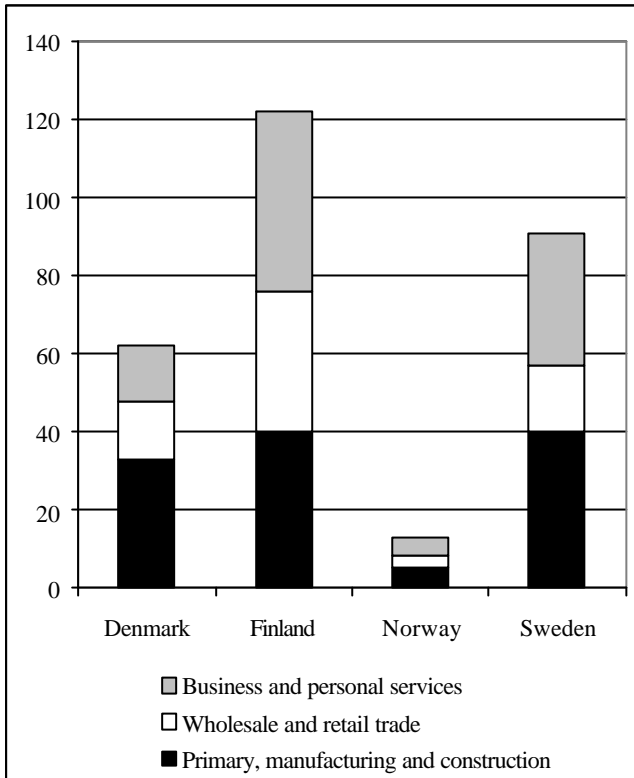
	Estonia	Latvia	Lithuania	St Petersburg	Total
Sent	600	560	520	420	2100
Received	123	109	124	39	395
Returned to sender	11	31	38	2	82

Source: Quoted from Snickars & Bourennane (2000).

Firms in different sectors of the economy decide to establish operations at different points in time. Figure 6 shows that Finnish companies prevail in the eastern part of the Baltic Sea rim region, and that the share of business and personal services companies is higher than for the other countries. It is interesting to note that the number of companies in manufacturing is about the same from Denmark, Finland and Sweden. One can also conclude from the table that Norwegian firms are considerably less active in the eastern BSR market than firms from other Nordic countries.

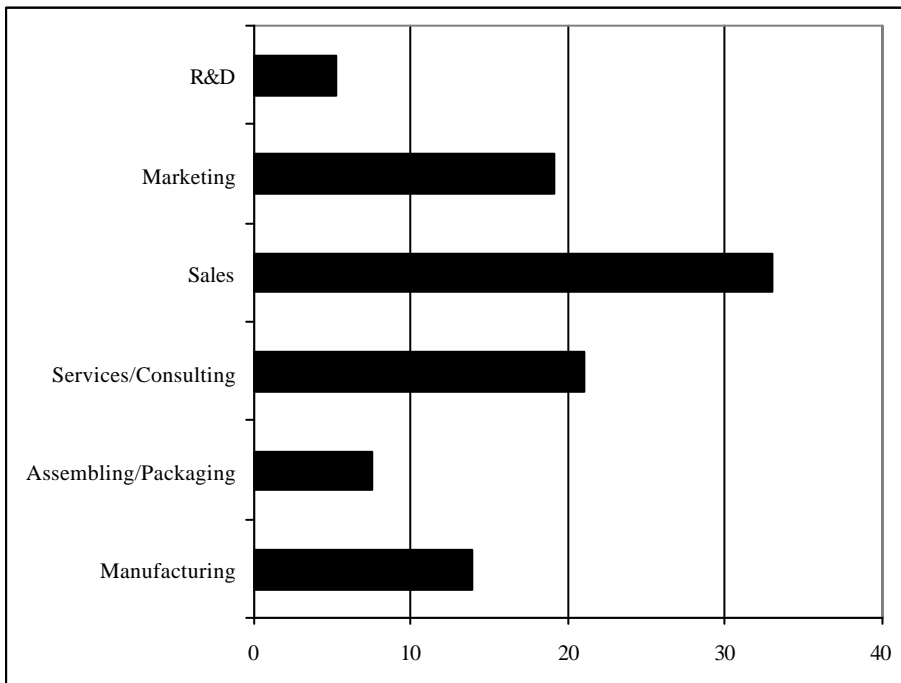
The three most important motivations for investments in the east BSR countries, see Figure 7, are in order of priority – market expansion, local demands and low labour costs.

Figure 6: The number of Nordic firms by economic sector in the Baltic countries and in the St Petersburg region in 2000.



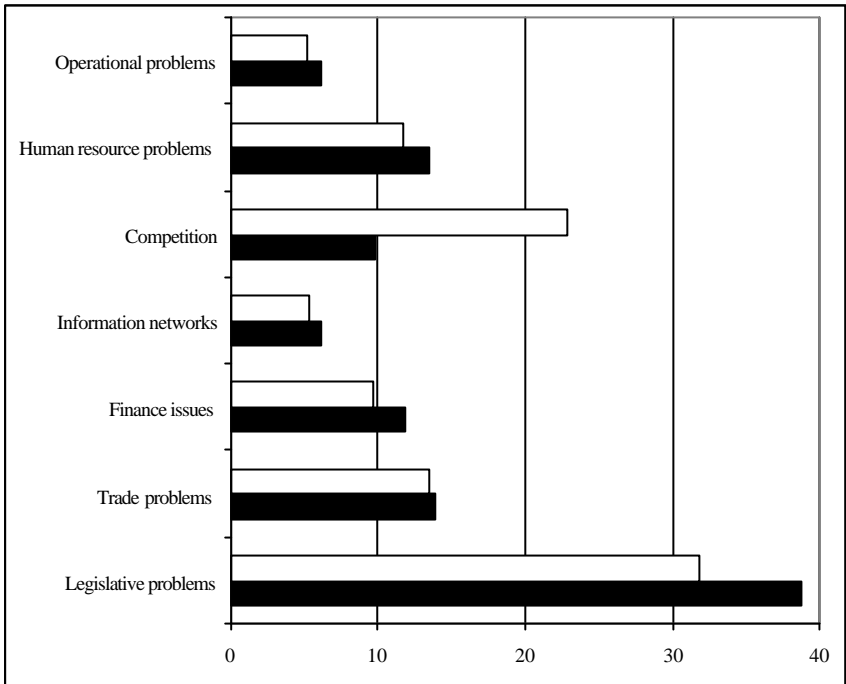
Source: Quoted from Snickars & Bourennane (2000).

Figure 7: Reasons for FDI in the Baltic countries 1999.



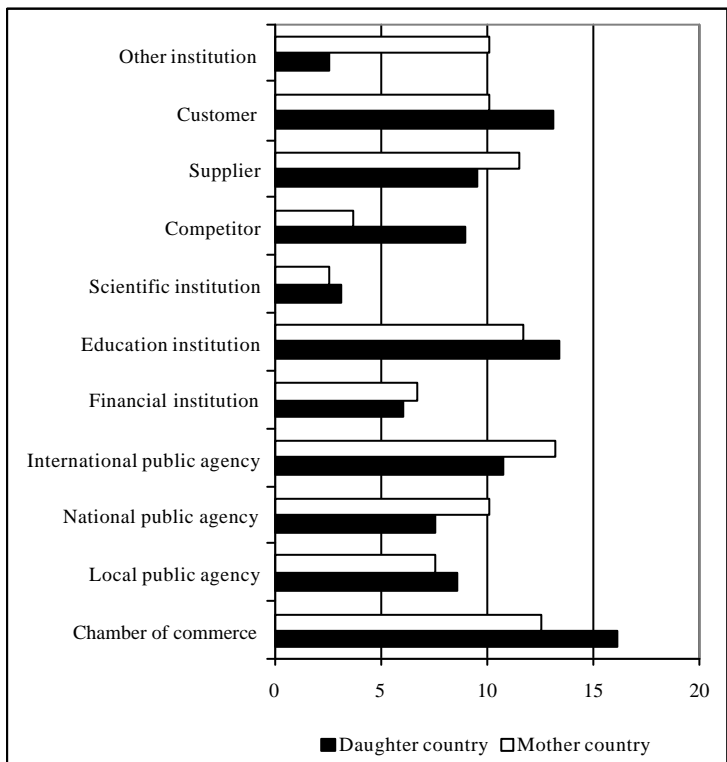
Source: Quoted from Snickars & Bourennane (2000).

Figure 8: Problems for FDI in Baltic region when firms first established and in 1999.



Source: Quoted from Snickars & Bourennane (2000).

Figure 9: Importance of different cooperation partners for Nordic companies in the BSR and the home country in 1999.



Source: Quoted from Snickars & Bourennane (2000).

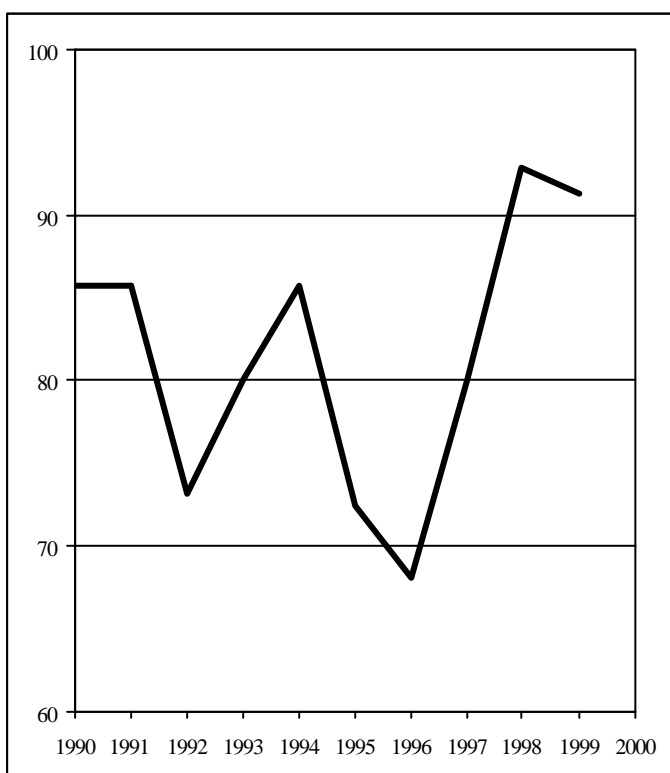
Priorities were unchanged in two studies comparing companies started up in 1994 or earlier and companies started up 1995 or later. However, an increased score confirmed

the first priority given to market expansion, is promising for the future development of trade and investments in the BSR.

Companies investing in the east BSR still mention the traditional obstacles to investments as being bureaucracy, uncertainties in law and regulation, and custom clearance problems, see Figure 8. However, competition is mentioned as one of the critical problems in the three Baltic countries in the survey study. Being a problem for the company it is also a measure of maturing economies especially when competition from western companies is included (e.g. Estonia and Lithuania).

When companies are investing in the east BSR countries the most often mentioned co-operation partners are chambers of commerce, customers, educational institutions, international organizations and banks and other financing institutions, see Figure 9. The pattern of co-operation is not significantly different in mother and daughter countries. It is worth noting, however, that the chambers of commerce are playing an active role in the establishment of entrepreneurial links across the Baltic Sea. It stands out as logical as well that educational institutions are more important in the eastern part of the BSR than in the western part.

Figure 10: Urban share of FDI in by Nordic firms in the Baltic countries and the St Petersburg region 1990-99 (percent).



Source: Quoted from Snickars & Bourennane (2000).

There is a lack of skilled labour, for instance, in the business administration area, which needs to be filled through higher education. The development of contacts in the

engineering sector seems to be slower than in the other parts of the economy. This may become a hindrance for the further development in the eastern part of the BSR region.

The presence of education institutions as co-operation partners confirms the strategic importance of those institutions in regional development. Further, the link to education institutions might also be taken as a measure of integrative impacts of investments since education is a sector outside the hard core of economic sectors and business service sectors.

Figure 10 summarizes the results of the firm survey as regards location. Across the countries in the eastern part of the Baltic Sea rim region the tendency is for foreign direct investment to concentrate further in the capital regions over time. The trajectory in Figure 10 fluctuates but there is a significant trend towards further urban clustering of investments. There can be several observations for this tendency. One is simply that more service firms have been involved in the process in later years than early after the opening of the new business frontier. The other explanation is that the risks in moving to locations outside the main regions may have been higher than anticipated. The establishment of the market economy in itself contains a drive towards urbanisation but as a consequence of structural change and as a consequence of the preferences of young persons in urban rather than rural living.

5. Conclusions

The analysis of economic linkages in the Baltic Sea rim region conducted in this paper shows no unequivocal picture of the BSR in the European spatial system. An evaluation of the pattern of the bilateral trade and FDI flows within the region and between the regions and the external partners concludes, that most countries have more intensive relations to outside partners than to countries within the region. This does not mean that internal trade and FDI is unimportant. On the contrary, it seems that intra BSR linkages are of major importance for in particular the three Baltic countries. The latter is also indicated in the results of the industrial networking study. At least in some sectors (i.e. the case of the Danish-Baltic textile industry) a tendency towards the creation of a comprehensive functional economic sub-system can be identified. Similar indications are found with regard to the spatial concentration of foreign direct investment in the industrial networking survey.

These findings are reinforced by the tendency toward a certain normalisation of the east-west trading pattern within the region. The analysis of intra-industry trade shows a slight tendency – still on a much lower level – toward an adaptation of the traditional western patterns of trade.

From a spatial point of view the development of specific, geographically defined systems of production are of major importance. In this regard the tendency toward clustering of FDI in the metropolitan areas of the transition economies is of significant importance for the future development of the regional system. A system of urban networks defined according to specific functional links. The availability of a relevant regional infrastructure to link the investment hubs in the emerging market economies to

the hinterland and not only to the financial and economic centres in western Europe is a necessary condition for balanced development within the region.

To answer the question whether or not we are dealing with regional and sub-regional integration or not in the BSR is not easy. The analysis of economic linkages in this paper cannot prove that the BSR is a functional region according to the common understanding of the concept. External linkages are stronger than internal. This does not mean that integration does not take place in the BSR. We have found indications of geographical concentration of linkages (sub-regional integration) as well as close sectorial co-operation.

Sectorial co-operation and sub-regional clustering of economic activities in the BSR are complementary factors and not substitutes to the integration into the general economic system of Europe. In this regard the BSR is similar to other parts of Europe, where sub-regional co-operation goes hand in hand with the development of external relations to other parts of Europe and to the overall global economic system.

References

- Deutsche Bundesbank (1993ff), Statistische Beihefte zu den Monatsberichten der Deutschen Bundesbank – Zahlungsbilanzstatistik. Frankfurt.
- Cornett, A & Iversen, S (1993), Commercial Relations in the Baltic Rim Region in a Network Perspective. In Lundqvist, L & Persson, L-O (eds), Visions and Strategies in European Integration, pp 107-30. Springer Verlag, Berlin.
- Cornett, A & Iversen, S (1997), The Baltic Rim in the European Trade System. In Owsinski, J & Stepniak, A (eds), The Nordic -Baltic Europe - Integration Risks, Barriers & Opportunities. Warsaw-Sopot.
- Cornett, A (1999), The Problem of Transition and Reintegration of East and Central Europe: Conceptual Remarks and Empirical Problems. In Fischer, M & Nijkamp, P (eds), Spatial Dynamics of European Integration - Regional and Policy Issues at the Turn of the Century, pp 255-79. Springer Verlag, Berlin.
- Cornett, A (2000), Regional Integration Through Trade in Baltic Rim Region. Study carried out in the Interreg IIC project Urban Systems and Urban Networking in the Baltic Sea region. Danish Forest and Landscape Research Institute, Hørsholm.
- Cornett, A (2001a), Regional Economic Integration in the Baltic Rim - Towards a European Region after Ten Years of Transition? In Bröcker, J & Herrmann, H (eds), Spatial Change and Interregional Flows in the Integrating Europe - Essays in Honor of Karin Peschel, Contributions to Economics, pp 13-27. Physica Verlag, Heidelberg.
- Cornett, A (2001b), From trade integration to the integration of the production system - A case study of the impact of economic transition on trade and specialization in the Baltic Rim. Paper presented at the Uddevalla Symposium 2001 on Impacts of Changes in the Regional Environment: Policy, Infrastructure and Internationalisation. Vänersborg.
- Eskelinen, H & Snickars, F (1997), Competitive European Peripheries. Springer Verlag, Berlin.
- European Commission (2000), Work Programme for 2000 (http://europa.eu.int/comm/regional_policy/document/radi/radi_en.htm), Directorate General for Regional Policy, Brussels.
- European Commission (2001), Europas enhed, befolkningernes solidaritet, områdernes forskellighed - Anden rapport om den økonomiske og sociale samhørighed, vol 2. Luxembourg.
- European Commission (1994), Europe 2000+ - Cooperation for territorial development, Luxembourg.

Gidlund, J (1990), Den oförklarade integrationen - statsvetenskapen inför Europas omvandling. In Karlqvist, A (ed), Nätverk - teorier och begrepp i samhällsvetenskapen, pp 119-151. Gidlunds Förlag, Värnamo.

Hansen, N (1991), Factories in Danish Fields: How High-Wage, Flexible Production Has Succeeded in Peripheral Jutland. *International Regional Science Review*, vol 14, no 2, pp 109-132.

Henning, R & Ramström, D (1997), Aldaris och Saku - Privatization in the Baltic States. SAGE Publications.

Hjalager, A-M (1990), Det tekstilindustrielle kompleks. In Hering, A (ed), Nord-REFO, no 2, pp 191-205. Copenhagen University Press.

International Monetary Fund (1998), *Direction of Trade Statistics Yearbook*, Washington DC.

Illeris, S (2000), Outsourcing of Textile and Clothing Industry from Denmark to Baltic Transition Countries. In Owsinski, J & Johansson, M (eds), *Global and Local Interplay in the Baltic Sea Region*, pp 55-68. The Interface Institute, Warsaw.

Johansen, H, Snickars, F & Steinbuka, I (1999), *Scandinavian Business Location in the Former Soviet Baltic Frontier – A Survey of Firms and Selected Case Studies*. Paper presented at the 37th European Congress, Regional Science Association, Rome.

Kenis, P & Schneider, V (1987), The EC as an international corporate actor - Two case studies in economic diplomacy. *European Journal of Political Research*, vol 15, pp 437-47.

Laaser, A & Schrader, B (1992), *Azur Reintegration der baltischen Staaten in die Weltwirtschaft*. Institut für Weltwirtschaftsforschung, Heft 2, Universität Kiel.

Mygind, N (1995), A Comparative Analysis of the Economic Transition in the Baltic Countries: Barriers, Strategies, Perspectives. In Mygind, N (ed), *Privatization and Financial Participation in the Baltic Countries*. Copenhagen Business School.

NEBI Yearbook (1999), *North European and Baltic Sea Integration*, In Hedegaard, L & Lindström, B (eds), NEBI Yearbook 1999. Springer Verlag, Berlin.

OECD-ITCS (1998 & 2000), *International Trade by Commodities. Statistics, Harmonized System*, Paris.

Pentland, C (1973), *International Theory and European Integration*. Faber and Faber, London.

Robson, P (1987), *The Economics of International Integration*. Allen & Unwin, London.

Snickars, F & Bourennane, M (2000), *Industrial Networking in the Baltic Sea region*. Study carried out in the Interreg IIC project *Urban Systems and Urban Networking in the Baltic Sea region*, Danish Forest and Landscape Research Institute, Hørsholm.

Tichy, G (1998), *Geography lost and found in economics*. Keynote presentation at the 38th European Congress, Regional Science Association, Vienna.

Viner, J (1950), *The Customs Union Issue*, New York, London.

Pontus, Å (2000), *Three Essays on Flows – Trade, commuting and foreign direct investments*. Licentiate Thesis, Royal Institute of Technology, Stockholm.