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CITIES AND NETWORKING IN THE BALTIC SEA REGION

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POLISH ACADEMY OF SCIENCES
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GUEST EDITORIAL

NIELS BOJE GROTH

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It is called the Baltic Sea Region, (BSR). Sometimes delimited by the drainage area of the Baltic Sea, sometimes by reference to the national and regional borders of 11 countries around the Baltic Sea. Historically, trade united large parts of the BSR, though it was also subdivided in terms of religion and political regimes. In spite of several long-lasting myths connecting countries in this part of Europe, it has been argued that the BSR is not glued together by a joined historical myth of one people and one territory, a mythodological identity. In that sense the BSR is not a region (Østergard 2000). However, several options for regional integration are currently at stake. The governments within the region have adopted a joint Vision and Strategies of the Baltic Sea Region, VASAB 2010 and a joint agenda for sustainable development of the region, Baltic 21. More than 100 cities have joined the Union of Baltic Cities and the EU has launched twice an INTERREG programme specially dedicated to the Baltic Sea Region. Further, several institutional, economic and cultural cooperations have been established in the aftermath of the fall of the "Iron Curtain."

The articles of this volume of Geographia Polonica are closely related to one of these inititatives for sustaining the regional integration in the BSR, i.e., VASAB 2010. In 1999, the INTERREG IIC project *Urban Systems and Urban Networking in the Baltic Sea Region* ("the USUN Project") was initiated by the Committee for Spatial Development of the Baltic Sea Region, CSD/BSR. The project was implemented by researchers from all 11 countries in the region. Findings are presented in many reports and articles (DFLRI 2001), and conclusions and recommendations were approved at the Fifth Conference of Ministers for Spatial Planning and Development in Wismar 2001 (Wismar Declaration 2001).

The purpose of the USUN Project was to provide information needed for an upgrading of VASAB 2010 (VASAB 2010+). Though the articles of the present volume are rooted in the USUN project, they do not merely report it, since the findings are reported elsewhere (DFLRI 2001). Rather, these articles examine subjects related to the BSR, of which most are generally concerned with urban and regional development.

REGIONAL INTEGRATION AND NETWORKING

In Urban networking: trends and perspectives in the Baltic Sea Region, Vesa Kanninen and Harry Schulman take as their point of departure the interrelationship between urban networking and globalization. The authors are concerned with the new roles of cities and their abilities to take part in international networking. To the extent that local economies are woven into international relations, the tissue of local urban hierarchies are loosened and substituted by less regular mosaics of cities in which functionally specialized smaller cities are also offered opportunities. It is supposed that cities involved in international networking are changing the composition of three basic urban functions: (1) being living environments for inhabitants and action milieus for local firms and organizations, (2) being centres of their own spheres of influence, and (3) being locations for supra-regional and even international activities. Formerly, urban development was heavily influenced by the regional-service functions cities played in urban hierarchies, i.e., the second urban function. In the future, the emphasis of urban development seems rather likely to stress the first and third basic functions. Thus, as cities become more international, attention is paid to their own inhabitants and companies rather than those of the urban hinterland. Basic elements of urban networking are laid out and special attention is paid to the organizing capacity of a city. An empirical survey conducted by the authors shows that both large and smaller cities in the BSR are involved in international networking. In addition, urban networking involves cities from most parts of the BSR. Based on criteria including position in international urban systems, networking capacity and internationalization strategies, cities included in the survey sample are classified according to a typology of five "profiles of urban networking." By developing this concept, the authors try to contribute to an operationalization of the new emerging logic of "space of flows."

Andreas Cornett and Folke Snickars further investigate spatial effects of globalization in *Trade and foreign direct investments as measures of spatial integration in the Baltic Sea Region*. The article presents joint findings within two closely related empirical studies on trade and on industrial networking within the BSR. In joining the findings of these two studies, national statistics on the

development of trade during the 1990s are combined with survey data on foreign direct investment by Nordic companies in the three Baltic States and the St. Petersburg region.

The trade study shows that, in general, most BSR countries have more intensive trading relations with countries outside the BSR than inside. The BSR therefore seems to be a sub-system of a larger economic and political system, rather than a functional economic system of its own. Further, the studies show that most of the trade between the old market economies in the western part of the BSR is of the "intra-industry"- kind, i.e, trades products within the same branches, whereas the trade between the old and the new eastern economies is dominated by "inter-industry" trade, i.e, trades products within different branches. These observations indicate that the eastern economies are not (yet) integrated into a competitive trading with the western economies. However, the authors observe that intra-industry trade between the eastern and western BSR economies increased steadily through the 1990s, revealing an increasing integration of the eastern part of the BSR into the European economy.

Economic integration is but one of at least four kinds of integration, the three others being political, social and spatial integration. Thus, economic measures are not the only and final measures of integration. Having stressed that, the authors go into a more detailed analysis of economic integration to determine whether certain sectors or regions may act as doorsteps and hubs of economic integration in the BSR. If such sectors and regions are possible to identify they would probably be in focus for further political strategies on regional integration.

The bilateral relations within the textile industry between Denmark and Poland and between Denmark and Lithuania were chosen for detailed analysis. These relations show an impressive growth due to outsourcing of manual work from the Danish textile industry, starting with Poland at the beginning of the 1990s and following with Lithuania a few years later. Being an economic stimulus for local economies in Poland and Lithuania, the new textile relations have also caused significant changes in the Danish textile industry. Many jobs have been lost in the Danish textile district. However, the industry there has managed to develop into a less labour-intensive high-value-added one.

To study the spatial impacts of these relations, a survey was carried out on foregin direct investments of Nordic firms in the three Baltic States and the St. Petersburg region focusing on the establishment of new subsidiaries, acqusition of existing firms, etc. The study shows that FDI from the Nordic firms seem to cluster within the capitals and largest cities. Tendencies towards more decentralised investments in household-oriented retailing and services were observed. The above-mentioned statistical observation of trends towards a slow through strengthening economic integration was confirmed by the behaviour of firms which suggests that competition becomes increasingly a problem as well as a driver for investments.

From the spatial point of view, the tendency towards a clustering of FDI within metropolitan areas of the transition economies is of significant importance to the future development of the regional system. The availability of a relevant regional infrastructure to link the investment hubs in the emerging market economies to their hinterland, and not only to the financial and economic centres in western Europe, is a necessary condition for balanced development within the region, the authors conclude.

PLANNING AND POLICIES IN TRANSITION

The study on industrial relations established by Nordic firms within the three Baltic States and the St. Petersburg region demonstrated that Nordic investments were concentrated within the three Baltic States rather than within the St. Petersburg region. Being the largest city in the BSR, an important gateway to Russia and one of a cluster of capital and metropolitan cities around the Gulf of Finland (i.e., St. Petersburg, Helsinki, Tallinn, Stockholm and Riga), St. Petersburg attracts special attention as a driver of further integration and cooperation within the BSR. In Spatial planning for FDI in transition economies: the case of St. Petersburg, Nina Oding examines FDI in St. Petersburg. She draws our attention to the gap between the need for, and current limited amount of, FDI. The economy of St. Petersburg changed significantly throughout the 1990s. The share of manufacturing shrunk, while the shares taken by trade and public services increased. On the one hand, this process reflects a levelling-out of the former economic system's distortions, while on the other it represents a modern universal trend for service-dominated economic development. The author observes that at this stage foreigners tend to invest only in economic activities with short repayment periods, in renovation and expansion of separate manufacturing units, as well as in raw-material processing industries and industries producing goods with a low degree of processing that are in demand on international markets. Further, foreign investors give priority to goods and services with guaranteed local market demands. Thus, the bulk of FDI goes to manufacturing industries, in particular to the food industry, mechanical engineering and metal working, followed by telecommunications, trade and catering services.

In examining the obstacles to further investments, the author includes those affecting domestic, as well as foreign investments. As regards FDI, the key obstacles remain the same for years and are mostly related to legal, institutional and bureaucratic barriers. What is interesting to note is that regions surrounding St. Petersburg have taken radical measures to improve their investment climate. Domestic investments in St. Petersburg suffer from a lack of private investments. One reason is the weak incentives, another an acute need for a new urban planning strategy with a system of clearly stated targets and goals. However,

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St. Petersburg has started to catch up with these problems, with a strategic plan for St. Petersburg and an investments strategy for the St. Petersburg city centre having been approved just a few years ago.

In more general terms, the impacts of the political transition on spatial development and planning are examined in the paper *Planning urban systems in Soviet times and in the era of transition: the case of Estonia, Latvia and Lithuania* by Vanagas, Krišjane, Noorkoiv and Staniūnas. During the Soviet period spatial development was greatly influenced by political decisions and the command-type of political decision making. The ideal was for spatial development to entail a hierarchical urban system, evenly distributed so as to enhance accessibility to public services and jobs. New urban industrial centres were developed as hubs of economic development, facilitated by the location of new industrial enterprises and subsidiaries. Immigrants from other Soviet republics contributed to the workforce needed for the enforced industrialisation, especially in Estonia and Latvia. In these two countries migration had a pronounced influence on the composition of the population. Thus, during the period 1946-1991, the share of non-Estonians increased from 2.6 percent to 38.5 percent.

The urban systems were shaped by the appointment of cities as centres ranked in order of public service and accessibility for people of the urban hinterland. In the rural areas, villages suited as centres of collective farming were designated "prospective," whereas others termed "non-prospective" were left to their own destiny. Thanks to strict building controls, prospective villages prospered and became hubs of rural development competing with former centres.

Urban development after the political transition was characterised by new trends. One such, concentrated within Estonia and Latvia, was the re-migration of families that formerly emigrated to the Baltic States to take up work in the new industrial centres. Another trend was the economic restructuring of industrial production, as often followed by a crisis in the new industrial cities, several of which depended on one or a few industrial enterprises. In general, economic development concentrated within the largest cities. Accordingly, a large number of small towns and cities did not in essence acquire new infrastructure during the 1990s. If the Latvian experience is to be believed, this has happened because of a lack of focus and well-planned state policy after the transition. However, spatial development is currently becoming an issue of political concern in all three Baltic States. Thus, the final part of the article deals with current plans and strategies for national spatial planning. Interesting to note is that the development of the capital cities is a key issue in all three Baltic States. Being small countries, they all need large capitals to take part in global urban competition. Arguments are put forward most strongly by Lithuania, as somehow provoked by the fact that Vilnius was not appointed a "European City" in the Vision and Strategies for the Baltic Sea Region, VASAB 2010. In the Latvian case it is noticed that recent economic 8 Niels Boje Grot

concentration within the capital Riga has taken place in spite of a decline in the number of inhabitants. More generally, it is argued that this new trend belies the widely accepted hypothesis that a positive migration balance is an indicator of economic growth. There is no longer a need to concentrate labour as was the case during the over-industrialized Soviet period. Rather, the new economy creates a growing demand for a qualified workforce in cities to grow. Thus, the quest for "focused and well-prepared state planning" is not a desire to return to the former Soviet-type of planning, but rather a quest for planning based on new paradigms for the understanding of spatial development.

NEW GEOGRAPHICAL PATTERNS

During the 1970s many European countries experienced new trends in urban development. Those entailing urban development centralizing in the capital and metropolitan cities were broken. Some large cities even suffered from economic decline and the presence of obsolete industrial sites. Due to a lack of regularity, the new trends for decentralized development were characterised as "mosaic." In the USUN project it was expected that these new mosaic development trends would prevail. In fact, 11 studies on national urban systems focusing on the 1990s showed that in all but one BSR countries an outstanding trend to urban development was observed characterized by a concentration of development within the capital and metropolitan cities. Thus, it seems as if the pendulum has come back to its former position of the central-peripheral development of urban systems. However, times have changed and new generative forces are also in play. While urban development is concentrating within the largest cities, urban networking is offering medium-sized and smaller cities new opportunities for more direct (non capital city-mediated) access to international markets, institutional cooperation and chains of production. These trends are examined in the last two articles of the volume.

In *Urban systems in the Baltic Sea Region: metropolitan regions take the lead*, Tomas Hanell and Bue Nielsen provide multi-faceted evidence on the recent growth-trends for the capital and metropolitan cities in the BSR. According to their observations, national urban systems in the BSR were being polarized throughout the 1990s due to forces that favour the capitals and metropolitan cities and turn smaller and medium-sized cities into vulnerable situations. At play are internationalization of the economy, the decline in industrial production and the advance in service production, IT and high technology. Along with internationalization of the economy, regional urban relations are substituted by international relations. Most vulnerable, being left alone on the global market, are the medium-sized cities suffering from declining industrial production. On the other hand, the largest cities are most capable of handling international relations – and thus seem the most attractive locations for the new

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knowledge-based services, IT and high technology. These general observations are not new, but what is new is the empirical evidence provided by the authors in terms of the shares taken by the capitals and metropolitan cities in the BSR during the 1990s as regards population growth, GDP, total employment, employment within the service sector and FDI. Paying due reference to exceptions, the overall picture is that of an outstanding and even "hypertrophic" development of the national urban systems in the BSR. Interesting to observe is that the characteristics are to be observed throughout the BSR, in eastern as well as western countries. It is a well-known fact that the urban systems of the smaller countries in the BSR are characterised by a high primacy of the capital cities. These countries therefore seem most exposed to further concentration of power and the economy within the capital regions. However, in the opinion of the authors, it also has to be acknowledged that the smaller countries need cities able to take part in international urban competition. Further, since they are small, these countries may be in a better position to spread the wealth of the capitals out to the peripheries.

The observed trends for economic development concentrating within the largest cities are also taken into consideration by Piotr Korcelli, Niels Boje Groth and Ewa Nowosielska in National urban systems in the Baltic Sea Region: trends and challenges. Theories of urban systems are discussed and examined by reference to recent observations of changing urban functions and relations. Due to an overwhelming prevalence of observations on economic concentration to the national core areas, special attention is paid to the potentials of the second layer of urban centres. These are not cities ranking as central places next to the capital cities. Rather, they are cities developing through their own competences in specialized functions, some being regional capitals and others smaller or medium-sized towns of lower hierarchical order. A tentative model for national urban regions influenced by globalization is suggested, comprising: (1) urban regions of international competitiveness, (2) developing regions outside the national core, and (3) cities of functional importance and cross-border regions. Development options for second-layer cities are very much related to the ability of cities and urban actors to take part in international chains of trade and production, and in institutional networking. Studies of urban networking were among the key issues of the USUN project, and findings within industry, trade and city cooperation sub-projects are discussed. Special attention is given to cooperation among universities, due to the fact that regional-usually younger -universities, seem to be very active in this area. The role of universities in Finnish regional policies, and recent trends in the establishment of new Polish universities in the urban system of Poland are put forward. Both of these examples show that universities are an urban function of strategic importance if the options of the second-layer of urban centres are to be developed. Finally, prospects for future urban development are examined in the light of the increasing interdependence of urban systems on the regional (i.e., Baltic-Sea), European and global scales, and in light of the increasing maturity of urban systems. Due to the first of these trends, urban systems may tend to evolve towards separate layers. If the largest cities take the lead as in a separate layer -detached from the hinterland zones-the majority of medium-sized and smaller cities will not be in a position to benefit fully from the integration process. Therefore much attention should be paid to the formation of linkages among the second-layer cities, i.e., linkages that run both astride national boundaries and across the national urban hierarchies. Thanks to the second of the aforementioned trends, national urban systems are characterised by a high level of urbanisation, low rates of demographic change and low levels of internal migration. In the eastern BSR rural-urban as well as urban-rural migration was envisaged in the 1990s. However, these turnarounds are most probably of a transitional nature and may prove to be shortlasting. With the advancing economic and social transformations, the current decade should witness a resumption of urbanisation processes. Still, this expected resumption of urbanisation will no longer involve a massive rural-to-urban movement, as the countries concerned are fairly highly urbanised and their rural populations are characterised by a relatively advanced level of ageing. Prospects are more transparent in the remaining part of the BSR. Here we are dealing with urban systems that are basically non-growing. These systems will continue to undergo restructuring, the focus of which is very likely to be further metropolitanization.

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URBAN NETWORKING: TRENDS AND PERSPECTIVES IN THE BALTIC SEA REGION

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ABSTRACT: In this article, urban networking has been defined as networking within an urban region as well as between such regions. The networking paradigm, arising from shifts in the conceptualization of space, is seen to reflect changes of importance between the levels of governance—of the city, the region, the nation, and the international community. Globalization and regionalization trends have resulted in patterns of urban action contributing to the presented generalized profiles of networking-oriented qualities. The organizing capacity of the urban region is recognized as the crucial success factor, and urban and regional policies are seen as key tools for successful networking.

KEY WORDS: networking, urban policies, regionalization, interationalization, urban governance, organizing capacity.

INTRODUCTION

This article deals with the recognition and description of the urban network in the Baltic Sea Region (BSR). The work is based on theoretical study and a work of international cooperation within the INTERREG IIC project context. The focal point has been the possibility of making international comparisons in a new action space just forming around the Baltic Sea.

Historically, the BSR has been a stage for a wide-ranging and constantly changing form of urban structures and cooperation. These changes have been linked inseparably with the development of societies. In general, cities have introduced and utilised the newest ideas and technologies of each cycle of economic development (e.g., Hall 1998). In different countries around the Baltic Sea, cities and urban systems have developed in different directions over the recent past, but the last decade has been a time for new unified prospects in city cooperation.

Cities are again facing changes in their roles. The 1990s meant deep reorganizations on both sides of the Baltic Sea. On the eastern side, the collapse of the "Iron Curtain" led to profound transformations of the economic and political systems. On the western side the expansion of the European Union was accompanied by restructuring processes in economies. At present, the cities are in corresponding situations: in the transition countries, Nordic and other West European ideas and models are being experimented with; in the EU countries, the transition economies' new markets and collaboration are being sought.

For the cities in the BSR, the situation is challenging. The enlargement plans of the European Union and the evolving strategies of the transition countries of the region will be important factors in shaping the future of new political and economic environments for cooperation between cities. Key questions concern whether the now-thriving patterns of regional identity building will be re-enforced or new directions found, as well as the way in which globalization and European integration processes will affect the future integrity of the region.

In this context, it is also necessary to consider that the BSR is not a clear or well-integrated economic or cultural region. Even the region's outer boundaries are somewhat indefinite (Gerner 1991, Veggeland 1993). Today the BSR exists above all as historical heritage and political and cultural visions. The unity of the region is mostly based on a common catchment basin and functional, sea traffic connections.

Another regional difficulty has been the classification of cities for this study. In principle it should be based on the functional urban region. However, this has been impossible to achieve because there are no such data available.

THE CONCEPT OF SPACE AND URBAN NETWORKING

In this study we use the concept of space as an expression of society. Since societies are undergoing structural transformation, it is reasonable to suggest that new spatial forms and processes are currently emerging. The purpose of this chapter is to identify the new logic underlying such forms and processes and to draw up a profile of the new spatial process, the space of flows, that after Castells (1996) is becoming the dominant spatial manifestation of both power and function in our societies. Here cities play a crucial role.

CHANGES IN THE LOGIC OF SPACE AND THE LOGIC OF NETWORKING

Recent social development has demonstrated the reorganization in society's spatial logic and levels of activity. On the one hand, it is globalization and European-level integration that are emphasized on the other nation-states, and the regionalization process within countries and across borders.

At the same time, there is growing tension between the powers that control the political territories and interests linked with networks. Networks of science-based knowledge and firms especially have broken free from traditional political territories. The tight connection between industrial, scientific and political interests has been disrupted and the significance of informal contacts is growing at the expense of formal ties (e.g., Jonsson et al. 2000, 99).

The interrelationship between the concepts *network* and *region* can be used as a basis for recognizing and describing a world that is not held together in the way it used to be. The image that emerges is one of a fragmented mosaic of self-reliant regions or territories linked together through different types of networks. Regions designate political space, networks depict geographical space as nodes connected by links. The significant difference between these two concepts becomes apparent when important networks become autonomous in relation to territories to which democratic controls are confined.

This change in the logic of space (Camagni 1993, Castells 1996), or in more practical terms, a change in the relative importance of territoriality on the one hand, connectivity and accessibility on the other, is not pervasive. Rather, it results in a two-tiered system with the space of flows dominating in economic and public spheres, and the space of places still holding the better position in the sphere of the social interaction of most peoples. In this line of reasoning, the tradition of defining regional hierarchies of central places in terms of distances and positions—whether the organizing principle be economic, physical or administrative—is being complemented by a networking definition based on access to networks and proactivity. A striking difference is the change in dependence from physical distance and hierarchical orders (Eskelinen and Snickars 1995).

This change into networking may also be thought of as a qualitative change in discourses of urbanity. The qualitative change is the new logic embedded in networking actions. The space of flows is about the flows of information: money flows as information, technology flows as information, knowledge flows as information. This is no novel situation for cities, which have always been informative nodes and pools of information. However, there has also been a quantitative change in these flows. This change is displayed in both the scope of these flows, which is increasingly international and global, and the proportion of the urban relations arranged according to networking logic.

Networking logic is predominantly a product of economic thinking, and the formation of networks may be seen to have its starting point in the structural change of modern market economy-driven societies. Insofar as the conditions in which networking is taking place are seen to be the result of (economic) forces mainly external to any single city or urban region, there are only limited chances for finding cures within the region.

Economically based approaches must also consider both competitiveness and profitability to be central motivations to networking. However, when networking

is considered to cover various functions of the urban administration, it becomes clear that economic aspirations do not suffice in explaining the motifs of the various actors.

In the functional meaning, urban networking refers to polycentric urban configurations, which are interconnected by linear infrastructures along with goods, people, information and money flow. A network city evolves when two or more previously independent cities, potentially complementary in function, strive to cooperate and achieve significant economies of scale aided by fast and reliable corridors of transport and communications infrastructure. On the other hand, similar urban regions cooperate to maximize synergy and innovativeness (Batten 1995, Camagni 1993).

Another dimension may be added by defining "netting" as the framework, or building process, of the (physical) conditions of networking (Vartiainen 1997a). This emphasizes the action-oriented nature of networking, and the need for physical prerequisites: "Physical networks, such as transportation routes, are used as an infrastructure for urban networking of this specific kind and it is possible to discover physical networks as one motive for urban networking in a socio-economic meaning" (Vartiainen 1997b).

The overall definition of networking may then be considered as "an economic and organizational principle, it refers to those mutually-supportive actions or coalitions which are related neither through markets nor by administrative hierarchies. In the spatial development context, urban networking refers to the local and regional cooperation between public and private organizations concerning services, innovation, training, communications etc." (Antikainen 1997).

Urban interregional cooperation or networking has profound implications to both policy-making and mobilizing regional resources. Funck and Kowalski (1993) argue that, while a solid economic base is fostering increasing interregional networking activities, it is also the case that such networking activities are closely related with "relaxing" reorganizations in urban administration frameworks, thus providing impetus for economic development, especially in peripheral regions.

While it is obvious that engagement in interregional, international and cross-border cooperation activities implies that the urban administration is capable of creating and organizing such cooperation, it leaves open a question as to the organizing of actions within the urban region and the engagement in public-private partnerships, co-partnerships and subcontracting partnerships within interregional and international cooperations.

CITIES AS MEETING PLACES FOR GLOBAL AND LOCAL PROCESSES

There are conflicting opinions between two schools of thought as to whether urban development follows the hierarchical or the mosaic model. In the

hierarchical model, the future development of the BSR appears to favour everstronger urban regions. In this understanding, the national hierarchies of central places are being replaced by new global and European urban hierarchies.

The mosaic type development, on the other hand, emphasizes local development factors, which are also expected to offer development opportunities for smaller and more specialized urban areas. From this point of view, the urban network can be described, not as having a typology of different levels of centres, but more from the standpoint of a profiling of cities on the basis of their functional specialization and factors of infrastructure and communications.

In this study, the urban network has been conceptualised by using the following three basic functions of a city (Schön 1993, Vartiainen 2000). A city is simultaneously (1) a living environment for the inhabitants and an action milieu for local firms and organizations, (2) a centre of its own sphere of influence, and (3) a location for supra-regional, and more often also inter-national, activities.

The classical Christallerian central place theory emphasizes the second basic function, i.e., the regional service function. However, the future emphasis of urban development seems likely to be on cities' first and third basic functions, i.e., on their local significance and supra-regional and international tasks. The methods used in this study therefore embrace aspects such as functional specialization and preconditions for internationalization (Vartiainen 2000, 6). The indicators pertaining to a living environment and quality of life should also have been important. However, the lack of comparative data has prevented analyses of these functions.

URBAN NETWORKS

The overall aim of urban networking is to achieve synergistic advantages by way of developing cooperation and a division of labour among cities. The cities or urban agglomerations are seen as administrative organizers in a networked system of cooperation. The actual actors in networking are not just the institutions of the local administration, but also firms, universities and other educational establishments, local government offices, NGOs, etc. This means that an urban network is taken to relate to both a way of arranging the strategic development of an urban region and a way of organizing cooperation among urban regions. These viewpoints emphasize the (pro)active nature of networking.

There are clear differences in the functional principles of networks and more traditional formal bodies (e.g., Borja and Castells 1997). Networks are more associative in their structure. They are actor- or agent-oriented and without any exact territorial or state representation base. Network organizations are more ad hoc, changing and heterogeneous than they are bureaucratic and stable.

In this study, the main emphasis is placed with inter-urban networking activities that have international importance in the BSR. The study concentrates on urban networking as cooperation between cities, whether bilateral or

multilateral, as long as the resulting overall matrix of related cooperation may be said to take the form of a network in which the city may be seen as an actor.

Three basic types or dimensions of networks have been used in this study: (1) the physical, e.g., transportation-related, (2) the institutional-firms and other organizations, and (3) the socio-cultural-individuals, knowledge transfer, etc. Transportation networks can be mapped quite easily, but institutional and especially social and cultural, nets are often difficult to depict in concrete terms. Many influential networks are invisible and anonymous to outsiders.

BASIC ELEMENTS AND EVALUATION OF URBAN NETWORKING

CONNECTIVITY

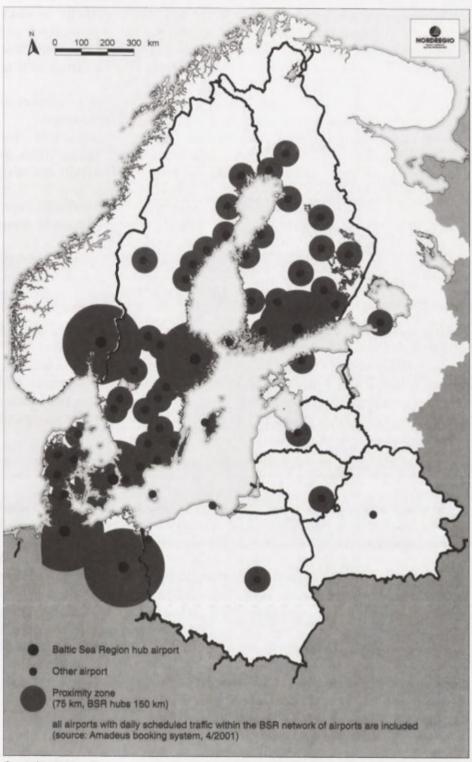
The basic physical elements, the "netting" prerequisites of networking in the BSR were touched upon briefly. It was held that the evaluation of VASAB 2010 on links could be considered valid on the level of investigation. It was out of the scope of this research to study the physical connectivity measured in distances, passenger kilometres, ferry connections and flight times in full. The basic assumption was that this kind of distance-bridging connectivity is well present in the VASAB 2010 city classification, and that on the level of the BSR the changes over a few years are not too dramatic.

However, one picture of physical connectivity within the BSR was arrived at by a simple calculation of daily scheduled flights, including considerations of schedules and flight times. This, connected with approximations of land connectivity, produced a presentation of a "Flight-the BSR" where overnight return trips are possible at least three days a week throughout the year (Fig. 1). This could be complemented by results of a parallel sub-study on sea transportation to provide a feasible picture of physical connectivity on a true BSR level.

URBAN STRATEGIES AND POLICIES OF INTERNATIONALIZATION

In the face of rapidly continuing global and European integration, one of the key issues for the cities in competition and cooperation on the regional stage is internationalization. Internationalization corresponds with efforts of cities at expanding region-wide transnational urban networking. It is the strategies for internationalization that position the urban region into politically-motivated, locally-organized international networking (Figueiredo 1993, Amin and Thrift 1995). Therefore, the investigation of strategies and policies of internationalization is a starting point from which to evaluate the capabilities of an urban region for engaging in networking activities.

Figure 1. "Flight - the BSR". Reach of daily overnight return trip by air travel.



The first question is whether such strategies and policies exist, and in which cities. The existence of these strategies and policies is a sign of political will and administrative organizing. The second question concerns the content of these strategies. The main trends to international actions may be categorized as follows (de Lavergne and Mollet 1991):

- Local economy internationalization can be measured, e.g., by the number of foreign firms and their relative importance in the local urban economy.
- The measure of industrial service-center functions distinguishes those cities that have extraordinary services to a degree greater than their "natural" share as regional or national centres, favouring economic and human resource development.
- The situation within high-speed infrastructure networks and transnational intercompany or inter-institutional links and interaction brings benefits to some cities.
- Specific international flow organization refers to some cities' ability or strategy to compensate for their peripherality by attracting specific flows via tourism, cultural activities, trade fairs, sports competitions, or generally by underlining their environmental and historical heritage.

All of these factors may be based on objective indicators that are not affected by voluntary local policies, so it is possible to differentiate between having "real" internationalization and having decided on an internationalization strategy. Local economy internationalization, industrial service-center functions and specific international flow organizations were subjects of study in the parallel sub-projects of the USUN-project covering aspects of industrial networking and tourism (Snickars and Bourennane 2000, Engström and Suer 2000).

BARRIERS TO INTERACTION

The most important barriers to networking presented here are connected with specifically urban administrations, so barriers concerning other urban actors such as private corporations or NGOs are not discussed in further detail. Neither were there possibilities for assessing legal systems and matters of property and ownership. The study is mostly concentrated on an understanding of the barriers at a general level. The listing of barriers to interregional cooperation presented by Cappellin (1993) is well suited to this understanding. Cappellin's approach deals specifically with strategic development issues, so it covers the scope of this study. Cappellin identifies the following groups of barriers:

Economic and cultural barriers

- A different technological development levels
- B different institutional competencies
- C inadequate financial resources

D different languages

E different working methods

Political and administrative barriers

F weak reciprocal knowledge and trust

G inadequate specification of interests

H inadequate motivation

I insufficient stability of objectives

J inadequate development of cooperation among

regional actors

K inadequate design of cooperation management

It is obvious that only in extremely few cases of international cooperation will all of the above barriers be overcome to the point at which they do not exist. Barriers A through E are bound to be a part of almost any international cooperation, and especially in the BSR, where there are, for example, very few possibilities for a common language other than one of the "main" *lingua francas* (English, German). However, these barriers are not in need of eradication, but rather to be assessed and taken into consideration.

It is, however, barriers F through I that pose the most pressing challenges to the networking urban regions in the BSR. While F deals with a wide variety of subjects, learning is the key word to overcoming any practical obstacles arising from a lack of knowledge about cooperation activities, partners and the networking environment. Barriers G, H and I are connected with strategic planning of the urban regions, and solving these questions is becoming crucial to the developing of any long-term cooperation activities. In the long run there is little room for *ad hoc* policies and rapidly shifting strategies in the cities.

Barriers J and K deal with the organization of cooperation within the urban region. In this sense, urban regions are in totally different positions, depending on their historical development patterns. Unlike other political and administrative barriers, these cannot be overcome by actions of local governments alone, since other actors of the urban region are to be taken into consideration specifically. It is barrier K that is most likely to have to be addressed within the urban governance system before successful urban region-wide networking can take full strides. It is therefore this question of building administrative prerequisites for networking and organizing capacity that we shall look at in more detail.

ORGANIZING CAPACITY

In this study, the organizing capacity of a city or an urban region means "the ability to enlist all actors involved, and with their help generate new ideas and

develop and implement a policy designed to respond to fundamental developments and create conditions for sustainable development" within an urban region (van den Berg et al. 1997).

Organizing capacity may be assessed by studying its various components (van den Berg et al. 1997). It is composed of six intertwined aspects of urban governance. The formal institutional framework or administrative organization is the starting point. The administration also needs to involve itself in strategic networks, which require leadership if their potential is to be utilised. Networks operate in an urban environment conditioned by spatio-economic conditions, which need to be explicated if they are to be tackled. The conditions must be fought with a coherent vision, strategies and objectives. Wide cooperation should be translated into both political and societal support.

As a rule, there are very few unitary authorities on the level of the urban region, but it may be said that such an authority will provide a solid starting point for developing organisational capacity (van den Berg et al. 1997). Competence within the institutional framework includes both formal competence as a necessary prerequisite, and cooperativeness which is crucial for a metropolitan/urban region administrative model (Longhi 1999).

Strategic networks mean patterns of interaction and cooperation among the mutually-interdependent actors which evolve around strategic policy problems and projects. The measure of success is the ability of the urban administration to govern these interaction processes between public actors and public and private target groups and individuals. The ability to initiate partnerships outside the sphere of urban authorities is the crucial factor in creating a partnership culture, which in turn allows for the formation of strategic networks.

Strategic networks do not replace the formal administrative structures, but rather complement them in key issues of urban development. These networks derive their importance from the dynamics of the network paradigm, according to which the value of the network is more than the value of the individual actors. This means that the relationships among the actors produce added value, something that is borne out by mutual two-way dynamics and mutual dependencies that motivate cooperation, form the basis for confidence and foster flexibility.

RESEARCH DATA AND EVALUATION

The present study started out from a desire to question the cities in the BSR concerning multiple facets of their urban networking activities. A questionnaire was thus sent out to 97 member cities of the Union of the Baltic Cities in March 2000. These cities were the first-round target group, chosen due to their stated interest in city networking. As the return percentage was unsatisfactorily low, a second, radically revised questionnaire was sent to the same group of cities in May, 2000. This questionnaire was more successful, but the return rate was still of only 33 percent, so there was a need to suplement this material with other data.

To supplement the surveys, several cooperation schemes were studied. The various EU Structural Fund programmes and Community Initiatives were seen as most influential in showing just how cities can organize networking partnerships, attract actors from the urban region, and work with the institutional hierarchies prevalent in most interregional cooperation activities. Special attention was paid to the "integrative" nature of the chosen programmes, and to the possession of data that present all parts of the BSR on an equitable basis (Fig. 2).

The INTERREG IIC Baltic Sea Region programme was studied, as it may be seen as one of the most influential urban and regional planning-related networks of activities and resource (re)allocation in the region. All projects and all actors (project partners) are present in the data.

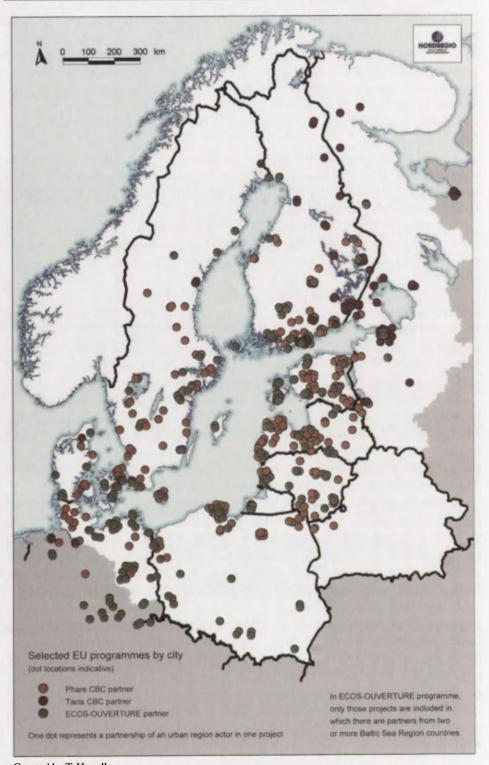
The data from the ECOS-OUVERTURE programme consisted of 87 BSR -oriented projects from the years 1991-1997. A project was chosen from the total of 340 within the programme if there were partners from at least two countries of the BSR.

The study concerned a total of 95 PHARE CBC Baltic Project Facility projects from years 1997-1998, and 38 corresponding TACIS SPF projects from the same time. The UBC city network was included, as it shows how cities engage in wide-ranging co-operation activities within an organized network. Data include city twinning activities and project activities from the years 1997-1999. These data are not totally comprehensive however.

To further balance the EU-orientation of the data, the Ballad Internet network was chosen as an "alternative" network in the sense that it is totally Internet-related (in that the coming-together of potential actors is mediated in the form of an Internet site). However, there is no visible mediator, and the network is accessible to any wilful actor, so there is no actual mediation. The data consisted of the actor database information as of March 2000.

For the purposes of the study, it was necessary to delimit the scope of activities targeted. Thus, the reliability of the results is totally dependent on the viability of the compilation of data from various sources. However, the method of compilation also boosts reliability, since the data sources are largely independent. In practise, reliability can be increased by adding new data until further additions produce no significant changes in interpretations.

In the course of the analysis, cities were then evaluated using a multi-variable technique that asserted a focus on pre-determined elements derived from the basic elements of urban networking: inclusion in formal and cultural networks, the scope and scale of cooperation activities in comparison with the size of the city, and the degree of commitment to EU-based networking activities. The results of the analysis are presented as profiles of networking. In the following chapter, these profiles are associated with general conceptual findings that have arisen from the theoretical and methodological discussion, as well as dialogues with the cities.



Created by T. Hanell

THE ESSENCE OF URBAN NETWORKING IN THE BALTIC SEA REGION

The BSR urban networking has been a challenging research task both theoretically and empirically. Our purpose has been to develop an analytical method for the multidimensional description of changes in the logic of space and the logic of networking around the BSR. As already stated, there is a growing tension between territorial powers and the interests of the networks.

The city has qualities that make it strategically important. In a long historical perspective, settlement patterns are the most stable spatial order underlying the societal life of the BSR. It is to this pattern that population, production, consumption and all forms of transportation are tied. Another quality of the city is that it provides an interface for the interaction between different geographical levels of interests from the local to the global. City-regions are also key economic units – the most successful regions economically are nothing more or less than cities and their neighbourhoods, or city-based corridors. Besides it is large cities that give regions their identity.

While territory has been a central part of societal organization, non-territorial networks have played an equally essential role. A network of cities has existed throughout our times. In the recent past, cities in Europe and the BSR have once again occupied a position that challenges established decision-making structures, essentially the traditional territorial states. The network model or metaphor captures the essence of the simultaneous processes of globalization, regionalization and state adaptation (Jönsson et al. 2000, 188). It induces us to view territories, organizations and human interaction in a new light.

We have especially focused on urban networking as an indicator or measure of urban development and its two facets - the importance in reorganizing action, and its way of organizing power relations and urban functions. The descriptions and analyses are essentially based on information received from the cities themselves, and much information is missing. The comparison is also reduced by the vagueness of the cities' territorial delimitation. The biggest contextual weaknesses of our knowledge base are related to the compilation of statistics of the new developmental trends described above.

URBAN NETWORKING AS A TOOL AND AN INDICATOR OF URBAN DEVELOPMENT

Networking in the urban administration may be seen as a shift in several conceptual levels. The simplest explanation presents networking as a new tool for administrative action. In this sense networking does not require changes in the role of the administration within the urban region or in the community of

urban regions. As such, networking may be a powerful tool with which the urban administration can enhance the dissemination of resources and the structural content to cooperation.

Seen as a novel way of organizing urban activities, networking entails a break with the hierarchic nature of "traditional" urban governance within the administration. In this vein, orientation towards networking activities means establishing, and participating in a kind of cooperation which is from the start structured according to networking principles. This means e.g., that public-private partnerships and "armslength" companies become relevant in various spheres of action.

Networking may also be seen as a paradigmatic shift in the conceptualizing of urban administrative relations. In this sense, the capacity of the urban administration to organize networking activities and create strategic alliances within the urban region becomes crucial. In this reasoning, a new networking-oriented administrative agenda is becoming more and more pervasive as the principle according to which activities are initiated, planned, structured and implemented. This means that the networking principles must increasingly be embedded into the administrative functions and the structures themselves, as well as into the minds of both the administrative staff and other actors.

Judging by the current evidence, there are some conclusions to be drawn from the analysis. Networking has qualities that are not dispersed unilaterally, through the BSR. Rather it seems that, at this moment, networking is at its roots a phenomenon with clearly different factual settings, as well as diverging meanings.

It may be said that, in their physical sense, "netting" actions are already taken for granted, although there are marked differences in, for exemple, the e.g., resources for infrastructural enhancements in different parts of the BSR. In a social sense also, networking has been approved of as a viable way of organizing action. This is evident in the internationalization strategies of cities. Networking has been accepted as a strategic lineation, not only as a means to other strategic ends. It is partners and cooperation that are being pursued in the first instance in international interaction. The "content" of urban development is visioned on the level of the urban region, and only translated into the international level by way of projects arising from cooperation schemes.

However, networking has not generally been accepted as a way of organizing urban power relations. These existing (administrative) power relations are connected to established power structures that offer varied but generally limited possibilities for a reorganization of the actual power relations.

This is particularly evident within a city region. There are forms of networking-related reorganizing power groups, which adhere to the logic of networking and act according to networking rules. However, urban administrations are organized and function according to the old logic of hierarchical action and decision-making. While the elected decision-making organs have also adopted new prac-

tises and emphasise many of the networking-paradigm basics, they are both bound by legislative restrictions and limited by the old administrative ways of handling issues.

It is evident that both the internal possibilities, as well as the barriers to networking, are in the last instance created in the values-chain of individuals connected with urban administrations. Each individual acts according to his/her own logic, and a complete chain of network-oriented individuals is needed in "key" positions in order to assure the functioning of the networking principles in practice. It is therefore a challenge to individuals themselves to reformulate their (administrative) values towards the prerequisites of the networking paradigm, and a task of administrations as actors to seek out ways in which the principles of networking may be incorporated into their administrative structures and methods.

But does networking – in any or all of the above meanings – correlate with the success or otherwise of urban development? It may be said that, if the density and variety of international and urban region contacts are taken as measures of success, the efficiency advantages of networking make it important *per se*. This means that networking, by definition, creates added value, not only because of the relations among the actors within a network, but also those between different networks through actors who function in several networks simultaneously. In more practical terms, networking may simply be an efficient way of widening the contact surfaces in various spheres of interaction.

Active networking thus seems to help in counteracting and complementing increased competition among cities globally and regionally. Competition is an unavoidable counterpart of cooperation, and in a sense also a necessary one. Competition brings about proactive measures, so it may—and regularly does—also boost networking. Cooperation and competition may thus be seen as two sides of a coin, distinct but necessarily related. The reciprocal nature of this interaction of cooperation and competition means that networking serves to alleviate tensions between the two. The cities that are the best networkers are on many occasions also in competition with each other, but at the same time emphasise the cooperative nature of their mutual relations.

INTERNATIONALIZATION, REGIONALIZATION AND URBAN ACTIVITIES

The starting point for an assessment of the internationalization of urban activities has been the identification of changes in international urban systems. As a consequence of the globalizing trends in the economy and culture of the developed countries, the relations among the three main levels of governance have changed dramatically. Formerly the most important level of political and economical control in the global system, the nation state has had to yield to both international actors and multinational companies on the one hand, and to

regional and local actors on the other. This means that there is increased scope for urban governance in attacking global markets and utilizing regional potentials. As a result, internationalization is unavoidably a part of urban interaction.

In the face of global and international trends towards the building of inter-urban regimes, one may ask whether networking is a feasible and competitive strategy for achieving a regionally-balanced path to urban development. So far there is little evidence to show that networking would in the long run produce a more equal pattern of cooperation. On the contrary, it seems that much the same applies to networking cooperation as does to any competition in economic terms: partners are chosen according to their competitiveness. In terms of urban development and advance, the factors of scale and scope are strongly favoured – since it is exactly these factors which are the result of being competitive in some fields (Cappellin 1991). Therefore, while good networkers seek other good networkers, it is the urban system-related cooperation patterns that are strengthened in many cases.

On the regional level, networking is developing as there are more and more actors who want to enforce their strategic position both within the region and in relation to European integration. This is to a large extent a matter of strategy-building, as much as of a change in the logic of business and administration. Internationalization strategies are being developed in small towns as well as large metropolises. Networking is one of the front-line tools by which to enhance international exposure, given that the prerequisites for successful networking are present.

This is a part of the process whereby the system of networking cities is forming its own categorization, based on the principles of networking, instead of "urban system"-properties. It may be appropriate to call these categories "profiles," since the borders between such categories are not clear-cut.

PROFILES OF URBAN NETWORKING

The profiles of urban networking describe the various circumstances of international action and the corresponding reactions of the cities, according to their capacity to handle the situation. Hence, the profiles reveal networking potentials as the outcome of the position of the city in the national urban system, the networking capacity, and the internationalization strategies of the city. The profiles are mixtures of existing, planned and envisioned elements.

International centres of urban networking are directed towards global or European-level networking, but their activities towards the BSR are also well managed and ample in quantity. The scale of operation of these cities seems to favour participation in international and global activities, but marginal actions are also developed. Since the scope of networking activities in these cities is great, they have formulated strategies that direct the cooperation activities

in various fields. Strategic choices have been made, although these cities are not concentrating on some specific issues on the scale of the BSR, but are rather forming strategic alliances around Europe and even globally on the basis of their similarity. This alliance building need not have been either conscious or strategy led.

Diversified centres of urban networking have formulated their urban cooperation strategies either explicitly or at least in terms of strongly-favoured implicit strategies. These cities have a clear orientation towards BSR-related urban networking activities. The city administrations have demonstrated their capacity to organize, foster and implement various urban networking activities, and this is also reflected on a practical level in the broad spectrum of projects which are being led or participated in.

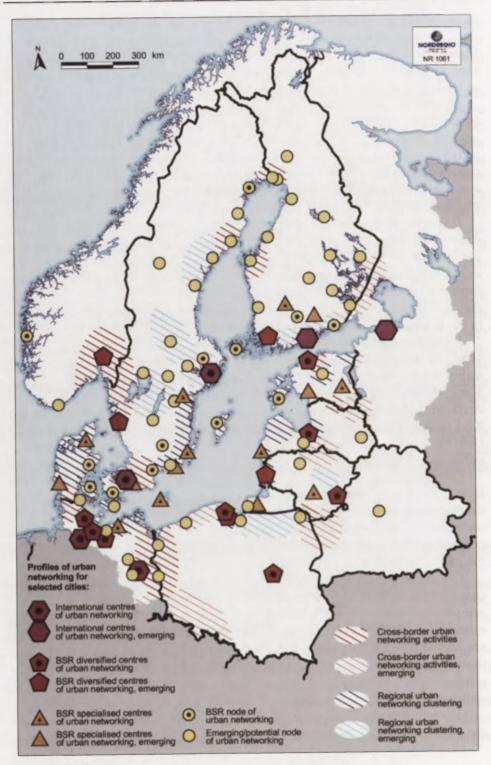
Baltic Sea Region-specialized centres of urban networking have made strategic decisions in the dominant or key sectors of the urban economy. Cooperation at the level of the BSR is active in these sectors. There are also activities in other fields, however, so specialization does not relate to the one-sided or monofunctional nature of the UN, but rather to real specialization. It is apparent that the capacity for organizing urban networking activities is good in the key sectors, in the fields of specialization.

Baltic Sea Region nodes of urban networking are prominent in their urban activities, and possibly also in networking, but have not in the light of this study shown a good capacity for or will to engage in BSR urban networking activities. Some of these cities are emerging urban networkers that are in the process of developing BSR-oriented activities and cooperation. These towns might not yet have well-specified strategies for urban development and/or internationalization, but they have shown the initiative to start building their international networking potential.

Emerging nodes of urban networking in many cases reflect a peripheral location in geographical, administrative or economic terms, at an early stage in the developing of urban networking activities. This is reflected in their treatment of such activities as a "novelty." In these towns, networking is sometimes not deemed crucial for urban administration. However, all have shown positive development in their capacity to participate in international cooperation activities (Fig. 3).

The above profiles must be seen in the context of the new emerging logic of a space of flows. They are not therefore directly comparable with the system-oriented hierarchical presentations of the past. As far as the emerging and existing logics of space are complementary in nature, the profiles presented here are methodologically compatible with the idea of the space of flows. The fact that the profiles have much in common with the hierarchical view of urban systems means that many of the forces in question are functional in systems- as well as network-oriented studies.

However, there are many notable differences between the urban systems and the urban networking view in the BSR. Some cities that are minor in the system



sense have proved that they can, at least in certain fields, cooperate and compete well beyond their "hierarchical reach". It is the organizing capacity of the urban administrations and of the urban actors at large which allows for this. The organizing capacity is a combination of several qualities which may be acquired by learning in a multitude of ways, by creating an environment in which these qualities may exist and grow, and by engaging proactively in the developing of administrative structures in support of such capacity-building. Overall, the success in networking may be described as a function of a) strategic thinking of the actor, b) the organizing capacity of both the regional partners and the individual actor, and c) the choices of networking partners.

Since networking partners are chosen according to their capacities to cooperate on strategic terms, networking has an inclination towards clustering and hence a reproducing of the former interregional disparities. In this reasoning, networking is not (as other authors also point out) a solution for historic or other inequalities. As there are, in principle, no boundaries to the rearranging of networking activities according to the will of like-minded partners, there is no real guarantee that hierarchies are dissolved. It seems rather unlikely that networking activities should not have intrinsic power relations embedded in seemingly equal cooperation activities.

POSTSCRIPT

Given the above, it is apparent that there is a need for stated strategies and policies of urban networking that could foster the organizing capacity of urban administrations. It is the participation and commitment of the political actors within the urban region, that gives credibility to urban strategies of cooperation. In the presence of such strategies and policies, it should be possible for the urban administration to implement corresponding activities. The strategic content gives direction to administrative practices and the allocation of resources.

The statement of goals also increases the transparency of administrative practises, hence adding to the democratic control of urban governance. And because urban networking is relying more on motivated activity than formal actions, it may also bring more social and humanistic values into the actions of the governing coalitions.

The study of urban networks in interregional cooperation activities also emphasizes the interrelationship between regional policy-making and urban networking. However, regional development issues (especially in lagging regions) are different from those of their urban areas. This means that there should be a search for complementary growth and development sources, and that these should be accounted for in the cooperation strategies.

Figure 3. Profiles of urban networking. Only the cities included in the study have been characterised by a networking profile. Accordingly, several cities are missing.

European and Baltic Sea Region integration will mean more pressures on the existing urban systems in many ways. These pressures are being tackled by a multitude of control and steering mechanisms-VASAB 2010+, the ESDP and European Urban Policy to mention a few-which are fostering administrative cohesion and the development of organizing capacity on a European level. But is this enough? Is there balance in the urban networks of the BSR? Can the existing barriers to interaction be overcome? Will the attractiveness of the Baltic Urban withstand global pressures? In the light of this study, it seems appropriate to ask these questions-but not to answer them. For the answers, we must turn to the decision-makers in local, regional as well as national governing bodies.

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TRADE AND FOREIGN DIRECT INVESTMENT AS MEASURES OF SPATIAL INTEGRATION IN THE BALTIC SEA REGION

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ABSTRACT: The purpose of the current article is to provide a closer look at the processes of economic transition and integration in the Baltic Sea Region (BSR) since the early 1990s. Focal points are regional and sub-regional integrative processes with regard to trade and foreign direct investment. Three complementary aspects of integration of the BSR are addressed. The first is a critical assessment of the BSR as a region within the European economic system. Secondly, on the basis of an analysis of economic flows within the region and to the outside the paper tries to evaluate whether the BSR constitutes a coherent functional economic region. Finally, an attempt is made to identify sub-regional economic units within the BSR. The analysis of economic linkages in the Baltic Sea Region shows no unequivocal picture of the BSR in the European spatial system. An evaluation of the pattern to bilateral trade and FDI flows within the region and between the region and external partners allows it to be concluded that most countries have more intensive relations with outside partners than with countries within the region. This does not mean that internal trade and FDI are unimportant. On the contrary, it seems that intra-BSR linkages are of major importance for the three Baltic countries in particular. The latter is also indicated in the results of industrial networking study. Similar indications are found with regard to the spatial concentration of foreign direct investment in the industrial networking survey. 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 is failing to take place in the BSR. We have found indications of geographical concentration of linkages (sub-regional integration) as well as close sectoral cooperation.

KEY WORDS: economic transition, regional and sub-regional integrative processes, trade, foreign direct investment (FDI).

INTRODUCTION

Before 1989 the "Iron Curtain" was the divide between the communist-dominated command economies and the western pluralistic democracies wherein the market was the dominating economic system. Nevertheless, the latter was not a homogeneous bloc. Some countries belonged to the European Community; others stood at the sideline of mainstream of European integration, linked to the EU through trade agreements between it 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 (BSR) from 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 and 2001). Secondly, the paper tries on the basis of an analysis of economic flows within the region and to the outside to evaluate whether the BSR constitutes a coherent functional economic region. Finally, an attempt is made to identify sub-regional economic units within the BSR.

In post-Soviet times, 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 Westernstyle government and business (Mygind 1995). In the post-Soviet era, we can expect some possible conditions of Scandinavian firm entry and location selection criteria (Johansen et al. 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 acquisitions of firms or the establishment of plants.

A company may buy an existing plant in the Baltic countries either as a joint venture or independently. In so doing, it 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 size or conditions of a bid, depending on the bidder's evaluation of the relative importance of the plant's location in their plan for operation and production. The plant will typically need modernization, including of equipment and communications systems, as well as alterations in the scale of production and labour force allocation (Henning and Ramstrom 1997). Any disadvantages in location may be viewed as relatively minor compared with 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 the presence of other western firms. 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 typically cannot be purchased in the Baltic countries and in Russia, only leased. Lease fees may vary, however, and this should be considered.

Companies of the first type have probably been most common during the first period 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 with western business practices to entrepreneurs either in connection with the western company providing services or products, or with it unrelated in terms of the product but similar in style of business. We might also expect an introduction of other western firms into the area, following a lead taken by 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.

THE CONCEPT OF INTEGRATION

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

- political integration,
- economic integration,
- social integration.

The three types of integration are essentially non-spatial in nature. However, they will all contribute to, 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 permitted.

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 have to be added.

Theoretically, the first two approaches are distinctly based in economics, in particular concepts from the fields 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 BSR.

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 need for restructuring of the existing EU-policies to meet the challenges of the enlargements with former CMEAcountries (Council for Mutual Economic Assistance). The theoretical concepts will be used for a principal evaluation of the needs for a future policy for the BSR 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, if specific regional functional linkages are to be identified, it seems sufficient to focus on the most comprehensive notion of integration, spatial integration, as a super-ordinate concept.

SPATIAL INTEGRATION

Political, economic and social integration have 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 economic potentials of the countries and regions involved. 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

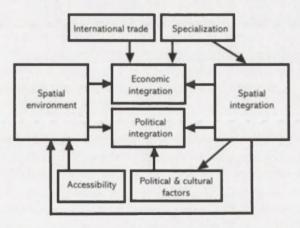
constitutes a kind of networking approach to the theories of integration, and one that is used to develop an approach for a comprehensive analytical framework by which change and development in the regional system can be better understood.

While there is usually a correlation between geographic adjacency and strong economic ties-as often observed in the analysis of international trade within the tradition of gravity models-this has not always been part of mainstream economic thinking and analysis in economic theory (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 but in many respects regional integration is an ambivalent notion, varying from a general concept that describes cooperation among 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 outside flows as considered the reason for a spatially integrated area to be spoken about.

The last condition in particular is restrictive (Eskelinen and 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



Source: Adapted from Cornett (2001). Figure 1. Illustrating the concept of spatial integration.

spatial proximity and adjacency, but at the same time political, economic and social integration reinforce the central aspect of spatial integration, accessibility.

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 (Gidlund 1990).

ECONOMIC LINKS OF AND WITHIN THE BALTIC SEA REGION

Trade is usually the first type of link between independent economic units, and it is often therefore the most sensitive indicator of changes in the economic environment. Trade flows in the BSR have suffered from the artificial economic borders between economies in the area. This does not mean that the region has constituted historically—at least not for the last hundred years—a functional internally coherent region. The eastern part of the BSR has historically retained ties in both the eastern and western 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. Thus the latter countries are, as a matter of fact, more in the nature of crossroads than the former.

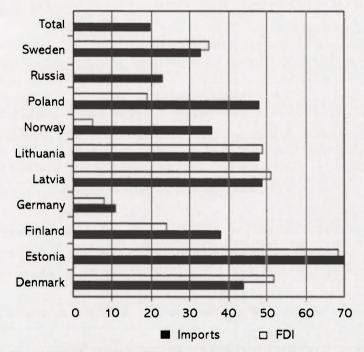
MAIN TRENDS FOR TRADE IN THE BALTIC SEA REGION

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 first two did not have major importance for the 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 mainly took place with regard to trade between the countries belonging to the former Eastern Bloc, the Nordic countries, and Germany (Cornett and Iversen 1993).

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

The figures reported in Fig. 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 now is 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 region and its external partners. An evaluation of these patterns can shed some light on the issue of whether the region is developing toward a comprehensive functional economic system within the European trading area. Secondly, independently of findings from the investigation of the first issue, it would seem relevant to look more closely at the processes of specialization taking place between branches of industries in the region. Thirdly, the analysis of specialization 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.



Note: No FDI for Russia available. Figures for Poland are 1995, Lithuania 1996. Source: Quoted from Cornett (2001), figures according to NEBI Yearbook (1999) and Deutsche Bundesbank (1993ff).

Figure 2. BSR share of total national imports and FDI received, 1997.

An investigation of these three issues will provide a sound basis upon which to address the key question of the current analysis, i.e., the identifying of current patterns and trends to 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 BSR are aspiring to become members of NATO and of the European Union, it would seem reasonable to assume that a linking-up with the western economies through both trade and investment would be promoted by both industry and the political system.

TRADE AND SPECIALIZATION

Trade flows in the Baltic Sea Region have suffered from the artificial economic borders separating economies in the area. This does not mean that the region has constituted a functional internally coherent region historically – at least not for the last hundred years. Table 1 shows that it is only for the smaller economies that the BSR has a dominant position with regard to foreign trade. Taking the nature and size of the German economy into account, the importance of the BSR 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 and 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 and 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, but these approaches have not been able to explain the real-world situation. The best known example is the so-called Leontief paradox.

Table 1: Share of intraregional trade as percentage of total trade of countries in the Baltic Sea Region 1992-1997.

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 Region	17.9	18.0	19.0	18.9	18.9	20.1

Note: Figures based on exports to countries in the Baltic Sea Region as percentage 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 when it comes to explaining actual trade patterns. Even a cursory inspection of the commodities actually traded between the developed parts of the world shows that comparative advantages cannot fully explain the pattern to trade flows. This leads to the next step in the analysis of the factors determining international trade, often labelled as competitive advantage.

From an 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

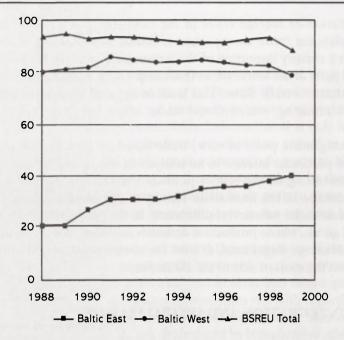
REGIONAL INTEGRATION AND SPECIALIZATION

The analysis of intra-industry trade in the BSR (see Cornett 2002) has demonstrated a tendency toward normalization of the composition of trade, but at a lower level, between the former state-trade economies and the old market economies in the BSR, as measured at a rather rough level of classification. Using these aggregated data has both advantages and disadvantages. The main advantage is that similarities are identified within the same branch or group of data, with the result 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. However, for the purposes of this analysis, the former aspects are the most important. Figure 3 provides a brief overview of intra-industry trade between the old and new market economies.

Figures for trade 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 on the basis of an empirical investigation of sectoral and sub-regional integration.

INTER- AND INTRA-REGIONAL SPECIALIZATION: THE CASE OF THE DANISH TEXTILE AND CLOTHING INDUSTRY

Traditionally, the textile industries in most industrial countries have been protected against external competition for many years. The so-called multi-fibre agreements (Kenis and Schneider 1987) are the best example. The policy



Note: Data according to EU harmonized system, revision 1 1988-1999, Grubel-Lloyd¹ 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 (2002).

Source: OECD-1TCS (1998 and 2000).

Figure 3: Intra-industry trade of the old market economies in the Baltic Sea 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.

is continued in the above-mentioned agreements, where textile and clothing industry, steel and agriculture obtained the major exemptions from free trade.

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

This unique combination of advantages is one reason for choosing the textile sector as an illuminating case where analysis of impacts of the reintegration of Eastern and Central European countries into the traditional Western European system of production are concerned. The second is the geographical

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¹The Grubel-Lloyd index measures the share of similar commodities in the total trade. In varies between 0 and 100. The G-L index equal 0 means that the sets of commodities imported and exported differ totally. The value of 100 indicates a full similarity of products being imported and exported.

concentration of the Danish textile and clothing industry. The case study on the structural changes in the Danish textile and clothing 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 its geographic concentration (with about 50 percent of the industry in a 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 (Illeris 2000). The impact on employment and the structure of the textile and clothing industry in the Herning-Ikast area, the closest Denmark comes to an industrial district (Hansen 1991) was tremendous (Cornett 2002). Figure 4 summarizes the development of the textile trade between Denmark and the two most important target countries for the outsourcing of the 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



Source: OECD-ITCS (1998 and 2000).

Figure 4: Trade in textile and clothing industry (USD million) between Denmark, and Poland and Lithuania.

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the trade flows can shed new light on the nature of the restructuring process. The analysis of the textile trade between Denmark and Poland as reported in Fig. 4 attests to extensive growth.

The trends reported in Tab. 2 show that the textile and clothing trade has increased its share of total trade on only a modest scale due to the increase of east-west trade in the BSR. Nevertheless, textiles still represent 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, while more than 27 percent of the exports were in this sector. Textile forms the single most important commodity in the bilateral trade between Denmark and Lithuania.

Table 2. Danish textile and clothing trade with selected BSR partners (USD million and percentage).

Industry category	1992 1995 1999		1992	1995	1999		
Commodity group	Denmark's	s imports fro	m 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'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 harmonized system, 100 commodity groups:

- 54 Man-made filaments
- 55 Man-made staple fibres
- 60 Knitted or crocheted fabrics
- 61 Art of apparel & clothing access knitted or crocheted
- 62 Art of apparel & clothing access not knitted/crocheted
- 63 Other made up textile articles including sets; worn clothing etc..

Source: OECD-ITCS (1998 and 2000).

Comparison of imports and exports between Denmark and Poland shows a slightly higher concentration of commodity groups in Danish exports than in its 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 a 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 Illeris (2000, 60):

"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".

Without overstating the statistics it seems as if the pattern with regard to Poland has changed toward a more balanced system of trade, measured by group of commodities. 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 textiles and clothing is more marked, and that of the two most important commodity groups is significantly greater 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, with not only Denmark but also Poland.

Overall, the analysis of the textile and clothing trade between Denmark and the two BSR countries seems to support the tendency mentioned in the introduction whereby the Danish textile industry has undergone a significant structural change toward a more high value-added industry, and one that is less labour intensive. This process is often based on a formal system of cooperation between firms and subcontractors, leading to the establishment of a subsidiary in the partner country. It is on this process that the next section tries to shed some light on the basis of a general survey of firms in the BSR.

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 Tab. 3 the percentage of FDI received from countries within the BSR varies from one country to another. However, due to limitations on the data, it has not been possible to examine fully the origins of FDI received or the targets of FDI.

The economic units in this section are the nodes (countries, regions or cities). The links are made up by trade and capital investment relations as measured by imports and exports as well as foreign direct investment. These investments are measures involving the buying and selling of companies, mergers and investments in new plants or transactions involving segments of plants. Thus,

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

Countries	Dominating targets in the BSR	Dominating sources in the BSF
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.

FDI can often 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 Tab. 4 below.

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

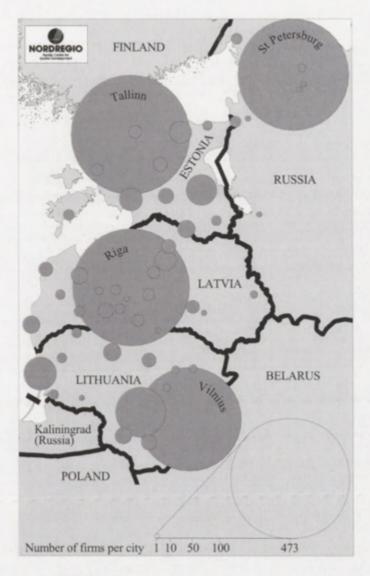
	Finland	Sweden	Denmark	Norway	Total
Estonia	367	121	72	28	588
Latvia	180	203	148	19	550
Lithuania	130	130	210	63	533
Russia	258	108	32	31	429
Total	935	562	462	141	2100

Note: Address lists provided by embassies.

Source: Quoted from Snickars and Bourennane 2000.

Table 4 indicates that western countries are major 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 Fig. 5). They provide the business services needed and are usually the prime location for company headquarters. Data available from the three Baltic countries indicate that the role of the capitals as hubs for foreign direct investment is decreasing with decreasing primacy of the capital. Nevertheless, the primacies of Riga, Tallinn and Vilnius are 40 percent,

31 percent and 22 percent in terms of national population share while the corresponding shares of total national foreign direct investments are 82 percent, 72 percent and 66 percent, respectively. The figures for Lithuania show that Kaunas and Klaipeda are also receiving relatively major shares of FDI, indicating the impacts of the more decentralized urban system in Lithuania, as compared to Estonia and Latvia.



Created by T. Hanell

Source: Quoted from Snickars and Bourennane (2000).

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

We can notice that most of the Nordic firms are located in the large cities. This is most likely due to the presence of such infrastructure as transport networks, telecommunication services and business service facilities in these regions. All these factors are providing firms with significant locational advantages. The capital regions can be used as bases for further expansion, and represent risk-minimizing strategies from the point of view of foreign investors. We can see also that there are a few companies located in small villages outside 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 Fig. 5 indicates the distribution of each Nordic country's companies among Baltic cities (see also Tab. 5).

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

Country	Cities	Companies	Percentage	
Estonia	Tallinn	473	81	
	Tartu	31	5	
	Parnu	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	
	Klaipeda	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. That the presence of Nordic companies in the St. Petersburg region is much more limited 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 addressing potentials and hindrances for Nordic firms in the BSR, questionnaires were sent out to 2,100 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 Bureaux of Statistics. Commercially available registers of private firms were also 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 allow conclusions for sectors of the economy to be drawn-for instance to relate analysis of changes in the Danish textile industry to the survey of FDI developments. While some Danish textile industry actors were members of the sample, they were too few in number for their actions to be compared with those of textile industry investors from other countries.

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

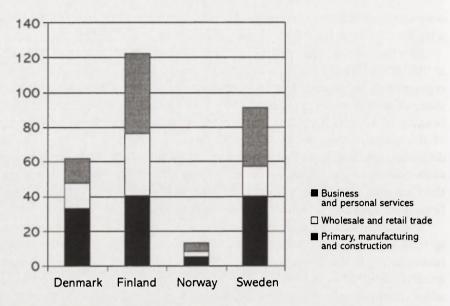
	Estonia	Latvia	Lithuania	St. Petersburg	Total	
Sent	600	560	520	420	2100	
Received	123	109	124	39	395	
Returned to sender	11	31	38	2	82	

Source: Ouoted from Snickars and 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 BSR, and that the share of business and personal-services companies is higher than for the other countries. The numbers of companies in manufacturing are about the same for 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.

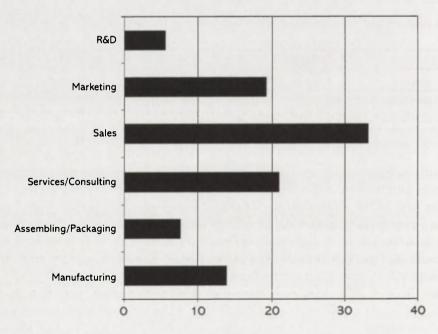
The three most important motivations for investments in the east BSR countries (Fig. 7) are-in order of priority-market expansion, local demands and low labour costs.

Priorities were seen to be unchanged in the two studies comparing companies started up in 1994 or earlier and those founded in 1995 or later. However, an increased score confirming the status of first priority given to market expansion is a



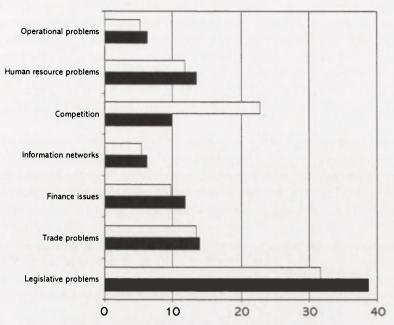
Source: Quoted from Snickars and Bourennane 2000.

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



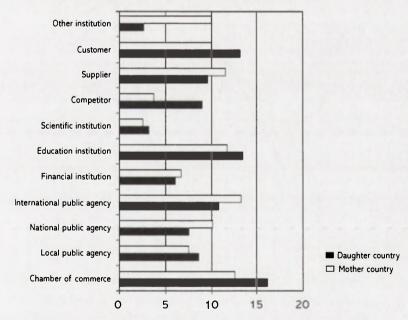
Source: Quoted from Snickars and Bourennane 2000.

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



Source: Quoted from Snickars and Bourennane 2000.

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



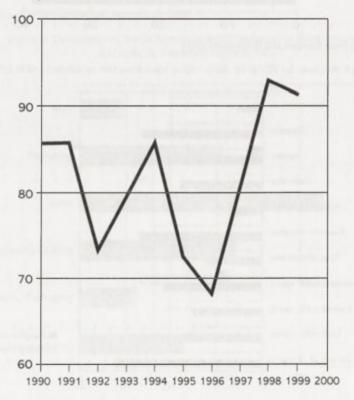
Source: Quoted from Snickars and Bourennane 2000.

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

promising finding 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 (Fig. 8). However, competition is mentioned as one of the critical problems in the three Baltic countries in the survey study. While being a problem for the company, it is also a measure of maturing economies, especially when competition from western companies is included (e.g., in Estonia and Lithuania).

In the case of companies investing in the east BSR countries, the most oftenmentioned cooperation partners are chambers of commerce, customers, educational institutions, international organizations and banks and other financing institutions (Fig. 9). The pattern of cooperation 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.



Source: Ouoted from Snickars and Bourennane 2000.

Figure 10. Urban share of FDI taken by Nordic firms in the Baltic countries and the St. Petersburg region in 1990-1999 (%).

There is a lack of skilled labour, for instance, in the business administration area, a gap that needs to be filled through higher education. The development of contacts in the engineering sector seems to be slower than that in the other parts of the economy, and this may become a hindrance to further development in the eastern part of the BSR region.

The presence of educational institutions as cooperation partners confirms the strategic importance of these institutions in regional development. Further, the link to educational institutions might also be taken as a measure of the 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 BSR the tendency is for foreign direct investment to concentrate further in the capital regions over time. The trajectory in Fig. 10 fluctuates, but there is a significant trend towards further urban clustering of investments. There can be several observations accounting for this tendency. One is simply that more service firms were 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 itself entails a drive towards urbanisation, but as a consequence of structural change and the preferences of young persons for urban, rather than rural, living.

CONCLUSIONS

The analysis of economic linkages in the BSR as conducted in this paper offers no unequivocal picture of the BSR within the European spatial system. An evaluation of the patterns to bilateral trade and to FDI flows within the region and between the region and the external partners is able to conclude that most countries have stronger relations with outside partners than with countries within the region. This does not mean that internal trade and FDI are unimportant. On the contrary, it seems that intra-BSR linkages are of major importance to the three Baltic countries in particular. This fact is also attested to by the results of the industrial networking study. At least in some sectors (i.e., the case of the Danish-Baltic textile and clothing 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 normalization of the east-west trading pattern within the region. The analysis of intra-industry trade shows a slight tendency-still at 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 is of major importance. In this regard the

tendency toward the clustering of FDI in the metropolitan areas of transition economies is of significant importance for the future development of the regional system. A system of urban networks is 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.

In answer to the question as to whether or not we are dealing with regional and sub-regional integration in the BSR is not easy. The analysis of economic linkages in this paper is not able to demonstrate that the BSR is a functional region according to the common understanding of the concept that external linkages are stronger than internal. This does not mean that integration is failing to take place in the BSR for we have found indications of a geographical concentration of linkages (sub-regional integration), as well as of close sectoral cooperation.

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

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SPATIAL PLANNING FOR FDI IN TRANSITION ECONOMIES: THE CASE OF ST. PETERSBURG

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ABSTRACT: The paper addresses problems relating to the investment process in a region. By evaluating this process it is possible to obtain a picture of specific features and vital areas for FDI in St. Petersburg. Traditionally, the investment needs of the St. Petersburg economy have been reflected in city plans and programs. A new form of strategic planning allows the city's administration and the rest of the urban community to join forces in transforming employment patterns, technologies and the urban environment. In addition, an Investment Strategy for the Rehabilitation of the Centre of St. Petersburg (1999) has been developed on the basis of the Strategic Plan.

KEY WORDS: investments, St. Petersburg economy, Strategic Plan.

ECONOMIC TRANSFORMATION AND FDI

In the last decade of the 20th century, the economic development of a number of Central and Eastern European nations was critically influenced by a global event, i.e., the crash of the socialist economic system. This centrally planned construct was totally dominated by the interests of the communist bureaucracy that alone decided what should be produced, how, and for whom, regardless of the actual internal demand. The priority was production for the sake of production, with producers enjoying soft budget constraints. The result was bogus economic growth serving as a facade for a deficit-ridden economy with commodity shortages, a low quality of goods and services, and a catastrophic over-consumption of resources per end-product unit. Within such a system of interests, external trade was often used as a political instrument; it did not reflect the comparative advantages of different countries and totally ignored economic, cultural or geographic factors. Thus, the marketwise transition from a planned/distributive economy required an extensive structural refurbishment of the economic system that led inevitably to a transitional slump. Given the

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important cleansing role of this slump, it should not be assessed along the same lines as any downward movement in a well-established market economy. Market forces had begun economic restructuring, shedding those production capacities that turned out low-demand goods. A system in which the state guaranteed 100 percent payment for everything produced was consigned to history, to the benefit of the consumer. The economic slump simply exposed the waste of resources that the socialist economy had habitually shown as added value.

Zaostrovtsev (2001) indicates that when making a comparison between the last year of socialism and the tenth year of capitalism in Russia, one should take into account a radical change in corporate behavior. Under socialism, enterprises strove to pad up their production volumes in order to report fulfilment and over-fulfilment of production plans, whereas after 1992 this trend reversed: it became feasible (even desirable) to play down actual output in order to dodge taxes. In addition, in the first years of the market transition, the official statistics did not capture small-business and individual-enterprise results. For example, there were huge gaps in the country's trade-balance figures provided by the customs bodies and the State Statistics Committee, because the latter did not cover unregistered individual "shuttle" traders. As a result, the official statistics provide only a vague reflection of the actual economic slump in Russia. A Swedish economist Aslund (2001, 120) maintains that, with the shadow economy taken into account, Russia's 1995 GDP stood at 74 percent of the 1989 level, instead of the 49 percent reported by official statistics.

An important factor behind a successful transition is foreign direct investment (FDI), and this is something made clear by the successful restructuring and economic growth enjoyed by Hungary, the Czech Republic, and Poland. It is notable that, in Hungary, the FDI per capita ratio is more than ten times as high as that registered for Russia. The importance of attracting foreign investors into the Russian economy is thus evident, especially given the currently insignificant presence of capital from this source in the country. However, it is common knowledge that FDI's positive influence is not limited to the import of capital, it also involves an inflow of new technologies, experiences and management know-how, as well as access to international markets.

FDI BY SECTORS AND REGIONS

The focus of the significance of FDI may change at different stages of economic transformation. As Bellak (1998) shows, the initial transformation phase sees FDI exert a stabilizing influence by updating existing capital assets. Later on, in contrast, these concentrate on restructuring in growing industries. It should be noted at this point that the problem of reliable FDI statistics has not been solved effectively in Russia so far. This is something that may be attributed

in part to the fact that the country's statistical system is undergoing transformation itself, and in part to the unsolved technical and methodological problems with FDI assessment. As Dohrn (2000) notes, by applying a generally accepted method to measure potential inconsistencies in FDI assessment by comparing incoming investment figures with external investment data existing in donor countries, one can observe a huge discrepancy between the two. At the receiving end, there is a tendency to overstate the actual amounts of investment attracted. The by-sector distribution of FDI is even less clear. For example, the EBRD (1999) indicates that FDI is predominantly concentrated in the primary sector, while Russian state statistics also report that the FDI by-industry structure is dominated by the fuel industry. In 2000 most foreign companies operated in income-inelastic spheres, e.g., in food processing, the tobacco industry and beverage production. Using the approach mentioned above, Dohrn (2000) indicates that, despite a long history of capital imports into Russia, most FDI still focuses on the stabilizing of the traditional industries (the fuel and power production complex). This does not mean, however, that investments are channeled to the "wrong" industries-the former pride of the Soviet economy (mechanical engineering, machine-tool building, power engineering, electronics, and aircraft construction). Rather, they simply go to the industries with guaranteed highest returns. The geographical distribution of investments is even more demonstrative. Moscow garners over 40 percent of all FDI in Russia, followed by St. Petersburg with 13 percent of the total. Data on the per capita FDI distribution in the west and east of the country (Savin 2001) are also of interest (Tab.1).

Table 1. FDI by region, 2001 first quarter

Region	FDI (USD .000)	Permanent residents at 01/01/01 ('000 residents)	of permanent		FDI per sq. km. USD/sq. km.
Russia total	2,717.737	144,819.1	18.8	17,075.4	15.9
Western (Euro- pean) regions	2,121.427	104,472.4	20.3	3,955.8	536.0
Eastern (Asian) regions	596.310	40,376.7	14.8	13,119.6	45.0

Souræ: Savin V., 2001, 18-21.

The uneven distribution of investment across Russia confirms the opinion that geographical distances are a hurdle to FDI (Dohrn 2000). However, the most important factors determining investment activity in the regions are those of resources (mainly natural) and the structure of the regional economy (Averkin et al. 2001, 479). On the one hand, the diversified structure of the ecoromy attracts investments, while on the other, it provides for comparatively

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high purchasing power of the population, something that is also an incentive to investors (Jumpponen and Tiusanen 2001, 15). Many foreign companies in Russia therefore, function in income-inelastic spheres, e.g., in food processing, tobacco and beverage production. There are also some coattail cases. Packaging for local demand, hotels and restaurant activities are also branches with a foreign flavor.

The rate of saving in the Russian economy has always remained within the 15-24 percent GDP bracket, a level which conforms to rates in Western economies. However, the savings do not transform into investments because infrastructure and investing institutions are lacking while the population distrusts banks, especially after the 1998 meltdown. In turn, the country's finance and credit sector can only grow after the ownership-rights situation in the corporate securities market is normalized, and the existing system's risks reduced.

Like all other Russian regions, St. Petersburg is in the middle of a tumultuous period in which it is basically impossible to come up with a reliable long-term forecast, to say nothing of a long-term development concept or priorities, given the high degree of both political and economic uncertainty. Even an attempt to measure the past structural changes and identify the economic prospects for the nearest future faces significant methodological and technical hurdles because of the difficulty in obtaining reliable data.

THE NEED FOR INVESTMENTS

If the slump is to be overcome and sustainable economic growth provided for, St. Petersburg needs wide-scale investments. At this stage, there is a need to find answers to the questions concerning:

- whether there is an actual deficit of investments,
- the actual demand on investment resources,
- the peculiar features of the current investment process in the city,
- the opportunities and constraints lurking around the spatial development of St. Petersburg.

For many years, the city has suffered from a lack of funds not only for development, but even for maintaining its residential stock and infrastructure in an operable condition. St. Petersburg has been chronically plagued by a host of municipal-economy challenges that include a catastrophic state of the water-supply and engineering networks, the sewerage and sewage treatment system, as well as municipal transport, roads, and electricity supply to downtown districts. Up to 40 percent of the city's heat- and water supply networks require replacement, while 15 million square meters of residential space are in need of capital repairs. To this end, the city each year spends up to 25 percent of its budget, a level that equals or even exceeds the average relevant municipal expenditure rates in European cities. The city's manufacturing enterprises cry

out for investment as well, citing their aging production assets. All this makes the need for additional investments obvious. Preliminary expert calculations by the city administration put this need at around USD 30 billion.

At the same time, the city's economic growth is hindered by a number of internal peculiarities and controversies. On one hand, to be able to use its investment potential to the full extent, St. Petersburg needs a structural overhaul of its economy; on the other, this structural overhaul is impeded by the presence of manufacturing capacities that depend on centralized funding within defense orders. In addition, the recent series of redistributions of financial responsibilities between regional budgets and the federal center has increased the burden on muricipal budget expenditures. This narrows the local authorities' room for maneuver, creates budget uncertainty and undermines the city's creditworthiness. These events are taking place against a background of increasing competition between Russian cities and territories where the attraction of new businesses is concerned, and this brings into sharp relief another urgent task—that of improving the city's investment climate.

MACROECONOMIC CHANGES

During the ongoing economic reform, the main macroeconomic indices of the city's economy Gross Regional Product (GRP), manufacturing output, investments, and employment levels) have undergone substantial change. The trends that had been in place by 1998 were erased by the August meltdown. On the threshold of the 21st century, the St. Petersburg economy began new growth on a different, "non-socialist" basis. Many companies, having gone through a difficult and painful process of structural overhaul and technological renovation, are setting their course along market lines and seeking to produce real added value.

PRODUCTIVITY

During the years of reform, the downward rates noted for the St. Petersburg GRP slightly exceeded those countrywide, something that can be attributed to a high share of mechanical engineering companies dependent on defense orders, and a comparatively low share of export-oriented industries. Our statistics began to measure GRP only in the mid-1990s (when internationally recognized statistical standards were introduced), therefore the evolution of this most important economic index cannot be traced back over the entire 10-year period. However, in St. Petersburg this index has always closely followed that of Russian GDP. The city's 1998 slump as compared with 1997 was about the same as that in Russia (a 5.3 only dip for St. Petersburg, and a 4.9 percent fall for Russia).

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A modern market economy is an economy of services and non-material products. The share St. Petersburg's GRP taken by services has consistently exceeded 50 percent since 1994 (Tab. 2).

Table 2. Gross regional product structure (in current prices, as % of the total).

	1994	1995	1996	1997	1998	1999
GRP in market prices, including:	100.0	100.0	100.0	100.0	100.0	100.0
Commodity production	36.4	33.9	32.5	28.7	33.0	35.3
Services, including:	54.7	57.1	62.3	65.0	60.6	54.4
Market services	45.4	47.6	50.0	56.2	53.3	48.9
Non-market services	9.3	12.3	8.8	8.8	7.3	5.5
Net commodity taxes	8.9	9.0	5.2	6.3	6.4	10.3

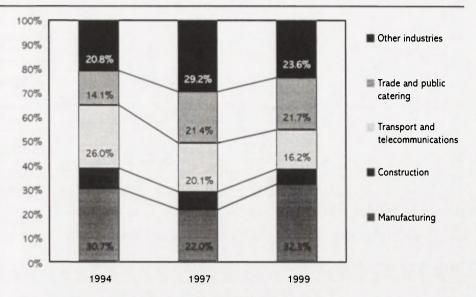
Source: Peterburgkomstat 2001a, Statisticheskiy Sbornik 2001, 10.

Similarly, the official share taken by market services in the city has never dropped below the 1995 level. At the same time, the actual share of market services must be even higher, because this sector is especially notorious for its shadowy operations. As to non-market services (free education, healthcare, law enforcement, etc.), their share depends in the first place on average wages of public employees that are much lower than in other sectors.

The GRP share taken by market services increased steadily between 1994 and 1997 (from 45.4 percent to 56.2 percent), after which it moved downward and hit the 48.9 percent bottom in 1999. This evolution shows that due to significantly smaller market-entry barriers, the services sector is much more flexible with respect to market demand. In the structure of the GRP by industry (Fig.1), market wise transformations are reflected in the first place as a surge in the share taken by trade and public catering. It should be noted that the diminished share of transport and telecommunications does not reflect their actual growth figures. Most of their tariffs are regulated and artificially contained by the state, thereby equating with the indirect subsidizing of manufacturing industries.

EMPLOYMENT AND MANUFACTURING

Structural changes in the St. Petersburg economy are especially evident when one considers the evolution of employment among such industries as manufacturing, trade, public catering, and science and related services. The share of manufacturing employees has shrunk significantly, while the share of those employed in trade and public catering went up from 7.7 percent in 1991 to 17.5 percent in 2000. This means that over the 1990s the structure of the city's economy developed predominantly in line with the evolution of the population's demand for market services. On one hand, this process reflected a leveling out of the former economic system's distortions, and on the other, it represented the

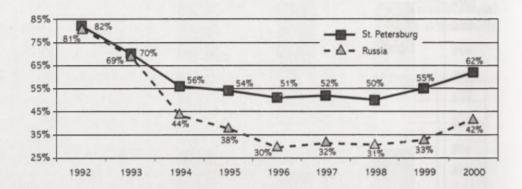


Source: Peterburgkomstat 2001a, Statisticheskiy Sbornik, 2001, 28.

Figure 1. By-industry structure of gross added value (in current prices, as % of the total).

modern universal trend of service-dominated economic development. Both in St. Petersburg and Russia-wide, excessive or non-competitive types of products or production were washed out of the market. Beginning from 1995, manufacturing ceded its leading position in the city's economy to transport and telecommunications. At the same time, the downturn in manufacturing industries was uneven in character, something that drastically changed the share taken by different industries in total manufacturing output. In the first place, the slump sapped the mainstay of St. Petersburg manufacturing; its defense enterprises that lost state funding. Instead, transport, telecommunications, power production, power engineering, the food industry, natural monopolies, shipbuilding, and instrument making surged ahead. Manufacturing output grew in 2000, with the best results being shown by mechanical engineering and metalworking, the food industry, the construction materials industry, and metallurgy (Fig. 2).

The years 1999-2002 brought resumed growth in manufacturing due to two macroeconomic factors. One was the lower real ruble cost after the 1998 meltdown (this boosted the competitiveness of Russia's commodities on both world and domestic markets). The other was a favorable situation on world oil markets that brought additional incomes to Russian oil and petroleum companies and pushed up their orders for equipment, something that meant new orders for mechanical engineering and metallurgy enterprises. The food industry, which could also have suffered as a raw-materials importer, instead continued to spearhead the economic growth as the result of a successful structural overhaul, installation of state-of-the-art equipment, well-learned skills of operating in a market environment, and the use of foreign investments.



Sources: Bank of Finland 2001, Petersburgcomstat 2000, p. 115 & 2001c, p. 49.

Figure 2. Manufacturing output evolution (1991 as 100 percent).

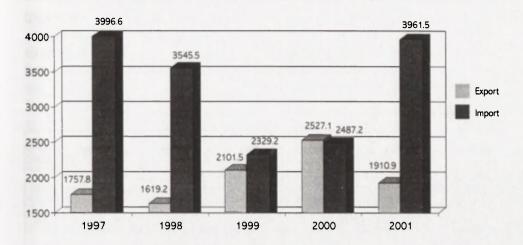
TRADE

External trade is of constantly increasing importance to the St. Petersburg economy. In 2001, the city's external trade turnover amounted to USD 5,872 million (third position among Russian regions after Moscow and Tymen Oblast (Fig. 3).

Since the autumn 1998 devaluation of the ruble, the city's external trade balance gradually bottomed out, from (-) USD227.7 million in 1999 to (+) USD 39.9 million in 2000. However, the external trade balance was negative again in 2001. It should be remembered that, unlike to many other Russian regions, St. Petersburg sells not raw-materials but products with a high degree of value added by processing (chiefly, machines and equipment). The city's exports were accounted for in almost 75 percent by machines, equipment, ferrous and non-ferrous metals, and metalwork, with 47 percent of all exports being in the form of mechanical engineering products. Imports are dominated by raw-materials, food, machines, equipment, and petrochemical products.

INVESTMENTS

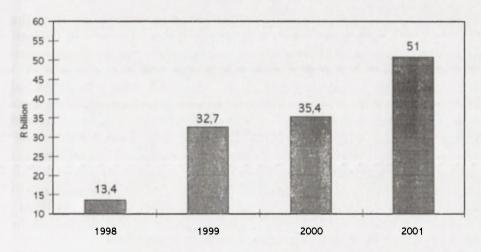
Beginning from 1998, Russia saw a downturn in the volumes of domestic investments in fixed assets, as well as a sag in direct foreign investments. In 1998, the aggregate amount of domestic investments in fixed assets fell by 6.7 percent, and that of direct foreign investments, by 14 percent. Moreover, the geographical distribution of foreign investment sources led by Cyprus, Luxembourg, and Switzerland showed that they rather represented re-exports of Russian capital. The 2000 foreign investments in Russian non-financial sectors (led by the U.S.A., Germany, France and the UK) amounted to over USD 10



Sources: Fond federal'nykh i regional'nykh program pri Pravitel'stve St. Peterburga 2001, Spravochnik investora "St. Peterburg-2001", Petersburgcomstat 2001b, Statisticheskiy sbornik, p.158.

Figure 3. Evolution of St. Petersburg's external trade in 1997-2000 (USD million)

billion, of which only 40 percent represented investments in business development, while the rest were accounted for by international organizations' loans to the government. Against the background of this investment crisis, St. Petersburg is one of the most attractive Russian regions for foreign investors. In the years 1996-1998, the share taken by St. Petersburg in the Russia-wide volume of capital investments hovered between 3.3 percent and 3.5 percent, whereas since 1999 it has almost doubled (Fig. 4).



Source: Stat.Sbornik/Goskomstat Rossii 2001, p. 679 and Peterburgcomstat 2002.

Figure 4. Investments in fixed assets, St. Petersburg in 1998-2001.

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The aggregate 2001 domestic investment from all sources amounted to R 50.97 billion (about USD 1.5 billion). The aggregate investments are dominated by extra-budget funds (70 - 80 percent), with almost two-thirds provided by mixed-ownership enterprises of the manufacturing, transport and construction industries themselves (Tab. 3).

Table 3. Investments in fixed assets by source of investment, as prcentage of the total.

	1995		95 1996		1997		1998		1999		2000		2001
	RF	SPb	RF	SPb	RF	SPb	RF	SPb	RF	SPb	RF	SPb	SPb
Budget funds, including from:	20.4	25.1	20.1	29.8	20.7	18.8	18.7	14.0	17.0	17.0	21.6	21.0	29.0
the federal budget	10.1	12.8	9.9	13.1	10.2	11.6	6.5	4.0	6.4	3.0	5.8	6.0	18.0
regional and local budgets	10.3	12.3	10.2	16.7	10.5	7.2	12.2	10.0	10.6	14.0	14.8	15.0	11.0
Extra-budgetary funds	78.2	74.8	79.9	70.2	79.3	81.2	81.3	86.0	83.0	83.0	79.4	79.0	71.0

Source: RF Goscomstat 1998, 735; RF Goscomstat 1999; Peterburgcomstat 1999 and 2001b.

One of the specific features of the investment process in St. Petersburg is share of budget funds in the total volume of investments that is above the Russian average. However, in 1998 the share taken by the federal budget fell from 11.6 percent to 4 percent. By 2000, the situation had returned to normal, with the local budget's share growing as well. Thus, the overall share of the funds from all budgets (29 percent) spent on the city's development reached its 1996 levels.

Beginning from 1998, the largest share of capital investments from the St. Petersburg budget has been that channeled into transport, in contrast to previous years when the priority expenditure item was the construction of residential and utility facilities (Fond federal'nych... 2001).

Another source for city infrastructure development funding is the Territorial Road Fund (R 3,398.1 million in 2000). However, the opportunities for a substantial reallocation of budget expenditures for investment purposes are also limited, as the city's capital expenditures have already reached their ceiling. Annual allocations for the city's development amount to USD 300 million from various budgets and budget funds. We believe that this circumstance somewhat slackens the drive to search for new funding sources, but a necessity remains to select the most lucrative and efficient ways to utilize capital investment. However, to achieve this goal, one has to change the existing framework by which infrastructure, housing and utility facilities are regulated.

The main source of data on investments in Russian regions is the State Statistics Committee. However, its information on foreign investments is not always accurate. The existing forms of statistics do not provide for clear separation of foreign investments in fixed assets. The St. Petersburg Statistics

Committee keeps a separate register of foreign investments in the section "External Economic Activities," where it applies the international classification of investments into direct investments, portfolio investments, etc. This system differs radically from that used for registering domestic investments, making it difficult to compare the two types of investments. One can surmise that the St. Petersburg Statistics Committee understates the volume of foreign investments, with the actual size of the capital provided by foreign investors being a little larger (Tab. 4).

Table 4. Foreign direct investments received, USD million.

	1995	1996	1997	1998	1999	2000	2001
St. Petersburg	157.5	175.3	234.0	413.3	698.5	1,147.5	1,171.3
St. Petersburg's share in Russia, percent	5.3	2.5	1.9	3.5	6.7	1.0	13.0

Source: RF Goscomstat 1998, 750; RF Goscomstat 1999; Peterburgcomstat 1999 and 2001b.

St. Petersburg is traditionally among the most attractive targets for foreign investment in Russia. In 1998, with 3.5 percent of all foreign investments in the country, it was only behind Moscow (49.8 percent), Moscow Oblast (6.0 percent), Tatarstan (5.8 percent), and Omsk Oblast (3.8 percent). In 2001, the share of St. Petersburg in the total foreign investment in Russia stood at 13 percent. However, the share of foreign direct investments in the aggregate foreign investment in Russia is under 20 percent. In 2000, the hard currency direct investments amounted to USD 134.9 million only, while total foreign investments were of USD 1,147.5 million.

The bulk of foreign investments go to manufacturing industries, in particular to the food industry, mechanical engineering, and metalworking. These are followed by telecommunications, trade, and public catering, something that reflects foreign investors' priorities as they opt for goods and services with guaranteed local market demand. At this stage, foreigners tend to invest only in facilities with short repayment periods (that produce goods in high demand on the domestic market), in the renovation and expansion of separate manufacturing units, as well as in raw-materials industries and industries producing goods with a low degree of processing that are in demand on international markets. The countries that lead by the volume of investments in St. Petersburg are the U.S.A, the Netherlands, Finland and Germany. In 1998, the top ten-investor countries included Cyprus (the well-known offshore zone), the Netherlands, and Luxembourg. As numerous surveys have shown, St. Petersburg businesses believe that, given certain conditions, the volume of investments in the city could be much greater. This has become especially evident in recent years, with the more attractive investment climate of neighboring regions (Novgorod, Leningrad, and Vologda Oblasts) becoming a factor behind their rapid economic growth.

Local authorities should therefore focus on lifting all sorts of bureaucratic

barriers impeding the organization and operation of new businesses. This includes regulations for purchasing title to real properties and using real property rights.

BARRIERS TO FDI

In the nearest future, objective macroeconomic reasons rule out a significant inflow of foreign investments in the city. The funds that may arrive will be destined for the support and development of already-existing production capacities (mostly in food, telecommunications, trade and public catering enterprises). The city may provide additional incentives for business/investment activities through the application of the local laws already adopted and through the developing of new regulations and procedures. However, it is important to note that the problems to be solved if the investment climate in the city is to improve have remained the same for many years. Naturally, these include the "federal constituent," such as federal civil laws, tax and customs policies, etc., as well as the countrywide business regulations, contract enforcement, and implementation of court decisions. Nevertheless, the distribution of investments by region shows that regional policies are also important in attracting foreign investments.

St. Petersburg is surrounded by regions that have taken radical measures to improve their investment climate. Compared with other north-western regions, St. Petersburg has too high a rate of sales tax, property tax, and road-users' tax. In 2001, the federal authorities established a new profit tax rate that permits the regional-budget constituent of this tax to be reduced, and thus provides regions with a new instrument to compete for investments by improving their investment climate.

The St. Petersburg market for profitable commercial properties is limited, and both the federal and municipal authorities continue to be the main property managers. That is why the state dominates the commercial-properties market and dictates both its conditions and formation procedures. The most critical problem at the current stage is that the city's administrative mechanism is not prepared to fully use the investment potential of the private sector in achieving citywide goals. This applies to both the aggregate volume of private investments that could have been much greater, given more propitious legal and institutional conditions, and to the results of the investment process (the territorial distribution of development, and the overall state of the urban environment). The city is in acute need of a new urban planning strategy with a system of clearly-stated targets and goals.

FRAMEWORK FOR URBAN DEVELOPMENT

The urban development activity of the Soviet period was not regulated by a legal framework, but by administrative acts and administrative power. At that

time both theoretical and applied urban studies flourished in the Soviet Union. Gosstroy research institutes were busy developing standards, admissible levels, general plans and blueprints. However abrogation of land ownership and the centralization of all important decisions resulted in distortion of land use, as well as settlement patterns. As a result there is a certain type of environment in the cities with exaggerated block sizes that are in a bad state of maintenance and unattractive to investment.

In 1998 the RF Urban Development Code was adopted by the State Duma. As a framework for urban development, the Code states goals of urban development and basic public rights, defines the essential actors, their rights and obligations, and lists essential planning and development documents, their content and acceptance procedure. There are also some important and influential Acts as regards urban development activity: "on Ecological Assessment" (1995), and "on Historical and Cultural Monuments Preservation and Usage" (1978). In addition, the Act "on Architectural Activity in RF" (1995) regulates some stages of the approval process and specifies procedures in the authorization of site-development parameters. There is also land legislation that regulates land allocation, land subdivision, the recording of land rights and the issuing of land titles.

On the regional scale, there are a number of acts adopted by executive bodies regulating state assessment procedures for design documentation, professional licensing of design and construction activities, construction process control and inspections on sites, and standardization issues.

On the federal level, the Ministry of Construction–Gosstroy, is responsible for urban development activity, including of the performance and approval of the RF General Settlement Scheme as well as the General Settlement Schemes for the large RF regions. The last General Settlement Development Scheme for the Territory of the Russian Federation (1995) mostly considered the prospects for immigration and migration in Russia. In 1999, the RF government approved the main requirements for the working out and coordinating of the new General Settlement Scheme as well as the main thesis thereof, identifying the political goals and implementation arrangement. RF subjects have duties similar to the corresponding federal bodies in the sphere of urban development and architecture.

Competence in urban development regulations is also delegated to municipalities - (the *raion*, *volost* and *uyezd*), which are entitled to establish authorities of urban development and architecture at their level, to approve urban development documentation and to issue building permits. However there is a different approach for Moscow and St. Petersburg, where the municipalities shall perform urban development regulation under the acts of RF subjects.

During the period 1990-1994, attempts to introduce tumultuous and drastic changes were made by the Office of the St. Petersburg Mayor by way of the elaborating of programs. A real step towards the formulating of a development plan (St. Petersburg 2000) was taken in 1993. All in all, the idea of the long-term

strategy for the city has undergone a certain evolution because of the new economic context. The main reasons for this were internal-market development causing a reduction of direct administrative management in favor of market mechanisms. Besides this were increasing international competition and trends in the development of the world economy. The future development of St.Petersburg is determined primarily by efforts to use its favourable geopolitical position. A rapid development of international trade can be expected to promote the city's growing role as a trade and transport centre.

THE STRATEGIC PLAN FOR ST. PETERSBURG

In 1996 a new concept in strategic planning was elaborated by the Project Office, set up at the Leontief Center specially for the Strategic Plan (Leontieff Centre 1998). This work makes it possible to unite the city's administration and the rest of the urban community in joint work to transform employment patterns, technologies and the urban environment. The planning process was able to draw in prominent experts and influential and powerful industrialists who, after examining developmental trends, formulated strategic priorities and proposed specific measures to be recommended by the Strategic Plan. Three public conferences were held, as well as dozens of workshops and meetings. Intensive work was carried out by 14 subject committees and several analytical groups. A system of strategic-planning bodies was established, comprising the General Council and Executive Committee for the Strategic Plan, the Council of Experts, a methodological seminar, subject committees responsible for specific strategic objectives and individual problem areas, and the Project Office.

The Strategic Plan defines the city's main goal and strategic objectives as well as specific objectives and specific measures for the realization of the main goal and strategic objectives. The main goal in the development of St. Petersburg is sustained improvement of the quality of life of all categories of St. Petersburg citizens. Also a more specific main goal, relevant to this particular city in its current period of development has been identified as the development of St. Petersburg as a multifunctional city integrated into the Russian and world economies and providing a favorable environment for life and economic activity. This wording indicates the main ways in which it may be achieved by integration of the city into the Russian and world economies and by improvement of its urban environment and social climate. Achievement of the main goal implies consolidation of St. Petersburg's position as Russia's principal center of contact between the Baltic region and the northwest of Russia.

The main goal divides into two lower-level sub-goals:

- increases in income and employment levels as a result of economic growth;
- improvement of general living conditions as a result of increases in the efficiency of expenditure of resources in the city exchequer.

To support the long-term changes required by the main objective and two sub-objectives of the Strategic Plan, four strategic directions have been identified. These entail the forming of an attractive business climate, integrating the city into the world economy, improving the overall appearance and environment of the city, and developing a healthy social climate.

A final selection process saw 211 measures selected, for which there are clear procedures for implementation, and established mechanisms of operation. Every measure has indicators evaluating results, costs and participants of its implementation. Experts have also identified 50 priority measures which take preference as regards funding from the city budget, and federal funds and international loans.

Among the key indicators are the creation of 200,000 jobs, an increase in the real income of the population of 15 percent, a lengthening of average life span by 3 years, and an increase in the amount of money collected by the state of 20 percent, with simultaneous more effective use of funds.

The Executive Committee and special subject committees coordinate the Plan's implementation, while working groups consisting of representatives from NGOs and the business sector have been set up for each of the Plan's measures. This organizational structure is responsible for monitoring implementation and updating the Plan. The Legislative Assembly and city administration play leading roles in the practical execution of most of the measures by passing plans of action for the implementation of the Strategic Plan. The measures are funded by separate schemes.

THE INVESTMENT STRATEGY FOR ST. PETERSBURG CITY

The year 1998 and the beginning of 1999 saw the development, on the basis of the third goal of the Strategic Plan, of an Investment Strategy for the reconstruction of St. Petersburg city center (Leontieff Centre 1999). The Investment Strategy is to be used as the basis for subsequent development and implementation of a methodology for use in compiling a municipal investment program and a program of changes to legislation and institutions relating to the reconstruction of real estate.

It is also to be used to guide the drafting and selection of investment projects submitted for funding from a World Bank loan. The investment strategy for reconstruction consists of a system of approaches that will make it possible for the activities of the city administration and other stakeholders to focus on effective reconstruction of the center of St. Petersburg. An Investment Strategy for the Rehabilitation of the Centre of St. Petersburg was therefore developed on the basis of the third goal of the Strategic Plan, and approved in 1999.

The Investment Strategy is to be used as the basis for the subsequent development and implementation of a methodology that may be used in compiling

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a local investment program and program of legislative and institutional changes relating to the restitution of real estate. The Investment Strategy comprises the program of most urgent regional normative and planning documents to encourage investments. It concerns land-use regulation, investment policy, compensation for damage caused by planning restrictions, co-operation and public participation, and the preservation of historical and cultural monuments. This program is currently in the process of gaining approval. In addition, the GIS (http://www.statedevelopment.spb.ru) has been elaborated to provide potential investors with useful information on properties. However, in spite of the great advantage, local conditions still retain certain lacunae that need to be filled. St. Petersburg is continuing with further simplification of procedures, clearer laws for private investors, increased transparency of conditions and stipulations, and effective control over compliance.

CONCLUSIONS

At the current stage of the economic transformation, FDI produces a stabilizing influence by updating existing capital assets. Later on it concentrates on restructuring in growing industries. FDI in Russia is concentrated in the energy and raw-materials sectors, which are well-developed now and will be important for the economy in the future. It should be proposed that FDI would play a significant but accompanying role, hardly crucial to the sustainable development of the economy.

Due to the short period of time involved, it has not yet been possible to assess the parameters of progress for Strategic Plan development. However certain features evidence the strengthening of the role of St. Petersburg as the Russian "window on the west," e.g., as a hub of international trade and gateway for information and investments. In terms of geopolitical opportunities, St. Petersburg focuses on a worldwide integration that considers integration in the Baltic Sea Region as the first strategic step. As is stated in the Strategic Plan, achievement of the main goal implies consolidation of St. Petersburg's position as Russia's principal center of contact between the Baltic region and the northwest of Russia. It is for this reason that St. Petersburg has to be a part of BSR and EU initiatives and proposals aimed at furthering Baltic Sea cooperation. St. Petersburg is willing to participate actively in the development of cooperation among sub-regions around the Baltic Sea.

It is important to understand the need for the orientation of St. Petersburg's main industries to be extended towards foreign markets, as well as for a favorable business climate to be established. Investors are faced with enormous compliance costs and delays, as well as onerous permits and licensing. The business climate must stimulate economic growth and become the main factor in attracting resources and investments to St. Petersburg.

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PLANNING URBAN SYSTEMS IN SOVIET TIMES AND IN THE ERA OF TRANSITION: THE CASE OF ESTONIA, LATVIA AND LITHUANIA

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ABSTRACT: The article deals with the principles of planning the urban system during the Soviet era in the three Baltic republics of Estonia, Latvia and Lithuania. The main items of Soviet regional and urban planning doctrine are first described and an outline given of urban network development in the programmes and projects elaborated during the post-war decades. Some light is then shed on the peculiarities of the urbanization processes and evolution of urban networks during the period of transition. The article outlines the way in which the restoration of independence in 1990 economic and political conditions change fundamentally in these republics, with concomitant altering of goals and problems in both regional and urban planning.

KEY WORDS: regional planning, urban network, central command-type system, transitional period, free market economy.

THE MAIN ELEMENTS OF SOVIET REGIONAL AND TOWN PLANNING DOCTRINE

The official doctrine of the Soviet planning assumed an unlimited knowledge of nature and society as well as the possibility to govern them. The Communist party played a dominant role in the planning process. Only gradually the Soviet scientist and planners have succeeded to participate in this process. According to these assumptions, the Communist party (supported later be the professionals)

was the sole decision-maker in the planning process, while the remaining segments of the Soviet society were reduced to the role of (a supposedly enthousiastic) executor of the Party's order.

Since 1970s, a sociological optique has gradually been introduced in the elaboration of plans. Thus, the possibility of a wider participation in the planning process seemed to be opened to the Soviet society. However, such possibility remained illusive. The Soviet society was never able to make a real use of it. Definitely, the Soviet planning was not a public activity. It continued to be a party activity, rather than a public process.

Since the Soviet party was practically the sole actor in the planning process, there was no need for special legal regulations. The Soviet planning history is composed mostly of directives, methodological instructions and norms.

According to the party programmes the long-term economic strategy of the former USSR envisaged higher standards and an increase in the production of food and consumer goods. An expansion of services was also seen as a necessary condition for ensuring a dynamic and balanced development of the Soviet republics. The working people as the party's ideological propaganda affirmed were considered the main productive force in the socialist society. In fact, the ever fuller satisfaction of the material and cultural requirements of the workers was mainly oriented towards a raising of the quality and productivity of labour. The greatest attention was consistently paid to the rational allocation and distribution of large-scale industrial production, public services, infrastructure and recreational amenities.

Regional (spatial) planning was considered the most effective instrument for fulfilling these tasks in the Soviet Union, in each of the Soviet Republics and in certain regions as well. Along with regional planning, a rational planning organization was established. Town planning was an organic part of the planning system specifying in detail the regional planning documents. Urban and regional planning was associated and interrelated with economic, social and ecological tasks of the Soviet state economy. Thanks to urban and regional planning, the instructions of the central state-planning organizations, branch ministries and institutions were coordinated and implemented within the given territories.

Urban and regional planning was subordinated to the strategic programs for the allocation of man-power prepared under the auspices of GOSPLAN SSSR. The subordination of urban and regional planning to economic central planning was a key feature of the Soviet model of planning and administration and was later called the command type of government. From the very beginning, this planning was characterized by intensive territorial concentration and great labour consuming content. Extensive industrial production formed the huge "combinats," groups of enterprises (as the technological factor) and mass employment of people into public production (the social factor). Statistical data from the 1970s indicate that more than 60 percent of industrial-productive staff were concentrated in enterprises of more than 1,000 posts each, while 12 percent

were employed in factories with more than 10,000 jobs each. The concentration of industrial production stimulated the formation of large cities and huge industrial centres. Soviet economists believed in the effectiveness of such urban units: the bigger the city, the higher the labour productivity, the more speedy the fund return, etc.

After World War II, the urbanization processes were intensified along with the rebuilding and expansion of the Soviet economy. Tens of millions of rural inhabitants were involved in industrial production and in other spheres of the national economy. As a result, the urban population in the Baltic States increased by 81 per cent during the 1960s due to migration from rural areas to the cities and a shift of status of rural inhabitants into urban inhabitants taking up industrial jobs. The direct interrelationship between the concentration of industrial production and population in large cities made it possible to achieve two goals simultaneously, one social and one economic, to provide full employment for the Soviet people and to obtain an effective functioning of the USSR economy in spite of low labour productivity.

The end of the 1950s witnessed not only the end of an era of cheap energy and raw materials, but also a marked decline of the additional work force. Accordingly, economic growth became more and more dependent on the rise in labour productivity and the effective use of the available resources. There was a need for enhancement of production efficiency, a higher level of technology and improvement of the competitiveness of products. These needs were specified in the socio-economic strategies of the 1960s and 1970s and the subsequent period. Also, they had great impacts on the further development of the Soviet urbanization doctrine and urban-system formation. From now on, cities would develop in a proportional, balanced way according to their size (including cities, towns and rural settlements, regardless of size, administrative status, economic importance and profile). The development of the biggest cities should be intensified without their growing much bigger (the growth of the largest cities was restricted), the potential of small and middle-sized towns was to be enhanced and networks of multifunctional urban and rural centers expanded. According to these directives, to be fulfilled by the top all-union institutions in the mid of 1960s, subsequent programmes and schemes of manpower distribution and urbanization were elaborated in the USSR republics, firstly in the Baltic by Estonia, Latvia and Lithuania.

URBAN DEVELOPMENT DURING THE POST-WAR SOVIET DECADES

From the beginning of the 1960s onwards, an intensive industrialization was set in train in all three Baltic republics. Newly planned industrial enterprises had to be located according to new principles that had to be adopted. Acute new social and economic problems appeared. One such problem was to provide jobs

for the former rural population now migrating to the towns. Due to the forced collectivization, people in rural areas became landless and migrated to the towns. The decrease in the rural populations of the Baltic republics is shown in Tab. 1. The villages in rural areas experienced fundamental changes. Huge centralized farms were established, along with a new settlement system suitable for the new model of farms. Accordingly, considerable changes in the social structure of the rural population took place.

Table 1. Urban population in the Baltic States, 1919-2000, (in percent).

Country	Years								
	1919	1940	1959	1970	1977	1990	2000		
Estonia	19	34	56,4	65	69,4	71.5	70.9		
Latvia	38	35	51,7	61	65,2	69.3	68.7		
Lithuania	13	22.9	38	49.9	52	67.7	67.2		

Sources: Countries 2000, Statistical Yearbook 2001.

Under these conditions the first works in regional planning were introduced in the Baltic republics. It was rather a new branch of planning and at the beginning of this campaign local planners felt their lack of theoretical knowledge and practical skills keenly.

ESTONIA. World War II and the subsequent Soviet occupation involved large changes in the Estonian population. During the period 1940-1953 the population losses of Estonia, due to war activities and political repression, have been estimated at 17.5 percent of the total population, and even currently the native-born population is still about 10 percent below its pre-war level (Katus et al. 1999).

During the Soviet period, the former agrarian-industrial economic structure was rapidly replaced by an industrial structure as the country was ruthlessly subordinated to the political-economic system of the Soviet Union. Extensive economic development had a strong impact on the growth of urban and rural settlement (Erlich 1976; Kaup 1986; Kukk 1991; Marksoo 1988; Nōmmik 1987; Paalberg 1968; Pragi 1974; Rea 1964; Volkov 1974, 1980). The enforced industrialization policy was supported by a new wave of creation of boroughs in the period 1945-1957. During these years, more than 20 boroughs and some towns were established legally-most of them having an industrial base and being situated in the north and east of Estonia.

In 1952, the urban population came to outnumber the rural population and immigration surpassed emigration up to the beginning of the 1990s. From 1946 to 1991 1,197,838 people arrived in Estonia and 850,455 people left the country–making a civil migration turnover of 2,048,293 people (Sakkeus 1991). It must be admitted that some migrants are reflected in both immigration and emigration flows according to how many times they changed their permanent residence. Nevertheless, as a result, the previous situation of an ethnically

homogeneous population was transformed into one with a large foreign-born population and social variability. During the period 1945-1989, the share of non-Estonians in the population increased from 2.6 to 38.5 percent. According to the 1989 census, the foreign-born population together with their second generation is 36 percent (Katus 1998). In reflection of these circumstances, the development of the Estonian population is quite exceptional in Europe—the migration component, when compared to other demographical events, has had an almost double effect on the development of the Estonian population.

Mostly as a result of the migration, the population concentrated primarily into two areas—the Tallinn agglomeration and the northeast of Estonia. In towns like Narva, Sillamäe and Kohtla-Järve of the northeast, an immense number of jobs were created within the oil-shale industry, chemicals complex, metalworking and machine building oriented to the Russian market. A fast concentration of population to towns with over 50,000 inhabitants was witnessed.

Between the 1950s and 1970s another aspect of Estonian urbanisation was achieved by forced collectivisation of agriculture and the migration of the population to county centres and small towns, mainly as a result of economic decline in rural areas. Between the 1970s and 1990s there was a policy of territorial and organizational concentration of production and servicing that deepened the periphery syndrome in rural areas. Controlled by centralised management, rural settlements were divided into those having prospects and those of "limited development." There was strict control over building activities. The larger rural settlements, usually state and collective farm centres, started to compete with the small towns and boroughs. In the mid-1970s, urbanisation was moderated, and a close network of small towns and rural settlements emerged. In the first half of the 1980s, a period of temporary settlement de-concentration started. Part of the population moved out of the main cities into rural surroundings or into the more pleasing environment of Western Estonia.

LATVIA. Since the 1960s, the concept of equal development of regions and the hierarchical settlement network was adopted. The "Scheme of regional planning" (Shema raijonnoi planirovki) of 1976 and "Scheme of a united settlement pattern (Shema rasselenija Latvijskoi SSR)" of 1978 were elaborated (Mezapuke 1981; Buka 1984). The former proposed the development of 8 regional group systems: the largest based on the capital (Riga), 6 medium-sized systems based on regional centres (Daugavpils, Liepāja, Ventspils, Valmiera, Rezekne and Jekabpils) and finally one regional system based on the small centre in Gulbene (Buka 1984).

Accordingly, the establishing of a hierarchical system of centres located evenly territorially and provided with social services was recommended. The following hierarchical levels of centres were proposed: the national, regional, district, inter-local (inter-collective-and-state-farm) and local. Rural centres were divided into centres with or without prospects. A network of new rural centres to meet the needs of collective state farms was developed (Mezapuke

Table 2: Hierarchical structure of centres of the united system of Latvian settlements (urban and rural) by the end of 1980s.

Level of	Accessibility				
hierarchy	(to public transport) within the catchment area	Level of services	Centre		
Centre of the united system of settlements: The Capital	Expressed as the possibility to provide weekly services for 90 percent of the population of Latvia. 3 hours	Centre of specialized services Providing a full complex (set) of standards for its own population and a full complex of specialized services for all inhabitants of country	Riga		
Regional centres (inter-district)	90 minutes	Centre for partial providing of specialised services and a full set of standard services Providing a certain number of specialized services for whole region and providing a full set of standard services for its own inhabitants	Daugavpils, Liepāja, Ventspils, Valmiera, Rezekne, Gulbene, Jekabpils		
District centres	60 minutes	Centre for full complex (set) of standard (everyday and periodic) services Providing full complex (set) of standard services for whole district and its own population	25 District centres By end of 1980s it was planned to add such small towns as Sigulda, Rujiena, Smiltene, Dagda and Ergli (this centre should improve accessibility to 1 hour in marginal areas of district)		
Interlocal (multi- enterprise) centres	30 minutes	Centre for limited complex (set) of standard (everyday and some periodic) services Providing a limited complex (set) of standard everyday and a certain number of periodic services for its own and catchment area population	104 centres (the higher range of prospective villages and small towns)		
Local centres	15 minutes	Centre for limited set of standard services Providing a limited set of standard services for its own and local area population	564 rural centres of agricultural enterprises (the lower range of prospective villages)		

Source: Luse et al. 1999; Prikasa 1989; Buka et al., 1989; Mezapuke 1981.

1981; Latvia's National Report 1996; Luse et al. 1999). At the same time, construction of new industrial enterprises, service objects and housing was restricted in the so-called non-prospective settlements (farmsteads, hamlets, and small villages). All these actions transformed the traditional settlement pattern and landscape radically as well as the life style of the population (Luse 1998).

According to Luse, in the Soviet period, sectoral plans had been prepared centrally, often apart from spatial aspects. The local authorities had to accept the proposals with no objections. The projects proposed to create a hierarchical

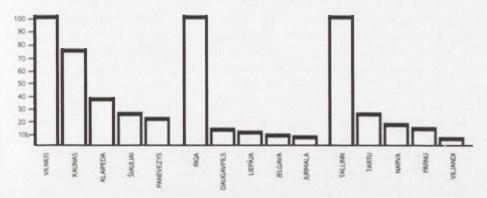


Figure 1. Relative size of the Baltic cities.

system of regularly distributed urban and rural centres with developed vertical links and a defined standard of service institutions for settlements of each level. The settlement hierarchy was considered the sum of partly-isolated elements and the whole structure a static unit. Accordingly, development following local needs was limited. The restructuring was carried out by the siting of new industrial and agricultural enterprises, housing and service objects, the improvement of the transport infrastructure within settlements chosen to be part of the urban hierarchy, and by further delegation of new administrative functions to those settlements (Luse 1998). To be appointed a district centre was a relevant factor in the development of many cities and towns, due to the concentration of administrative institutions and public services therein. During the 1960s Limbazi, Aizkraukle (the former Stucka) and Aluksne acquired new status as district centres.

The service provision was linked closely with the establishment of the new hierarchy of centres (Tab. 2). The service catchment areas were determined in accordance with the Soviet town building standards. All kinds of public and social services were divided into the groups of standard-services and specialised services (e.g., higher education establishments, hospitals, sports buildings and specialised retailing). The standard services were grouped into everyday services (needed daily) and periodical services (needed periodically). The size of some service objects, for instance the numbers of students in schools, numbers of beds in hospitals, numbers of places in enterprises of public catering were accounted for each centre, based on the population forecast for the centre and its catchment area. The catchment areas were assessed on the basis of accessibility of the service objects to public transport (Luse 1998; Prikasa 1989).

LITHUANIA. The first schemes of territorial planning in Lithuania were elaborated in the year 1958 by the scientists of the Urban Planning Department of Kaunas Polytechnic Institute, as well as by their colleagues from the Research Institute of Architecture and Construction and by specialists from the

Agricultural Planning Institute. A forced rural resettlement policy, quick industrialization and the construction of large industrial complexes were carried out in line with central planning conditions. Regional planning was considered an effective implementation of that policy based on a central command-type socioeconomic system. Unfortunately the positive proposals in physical planning were often denied or ignored by the high authorities of Soviet power (both from the central all-union and local institutions). Some programmes have been used only as propaganda displays, some of them being realized only partially (i.e., schemes for the development of recreational areas) (Šeselgis 1996).

Nevertheless, the realization of the regional planning programmes in Lithuania had some positive results. Firstly, the prime schemes of regional planning (prepared in the early 1960s) aimed at balanced development of cities and towns and a process of deconcentration of new industry compared to the other Soviet republics including Estonia and Latvia (Fig. 1). Secondly, the regional planning schemes were followed by master plans elaborated in all Lithuanian cities and towns. Finally, important scientific and practical experiences in physical planning were collected and methods in land and town management founded. These included harmonious connection of science, planning, design activity, environmental protection and the preservation of cultural heritage (afterwards, the term "Lithuanian school of regional and town planning" was frequently and widely used even among the Soviet planners) (Miskinis 1991).

In 1964, a generalized scheme named "Perspective principles for the development and distribution of industry in Lithuania" was approved by the government. It embodied years of scientific research, planning practice and the first experience in the implementation of regional layouts. The scheme was based on concepts (the "United Settlement System") elaborated by Šeselgis (1996). It was grounded on the consonant interaction of centres of different rank, evenly spaced across Lithuania's territory and fulfilling definite economic functions in coordinated fashion. The size, profile and territorial distribution of these centres (cities, towns and rural settlements) were determined by evolution and existing economic, productive, social and cultural factors, the network of settlements, conditions of nature and features of the landscape. A system of ten regional centres was established; it included such large, midium-sized and small towns as Alytus, Jurbarkas, Kaunas, Klaipeda, Marijampole, Ezys, Plunge, Siauliai, Utena and Vilnius (Fig. 2). The main principles and requirements of this system were strictly and consequently implemented at the bottom.

In 1980, an attempt was made to verify various existing data on the urban network with the initial considerations of the scheme being as mentioned above. The situation was as follows:

• The growth-rate of the two largest Lithuanian cities, Vilnius and Kaunas, had diminished markedly, whereas that of lower-level regional centres had increased visibly. The growth of small and midium-sized towns was in general

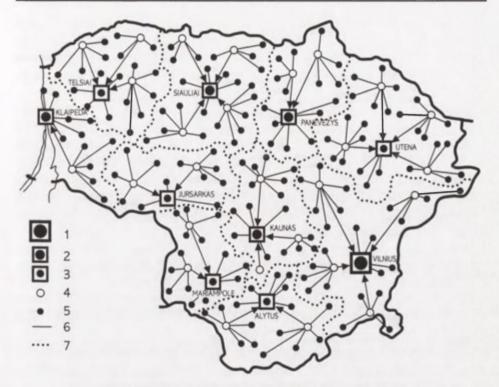


Figure 2. Principal scheme of Lithuania's urbanization (1964-1967).

1 – capital, 2 – regional centres, developed on the basis of big and middle-sized towns,

3 – regional centres, developed on the basic of small cities, 4 – centres of districts, 5 – local centres,

6 – direction of links, 7 – borders of regions.

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more speedy than the overall average, and centres presenting the highest level of services were dispersed more evenly across the Republic's territory. All these processes influenced immigration positively. Thus, the flow of newcomers from eastern Soviet republics was clearly reduced.

- The increase in the population of newly-formed regional centres was close to the former preconditions, though a little lower, if surpassing the average for the overall urban population increase.
- The growth of the capital Vilnius was the same as that in the start year 1964, in spite of immense industrialization taking place during the period of the scheme's realization (1964-1980).
- The level of development of new regional cities as service centres was slower than predicted, since their planned duties were inadequate to serve all the Republic's inhabitants evenly.

The main reasons for failures or inadequacies of the realized programme were the following: (Seselgis 1996).

• The forecasts for total population growth in Lithuania were inadequate (too optimistic).

- Thanks to the inaccurate evaluation of existing ecological conditions, it was necessary to relocate several bulky industrial enterprises. For example, a large oil refinery was built in Mazeikiai and not in the new regional centre Jurbarkas (located on the bank of the Lithuania's biggest river the Nemunas). Accordingly, the development of this new planned regional centre was halted.
- During the implementation of the approved programme "Perspective principles for the development and distribution of industry in Lithuania," the number of ten regional centres according to the governmental charge was augmented by six additional industrial centres (Jonava, Kedainiai, Mazeikiai, Telsiai, Ukmerge and Visaginas). This willful act reduced the growth chances of the regional centres established originally. For example, the construction of the Ignalina APS (unquestionable at Moscow's command) significantly impeded growth of the regional centre Utena situated nearby.
- The newly-established regions and their centres did not receive the necessary administrative position (status) and functions for their "full-blooded" existence. This usually happened thanks to decisions of the Soviet bureaucracy.
- The economic and industrial profile of the new regional centres was not coordinated with the development and rational siting of scientific and academic institutions.
- The policy for the industrialization of Lithuania (like other former Soviet republics) has served the interests of the whole USSR. Accordingly, it has been very poorly integrated with the needs of local industry and agriculture.

THE URBAN NETWORK AND THE CHARACTER OF CITIES SHAPED

ESTONIA. At the end of the Soviet period Estonia had 15 districts (rajoon) and 255 primary level administrative units, which were divided into 193 village soviets (külanõukogu), 27 boroughs (alev) and 35 towns.

Estonia was the most urbanised of the Soviet republics with its 71.5 percent share of urban population. The industrial and urbanized north and north-east Estonia were set against the south and west dominated by agriculture. Tallinn prevailed over the other cities, including (with subordinated satellite towns) over one-third of the total population, and nearly half of the urban population. Considered too large for Estonia by local territorial planners, Tallinn was several times made subject to proposals to control its growth. However, as growth was favored by all-Union political and economic interests, the city proceeded to expand through migration until the end of the 1980s.

With its population of 100,000, Tartu was the second largest town. Though remaining a traditional university seat, it also experienced several industrial developments. The industrial northeast of Estonia had the largest concentration of urban population outside Tallinn. In turn, Narva (over 90,000 inhabitants), Kohtla-Järve and subordinated towns and boroughs (with over 80,000) joined

several other industrial towns in forming a cluster of urban areas of nearly 200,000 people. Most of this population were immigrants of the post-war period. Service functions were developed unsatisfactorily in these industrial towns.

These main centres were followed by the district (rajoon) centres. Most were traditional county centres ("old towns"), though the establishment of four new districts during the Soviet period gave rise to new district centres only established as urban places in the 20th century, i.e., Kardla, Rapla, Jōgeva and Pōlva. Compared to the traditional county centres these towns had remained relatively small and insignificant. The socio-economic situation of all these district centres is relatively favourable. Nearly half of the population and jobs are concentrated in them.

The smallest towns and boroughs have had more problems. Some of them lost their original economic base, industries were closed or rendered outdated, as were railways, or they could not compete efficiently with neighboring large farm-centre settlements which provided better living and job opportunities.

LATVIA. After Latvia's incorporation into the Soviet Union following World War II, the settlement pattern changed considerably with the rapid growth of industry and collectivization processes in rural areas. Ideological considerations, a long-standing tradition of industry (especially in manufacturing), a relatively well-developed infrastructure and a favorable geographical location were the main factors promoting a rapid pace of industrialization in postwar Latvia. Industry was developed in line with political decisions in the five-year plans of the USSR, as well as the thinking of the Soviet Union's sector-based ministries. Latvia embraced the following areas of specialization in the common Soviet economy system: the labor-intensive machinery-building sector, the vehicle manufacturing sector, the textiles industry, the clothing and sewing industry, wood processing, the fishing and fish-processing industry, food processing, and pharmaceuticals (Krisjane 2001).

Industrial development was closely linked with urban development and has been characterized by several periods:

- Industrial development expanded very quickly in the 1940s and 1950s with the advent of major Soviet capital investments that outstripped local resources and labor. By 1950 the government had built or renovated more than 900 industrial enterprises with an output that was three times greater than the 1940 level (Purins 1975).
- The building of new enterprises and the expansion of older ones continued in the 1950s and 1960s. During this period factories found their way out of the larger cities and the newly-built factories supported entire townships.
- Between the 1960s and 1980s major factories were built in Daugavpils, Rezekne, Valmiera, Olaine and Ventspils. Rapid industrialization occurred in eastern Latvia, where there had been no major industrial centers before the war.

New urban settlements were mainly established for economic reasons and the industrial facilities built were narrowly specialised, e.g., close to natural resources (peat moss extraction – Seda and Balozi, hydropower –Aizkraukle), or new "greenfield" industrial plants (chemical industry–Olaine, ferro-concrete–Vangazi). At that time the Council of Ministers of the Latvian SSR had issued a decree that industry should be decentralized beyond Riga. However, the majority of Latvian enterprises continued to concentrate in and around the capital city. This led to increased environmental damage, as industry represented the major source of air and water pollution in Latvia until the late 1980s (Krisjane 2001).

The centralized decisions on industrial development in the Soviet Union created an artificial shortage of employees in Latvia, promoting a large inflow of people from other regions of the USSR. Within the period 1951 to 1990, 2,172,000 people arrived in Latvia or 54,300 people per annum, but the number of people leaving Latvia during that time was 1,802,000 or 45,000 per annum. The net migration from 1951 through 1990 thus involved 370,000 people or 9,300 per annum. The highest volume of migration was to Riga. Due to migration the ethnic structure of Latvia changed drastically (Bauls et al. 2000). The forced collectivization of agriculture led many rural residents to depart for the cities.

Until the early 1990s, the population of the country, including the populations of towns and cities, tended to increase year after year. This was due to migration processes, which provided approximately two-thirds of the population increase, as well as to natural population growth (Bauls et al. 2000). Riga had more than 910,000 inhabitants by 1989. The next largest cities were: Daugavpils (125,000) and Liepaja (115,000); and more than 50,000 inhabitants were living in Jelgava, Jurmala and Ventspils (1989 gada... 1992). Approximately half of the total population was living in these largest cities.

Until 1990, Latvia contained 93 urban areas: 56 towns and cities, as well as 37 townships. The status of the townships was changed to towns or rural centres. At the beginning of the 1990s, more than half of the governments of all townships decided to obtain town status, whereas 17 decided to obtain the status of rural centres. At the end of the Soviet period, in terms of administrative functions, towns and cities were divided into republic cities, district centres and local centres.

In analysing the development of the expected hierarchical settlement pattern at the end of the 1980s, many studies have stressed that as of the end of the decade even development had not been attained, especially where urban areas were concerned. Riga still dominated other cities of the urban hierarchy. The capital and its agglomeration continued to have an enormous concentration of residents and economic activities. Riga's size and economic dominance over a wide area had a strong influence on the development of settlements, population density, migration and economically functional interactions, both directly and indirectly. In connection with the development of suburban traffic, the densely populated areas stretch out from Riga like rays along the major traffic highways.

Especially prominent was the densely populated Riga – Aizkraukle zone, in which an intensive economy has developed along the valley of the Daugava River, a railway and highway like a ribbon branching off Riga. A similar pattern could be seen in the Sigulda, Saulkrasti, Tukums and Jelgava directions (Krisjane 2000a). The rise of densely-populated zones created favourable conditions for development and activities. The agglomeration concentrated 60 percent of the entire urban population and 65 percent of Latvia's employees in industry (Filimoneko 1989). From among seven proposed regional centres—Daugavpils, Liepaja, Ventspils, Valmiera, Rezekne, Gulbene and Jekabpils—only Daugavpils and Liepaja were able to play the role of regional centres for their surrounding areas (Latvia's National Report 1996; Filimonenko 1989; Luse 1998).

The three neighbouring Baltic republics of Estonia, Latvia and Lithuania are almost identical in their geographical situation, size of territory and population (Tab. 3), traditional life-style and Western-orientated mentality, but also in their 20th century history and fate. All lost their independence in 1940, while their paths back to liberty was analogous as well, ending successfully in 1990 with regained independence.

Table 3. Cities and urban populations in the Baltic States, 2001.

	ESTONIA (2001)*			LATVIA (2001)			LITHUANIA (2001)		
Cities and towns according to size ('000)	Number of cities and towns	Number of inhabitants in cities and towns ('000)	Share of all urban residents (%)	Number of cities and towns	Number of inhabitants in cities and towns ('000)	Share of all urban residents (%)	Number of cities and towns	Number of inhabitants in cities and towns (*000)	Share of all urban residents (%)
Fewer than 3	17	32.3	3.4	28	63.2	3.9	37	65.6	26
3 – 19,9	28	225.1	23.9	39	306.5	19.0	49	454.7	18.1
20 – 49,9	3	113.2	12.1	5	164.8	10.2	13	398.2	15.8
50 – 99,9	1	68.5	7.3	3	208.4	12.9	2	129.7	5.2
100 and more	2	501.1	53.3	2	873.3	54.0	5	1 467.7	58.3
Total	51	940.2	100.0	77	1 616.2	100.0	106	2 515.9	100.0

^{*}including towns with the status of city or rural municipality

Source: Population Age Structure of Cities and Rural Municipalities 2000-2001, Statistical Office of Estonia, 2001; Vanagas and Staniunas 2000.

In spite of these similarities there are quite fundamental differences in the aspect of spatial organization. The sizes of cities, character of the urban network, situation and typological character of the capital city, length of seashore and so on can all be referred to here.

LITHUANIA. The process of urbanization in Lithuania, compared with that of the neighbouring Baltic countries, was more or less proportionate in that the number of cities increased along with the urban population. This helped to avoid dense concentration of the population in the few big cities (Fig. 1). The post-war policy of developing industry not only in the large cities but also in the medium-sized and small towns resulted in a better demographic situation in Lithuania than in the two other Baltic states. These towns were not so attractive to Russian migrants.

The majority of Lithuanian industrial enterprises were engaged in the production of up-to-date machinery and its separate parts, processed foods and light industry products. There was also highly developed production of inorganic fertilizers, synthetic fibres, polymers, metal cutting machine tools, precision instruments, electronics, cement and reinforced concrete structures. In the city-port Klaipeda a powerful shipyard was built during the Soviet period. Unfortunately, the capacity for production here outstripped local demands, such that the yard became a heavy burden on the country because of its huge energy consumption and intensive environmental pollution.

Lithuania's method of dispersed industrialization had a positive impact in forming the local urban network. At the dawn of regained independence there were 111 towns and 20,773 settlements in Lithuania. Forty-one percent of the population was concentrated in the 5 largest cities: Vilnius (580,099 inhabitants), Kaunas (418,707), Klaipeda (203,269), Šiauliai (146,960), and Panevezys (133,347). A characteristic feature of the Lithuanian urban system and one of its privileges is the consecutively diminishing size of the main cities (Fig.1). The population of the second largest city of Lithuania, Kaunas, is 72.5 percent of that of the capital, whereas the analogous figures for the second largest cities Daugavpils in Latvia and Tartu in Estonia respectively are 26.6 and 14.2 percent.

URBAN DEVELOPMENT DURING THE PERIOD OF TRANSITION

ESTONIA. The idea of regional policy was formulated for the first time in the Concept for the Economic Independence of Estonia (IME) dated 1989. In this document, regional policy was defined as "an activity carried out by public authorities and aimed at the balanced and comprehensive development of the regions with the use of all resources and possibilities" (IME 1988). The first practical steps were taken in 1991 when a regionally differentiated corporate income tax relief scheme and infrastructural investments in remote areas were introduced.

A new regional development strategy was launched in 1999. According to the Estonian Regional Development Strategy, regional policy is defined as a system of targeted activities of national authorities for the improvement of preconditions for development in regions and for the direction of regional

development in the state. Regional policy is to be evaluated on the basis of two key indicators: average income and the unemployment rate. Five principles have been distinguished:

- innovativeness-development of a capability to study and give support to new ideas and activities;
- stimulation of initiative–fostering the emergence of initiatives and supporting their development;
- sustainability-the creation of ongoing self-sufficiency;
- integrity of the area-the development of an area proceeding from the interdependence of its center and peripheries, and
- decentralized concentration a balancing of regional development based on the network of county centres.

The last two principles reveal a change in the ideology of regional development. It is taken as read now that the developing of a territory requires support for its centre, as the periphery is dependent on that. Further, the dominance of the capital can be balanced through the developing of the other – mainly county centres. So, the urban system is to become an object of regional policy in coming years. Among the new programmes there is even a special one to develop the network of centres.

The aim of the development activities is to increase local development potential and to create conditions for its usage in all areas of Estonia (Raagmaa 1996). Seven regional development programmes will be operating in 2000: the Programme for Areas of Agricultural Restructuring, Programme for Areas of Industrial Restructuring, Programme for the Islands, Programme for the Network of Centres, Programme for Local Initiatives, Programme for the Setomaa Region and Programme for Cross-Border Cooperation.

Spatial planning at national, regional and local levels is regulated by the Building and Planning Act (1995). In accordance with this, the Estonian planning system includes national planning, county planning, rural municipality/town comprehensive planning and detailed planning. The spatial development vision and ideas about the involvement of the urban system in regional policy originate from the National Spatial Planning Document, "Estonia 2010" (Keskkonnaministeerium 2001), an approved policy statement on national planning that is the basis for county plans. Adopted county plans are in turn the basis for the comprehensive plans of rural municipalities and cities.

The vision for the Estonian urban system was formulated in the aforementioned National Spatial Planning Document "Estonia 2010." This deals with the role of Tallinn in the international context, and then with issues connected with the structure of the national urban system.

To ensure the competitiveness of Estonia in the global environment it is necessary to have an economically strong capital, in which international communication and transport routes, innovative product development and financial structures are functioning. Because of its relatively small size, it is difficult for Tallinn to perform some functions that are necessary in the era of globalisation. However, the capital-city status of Tallinn can help to solve these difficulties if co-operation with larger centres is entered into. Although Tallinn is one of the smallest capitals in Europe, it performs corresponding functions to the capitals of other states. In consequence, Tallinn also has an opportunity to choose co-operation partners on the corresponding level of the hierarchy in the Baltic Sea region. It has to be done through a deepening of cooperative connections with other capitals along the coast of the Baltic countries, i.e,. Helsinki, Stockholm, St. Petersburg and Riga. Cooperation with the latter is especially important considering the enlargement of the European Union.

If new development possibilities for Tallinn are to open up, its close connections with Helsinki are crucial. This relates firstly to the future of the Via Baltica transport corridor, which has to ensure quick waterway, road and railway connections between Finland and Central and Southern Europe. The accession of the Baltic States and Poland to the European Union (and the former's possible joining of Poland in NATO) will surely contribute to an improvement of connections. Secondly, extensive economic and cultural cooperation with Helsinki represents major developmental resource of Tallinn. Its most efficient field is tourism, which has significantly wider grounds because of the common ethnic origin of the Estonian and Finnish people and the similarity of their languages. The development of connections between the two capitals will certainly contribute to the competitiveness of both.

Looked at from the international perspective, Tallinn is seen to be the only Estonian city to have gained a visible role. Firstly, it is one of the main ports of the eastern Baltic mediating trade between Russia and the West. As the Old Town of Tallinn has been included on the list of World Cultural Heritage Monuments of UNESCO, and as the tourism flow from Finland to Tallinn is impressive, it can also be considered one of the tourism centres of the Baltic Sea Region. Looked at from the domestic perspective, internationalization processes can be seen to have permeated many areas of activity in different towns. Here we can give only a few examples. Tallinn and the surrounding areas are concentrating over 80 percent of all FDI. The control over the biggest banks, industrial and service companies has shifted to foreign owners. These processes are again connected with Tallinn first and foremost. The subcontracting of Estonian companies to Western enterprises is very widespread and its first stage has very much been based on the geographical position and national importance of particular towns.

In the development of the national urban system Estonia has to show a preference for the functional development of centres, the creating of better connections between towns and their networking to the path of an increasing concentration of economic potential and population in the capital. The goal is a balanced system of towns and it will be pursued through favouring development of all county centres and selected local centres, strengthening of Tartu as the regional city and the creating of networks of centres.

The strengthening of Tartu should make it a centre that would contribute to the rise of the level of development of all of southeastern Estonia. The efforts should be targeted at strengthening its role as a university town and centre for knowledge-intensive industry. Tartu will be able to assume certain functions of Baltic-level importance.

The cooperation of cities must complement the strengthening of certain centres. There are various ways of achieving this:

- through cooperation of the main cities and their hinterlands (Tallinn agglomeration, the creating of a united labour market for the industrial cities of the northeast, relations of Tartu, Põltsamaa, Jõgeva, Otepää etc.) and
- through cooperation in the forming of development zones near the main international transport routes and cross-border cooperation towards Latvia (Valga-Valka, Pärnu-Limbazi), Russia (Narva-Jaanilinn) and the overseas neighbouring countries of Finland and Sweden.

This cooperation must be supported by relevant improvements in the road connections and traffic rearrangements. In the longer term, the settlement system will also be influenced by the development of telecommunications and innovation, which will allow for the shifting of people from big towns to suburbs and smaller centres. This means scattered settlement development, which will soon need profound changes in the organization of the local transport system.

LATVIA. At the beginning of the 21st century, the Latvian urban network consists of 77 cities and towns. Towns and cities establish the frame of the country's settlement; they play an important role in the development of the country's economy, culture and education. Administratively Latvia is still divided into twenty-six districts and seven national cities that have their own administrations: Riga, Liepāja, Daugavpils, Jelgava, Rezekne, Ventspils, and Jurmala. Twenty more cities are also district centres, while the other fifty urban centers in Latvia sustain functions of local government bringing the total number of cities to seventy-seven (Krisjane 2000a).

The development of the urban network can be influenced markedly by the administrative-territorial reform initiated in the recent years at both local and regional level. In October 30, 1998, the Latvian parliament adopted a new law on administrative and territorial reform, specifying that at the completion of the process, Latvia will have two levels of local government - local and regional. The goal of the reform process is to create local and regional governments that are able to develop economically, as well as to set up administrative groupings of local and regional local governments so as to provide quality services to the area residents. It is planned that the reform at the local government level will take place in the two phases. Prior to December 31, 2003, it will be based on initiatives from the local governments themselves, while between January 1 and November 30, 2004 on plans prepared by the Ministry for Environmental Protection and Regional Development (Administrativi teritorialas...1998).

The establishment of five planning regions has been approved, but the centres for these regions have not been identified yet.

There are a few main characteristics of the urban system in Latvia. Latvia has a monocentric urban system, with the capital city of Riga dominant in the structure. Around the city there is a large metropolitan area, with some one million residents in the core area and 1,19 million people in the entire metropolitan area. Riga's size and economic dominance in the wide vicinity have a strong influence on the development of settlements, population density, migration and economically functional interactions, both directly and indirectly. The process of suburbanization in the surroundings of the capital is evident. Riga is not only the largest city in the Baltic States, it is also an important European-level metropolis of the BSR. Despite the fact that its population declined in the 1990s, Riga remains a city of intensive economic activity. This belies the generally accepted hypothesis that a positive migration balance is an indicator of economic growth. This great change in the structure of the national economy can be explained by the fact that there is no longer a need for as intensive a concentration of labour as was the case during the over-industrialized Soviet period. On the other hand, the availability of a wide range of jobs and the development of new and dynamic sectors of the economy create a growing demand for qualified workers, and this could serve to increase migration flows (Krisjane 2000b).

The number of people living in the country, including in its cities and towns, has declined, but the proportionality between Riga and the next largest cities has been maintained. Daugavpils and Liepāja have only one-seventh or one-eight as many residents – 14.5 per cent of the number of Rigensians in Daugavpils and 12 per cent in Liepāja.

A large number of small towns and cities (fifty-four) have fewer than 10,000 inhabitants. In the last decade the small towns have not only failed to acquire any significant new infrastructure and development possibilities but they have, on the contrary, lost former infrastructure, especially in social terms. This has happened because, in the absence of a focused and well-planned state policy, the bigger cities are taking over the functions of the small towns and, consequently also their financial and human resources (Concept of Urban Development Policy 2001).

There were critical changes in Latvia's economic life in the 1990s. The economy was affected by structural changes that have moved the nation from a planned economy to a market one in a relatively short space of time. Economic development has not affected all cities and regions of Latvia equally however. The most rapid growth rates have been found in the region of the capital city with Riga and the Riga District have attracted nearly 60 percent of foreign investment, as well as in those parts of the country traditionally associated with export-oriented sectors and transit services. The favourable geographical position of Latvia, proximity to the Baltic Sea and the presence of ice-free ports

encourage passenger and cargo transportation. The efficient and competitive transport and telecommunication systems are important preconditions for economic growth of the country. Latvia has also a well-developed port system. In addition to the large ports at Ventspils, Riga and Liepāja, seven smaller ports that have been developing over the last decade. Ventspils is the largest port on the eastern shore of the Baltic Sea. It specializes in the shipping of oil products, mineral fertilisers and chemicals. There is a free port at Ventspils, set up to promote Latvia's participation in international trade, to attract foreign investment, to develop services and create new jobs. Along with cargo and passenger transportation, some ports are developing also as pleasure boats and yachts centres.

The Latvian settlement structure is an important part of the national spatial planning which is being pursued. The main goal - a sustainable, polycentric urban network - will be included as one of the development priorities. With a view to this goal being reached, the Concept of Urban Development Policy has been developed, though not yet approved. The main aim of the policy in this sphere is to develop a sustainable urban network. This will ensure possibilities for a high quality-life, not only for urban inhabitants, and will also serve as a force for equal development opportunities for all inhabitants of the country, simultaneously promoting sustainable development nationwide (Concept of Urban Development Policy 2001). The priorities of urban development will be:

- balanced development of the urban network, ensuring all of equal possibilities for development in accordance with regional strategies, as well as a transition to a polycentric spatial system with a developed network of small and medium sized towns;
- the formation of capable and innovative public management based on the application and development of urban advantages, with the present regional centers becoming the bases ensuring the competitiveness of the region in Europe and the world;
- the transformation of the urban network into a system of service providers which ensures diverse production, the spread of goods and services, consumption and exchange both within the network and outside it, providing convenient accessibility of economic and social infrastructure to all inhabitants;
- development of the transport and telecommunication networks into an integrated structure ensuring equal public accessibility to services including out side urban structures, and decreasing unnecessary migration to cities;
- development of human resources and local capacity in order to ensure a quality inner structure of towns.

LITHUANIA. The current peculiarities of Lithuania's urbanization mainly follow from its regional policy implemented in line with the government programme adopted in 1964. Some of its positive results (discussed in the previous chapter) were revealed much later, particularly after regaining

independence in 1991. One of the most important achievements is a distinctly favourable ethnic composition of the Lithuanian population (as compared with that in the neighbouring Baltic states), as a direct outcome of a spatial management policy directed towards dispersed industrialization and urbanization throughout the country, with priority being given to medium-sized and small towns, and to the limiting of growth in the two largest cities of Vilnius and Kaunas.

Among the disadvantages are the character and location of the country's capital. Vilnius is a typical "continental" city, whereas Riga and Tallinn (as well as other capitals of the BSR states like Copenhagen, Helsinki, Oslo and Stockholm) are situated by the sea. The importance of seaports is emphasized by the fact that, according to the VASAB 2010 classification of BSR cities ("pearls"), the ten cities belonging to the highest category of "European Cities" (Berlin, Hamburg, Helsinki, Copenhagen, Minsk, Oslo, Riga, St. Petersburg, Stockholm and Warszawa) include seven that are seaports (Group of Focal Points 1994). Lithuania has no city of this category. The country's situation is worsened by the fact that its Vilnius "centre of gravity" is far away from the country's "gateway to the world," the port city of Klaipeda. In addition, Vilnius is located very eccentrically, only 35 kilometres from the Belarussian border, as the sad result of numerous historical courtailments of Lithuanian territory by force. Complications arising in connection with the location of both cities demand a specific approach, not only to the spatial development of the capital city, but also to problems in the wider context, i.e., the entire country's urban network. The territory of Lithuania holds several important international transport corridors ("strings"). Firstly, the meridian-line, the "backbone" of Eastern Europe, the "Via Baltica" corridor, the IXB corridor, starting deep in Russia and bridging Ukraine, Belarus and the Central-Asian states of CIS with a Baltic Sea, leans on the seaport of Klaipeda. The western part of Lithuania takes the "Via Hanseatica" corridor, an important highway linking the traditional set of Europe's formerly Hanseatic cities (Fig. 3). And finally, the IXD corridor from Kaunas extends to that enclave of Russia, Kaliningrad district. As Fig. 3 shows, Kaunas is exactly in the place at which these three corridors form an important junction. This is thus a well-justified hint and precondition to the effect that (together with the capital Vilnius) this is the main "pearl" of the Lithuanian urban network to be developed.

The missing representation at the highest level of the BSR city hierarchy is a rather major drawback for Lithuania, even in the case of upcoming EU membership if it is to take an equivalent position among the states of the BSR and Europe, in an arena of constant competition for role, influence and market. Status as a European City is a reliable guarantee for potential EU aid and a powerful magnet for foreign businesses and investments.

What are real chances of any Lithuanian city entering the Euro City circle? Features of the ten BSR cities belonging to this category indicate a maximum of



Figure 3. The main transport corridors in Lithuania

three qualities: status as a country's capital, possession of a seaport and size. Only one Euro City-Copenhagen-distinguishes itself by the presence of all three characteristics. For the remaining nine cities it was enough to exhibit two features, namely seaport and size (Hamburg and St. Petersburg), status as capital and sea port (Helsinki, Oslo, Riga and Stockholm), and size plus status as country's capital (Berlin, Minsk and Warszawa). Taking these considerations into account, the categorization of Lithuanian cities seems to be very narrow. Klaipeda, not being a state capital, is in addition, evidently too small (compared with to Hamburg and St. Petersburg). Unfortunately Kaunas does not meet any of the three requirements. Vilnius, regardless of its well-known status as a historical capital, is far below the size of Berlin, Minsk and Warszawa. With fewer than one million inhabitants, Vilnius will always be faced with too high a hurdle to attain Euro City status. Besides this quality, plus its status as the country's capital, Vilnius must be recognized as an internationally prominent metropolis and a centre of up-to-date production, businesses, finance, foreign tourism, and universities making it stand out for its versatile attractiveness.

In conditions of an abrupt demographic decline in Lithuania (as in most post-socialist countries) a population of one million inhabitants seem rather incredible for Vilnius. Nevertheless, the Master Plan for Lithuania, elaborated a couple of years ago (Lietuvos Respublikos...2002) presents a more realistic way of achieving Euro City size and importance. This town planning idea was cherished in theoretical considerations long ago. The fact is that Lithuania looses from the unique situation of its urban network. The two biggest, similarly sized cities of Vilnius and Kaunas are situated on a main international and local

transport corridor, the so called urban-demographic backbone. Both cities are linked by the intensive counterflowing passenger and freight transport streams, and the shuttle-like travel of thousands of commuters. This fragment of the country's main backbone could serve successfully as an urbanized strip thus forming a so called *dipolis* (Vanagas 1995) containing the urban sprawl of both metropolitan cities. In such a way, the geographical drawbacks of Vilnius's eccentric situation in the country, far from its geometric center, its distant location from the seashore and main seaport can all be compensated for by adding the features of the second city, Kaunas. i.e., the proximity to the junction of the main transport corridors (Fig. 3). It would be not a Milutin-like ninety-kilometer-long, densely-urbanized "conveyer," but rather a "necklace" of garden-city type nuclei on the route of intensive transport, communication, and information exchange in the energy core, and supplied by up-to-date rapid railways and expressways and cut by the spacious green gaps between these cozy suburban settlements built mainly of low-rise terraced and detached houses.

The drawbacks of the Lithuanian urban network can be slightly compensated for by the strengthening of the favourable and perspective role of the country's seaport Klaipeda. This port is the northernmost of the Baltic Sea harbors free of ice during winter. It is on the western end of the main BSR route East-West (corridor IXB) originating deep in Russia. The important westward routes to the German city of Kiel, to the Danish ports (thus to the Central- and West-European aquatories) start here. According to specialist references, Klaipeda's port has great prospects: cargo capacities of 15-16 million tonnes annually can easily rise to 100 million tonnes. Such a potential would equal the capacities of New York, Yokohama, Le Havre and Marseille and would enable Klaipeda to join the list of the ten biggest European ports. An essential condition for this extension of Klaipeda would be the hitherto existing up-to-date and powerful rail and automobile approaches left by the Soviets, who built a large installation for the military ferry link Klaipeda - Mukran (Germany) in the 1960s.

All these suggestions from the Master Plan for Lithuanian Territories [Lietuvos Respublikos...2002] are in accordance with the Law on Territorial Planning [Lietuvos teritoriju planavimo istatymas...1995] which requires among other things that land for the development of infrastructure in residential areas and other spheres of activity be defined carefully and investments in social and economic development be promoted (Staniunas 2001).

CONCLUSIONS

After World War II, and especially in the 1960s and 1970s, the industrialization of Estonia, Latvia and Lithuania, combined with the collectivization of their agriculture to make the process of urbanization become very intensive. In Estonia and Latvia, the importance of the capital cities Tallinn and Riga has

grown steadily, and this has influenced the development of the settlement system, which has become unbalanced in these countries. Meanwhile, Lithuania has been able to maintain dispersed, polycentric development, with the growth of small and middle-sized towns and a relative deceleration of the progress of Vilnius and Kaunas.

Centralized decisions on industrial development made in the Soviet Union created an artificial shortage of employees in the Baltic countries, especially Latvia, promoting a large inflow of people from the territories of Russia. Until the early 1990s the size of the population in the Baltic countries increased from year to year. Tallinn and Riga were dominating in the hierarchy of urban system. The two capitals and their agglomerations have continued with the concentration of residents and economic activities.

During the transition period economic development has mostly taken place in the capitals and other larger cities of the Baltic countries. The overall decrease in population in all the states has been accompanied by a notable decline in the number of people residing in the capitals. The reasons for this can be found in the migration of the non-native population out of the Baltic States as well as in the emergence of an urban sprawl that is characterized by a tendency towards commuting between dwelling areas and working places.

The future development of urban networks will be rather different in each of the three Baltic countries. As the concentration processes towards bigger cities continue, Estonian national policy will emphasize the role of regional cities and towns as the "engines" for regional development. In their development, the new conceptual approach supporting polycentrism of the urban system will become more and more prevalent. The Latvian urban pattern still has a mono-centric system with the dominance of the capital city. Future development will possibly be influenced by administrative-territorial reforms at both local and regional level as initiated in the last few years. The Lithuanian urban network will be developed in line with the Master plan for the country, and taking into consideration the system of international transport corridors and urbanization axes. The last statement is also true in the cases of Estonia and Latvia.

Deriving from the rapid development of international cooperation and competition between the towns, the participation of Baltic towns in transnational networks is increasing notably. This is also indicative of the growing importance of these towns in the economic and social integration of the Baltic Sea Region.

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URBAN SYSTEMS IN THE BALTIC SEA REGION: METROPOLITAN REGIONS TAKE THE LEAD

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ABSTRACT: Traditionally, apart from having had a role as gateways to national economies, capital or metropolitan areas in the Baltic Sea Region (BSR) have primarily acted within the framework of their national urban systems. This has at least to some extent guaranteed a more balanced development pattern between these cities and their respective countries. In the 1990s this balance was challenged by recent changes in technology, the economic system, regional (or international) integration and demography that have called for changes in the regional urban system. The increasing importance of the knowledge-based economy, the concentration of R&D, and increasing competition among cities and countries, have all acted as engines for an unusually marked polarisation of economic activities to just a few of the larger BSR cities. While the experience in the cities of the eastern BSR is to a certain extent similar to that of the western parts, the development of an open market economy in the eastern BSR is adding further momentum to their growth.

KEY WORDS: urban system, regional development, regional integration, Baltic Sea Region.

INTRODUCTION

In recent years we have witnessed remarkable changes in the urban systems of the countries around the Baltic Sea. These changes are to a large degree caused by technological developments whereby production and services have increased demands for qualifications within the labour force. The establishment of a private market economy in the eastern part of the Baltic Sea Region (BSR) has also had far-reaching implications for the balance of the existing urban system.

The fates of cities under these new circumstances differ, reflecting the viability of their old economic base in the new economic and technological environment. Changes do not concern cities only because regional urban systems are also widely affected. This paper therefore offers a brief characterization of cities and urban systems in the BSR before giving a description of the population-related and economic development of cities in the BSR in the 1990s. Finally a few hints as to possible future developments are given.

DIFFERENT TYPES OF CITIES IN THE BALTIC SEA REGION

Trying to characterize the cities in the vast area of the BSR is an almost impossible task. Given the wide variety of things that are actually happening in different cities and places across this area, a description of qualities and features of the cities is necessarily sketchy. The different quality, definitions and details relating to the data describing economic activities and other functions of cities in different countries add to the problems.

Nonetheless, some rough catchwords can be used to describe distinct types of cities in the Baltic Sea Region:¹

- Cities that are centres of higher-order functions as regards production, distribution, circulation and control. This type comprises the ten national capitals in the area, possessing state functions and thus placed at the top of the national administrative hierarchy. These cities are all national centres of control with headquarters of big national corporations, upper-end branches of multinationals, and the centres of national business organizations, trade unions and political parties, and business services. They also function as gateways for the import and export of commodities, services and information. Besides the capitals, St. Petersburg and Hamburg also have a similar range of functions, top state administration excluded.
- Other big cities with large-scale production, distribution, control and circulation functions including some headquarters of big corporations, business service functions for a sizeable part of the national territory, some import, export and transport functions, and manufacturing for global or international markets. Typical cities in this category are Göteborg, Århus, Bergen, Kaliningrad, Gdańsk, Poznań, Wrocław and Kraków.
- Cities with large-scale specialized international functions within production (specialized manufacturing city regions like the Upper Silesian conurbation, Oulu), circulation (Murmansk, Klaipeda) or control (Västerås).
- Cities with specialities, competing in or catering to an international market. This group comprises many middle-sized manufacturing cities (of 25,000

¹ Descriptions of the national urban systems in the BSR are given in detail at the VASAB 2010 secretariat (ed.), 2000.

inhabitants or more) with different production profiles, but also some specialized cities within tertiary activities (like Mariehamn in shipping, Rostock in transport and university cities like Tartu).

• Cities that are regional centres clearly dominated by regional functions (e.g., in public administration, retail trade and local circulation). These centres often also possess key functions as gateways to and from their region. Many of the administrative centres on a regional level belong to this category.

Cities not only are to be described as separate units, however. For cities are also parts of urban systems and it is to the regional examples thereof that we shall now shift the focus.

It is well known that many cities are not alone in facing global competition. Cities make or are forced into networks. Perhaps the most well-known of these involve the Christaller-type hierarchical organization of trades catering to the needs of rural and urban populations leading to a city system of a nested hierarchical nature (Christaller 1933). The phenomenon of networks is not limited to retail trade and personal services, however. Manufacturing firms also often work together in networks, leading to functional connections among the cities in which they are located. Multinational corporations are often organized in a manner similar to a nested hierarchy, where headquarters take strategic decisions of global range, while administrative offices take care of the corporation on a national or regional scale.

The different networks often combine into a territorial structure, wherein firms in central cities dominate a certain hinterland, forcing lots of international contacts of the hinterland to be made by firms, organizations and headquarters in the central city. These networks make up the core of a regional urban system. Regional urban systems are parts of a larger national urban system based on state functions and other national-oriented activities (organizations and national TV are examples). With this qualification, regional urban systems can be treated as real entities.

DIFFERENT REGIONAL URBAN SYSTEMS

In the BSR the capitals (plus St. Petersburg and Hamburg) are nodes of regions and urban networks of general international competitiveness. In most countries, business services, state administration and international gateway functions of trade, investment and information concentrate in the capitals. They thus take the lead in international competition in the fields of advanced higher-order services, as headquarters of multinationals and other internationally-oriented companies and in relation to urban tourism. Only seldom does the national capital compete in these fields with other cities in their respective countries.

Capitals and metropolises of course differ from one another. In the BSR, Berlin and St. Petersburg are by far the largest cities in terms of population and function as centres for far-reaching hinterlands. The other capitals dominate smaller regions. Equally, all the metropolises are surrounded by dispersed minor cities, the number of which generally decreases from south to north.

Other cities within the range of functions of the capital make use of the developed and competitive services and skills in the capital in international relations. Cities within this range become dependent on the capital city and its firms for investment and higher-order services, and local firms are often branches of firms located in the capital. These cities perform a role that is mostly not directly internationally-related, but related instead to the metropolis and its total urban system, being a production, recreation, housing or local-service locality. The fortunes of the whole urban system in these areas thus depend on the performance of the capital city in international competition.

It should be noted that the range of the capital city in this respect normally comprises an area far larger than its local labour market area. It is not only cities within commuting range of the capital that come under its dominance. Outside the local labour market area of the capital, we find a hierarchy of regional and local centres, most of which are developing their manufacturing industries depending on relations with the capital in the fields of business services, logistics and management, and of course also providing service functions to their regional or local hinterlands. On the other hand, the dominance area does not normally comprise the whole national territory, except where state administrative functions are concerned. Parts of the countries develop independently of the capitals, either because they are too far away or because they have had an economic or political history of their own.

Outside the dominance area of the capital city we thus find some cities and regions developing rather independently, due to a high degree of specialization based on local expertise in production and local embedded traditions. In the era of globalization, firms in such cities and regions tend to be integrated into international markets and networks of production, as sub-contractors or brand-companies of high reputation. Thus, cities in these areas often develop independently of the national core.

The economic functions of these cities differ from region to region. In some places, as in traditional industrial districts, cities of almost equal size develop networks between their firms. In other places, a larger city takes the lead and performs like a mini-capital for the area, with some higher-order business, financial and administrative functions of the kind usually concentrating in the capital. A regional university might be the point of departure for developing new high-tech firms. In some cases, cities are specialising totally independently of other cities, as in some monoindustrial and resource-based cities, using local resources of energy or ore or forests, or using local tourist amenities.

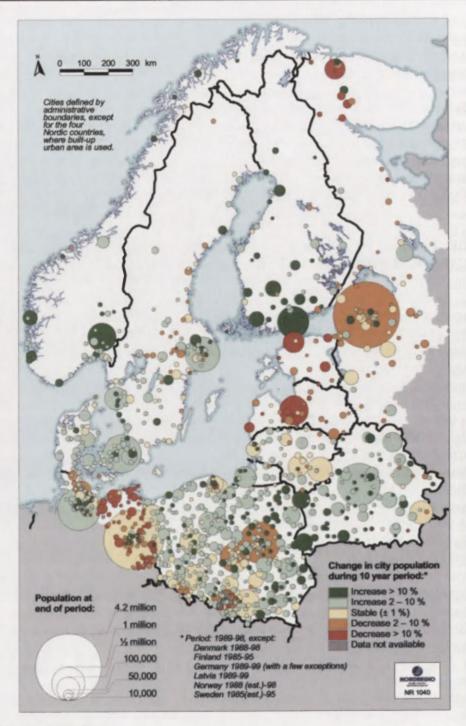
Large parts of the BSR outside the national cores are characterised by a polycentric urban system. Most of Poland, together with northern Germany, western Denmark and southernmost Sweden is marked by a rather uniform distribution of middle-sized cities reflecting earlier and existing functions as service centres for rural areas, with connected manufacturing industries. Most of Belarus, Russia south of St. Petersburg and central Scandinavia have a regional urban system with dispersed cities dominated by a regional centre with around or more than a quarter of a million inhabitants. In the far north of Scandinavia and Russia, cities and towns are relatively few and far between, with the exception of those forming 'corridors' like the ones along the coastline of the Gulf of Bothnia or the strip southwards from Murmansk.

DEVELOPMENT OF REGIONAL URBAN SYSTEMS IN THE 1990S: CAPITAL REGIONS AND METROPOLISES TAKING THE LEAD

Traditionally-apart from having had the role as gateways to national economies-capitals or metropolitan areas in the BSR have primarily acted within the framework of their national urban systems. At least to some extent this has guaranteed a more balanced development pattern among these cities and their respective countries. In the 1990s this balance has been challenged increasingly.

In the BSR as a whole the overall migration surplus has been more or less totally absorbed by cities. This was especially the case during the latter part of the 1990s. Data from the northernmost Nordic countries is illustrative. In the aftermath of the economic crisis of the early 1990s, migration in Finland, Norway and Sweden to the largest cities and in settlements within commuting distance of them has increased pronouncedly in strength. On average during the period 1995-2000, less than a quarter (110 of 448) of all municipalities in Finland showed positive net migration (domestic and international combined). In Sweden too, such municipalities numbered only 93 (out of 289) and in Norway 197 (out of 435). With a few exceptions, these municipalities were markedly within the local labour market areas of the largest cities. In Denmark this concentration is not as pronounced, with population growth increasingly occurring in a majority of the municipalities. On average during the period 1995-2000, 201 of the 275 Danish municipalities showed positive net migration, compared with only 137 during the period 1990-1994.

The picture is largely similar if one looks at only cities, delimited narrowly according to built-up urban fabric (in the four Nordic countries) or administrative units (in all other countries/regions) rather than functional urban regions (Fig. 1, Tab. 1). Although population in all cities of the Nordic countries has increased, the phenomenon has been most rapid in urban areas with more than 100 000 inhabitants. In Denmark this has occurred fairly equally in nearly



Created by T. Hanell

Figure 1. Population changes in the BSR cities during the 1990s.

all towns regardless of size, as is the case with the settlements in Schleswig-Holstein that surround Hamburg. In Belarus, Lithuania and Poland, population growth has also taken place regardless of city size, except in the case of population loss in some larger cities such as Warszawa, Łódź, Kraków, Vilnius or Kaunas. In Estonia, Latvia, the BSR parts of Russia and the New Länder of BSR-Germany, overall population development during the 1990s has been strongly affected by returning CIS nationals, both military and civilian. Thus virtually all cities in these countries/regions had lost substantial fractions of their populations in the course of the 1990s, with smaller settlements surrounding Berlin or St. Petersburg being the only major exceptions to this. Nonetheless, more recent data based on surveys rather than registers (e.g., Sjöberg and Tammaru 1999) indicate that, in Latvia and Estonia especially, the largest cities (Riga, Tallinn) or their surroundings (Hanell et al. 2000b; Krišjane 2000) again appear to act as magnets for migration although official data do not fully corroborate these trends.

Table 1. Population changes in BSR cities during the 1990s.

			Population change during 1990s ¹							
		Inhabitants			1:					
City population by size class	No. of cities	in these cities	BSR total	FIN, NOR, SWE	DK, Hamburg, Schleswig- Holstein	BEL, LT, POL	EE, LV, BSR-Russia, Berlin, New Länder			
> 1 000 000	7	15 153 100	0.0%	8.2%	3.7%	2.9%	-3.6%			
500 001 - 1 000 000	9	6 343 500	0.6%	14.6%	:	-1.6%	-12.9%			
250 001 - 500 000	18	6 504 200	0.4%	3.4%	:	2.8%	-6.8%			
100 001 - 250 000	64	9 846 400	1.2%	12.5%	2.7%	0.8%	-8.0%			
50 001 - 100 000	116	7 948 200	2.6%	7.5%	2.0%	5.0%	-6.3%			
25 001 - 50 000	222	7 819 200	3.0%	7.1%	5.5%	3.5%	-3.8%			
10 000 - 25 000	603	9 478 000	4.0%	6.0%	5.9%	7.0%	-6.2%			
All cities > 10 000 inh.	1039	63 092 600	1.6%2	8.9%	4.0%	2.8%	-5.4%			

Source: National Statistical Institutes

Cities defined on basis of administrative units, except for the four Nordic countries, where built-up urban area is used.

Period 1989-98, except Denmark: 1988-98; Finland: 1985-95; Germany & Latvia: 1989-99; Norway: 1988 (est.)-98; Sweden: 1985 (est.)-95

In a manner even more pronounced than in the case of population, capital and other large city areas in the BSR are accounting for disproportionately large shares of their respective countries' economic development. Using Gross Domestic Product (GDP) as an indicator of the overall economic strength and competitiveness of regions, this spatial polarization is obvious on an overall BSR

² Data for 16 towns missing

level. Roughly one-third of all regions in the BSR (i.e., 42 of 153) produced two thirds of the area's entire GDP in 1996, although accounting for only half of its population and less than a fifth of its land area (Groth 2001, 84). Although much of the above is explained by differences in economic strength between the eastern and western BSR, Tab. 2 (first two columns) reveals that the ratio between the capital region's share of GDP and that of population is also highly distorted within most BSR countries. (Note that due to the arbitrary statistical definition of city regions, the data are not truly comparable among countries, and should be interpreted horizontally only. (For details on the delimitation of city regions, see notes to Tab. 2.). This discrepancy is most pronounced in Estonia, where Tallinn, with 37 percent of the Estonian population, accounted for 58 percent of Estonian GDP (a ratio of more than $1:1^{1/2}$) in 1997. Similarly, the ratio for Riga, for example, is also greater than 1:11/2, and nearly as large for Oslo, Helsinki or Warszawa. However, this is not at all unique in an overall EU context, where analogous hypertrophy can also be observed in France, for example, where the Île de France (Paris plus surroundings) has 19 percent of the French population but accounts for nearly 30 percent of the country's GDP. The same is also evident in some smaller EU countries such as Belgium, Austria or The Netherlands, though the pattern is more balanced in countries such as Germany or Italy.

In the BSR, the shares of employment - and especially the shares of service-sector employment—are also disproportionately high in the capital regions, Berlin and Minsk being the only exceptions (Tab. 2, columns 3 and 4). This discrepancy is most pronounced in Poland, Latvia, Norway and Finland, and—regarding public and private service sector employment—also in Lithuania, Estonia and Sweden. Despite the fact that capital regions usually have negligible agricultural employment and generally also minor manufacturing sector—ensuring that the service sector should be oversized in comparison with the rest of the country—the divergence in these BSR countries is substantially higher than in most EU countries (with, for example, Greece being an exception).

Far more alarming than this static picture, however, is the quick rate at which polarisation between these few city regions and their respective country hinterlands has occurred during the mid-1990s. With the exceptions of Berlin and Minsk, the cities have experienced a total employment increase that is more rapid or else an overall decrease that is less dramatic, than in the countries as a whole (Tab. 2, last 4 columns). If this trend is sustained, the already very uneven balance (especially in some eastern BSR countries) will be accentuated further.

The increase in service sector employment shows even greater favouring of large cities. As the service sector, and especially the private service sector, accounts for a lion's share of all new jobs created in the eastern and western Baltic Sea Region alike (Hanell et al. 2000a, 38-41), this propensity seems more alarming still. While the service sector employment in Lithuania (excluding Vilnius) grew by 3 percent between 1993 and 1997, it increased by as much as 19

Table 2. Concentration of e	economic activity in ma	ajor BSR metropolitan regions	s.

	Shar	e of nation's	s* total of:			Change in:					
	population Gross at end Domestic of 1998 Product		Domestic employ-		in city in rest of		employment				
	0.1776	1997	1997	employ- ment 1997	1993-97	country* 1993-97	1993-97	in rest of country* 1993-97			
Berlin ¹	28%	28%13	28%	31%	-5%	0%	1%	6%			
Copenhagen ²	34%	40%	34%	39%	5%	4%	7%	5%			
Oslo	22%	31%12	26%	31%	17%	8%	17%	9%			
Stockholm ⁴	20%	26%	22%	26%	5%	0%	4%	-2%			
Helsinkiʻ	25%	35%	29%	35%	11%	6%	12%	8%			
St. Petersburg	44%	54% 14	49%	52%	-1%	-12%	10%	9%			
Tallinn'	37%	58%	41%	49%	-2%	-11%	11%	1%			
Riga ⁸	37%	56%	44%15	53% 15		-					
Vilnius ^e	24%	29%	26%	33%	2%	0%	19%	3%			
Minsk ¹⁰	32%	-	33%	32%	-12%	-10%	-9%	8%			
Warszawa ¹¹	13%	18%	14%	16%	17%16	11%16	2616	23%16			

Source: National and Regional Statistical Institutes, Eurostat

General note: The differing regional delimitations from country to country imply that data in the table's first four columns are comparable horizontally only!

* "National" figures (shares, change) for Berlin and St. Petersburg refer to the BSR parts of their countries only.

1 Land of Berlin, 2 Københavns kommune, Frederiksberg kommune (Københavns amt, Frederiksborg amt and Roskilde amt), 3 Oslo and Akershus fylke, 4 Stockholms lan, 5 Uusimaa (maakunta), 6 St Petersburg city, 7 Harju maakond, 8 Riga rajon, Riga city and Jurmala, 9 Vilnius apskritis, 10 Minsk Oblast, 11 Mazowieckie woivodship, 12 The share is 26% if GDP from offshore activities is included in the Norwegian total, 13 Data from 1996, 14 1996 and excluding Kaliningrad 15 Data from 1998, 16 Period May 1995-May 1999

percent in Vilnius. The corresponding employment increase in Tallinn was also more than 10 percent higher than that in the rest of Estonia. Denmark apart, the rate of service sector job creation in the Nordic countries' capital regions greatly outpaces that in the rest of the respective countries.

Although longer time series are not available for the entire BSR, the existing data for the development of GDP during the 1990s show similar tendencies. Between 1991 and 1999 the capital region's share of total country GDP increased substantially in all Nordic countries except Norway. (However overall GDP figures for Norway are highly affected by changes in oil and gas prices, and thus the spatial distribution of Norwegian GDP is highly questionable). Available data for the latter part of the decade indicate that economic development in transition countries has even more favored the capital regions

^{- =} Data not available

Table 3. Development of population and GDP in major BSR metropolitan regions 1991-1999.

		1991	1992	1993	1994	1995	1996	1997	1998	1999
Copenhagen	a) % population	33%	33%	33%	33%	33%	33%	34%	34%	34%
	b) % GDP	38%	38%	40%	40%	41%	40%	40%	41%	41%
	c) GDP/capita level	116	115	121	122	123	121	122	123	122
Oslo	a) % population	21%	21%	21%	21%	21%	21%	22%	22%	22%
	b) % GDP	-	31%	31%		-	-	31%	- 0	nell-
	c) GDP/capita level		151	150		-	-	146	-	-
Stockholm	a) % population	19%	19%	19%	19%	20%	20%	20%	20%	20%
	b) % GDP	23%	23%	25%	24%	24%	25%	26%	26%	27%
	c) GDP/capita level	123	122	127	123	123	126	129	133	131
Helsinki	a) % population	23%	23%	23%	24%	24%	24%	24%	25%	25%
	b) % GDP	33%	33%	33%	34%	33%	35%	35%	36%	37%
	c) GDP/capita level	134	132	132	133	132	139	138	140	1421
Tallinn	a) % population	39%	38%	38%	38%	37%	37%	37%	37%	37%
	b) % GDP		-	-	1.0		57%	58%	59%	59%
	c) GDP/capita level		-	-		-	152	157	160	159
Riga	a) % population	42%	42%	42%	41%	41%	41%	41%	41%	41%
	b) % GDP	-	-	-	-	-	53%	56%	-	-
	c) GDP/capita level	-	-	-	-	-	130	136	-	-
Vilnius	a) % population	25%	25%	24%	24%	24%	24%	24%	24%	24%
	b) % GDP	-	-			-	29%	29%	31%	33%
	c) GDP/capita level	-	-	-	-		118	121	130	137
Warszawa	a) % population	-	-		-	13%	13%	13%	13%	13%
SHOWING	b) % GDP	-	-			16%	18%	18%	19%	20%
	c) GDP/capita level	-				125	135	137	146	149

Source: National Statistical Institutes, Eurostat

- a) Region's share of total country population
- b) Region's share of total country GDP
- c) Region's GDP per capita, index country average = 100
- = Data not available? Preliminary figure

(For details on delimitation of city regions, see notes to Table 2.)

(Tab. 3), with the rural hinterlands in particular lagging behind this development. For example, in Tallinn, GDP per capita in 1999 was 59 percent above the country average, and as much as 275 percent higher than in the "poorest" Estonian region (Kirde-Eesti, i.e., northeastern Estonia). Per capita production levels were also substantially higher in Warszawa (nearly 60 percent above the country average), Oslo (49 percent above in 1997) and Helsinki (42 percent above). The smallest differences in the BSR were for Copenhagen (only 22 percent above the Danish average) and Stockholm (31 percent above the Swedish average).

In terms of inward FDI, it is the capitals that are the prime targets. Of all the Nordic companies present in the Baltic States, as many as 77 percent had located themselves in the three capitals as of 2000; when northwestern Russia is considered as many as 97 percent of them were in St. Petersburg (Snickars and Bourenanne 2000). This pattern is not as marked in the Nordic countries, but here also the capitals are the prime ports of entry for foreign investment.

All in all, these data thus indicate that the overall polarization affecting capital-cities and other large city regions in most of the BSR was accentuated during the latter part of the 1990s. From a European perspective this is nothing unique, for in the EU also, despite growing cohesion between countries, the regional differences within countries are increasing markedly. For smaller BSR countries, such as the Baltic States, the hypertrophy of the capital regions need not be all that troublesome. Some argue that small countries do need a strong capital in order to be able to compete in an international arena. Furthermore, a prosperous capital and large city regions can also act as engines for the spread of growth, employment and, in the end, wealth to surrounding lagging areas, especially where physical distances are short and possibilities for interaction greater.

CHANGING REGIONAL URBAN SYSTEMS

The urban system in an area is the result of the history of society's development in that area. The different histories of urbanization often explain the urban patterns of to-day. In the Medieval period Hansa cities flourished as trading depots and mediators between international markets and large rural hinterlands, giving rise to the still existing and rather uniformly located strip of cities along the shores of the Southern and Eastern Baltic Sea.

The rise, development and fall of cities is a result of the possibilities these centres have had for supplying the urban functions demanded by general social development. Sometimes in history existing cities have succeeded in restructuring themselves to new social demands. In other situations, social and economic changes have been so tremendous that new cities and urban systems have risen to supplement or replace the old ones. Some countries (Denmark is perhaps the most outstanding example) industrialized by processing agricultural products, favouring a relatively decentralized urban system based on the old Medieval one. In other countries where industrialization was based on coal, iron or wood, manufacturing industry created a new urban pattern often thwarting the old one. Localised resources led sometimes to urban clusters (prominent in the coal basin of Southern Poland but also to a lesser degree in iron ore areas in Sweden). Industrialization in the eastern part of the BSR after 1945 also led to the establishment of new cities, perhaps most markedly in Belarus.

Recent changes in technology, economic systems, regional (or international) integration and demography call for changes in the regional urban system, as illustrated by the development in the BSR in the 1990s. The changes in the location of economic activities and population in the last decade have unveiled tendencies that will presumably have lasting effects on the urban systems in the BSR.

Globalization and economic integration with Western Europe have favoured capitals in Eastern Europe (and a few other cities as well) in different ways. They have become places for the location of foreign investments, business and personal services; international trade entrepôts; or centres of urban tourism and organized crime. These developments have led to a hypertrophic development of the capital regions in economic terms and are definitely changing the national urban systems and the functions of different categories of cities within them.

The deindustrialization resulting from globalization and integration aggravates the problems leading to a decrease or even destruction of the economic base of many middle-sized and smaller cities, and thus demantles the regional urban systems. In Poland, for example, the reduced role of heavy industry in the 1990s has reduced the importance of the Upper Silesian conurbation, a process also well known to northeast Germany. The western part of the BSR has also seen a shift from manufacturing to services at times leading to severe changes in local urban systems, especially when one-sided towns with few restructuring possibilities have been hit.

The introduction of new information and communication technology further adds to the imbalances of national urban systems. Handling new technology efficiently requires a certain degree of knowledge, something that fosters cities with the technical universities and other higher education establishments more often found in big cities than elsewhere. This favouring of major urban regions is happening in all countries around the Baltic Sea, including the western ones.

Besides these consequences of general social and economic development, demographic changes such as the population crisis in Russia and the ethnic exodus of Russians from the Baltic States also make themselves felt in the recasting of the urban system.

RE-EMERGING CENTER-PERIPHERY PATTERNS

Regional development in western and northern Europe through the last 50 years has often been described as occurring in two phases: The 1950s and the 1960s were dominated by a center-periphery pattern where large urban regions (their surroundings included) gained, while the more agriculture-dominated rural districts declined, relatively. The following decades showed more of a mosaic pattern (Illeris 1990), in which prosperous and depressed local labour

market areas were intermingled in such a way that more sweeping regional generalisations were difficult to make. This mosaic pattern reflected a turn around trend in the location of population and changed residential preferences in favour of rural settings (Berry 1976). The mosaic pattern did not spread to every corner of northern Europe, however. In the northern part of Scandinavia the mosaic experience represented short interlude of the 1970s, with these thinly-populated areas soon reverting to the traditional population exodus of peripheral areas.

The center-periphery pattern reflected the geography of industrial society and the result of a declining rural economy. Thus many saw the mosaic pattern as an outcome of a service society wherein the creativity of human beings was seen as the determining factor of production. Attitudes, preferences and behaviour became more individualized, and the resulting geography thus became more unpredictable than it had been in the industrial society. Local qualifications, either technical or social, could be seen as determinants of local and regional fortunes, thus explaining the mosaic pattern to regional economic growth.

Developments in the 1990s in the BSR and elsewhere have raised doubts about this mosaic pattern being the general geographical outcome of a service society. Clearly the later years witnessed growing disparities between "capital" regions (including some other large cities) and other parts of national territories. The pattern of development bears much more the stamp of a center-periphery pattern than that of a mosaic model, especially in the eastern part of the BSR, but also in the western part, even if disparities here did not widen that much.

This return of the center-periphery pattern may reflect the growing use of science in developing production processes and new technologies. In periods of fast technological change in particular, this factor may well be decisive. Patents, the use of IT, biotechnology and business services have become widespread, reflecting the use of advanced knowledge as a factor of production and a tool in competition. These changes in society all seem to foster development in larger cities appropriately equipped with qualified labour, technical universities, laboratories and research and development units. This type of city seems everywhere to show rates of growth (in employment, production or personal incomes) that are above the national average. Metropolitan areas normally possess a high share of these demanded institutions, leading to the observed above-average performance. Individual preferences of key labour also seem to give metropolises a high esteem-as witnessed by the growing number of high-grade residential areas in inner cities, together with the traditional ghettos of the rich in suburban areas of natural beauty. Life in more peaceful rural settings is not at the top of the agenda.

PERSPECTIVES FOR THE FUTURE

Different urban systems provide the different regions in the Baltic Sea Region with diverse possibilities for fulfilling the demands arising from enhanced integration among the countries around the Baltic Sea and a developing international division of labour. The regions thus have different perspectives for their future.

Some regions in the Baltic Sea Region possess an urban system concentrated in a dominant capital or metropolis. Capitals and metropolises in general offer a broad range of international opportunities, often based on the administrative and management functions in which they have established experience within the national territory. Other cities in these regions often see themselves in relation to the dominant metropolis, as, for example, supplier of special goods or services to the metropolitan area.

Towns and cities more uniform in size mark the urban systems in other areas of the BSR. The cities thus have rather even possibilities for participating in the international division of labour, depending on their peculiar specialization, and sometimes in rivalry. Many of these cities have historically been based around interplay with their rural surroundings, as centres for trade and services and as buyers and manufacturers of commodities from agriculture and forestry. This role seems to be threatened by international processes of integration. The future of these cities depends on how they can use their existing know-how to create new income-generating activities.

GENERAL NOTE ON STATISTICAL MATERIAL USED IN THIS PAPER

The statistical material used in this paper stems from the national or regional Statistical Institutes of each of the 11 BSR countries. These are: the Ministry of Statistics and Analysis (Belarus), Statistics Denmark, the Statistical Office of Estonia, Statistics Finland, the Federal Statistical Office (Germany), Central Statistical Bureau of Latvia, the Department of Statistics to the Government of the Republic of Lithuania, Statistics Norway, GUS – the Polish Central Statistical Office, the State Committee of the Russian Federation on Statistics (Goskomstat) and Statistics Sweden. Material from Eurostat (the Statistical Office of the European Communities) has also been used, as well as, in the Russian case, that from regional (e.g., St. Petersburg, Kaliningrad) statistical offices. As the number of sources is very large, and as much of the data have been provided to us in electronic format only, and usually on several different occasions spanning the latter half of the 1990s, we have chosen not to mention the source for each data item separately, but jointly indicated the source as "National Statistical Institutes."

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NATIONAL URBAN SYSTEMS IN THE BALTIC SEA REGION: TRENDS AND CHALLENGES

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ABSTRACT: The point of departure in the search for the emergence of international urban systems must be offered by studies on the development of national urban systems. The project on Urban Systems and Urban Networking in the Baltic Sea Region (USUN) has shown that in the 1990s the national urban systems throughout the Baltic Sea Region experienced a concentration of economic activity in the largest cities. However, some medium-sized regional centres situated outside national core areas also proved dynamic, something that was revealed by studies on urban networking undertaken within the project. In this article, the concept of urban systems is examined, with recent trends and challenges discussed, together with the prospects for a balancing of the development of urban systems through a fostering of the dynamics of second-layer cities with higher education functions taken as an example.

KEY WORDS: national urban system, inter-urban competition and cooperation, second-layer cities, urban policy, Baltic Sea Region.

WHY NATIONAL URBAN SYSTEMS?

The concept of national urban systems may appear out of date in an era of globalization and the European integration in which concepts such as "world cities" and "competitive cities" have entered the agendas in both research and politics. In the Baltic Sea Region (BSR), the spatial development perspective, i.e., VASAB 2010, was built on three pillars, of which one was a model of an urban system for the entire Baltic Sea Region. In this system the largest

("European") cities were held responsible for the international competition of the BSR vis-à-vis the world outside it. The next layer of "Baltic Cities" was made responsible for cross-Baltic integration, being assisted by "national" cities in the third layer. Finally, "regional" cities were made responsible for domestic regional development and cohesion.

These trends notwithstanding the search for the identification of international urban systems, is still of necessity employing the concept of national urban systems when it comes to assessments of the current state of cities and their future prospects. In fact, transnational systems are seen to emerge through a coalescence and integration of regional and national systems of cities. And even though international borders are becoming increasingly permeable to numerous forms of inter-urban interaction, they continue to reflect major differences in economic, cultural and physical traits of urban places, of urban planning traditions and national urban strategies. This is particularly the case with transitional areas such as the BSR. Hence, in the search to identify both general and specific characteristics of cities within the region in question and the evolving patterns of inter-urban interaction, an analysis of individual national urban systems was once again given a benchmark role.¹

CHANGING PARADIGMS OF URBAN SYSTEMS

The focus upon nationwide, inter-urban interaction appeared in the American regional science literature as early as the mid-1950s (Isard et al. 1956). This marked a departure from the earlier, mostly static approaches stemming from the central-place and economic-base theories, such as functional classifications of cities. In the classic study *Metropolis and Region*, Duncan et al. (1960) presented a comprehensive picture of the national spatial economy in the United States on the basis of an analysis of evolving patterns of interdependence among major cities and metropolitan regions.

Formation of national urban systems was also taking place in Europe after World War II, as an outcome of increasing urbanisation and population concentration within the central-place dominated urban hierarchy. This was initially related to industrial expansion, and subsequently to an integration of production and service-sector activities which led inter-regional linkages to become ever more important (Wärneryd 1999). Public recognition of these developments and their role was reflected in the elaboration in a number of countries of national urban strategies focusing on the completion and strengthening of national urban hierarchies by public services and infrastructure (Bourne 1975; Swain 1975).

The processes in question reached a culmination phase in Western Europe during the 1970s, to be followed by a trend towards the increasing international interdependence of urban regions. It was not only the largest cities, but also the regional cities, that were building international relations. Regional cities that successfully established new international linkages have become less dependent on national hierarchical relations. Subsequently urban systems developed less systematically. Rather, they developed as "mosaics" (Illeris 1994). National policies on urban systems learned the lesson and turned the service-oriented approach into a development approach focusing on framework conditions for local production.

THE SEARCH FOR NEW PARADIGMS

Comparative studies of the evolution and morphology of national urban systems have been searching for new paradigms.

One of these was presented by Dziewoński (1986) who suggested a disaggregation of national settlements systems into three, basically horizontal subsystems, i.e.: (1) the *central-place subsystem* reflecting spatial patterns of the provision of consumer goods and services; (2) the functional subsystem reflecting the spatial division of labour in terms of specialization in production and producer service activities at a national and international level; and (3) social subsystems representing social, cultural, political and ethnic divisions and linkages within the systems.

Every urban centre can belong to each of the three subsystems, which account for varying proportions of the total activity (Mera 1975). As Dziewoński pointed out, a major issue in studies of settlement systems is to identify hierarchical, regional and temporal variations among individual types of urban and rural places. While the hierarchical variations prevail on a regional scale, the interregional variations are related to historical and environmental factors, and the temporal variations are mostly discerned at an international level, since, as Clark (1957) stated, they are attributable to the relationship between urbanisation and economic development.

TYPOLOGY

This leads us to the question of typology of national settlement systems. The schemes proposed by Bourne et al. (1984) and by Dziewoński (1986) introduce a differentiation along three axes measuring (1) the level of *economic development* (including the role of planning and control), (2) the overall *density* of population and land use intensity, and (3) the *historical origins* of the systems.

One aspect of economic development that is crucial to the development of an urban system, is the extent to which economic development took place in cities nested in, or isolated from the rural hinterland. In many countries, e.g., in Poland, Germany and Denmark, trade and industry developed in cities as a result of the needs of agriculture. In other countries new towns developed in the dawn of industrialization, profiting from the extraction of natural resources or from new large scale industrial production oriented to national as well as international markets.

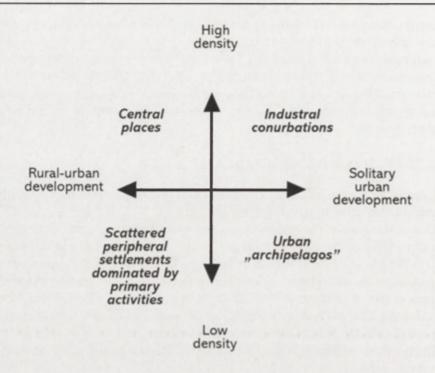


Figure 1. Typology of urban systems.

While settlement systems characterised by high land-use intensity display a strong, central-place related, hierarchical component, the systems found in sparsely inhabited countries tend to be founded upon networks of urban centres situated at break-in-transportation points. Historical transformations of settlement systems attributable to shifts in political power represent another explanation for their present patterns. The existing national systems have emerged either through integration of earlier regional and local systems, or through disintegration of the antecedent systems. In the former case the outcome is pronounced polycentricity and a balanced hierarchical structure; in the latter case a strong dominance of the main urban centre, i.e., high city primacy. A number of contemporary national urban systems were once carved out of much larger systems, i.e., imperial systems or those formed by coalitions of trading centres. In such cases the present characteristics may include an eccentric location of the capital city, or the existence of pairs of major urban centres (an old and a new capital, or a political and an economic capital) competing with each other for the dominant position within the system.

A typology of urban systems based on these considerations is presented in Fig. 1. The typology is unfolded along two axes: the density of the urban system and the urban-rural nesting of economic development.

NEW POWERFUL FORCES

Over the last two decades national urban systems have come under pressure from powerful new forces, the effects of which include shifts in the functional structure of cities and a reorientation of the established networks of the urban hierarchy, and of the patterns of urban dominance and subdominance. One of these priming forces is the growing openness of national economies and the emergence of global markets for capital, investment and consumer goods. Another important parallel force is technological change that allows for the rapidly growing mobility of production factors. This results in a decline of the role of such locational factors as transportation cost, as well as the availability of raw materials and intermediate inputs. Those traditional or "hard" locational factors are increasingly becoming replaced by "soft" locational factors, which include the quality of the natural as well as man-made environments, the diversity of cultural life, the local business climate and citizens' motivation, and the public security and efficiency of the local government (Funck 1995). All these tendencies combined lead to a locational footlooseness of enterprises, and make it possible for newcomer cities to challenge the role of established centres, rendering each of these a potential loser (Wegener and Kunzmann 1996).

In his study on the Danish urban system Nielsen (2000) reveals some of these trends. Breaking with the former centre-periphery dichotomy, some communities in West Jutland have shown a pronounced growth starting with the 1970s. The region is peripherally situated and showing many characteristics of traditional peripheral regions (i.e. unskilled jobs, a high rate of material production and agriculture). However, the growth of the region throughout the latest few decades has very much been founded on local initiatives revealing an increasing independence of the national core. The independent development of West Jutland seems to contrast with an expanding sphere of influence around Copenhagen. The Danish study also shows that dynamic development is not merely correlated with the development of business services and high technology concentrated in the capital region, since the economic development in West Jutland took place in an economic environment characterised rather by dominance of unskilled jobs within primary and secondary types of production. General characteristics of the regional development in Denmark are shown in Tab. 1.

INTER-URBAN COMPETITION

The increasing factor mobility and new locational factors create preconditions for inter-urban competition. Although economic history abounds with records of rivalry between cities, this phenomenon has achieved a particularly major

							Development trend	ls
						Dynamic	Medium	Stagnation
noc	Avanced +	Private services	+	Dominating region	3+	Århus	Copenhagen	
Function and influence	Skilled +	Material production and public service	+	Dominated region	3 +	East Jutland	Sealand, Funen, N+S Jutland	Southern islands
Function	Unskilled + jobs	Material production (+agriculture)	+ 1	Independent region	3 +	WEST	JUTLAND	Northwest Jutland

Table 1. Development trends of Danish regions.

Developed from Nielsen (2000, 47)

dimension in the present European context. While generating new potential for economic growth, the elimination of economic borders as well as of political barriers, leads to strong competition among cities, industrial centres and harbours, which are accustomed and were in fact, to functioning in a monopolistic or oligopolistic environment, within the boundaries of their respective countries and regions.

It is likely that inter-urban competition is restricted to the large cities and functionally specialised cities such as ports. Within the BSR, for example Stockholm and Copenhagen are competing as centres in such spheres as financial services and cruising. However, the pronounced difference in scale restricts internal competition among several of the BSR capitals. Rather, they compete each on its level in a wider European context. Smaller regional cities are not competing in a similar way. Rather, local companies are increasingly involved in international competition forcing them to outsource parts of production, for example or to take part in international chains of production as subcontractors. Phrasing the impact of globalization into a simplified dichotomy, it is likely that the international performance of large cities is crucial to the strategic choice made by international companies, whereas the international performance of local companies is crucial to the local development of regional cities.

DEMOGRAPHIC PROCESSES

The above list of major factors responsible for the recently observed reorganization of national urban systems is by no means complete. Due regard has to be paid to demographic processes and, last but not least, to changes in political and economic systems in Central and Eastern Europe. Not surprisingly, many traditional rules pertaining to the morphology and dynamics of urban systems are no longer applicable. Unlike in the past, population growth and

decline are failing to be related systematically to city size and city functional structure, while the established urban hierarchies are subject to progressive fragmentation.

These new urban trends and new patterns of urban interdependence have broader, social and economic implications. They also generate alternative regulatory measures. In the cases of the urban systems in the BSR, such developments may be expected to assume particularly varied forms. This should not preclude and may in fact stimulate joint policy responses.

From both a genetic and a morphological perspective, the national urban systems in the Baltic Sea Region display wide-ranging differences. Their shape and intensity vary from that of an "urban archipelago" in Sweden and Finland, to the rather densely spaced, central-place based networks of urban places found in Poland and Germany. The city-size distributions range from the extremely primate, as in Denmark or Latvia, to the quite regular rank-size patterns of Poland and Belarus. Yet the efficiency of national urban systems, their connectivity and accessibility characteristics represent a function of the development of technical and social infrastructure, and may not relate systematically to the spacing of towns and the nature of the urban hierarchy. The morphology of urban systems provides just a general spatial frame for human activity, while their success and failure are determined mainly by economic and political factors.

URBAN DEVELOPMENT AND POLICY

The integration of national urban systems and the expanding global dimension of the economy have led to an increasing dominance of capital cities and other metropolitan centres, as observed during the 1990s. These major centres have become magnets for the fast-growing sector of business services (FIRE² activities in particular), the network of communications-related industries, the flows of investments, high-value trade and tourism. The trends are basically universal, as they stem from the very nature of internationalization and globalization processes.

Hence, in the case of mature, non-growing urban systems, such as those found around the Baltic Sea, the main issue confronted by urban planners and policy makers is how to preserve a spatial balance in an urban system that is subject to two parallel developments, i.e., deindustrialization and the spatial concentration of high-order service functions. Here, however, the basic commonalities end, as the individual countries of the region vary considerably both with regard to the nature and extent of deindustrialization, and the proportionality between spatial spread and the backwash processes that take place within the service sector.

The problem is particularly acute in transition economies that carry numerous consequences of the era of "forced industrialization," based on extensive use of manpower and natural resources, made feasible in the past by centralistic controls and a lack of effective competitive, innovation-generating mechanisms. This might lead now towards patterns of urban systems change pictured explicitly by Lichtenberger (1994, 29-30):

"While the globalization of the economy is creating competition between large metropolises for the distribution of the growing quaternary sector, in ... (Eastern Europe) only the primate cities will participate actively in the cooperation with, and competition between the eurometropolises, and become innovation centres for new international economic and technological developments. Only the primate cities will profit from the transfer policies of the international financial and real estate markets."

THE SECOND-LAYER OF URBAN CENTRES

The above evaluation seems excessive in the sense that it implies the dominance and persistence of a dual economy system. This is not the prevailing situation. Empirical studies of urban systems, including those prepared within the framework of the USUN project, indicate that, at least the second-layer of urban centres—those below the capital-city level—have been attracting modern economic activities and external investments, and hence undergoing physical modernization. This is also true of some smaller towns. In the search for local labour skills and other resources, the allocation of FDI has recently been assuming a more decentralized pattern than was the case during the early 1990s (Korcelli 1997), althought a high concentration of FDI within the capital cities is still un unquestionable fact.

BACKWASH EFFECTS

Backwash effects represent a major problem in the contemporary evolution of national urban systems that experience systemic transformation. As Fassmann (2000) emphasised, there is a general consensus that metropolitan areas are the main "winners" in the transformation process. Another type of area in the same category are, according to that author, the border zones (i.e., those neighbouring with Western European countries). At the opposite end are industrial cities where firms—often the main employers—are trapped between the need to adapt to a new structure of trading markets, and the necessity to catch up with rapid technological and organizational change.

The dominance of backwash over spread effects within national urban systems represents a general trend of the 1990s, and one that is not restricted to transition economies. While the goal of retaining a balanced urban system is

generally proclaimed in national urban strategies³ it runs counter to observed developments. As Schulman and Kanninen (2000, 106) conclude in their report on the Finnish urban system: "... the growth of Helsinki region is unbalancing the urban system, thus preventing or at least hindering possibilities for a balanced national urban system." Also in Norway: "The very size and growth potential of Oslo is regarded as a regional problem in its own right, as it overshadows the rest of Eastern Norway. Not even the largest of the other cities are capable of competing with the capital, giving rise to highly unbalanced growth in the region" (Alvheim 2000, 210). And: "... a trend scenario is one of an Oslodominated urban system, where most of the impetus to growth has been funnelled into Metropolitan Oslo" (ibid., 211). Also, in northeastern Germany, the metropolitan regions of Berlin and Hamburg have been growing, mostly on account of peripheral regions (Hahne 2000, 142).

Only in the case of Sweden does metropolitanization seem not to be a strong overriding tendency, although the major metropolitan areas have recorded a positive migration balance during the 1990s, following net outmigration that prevailed in the previous decade. An indication of the spatial concentration of economic activity has been a decline in traffic at a number of smaller, regional and subregional airports (Engström and Bhandari 2000, 326). Yet some middle-sized Swedish cities have retained high-order functions as headquarters of large international companies. Typical losers in the urban system are industrial towns dominated earlier by iron, steel and forest industries. A continued depopulation of the remote northern counties and of peripheral municipalities in middle and southern Sweden has been taking place (Wärneryd 1998).

Spatial backwash effects in urban systems of the Nordic countries have generally been moderated by an expansion of education, a growth of leisure activities, and a continuing provisioning of public services. As mentioned above, some peripheries in Denmark started to develop rather independently from the national core from the early 1970s onwards, contrary to the prevailing trends for peripheral regions. Nevertheless, marginalization of the periphery, aside from selected centres, and deindustralization have been widespread phenomena during the 1990s. Modern economic activities have typically gravitated towards the largest, and the middle-to-large urban centres.⁴

THE DEAD ENDS OF REDISTRIBUTION

Confronted with these patterns of change, the formulation of spatial development strategies that assume an important role to be played by economic spread effects within an urban system proves a difficult task. When they do occur, the spread effects tend to be discontinuous in space and to disregard the established urban hierarchy. This is even more so when, as observed recently in the Eastern BSR countries, the accessibility of smaller urban places is

disproportionately affected by contraction of the formerly heavily-subsidized public transportation systems.

Instead, the evidence for Poland shows that the major cities tend to intercept the economic functions once performed by smaller towns situated within their hinterland zones. Often this process is only partly accompanied by the absorption of labour resources associated with those smaller centres. As a result, economic disparities, both income and unemployment differences, tend to grow on both an interregional and an intraregional scale.⁵

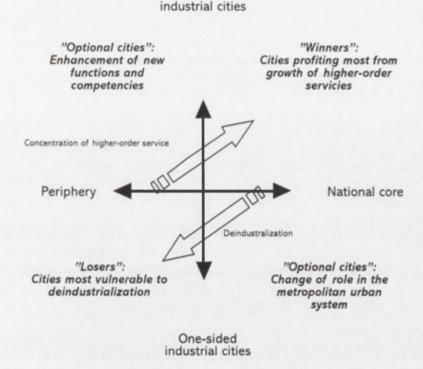
The scope for distributional policies is also restricted by efforts to make national capital cities more competitive on an international level. In particular in the transition economies, where the necessity to attract foreign investments and international activity in general is strongly emphasised, but also in developed economies, the position of the main urban centre within the European urban hierarchy (see, for example, the case of Copenhagen) represents a crucial factor fostering national economic competitiveness. Hence, various policies are implemented with the aim of upgrading those centres that serve as gateways to the respective national urban systems, and attempting to improve their international image. In countries with relatively low urban primacy, postulates are formulated to integrate the population and economic potential of neighbouring large urban centres (Warszawa with Łódź in Poland; Vilnius and Kaunas in Lithuania) so as to provide, on the urban map of Europe, a visible, explicit core of a national urban system (Vanagas and Staniunas 2000).

AN INTERIM CONCLUSION

At this point it is justifiable to conclude that in the face of variations among individual countries as well as East-West differences, the recent evolution of national urban systems in the BSR has followed the common path of metropolitanization and the dominance of economic backwash over spread effects in space. Spatial polarization within urban systems has been both the main development trend and the central policy question.

The two generative forces behind this development are growth of higher-order services in national core areas and deindustrialisation harmful to industrial cities in the peripheries. However, signs of second-order development trends have also been seen. On the one hand, former industrial cities situated within extended commuting distance of metropolitan centres created by modern transport means have successfully changed the role from self-dependent industrial towns to suburbs and service towns, eventually benefiting from the spread of back-office service employment. On the other hand, examples of regional cities developing international competences have also been seen, as in the above-mentioned case of Denmark.

In sum, recent developmental trends have created a tri-pole of urban careers: "winners", "losers" and two types of "optional cities", i.e., restructuring and



Diversified

Figure 2. Spatial impacts of deindustrialisation and the growth of higher order services.

revitalizing cities (Fig. 2). Evidence of the "winners" and the "losers" is very pronounced, whereas evidence of "optional cities" is less distinct. In what follows we shall concentrate on optional cities, focusing on new functions generated by university networking.

SECOND-LAYER CITIES IN NATIONAL URBAN SYSTEMS

In the traditional terminology of national urban hierarchies, cities of the second order are the regional capitals. As discussed above, we no longer speak about a second-layer of cities as central places ranking next to capitals. Rather, the second-layer comprises cities developing due to their own competencies or specialized functions, some being regional capitals, and others smaller or medium-sized towns of lower hierarchical order. Within the framework of the USUN project, the phenomenon was only investigated tentatively. The case of Denmark indicated that most regions are dominated by the national capital and a few regional capitals. However, more independent regions and cities situated outside the national core have also developed, representing a second-layer of

dynamic urban centres. Following these observations, cities in national urban systems were tentatively classified according to the following categories:

- URBAN REGIONS OF INTERNATIONAL COMPETITIVENESS. These are the urban regions that generally and in several aspects have developed international relations, being first and foremost capitals or large metropolitan regions. They are international gateways for capital, information flows, political and industrial relations.
- DEVELOPING REGIONS OUTSIDE THE NATIONAL CORE. These are regions developing on account of their specialized competencies, many being sustained by direct international relations of their own within the sector of competencies. The presence of a regional university might foster the development of such regional competencies.
- CITIES OF FUNCTIONAL IMPORTANCE AND CROSS-BORDER REGIONS. These are areas of special functional importance to the national urban system, i.e., cross-border cities, cross-border regions, and cities taking up specialized functions within the national infrastructure (e.g., as regards energy, transport, education, etc.).

Shown below (Tab. 2) are examples of national urban systems organized in line with these categories. The classifications are based on individual evaluations made by project executives from each of the listed countries, rather than on strictly comparable data. Thus, the evaluations should be read as an empirical visualization of our tentative model, rather than as conclusive empirical statements.

In the national urban systems it is the second-layer cities that are most vulnerable. Within this layer we find cities successfully developing and cities in crisis, restructuring or reborn after a period of restructuring. Thus, these cities are not regularily related to a national urban system.

SECOND-LAYER CITIES IN BSR NETWORKING

As indicated above, the development options for second-layer cities are related very much to the ability of the cities and the urban actors within them to establish international contacts and to take part in international chains of trade and production. In the USUN project some of these abilities were examined in networking studies, especially in the study on higher education, industry and city-cooperation.

INDUSTRY. The study on industry (Snickars and Bourennane 2001) showed that investments of Nordic firms in the St. Petersburg region and the three Baltic States concentrated within the metropole of St. Petersburg and the three capital

Table 2. National urban systems.

Type of city/region	City/urban region	Features			
	GERMANY - BS	R part			
Urban region of	Berlin /	Capital			
international	- Potsdam	University, Administration			
competitiveness	Hamburg	Metropolis			
Developing regions	Lübeck	Port, University, Medical tech.			
outside national core	Rostock	Port, University			
	Kiel	Port, University			
City of	Schwerin	Administration			
functional	Stralsund	University			
importance	Greifswald				
Cross Border Region	Frankfurt / Oder	Europa University Viadrina			
	SWEDEN				
Urban region of inter-	Stockholm/	Capital			
national competitiveness	- Uppsala	Universities, Biotechnology			
•	Gothenburg	Port (West), Logistics, University			
Developing regions	Malmö/Lund	Medical centre, part of Oeresund Region			
outside	outside	University			
national core	Linköping/Norrköp.	Port (BSR), Aircraft industry, University			
	Umeå	University			
	Karlst., Örebro, Växjö				
	Vänersborg/ Trollhättan	Engineering industry			
Cities of	Helsingborg	Port (Ferry), Oresund Region			
functional	Karlskrona	Port (Poland), ICT			
importance	Luleå	Ironworks			
	Sundsvall	Paper Mills			
	Västerås/ Eskilstuna	Engineering industry			
Cross Border Region	Haparanda	Most integrated CBR in Europe			
Closs Bolder Region	ESTONIA				
Urban region of inter-	ESTONIA				
national competitiveness	Tallinn	Capital			
Developing regions					
outside national core	Tartu	University			
outside national core	Pärnu	Port, Resort and Tourism			
	Narva	Border-cross, Energy production, Textile			
	Valga	Border-cross, Logistics			
Cities	Kohtla-Järve				
of functional	Viljandi	Chemistry			
importance	Haapsalu	Resort, recreation			
	Kuressaare	Resort, tourism			
	Paldiski	Port			
	Otepää	Winter-sport, recreation			

cities of the Baltic States by rates that far exceeded their shares in the national populations. Thus, foreign investments seem to prefer the largest cities and not cities of the second-layer. However, two observations should be mentioned. First of all, the urban systems in Estonia, Latvia and the St. Petersburg region of Russia are characterised by an extreme primacy. It is likely that these cities attract business services and other important infrastructure for foreign investors at an disproportionate scale as well. Second, the study showed that foreign investments in Lithuania were directed to second-layer cities as well, hence revealing the more decentralized urban system of Lithuania.

Deviating from the pattern of industrial relations focusing on capital cities is an observation made by Cornett (2000). In his study on trade within the BSR he found close relations established during the 1990s between Denmark on the one hand and Poland and Lithuania on the other within the branch of textiles. These relations are typically established between second-layer cities situated in districts specialised in the textile industry.

CITY COOPERATION. Although a number of second-layer cities, especially in the case of transnational economies, have difficulties in attracting investments, they are not inactive in networking. The study on city cooperation showed that large as well as small cities in the BSR are involved in networking activities. The participation of cities in urban cooperation is revealed by participation in EU programs, e.g. ECOS Ouverture, PHARE CBC and TACIS. Cities from all over the BSR are taking part in these programmes. When it comes to non-funded cooperation, cities throughout the region are again taking part in, for example, twin-city cooperation arrangements, while many cities are also registered as networking actors in the independent "Ballad" networking forum.

The widespread participation of small and peripheral cities in the BSR shows that urban networking is not restricted to the large cities. Via networking, second-layer cities are taking proactive positions vis-ā-vis the EU and cities of their own kind. They seem not to be trapped in a fixed hierarchical position searching out for state aid. Rather, they opt for strategic alliances with other cities and attempt to "play their cards" in terms of current EU policies.

The widespread participation of small and peripheral cities in urban networking is undoubtedly encouraged by the modern information revolution. Furthermore, the devolution of state powers to local municipalities which has taken place in the Nordic countries, but also in some of the transition countries, Poland in particular, created a tradition of networking between local authorities in Denmark, Norway, Sweden and Finland. In the Eastern countries the transition has impelled local authorities to take actions of their own.

HIGHER EDUCATION

Generally, higher education is closely related to the urban hierarchy. Thus, throughout the BSR, university capacities were found generally to correspond

with the rank and size of towns (Groth 2001). The correspondence between city size and the presence of higher education was confirmed by a Polish study on education higher and systems urban in Poland in the 1990s (Nowosielska 2002). The study showed a high and positive correlation between city size and the presence of higher education throughout the 1990s (Tab. 3).

Table 3. Correlation between size of cities and the presence of higher education in Poland in the 1990s.

Correlation between size of cities and urban ensembles (number of inhabitants) and	1992	1999
number of schools	0.87	0.85
number of students	0.87	0.77

However, the table also attests to a clear and almost general tendency for a dissolution of the association between the size of a city and its academic endowments as measured by the number of schools and student enrollment. During the 1990s the correlations weakened, thereby confirming that big cities have gradually been losing their positions as the most preferred locations for higher education. This is particularly true of non-state schools and their students. Proportionally, however, big cities still concentrate the lion's share.

During the 1990s the number of students more than doubled and the number of higher education establishments, most of them private, increased remarkably. The nearly doubled number of higher schools spread out from 42 to 67 cities, with the impact being to increase of the number of academic cities by about 60 percent. Owing to the enrollment of many new students in higher schools located in small or medium-sized cities, the spatial distribution of higher education in the 1990s was characterised by "filtering-down" to smaller towns. This evidence runs contrary to the central place theory with its well-defined hierarchical organization of urban centers as well as goods and services obtained from each hierarchical level. Different conditions may play a decisive role in the case of small localities becoming academic centers. Sometimes it is their convenient location in relation to a larger academic center (e.g., Podkowa Leśna near Warszawa) or a narrow specialization of a school as in the case of some military academies (e.g., Deblin) or a local initiative (e.g., Nowy Sącz).

Recent events in Poland reveal a more general trend during the last decades involving a change in the role of universities as centres of research and higher education. Formerly, the location of universities was generally restricted to the capital cities and a few older university towns. Universities were prestigious institutions for the elite. After World War II, new universities were established in major regional capitals as part of the development of the modern welfare society in many countries. The establishment of new regional universities was further encouraged in the 1970s and 1980s along with regional policies based on growing recognition that regions must develop through the strengthening of endogenous capacities of which one is the institutional environment.

HIGHER EDUCATION IN FINNISH REGIONAL POLICIES

The creation of regional universities became a key element of Finnish regional policy after the Second World War. Regional universities were established in two stages in order to counterbalance the concentration of service and economic development in southern Finland, as Helsinki and Turku housed the only two national universities at that time. The first generation of regional universities was founded in Finland's midwest (Tampere, Jyvaskyla and Oulu) between 1945 and 1965. A second generation was founded in the 1970s (beginning in 1969) in the southeastern part of Finland (Lappeenranta, Joensuu and Kuopio), the west (Vaasa) and the north (Rovaniemi).

In their assessment of the three eastern universities of Lappeenranta, Joensuu and Kuopio, Dahllof et al. (1998) concluded that the three universities have helped reduce the educational gap between the region and the country as a whole. Furthermore, they conclude that the universities have managed to meet the dual tasks of a regional university, namely establishing a traditional academic reputation and participating actively in regional development processes. However, they also note that while the universities of eastern Finland were established as a conscious act of national policy to foster more even regional development, it is currently difficult to identify a strong commitment to this agenda (Dahllof et al. 1998, 37). The Finnish commitment to a knowledge-based regional policy was further emphasised during the 1990s. The economic recession of 1992-1994 confronted Finnish industry with the loss of the huge Russian market and forced it to find new markets. It was not possible to stay competitive only by rationalizing production through technological innovations. It also became necessary to implement new principles in the organizing of production. In this situation, knowledge and cooperation became crucial. Thus, in 1994, the Finnish government passed the Regional Development Act to introduce the Centre of Expertise Program. Pooling local, regional and national resources, 14 program-based regional centres have been set up for the period 1999-2006, to develop expertise in selected internationally competitive fields. Regional universities are key actors in the programme, as are the new "Polytechnics" belonging to a non-academic education system built up in the 1990s. While the universities are funded largely by national grants, the polytechnics are funded to a high degree (43 percent) by local authorities.

UNIVERSITY NETWORKING

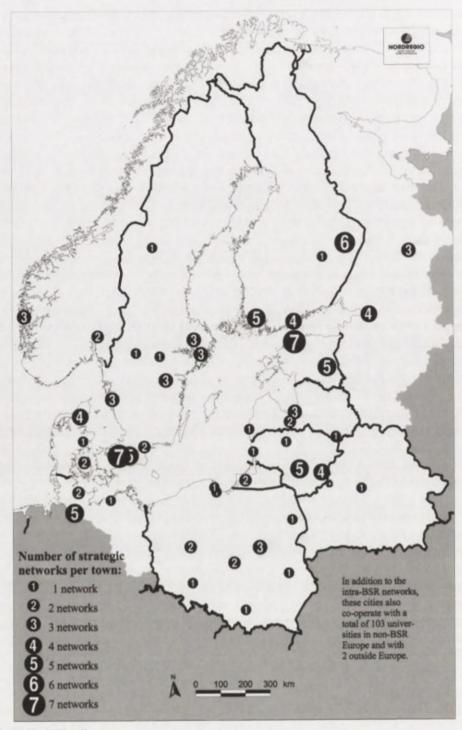
Due to the above-mentioned positive correlation between the size of cities and the number of schools and students, one might expect that the cities with the largest number of students would take a leading position in university networking. So, in a survey on networking within the higher-education sector (Groth 2001) universities in the sample were asked to specify the number of strategic networks in which they took part. A strategic network is taken to be an ad hoc cooperation between universities agreeing on measures to be undertaken jointly. A strategic network is not an organization to which one can apply for membership. Cooperation rather than participation is crucial and the success of a strategic network is measured by the commitment of each partner rather than by the mere number of members. Figure 3 shows the location of 27 strategic university networks revealed by the survey, as measured by the number of networks nested in the cities accommodating universities in networking.

The map shows that regional capitals such as Tartu, Petrozavodsk, Joensuu, Kaunas, Aalborg and Lund/Malmo are intensively involved in university networking. This level of activity is to some extent contrasted by a lower level of networking located in the capital cities. Thus, in listing the number of strategic university networks located in each city, we find that regional cities outside the national cores often play a more active role as hubs for university networking than do the capital cities. Although further studies are needed, we use university networking as one of the key measures of urban and regional development opportunities established outside the national metropolitan areas. A recent statistical study on regional development in Sweden confirms that, besides GDP, accessibility to education is one of three endogenous factors that above all influence the development potential of local labour markets, the other two being the size and the flexibility of the local labour market (Liljestrom and Stromquist 2000). Thus, the establishment of new regional universities seems to be an important option by which to counterbalance the trends of urban concentration within capital cities.

INTEGRATIVE URBAN RELATIONS

It is obvious that university networks located mainly in the BSR are most relevant to the internal BSR integration. The networks, which include eastern as well as western BSR universities, are presumed to be the most integrative.

In order to identify those cities that are the most active in integrative networking, urban relations as established by the strategic university networking were examined in the above mentioned study (Groth 2001). Table 4 shows urban relations created by the 27 strategic university networks identified in the survey sample focusing on cities involved in 3 or more university networks. According to Tab. 4, university networking has created for example 30 urban relations between Copenhagen and other BSR cities: 21 relations between Copenhagen and cities in the west BSR and 9 relations between Copenhagen and cities in the eastern BSR. These 9 relations, equal to 30 percent of the total are called "integrative". Sixteen cities of the survey accommodated three or more networks providing at



Created by T. Hanell

Figure 3. Number of strategic university networks per town (survey sample). http://rcin.org.pl

involved in 3 or more Western BSR cities involved in university networking Eastern BSR cities involved in university networking All university networks St. Petersburg West-East Pct Petrozavodsk Copenhagen Kaliningrad Kristianstad Linköbing Östersund Turku/Åbo West - West Daugavpils Hamburg West-East Stockholm Göteborg Uppsala Rostock Aalborg Joensuu Jelgava Liepaja Kaunas Klaipeda Vilnius Gdynia Kraków Poznań Bergen Karlstad Orebro Helsinki Siaulai Lublin West-BSR Maimo Tallinn Minsk Łodź 4 15 27 Hamburg 1 1 2 1 1 11 2 12 8 2 1 11 Aalborg 30 30 2 3 1 9 1 2 1 2 1 2 1 21 1 1 Copenhagen 1 1 1 1 1 2 11 1 1 2 6 17 35 Bergen 1 1 1 1 2 15 13 2 2 1 13 1 Göteborg 1 2 7 10 17 59 2 2 2 2 Linköbing 2 2 1 12 30 40 2 1 0 2 1 2 1 2 2 18 2 2 2 2 1 Lund 1 1 1 2 3 12 17 71 2 2 Stockholm 2 2 2 2 10 5 15 33 1 1 Uppsala 2 1 6 20 30 2 14 2 Helsinki 1 3 2 1 6 17 35 1 1 1 11 13 1 2 1 Joensuu 1 2 2 20 31 65 Turku/Åbo 2 2 1 11 3 3 2 2 1 1 East-West Pct East-East East-BSR 6 83 Petrozavodsk 3 5 10 23 57 13 2 1 1 2 1 1 1 1 St. Petersburg 1 24 37 35 1 2 2 3 1 3 13 3 3 3 4 2 Tallinn 3 2 2 4 19 29 34 1 3 10 2 Tartu 1 1 2 8 3 3 17 25 32 2 2 2 3 Riga 21 33 36 2 3 2 3 Kaunas 2 2 1 1 2 12 4 3

2

8

5

4 2

2

2

3

0 1

3

2 2

1 1 2

1

Vilnius

Kaliningrad

Warszawa

21 29 28

14 19 26

10 17 41

2

least 30 percent of integrative urban relations. More than a half of these cities (9) involve regional cities, hence confirming the above-mentioned observation that regional universities are active in networking (Tab. 5). Further, regional cities seem functionally to play a key role in forming transnational urban relations that are crucial for regional integration in the BSR and for the establishment of a new division of labour between cities therein.

Figure 3 shows the location of 27 strategic university networks revealed by the questionnaire sample. Figures attached to the cities reveal the number of networks nested in the cities. Regional capitals such as Tartu, Petrozavodsk, Joensuu, Kaunas, Aalborg and Lund/Malmö are intensively involved in university networking. This level of activity is to some extent in contrast with the lower level of networking located in the capital cities.

Table 5. Cities showing integrative urban relations created by three or more university networks.

Cities involved in 3 or more university networks			Urban r creat netwo	Number of networks				
	Regional city	West	West-East	Total	West-East (pct)	West	East-West	Total
Copenhagen		21	9	30	30,0	3	4	7
Bergen	X	11	6	17	35,3		3	3
Linköbing	X	7	10	17	58,8	1	2	3
Lund	x	18	12	30	40,0	1	4	5
Stockholm		5	12	17	70,6		3	3
Uppsala	x	10	5	15	33,3		3	3
Helsinki		14	6	20	30,0		4	4
Joensuu	х	11	6	17	35,3	1	5	6
Turku/Åbo	X	11	20	31	64,5		5	5
East-BSR	Regional city	West	West-East	Total	West-East (pct)	West	East-West	Total
Petrozavodsk	X	5	1	6	83,3		3	3
St. Petersburg		13	10	23	56,5		4	4
Tallinn		13	24	37	35,1	1	6	7
Tartu	х	10	19	29	34,5	1	4	5
Riga		8	17	25	32,0		3	3
Kaunas	х	12	21	33	36,4	1	4	5
Warszawa		7	10	17	41,2		3	3

PROSPECTS FOR THE FUTURE

Among factors that may influence the future evolution of national urban systems in the BSR are two that are both fundamental and impossible to overlook. Factor number one is the increasing interdependence of urban systems at the regional (i.e., Baltic Sea) scale, that of Europe, and the global scale. The forms and outcomes of this process are not predetermined. A pattern that has emerged so far is of a growing interaction among the capital cities and some other major urban centres of a network that is tending to evolve towards a separate urban subsystem—that of "European" and "Baltic" Cities in VASAB 2010. If this does occur, such a development will not be an optimal one, as it implies that a majority of medium-sized and smaller cities would not be in a position to benefit fully from the integration process. This would also imply a partial detachment of the major urban centres from their hinterland zones.

An alternative scenario and one that deserves broad policy support is the formation of linkages among the second-layer cities, that is linkages that run both astride national boundaries, and across the national urban hierarchies. There are already some important links among cities in the BSR, partly based upon a historical tradition, that do not pay respect to national urban hierarchies. Such non-hierarchical ties are in fact typical of maritime regions, where the neighbourhood across the sea constitutes a foundation for sustained human interaction, both economic and cultural.

New and more recent links are also being established currently between second-layer cities taking part in international cooperation, and between urban actors of which some are regional universities. The importance of such links is difficult to overestimate. They fit well into recent regional policies based on endogenous means now widely accepted as in the mainstream of policy thinking. A cornerstone of endogenous regional policy is regional learning provided within the environment of regional institutions, among which are the regional universities open to the needs of local and regional stakeholders.

The second important determinant of the future evolution of national urban systems is their maturity. This is measured by a set of interrelated characteristics: a high level of urbanization (i.e., a small fraction of the population being rural), low rates of demographic change, and low (and further declining) levels of internal migration.

The process of the thinning out of rural population densities in the northern and central provinces of the Nordic countries had basically been completed by the end of the 1960s (Andersson and Holmberg 1980; Rikkinen 1979; Karjalainen 1989). Subsequently, owing to the large scope of governmental policies in regional development, the north-south population drift slowed down considerably. Internal migration became oriented not only towards the large metropolitan areas in the south, but also to smaller and medium-sized urban

growth centres situated in the north. In the late 1970s net inmigration into urban areas reverted to net outmigration.⁶

From the late 1980s on, the trends shifted again, producing increasing migration gains in the metropolitan areas, in particular the capital regions. In the case of Finland the recent internal migration patterns are characterized as follows: "The rural areas lose inhabitants to the provincial centres which, in turn, are marked by further migration into the largest urban regions, eventually the Helsinki region" (Schulman and Kanninen 2000, 116). Similar shifts are noted in Sweden and Norway. But the scale of rural-to-urban migration is quite limited owing to the relatively small populations at risk of migrating. An illustrative summary statement in this respect concerns the Danish urban system: "The urbanization process is completed, and no further rural exodus can be expected" (Nielsen 2000, 33).

In the eastern and southern parts of the BSR, the process of rural depopulation lasted longer, reaching its peak phase during the 1970s in Poland, where more than 2 million people migrated from rural to urban areas, and also in the former Soviet Union, where the rural population dropped by 6.5 million people during that single decade. In the 1980s, the sizes of the rural populations were practically constant in Estonia, Latvia, and Poland. Only in the case of Belarus and Lithuania was further substantial contraction recorded.

By the 1990s the urbanization trend was continuing only in the case of Belarus (Semenkevich 2000), while in the other countries in the eastern and southern parts of the region it was possible to note a considerable decrease in the urbanization rate (as in Estonia), or its stability (in Latvia, Lithuania, Poland). This reflected a reversal in the balance of rural-urban migration (Noorkoiv 2000, 62; Oding 2000, 297), or a decrease in the migration gains of urban areas, to a level at which rural-urban differences in natural population growth are no longer compensated for (Krišjane 2000, 177; Korcelli and Nowosielska 2000, 228).

There are numerous and interrelated causes for the recently observed turnaround in rural-urban migration patterns in the eastern and southern parts of the BSR. One of these is emigration, as well as temporary migration to work abroad. To a certain extent the migration decline may also represent an artefact, as both migration and domicile registration systems have partly been discontinued in several of the countries concerned. Also, suburbanization has in some instances been subsumed under urban-rural migration.

However, the main reasons for the slowdown or even reversal, of the urbanization trend in the eastern and southern BSR are economic; namely a substantial decrease in employment in such basic urban occupations as industry and construction. In this sense the return to the land can partly be interpreted as an effect of premature urbanization in the previons decades. However, this present phase is most probably of a transitional nature, and may prove to be short-lasting. With the advancing economic and social transformation, the

current decade should witness a resumption of the urbanization processes in the eastern and southern parts of the region.

Still, this expected shift will no longer involve a massive rural-to-urban movement, as the countries concerned are already fairly highly urbanized, and their rural (as well as urban) population is characterized by a relatively advanced level of ageing—a factor that hampers spatial mobility. The change in trends may thus have only a limited impact upon the reorganization of urban systems.

Poland can be considered an exceptional case in this respect as its pool of rural population is large in both relative and absolute terms. In spite of this, in none of the demographic forecasts or economic scenarios available is a rapid rural-to-urban migration foreseen for the near future. This case requires a separate discussion, which extends beyond the framework of the present paper.

Prospects are more transparent in the remaining parts of the BSR. Here we are dealing with urban systems that are basically non-growing, or that possess a rather limited potential to grow. These systems will continue to undergo restructuring, the focus of which is very likely to be further metropolitanization. Such a restructuring of non-growing urban systems inevitably involves a contraction of population and of economic activity in a number of smaller and medium-sized towns, even though this process will be mitigated by a growing role of residential functions, and of retirement and leisure-related activities that tend to be spatially dispersed.

Nonetheless, as Klaassen and Paelinck (1979) argued convincingly some three decades ago, with rising standards of living, factors such as decreasing household size, increasing floor-space consumption, and growing spatial mobility can partly compensate for a decrease in the number of inhabitants and of the number of jobs. Hence, the latter trends do not necessarily imply overall urban decline.

NOTES

The approach chosen in the framework of the USUN project was to collect statistical data and qualitative information, as well as to provide an interpretation of trends and problems pertaining to both present urban patterns and development potential. Rather than attempting to assemble fully equivalent datasets for each of the urban systems concerned (something that, as the experience of many international urban comparative studies demonstrates, tends to be trivial while still not fully comparable), the approach followed here allowed local experts to expose the kind of information, both general and specific, that was judged to be relevant to the study as a whole. The commonly adopted guiding rules for the compilation of individual country reports embrace the inclusion of data on the spatial as well as size-related distribution of urban places for at least two points in time (1989 and 1999 preferably), a review and evaluation of urban policies, and the presentation of economic profiles of major cities or metropolitan areas. Such profiles have been structured after

Bourne (1997), who divided urban economic activities into five sectors—those of production, distribution, circulation, reproduction and control. In most of the country reports this framework has been considerably extended so as to cover, inter alia, detailed analyses of demographic trends and migration, the local government structure, as well as inter-urban linkage patterns.

- ² FIRE: Finance, insurance, real estate.
- ³ For example, in Denmark: "The government has the overall goal of ensuring a balanced development of the urban system"; while at the same time: "Copenhagen should develop into an international metropolitan region": (Nielsen 2000, 36).
- ⁴ Such as Århus and Odense in the case of Denmark.
- In the case of the region of Warszawa, the growth-generating, spread effects are present within a 40-45 km radius of the city centre. Radom, an industrial city of 232,000 inhabitants, situated 100 km south of Warszawa, on the Warszawa-Kraków transportation axis, is mainly affected by backwash effects related to the close proximity of the metropolis. According to Lisowski (2000) the most pronounced, negative impacts include the brain drain (i.e. outflow of human capital), as well as of financial resources (savings) that tend to flow to Warszawa's real-estate market. Positive (spread) effects of the nearness of Warszawa accrue to the sector of higher education in Radom, which benefits from the part-time employment of Warszawa-based scientists and lecturers, and to the sector of small and medium-sized enterprises, oriented towards the metropolitan market for goods and services. A comparison of positive and negatgive effects of this interaction allows it to be concluded that the latter are dominant, and that the city of Radom is in fact encircled by the "metropolitan shadow" of Warszawa.
- ⁶ This phenomenon was referred to as "counterurbanization".
- ⁷ While making this strong assumption, we have to retain some reservation based on past experience. Twenty years ago counterurbanization was considered a sustainable phenomenon. For example, Illeris (1984, 236) reported: "The only firm (planning) guidelines concerned growth in the Copenhagen region, (according to which) the shift of population growth from the Metropolitan Region of Copenhagen to other parts of the country should continue".

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BOOK REVIEW

Consultancy and Innovation. The business service revolution in Europe by Peter Wood (ed.) Routledge Studies in International Business and the World Economy.

Routledge, London and New York, 2002, 370 pp.

- EWA NOWOSIELSKA

This book is about KIS: Knowledge Intensive Services, and their role in the modern European economies. More precisely, it reflects on that segment of the service sector which is based around consultancies given to the various branches of the economy (including also services). Consultancy is an exchange process between consultant and client in which knowledge is codified, adapted to the client's specified needs. and conveyed to him. A delivered report, architectural design or economic analysis provide good examples of the results of this activity. Consultancy is somehow engaged in promoting innovation through the various structural layers and spatial levels of national economies. However, such a relationship should not be taken for granted, since the evidence does not confirm the role of consultancies as forces dominant in promoting change (Wood, p.72). Thus, one of the goals of this book is to reveal how and to what extent these two notions are related in practice. The remaining services, not consultancy-based, form a common background against which to discuss consultancies as regards their forms, developmental trends and dependent relationships.

The book has a clear, three-part structure. The core is composed of eight papers discussing the development of KIS in some of the EU countries (these are – in the order followed in the book: France, Germany, The Netherlands, the UK, Italy, Greece, Portugal and Spain). The papers, all written by native authors, are based on a research undertaken in these countries within the framework of the EU international project on Knowledge-Intensive Services and Innovation (KISSIN) in the years 1996-1997. The core is preceded by three essays written by Peter Wood, Professor and Head of the Geography Department at University College London, specialist in service-sector research

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and leader of the KISSIN research project mentioned above, and - last but not least – editor of the book. The first paper reflects on the nature of innovation, its changing forms, phases, bases, importance and dependences (e.g., on sustained organizational learning); on conditioning within organizations (e.g., effective communication); and on its relationship with consultancy (which is shown to be one of parallel but associated processes). Models of innovation are also discussed briefly. The second paper in turn analyses consultancy from the points of view of its characteristics and causes through to those of the developmental trends and consequences. Finally, the third essay goes deeper into the relationship between consultancy and innovation, in order to built stronger conclusions about the innovative role of consultancies. Four such roles are distinguished (as facilitators, conveyors, adapters and initiators of change), and these are studied by way of UK-based case studies. The final part, also by P. Wood, summarizes the evidence from eight EU member states, reflecting upon the diversity of processes and policies revealed in these countries, and identifying problems arising when consultancies are incorporated into innovation policies.

Let us start with KIS. Just what are they? Surprisingly, no simple definition seems available - not even for one who has waded through nearly four hundred pages of the book. Theoretically, there seem to be many ways to define KIS, and the underlying sense would seem to rely, for example, on the "provision of knowledge about change", or on "specialist knowledge (offered) to other organizations in a rapidly changing, increasingly uncertain, and internationally-orientated economic environment". The definition of KIS as "private sector firms providing knowledge-based services to other business and non-business organizations" (p.3) is perhaps the simplest and most appropriate definition for current use. However, none of these definitions makes explicit the term consultancy - which is after all a notion central to the understanding of KIS, and, in turn, to the whole book.

One should conclude from the above statements that KIS do not embrace consumer services such as the educational or cultural, though no one would deny their relationship with knowledge. Being provided by private profit-making companies, KIS do not include the non-commercial information and advisory bodies supported by government and trade. Their distinction from other currently-known groups of services, such as "producer services" and/or "business services", lies mainly in historical connotations stressing divides of a consumer-producer character (in the former case), or a private-public character (in the latter). Since these distinctions are not observed rigorously in the book, especially in its empirical part, comparisons between the countries are difficult. The expression "professional services" perhaps comes closer to the sense of KIS, though again this is not made consistent use of – either in the book in question or any other publications, for that matter.

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Defined more pragmatically, KIS are responding to client needs for expertise in the domains of: management and administration (e.g., management consultancy, financial strategy or legal advice), production (including architectural or engineering consultancy), research, human resources (e.g., training, recruitment), information and communications and marketing (advertising, public relations, fairs and exhibitions, etc.). They have been expanding rapidly since the early 1980s. In the UK, for example, employment in the management –related services more than doubled in the years 1980-1989 (Wood, p. 176). The majority of these enterprises are small in scale (employing fewer than 10 persons per firm), and increasingly tradable over longer distances, nationally, internationally and even globally.

Despite their having adopted a common classification base for economic activities, (NACE), the eight EU countries studied cannot readily be subject to quantitative description of KIS components. First, there is the usual discrepancy between the data and measures that are available and those that are desired for specific research purposes. Secondly, levels of aggregation of various elements of KIS in various countries are often non-comparable, making country-to-country comparisons problematic, if not impossible. Examples can easily be found in the core-part of the book. In fact, only very rough quantitative comparisons can be made among the eight countries. In fairness, though, such problems are by no means uncommon in research throughout the service sector.

Furthermore, the problems with definitions and measurement, though important and troubling when it comes to comparability of research, do not seem central to the book. The focus is on issues related to trends for KIS supply and demand (basically during the 1990s), and the inequalities of their regional distribution; on the environment for KIS, with an indication of the key factors facilitating or obstructing their development; and on how and in what circumstances consultancy becomes a vehicle for innovation - and to what extent this might be stirred by the intervention of national or regional policies.

The book is rich in facts about KIS development and in suggestions about policy implementation as regards the development of consultancy, as well as about the possible obstacles to its development. Facts are sometimes difficult to organize in a common framework. This is partly due to the classification and aggregation problems already mentioned, though mainly a reflection of the diverse economic, political and social circumstances characterizing the countries being studied. In fact, common ground could only be created as regards two groups of countries, called "northern" and "southern". Although the evidence collected during the implementation of the research project shows that both groups are progressing in the same direction – towards a services-dominated, flexible economy – it is widely acknowledged in the book that each group has started this process from different platforms of economic, social and cultural development. This, in turn, has led to contrasts in innovation focus and environment. The northern group is composed of countries well-developed

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economically and of high income, such as France, Germany, The Netherlads, the UK, and Italy (except for the Mezzogiorno region). Technical anl organizational innovations in this group stem from transformations from mnufacturing- to service-dominated economies, where manufacturing continus to play an important role (if with a transformed structure and lower employmnt; from old to new forms of production, and from rigid to leaner forms of econmc organization. Most consultancy in the "northern" countries is given bythe rapidly developing small and medium-sized consultancy firms. The developiert of new technical-based centres of growth, and of new skills and new loca ors complete the portrait of the group. In contrast, the "southerners", like Grece, Portugal, Spain and the Italian Mezzogiorno, began "the move towards ev, competitive, technical and organizational cultures" much later. In consequence, they are taking on with a time-lag the effects of market liberalization, other rapid increase in consumer demand, and of the development of new sectos of the national economy. In addition, the penetration of their national markes by multinational investors bringing innovation and introducing, for example, Ighlevel management and technical skills, has been retarded. Small and medunsized enterprises are in the main rather old-fashioned in terms of the style:and organization of production. Thus the initiatives of national governments an the EU (e.g., various Supporting Programmes) play key-agent roles in promting change.

European diversity is clearly evidenced in the titles of chapters relating t the particular countries. Thus, the specificity of KIS development, for exampl, in Germany lies in their growth within a basically industrial economy, wherea the Dutch KIS result from adaptation to a small open economy, and the deviorment of Italian KIS seems to rely mostly on regional demand. In countries uch as Greece, Portugal or Spain, the stress is put on their rapid econmic development, and on a modernisation of their economies very much resuling from their accession to the EU.

The value of the book lies in its exposing of the diversity of situators, problems and solutions resulting from the research on KIS. In contrast to that might be expected, similar levels of economic development and culture denot create similar milieus of innovative change, do not necessitate similar polies, and do not engage similar institutions in promoting change. In fact, each contry is unique in its life experience to a great degree, and the EU policies - contray to expectations - do not exert unifying impacts. Even if "the drives and gos of business innovation are broadly similar throughout Europe." Do tese statements rule out any opportunity for experience gained elsewhere 1 be capitalized upon? It all depends on how this experience is intended to be usd. It seems hardly possible to transfer a complete model or solution in its full interity from one country to another. In contrast, nothing would stand in the way of the extraction of particular fragments from the global treasury of solutions.

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In consequence, the reviewed book, though not dealing directly with KIS development in the European countries seeking accession to the EU, nevertheless offers a valuable insight into the problems future EU members would probably face. These seem many. Among them are, for example, the demand constrained by small-scale markets or by the cautious attitudes of firms as regards the employment of outside advice, as well as the danger that the consultancy market may be distorted by the directing of much effort towards EU project-preparation, rather than innovation programmes themselves. Another problem that will certainly manifest itself, and rather sooner than later, is the quality of advice available from the limited range of consultancy possibilities. Without any doubt, the regional contrasts in KIS development existing in the old EU member states will also worry the Union's future adherents. And this is where the experience of those existing members would be particularly helpful in suggesting how certain forces might be controlled, and in pointing out the dangers, as well as the acceptable solutions.

Critical remarks. Some are editorial in character. There are, for example, redundancies in many papers (e.g. the Italian report). A few maps illustrating the regional distribution of KIS would certainly facilitate reading and eliminate superfluous description. Also the spelling should be more consistent (e.g., "competences" and "competencies" (p.136-137).

As to the "national content" of the book, the critical point is its comparability. It is understandable that, because of the specificity of each country, the construction blocks of each national report are different. Less sympathy can be extended when the introductory part of each report portraying the changes in the structure of the service sector or of KIS also uses different levels of disaggregation of economic activities. In such a case comparability really does suffer from the lack of consistency. Finally, a comment on the sub-title of the book: "The business services revolution in Europe." It seems disputable whether the development of business services is always revolutionary in its character. My own impression based on this book is that we may only face revolutionary change when innovations are involved, and when they are massive (substantial) in character as well as in spacing. However, as this is not always the case, is the sub-title not a bit too expansive for the book?

Overall though, these few criticisms do not diminish the value of the book. Consultancy and innovation offers rich theoretical and empirical material allowing the reader to take a closer look at the most important and intriguing part of the modern economy, i.e. the Knowledge Intensive Services.

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Publishers.

Chapters from books: Dematteis G., 1996, Toward a Unified Metropolitan System in Europe: Core Centrality Versus Network Distributed Centrality, [in:] Pumain D., Saint-Julien T. (eds), Urban Networks in Europe. INED. John Libbey, Paris, 19-28.

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Consultancy and Innovation. The business service revolution in Europe by Peter Wood (ed), Routledge Studies in International Business and the World Economy. Roultegde, London and New York, 2002, 370 pp.

Ewa Nowosielska

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