

“Polycentricity and beyond in Nordic Regional Governance”

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Preface

The research programme, *'Internationalisation of regional development policies – Needs and demands in the Nordic countries'* was commissioned by the Nordic Council of Ministers in the spring of 2005.

The aim of this programme is to undertake research on key issues, where it has been identified that new knowledge is needed, and where such knowledge could be seen to benefit the development and implementation of regional development policy in the Nordic countries.

The basis for the research programme is its Nordic character. Research should lead to new knowledge both for the academic world and for the world of policy and practice. Projects should add 'Nordic value', i.e. they should produce knowledge of relevance for several regions and countries across Norden. The research should moreover be comparative and collaborative across at least three Nordic countries or self-governed areas.

Three themes of high priority for the research programme have been identified; *'regional governance'*, *'innovation and regional growth'*, and *'demography and labour migration'*.

In addition to these priorities two additional crosscutting themes were also defined; 'the enlargement of the EU and the challenges for Nordic regional development policies' and the broad topic of 'the three dimensions of sustainable regional development'; i.e. social, economic and environmental sustainability.

The research programme has been launched in two rounds. In the first round during the spring of 2005 it was decided to fund five projects. These were reported during 2007. In the second round during the spring of 2007 it was decided that a further five projects should be funded. These will be reported in 2008 and 2009. All project reports are published in this publication series dedicated to this programme. At the end of the programme, a synthesising report will also be produced where the most important findings are discussed. This report is planned to be published in the winter 2009/2010.

Nordregio wishes to thank the Nordic Senior Official Committee for Regional Policy and the Nordic Council of Ministers for providing this unique opportunity to develop new research-based knowledge and for encouraging cooperation and the exchange of ideas between Nordic researchers.

Nordregio would furthermore like to thank all of the involved research teams and the programme's Steering Committee for their continuing contributions to the Nordic discourse on regional development.

Ole Damsgaard
Director

Margareta Dahlström
Coordinator of the research programme

Authors' Preface

The aim of this study is to examine the interplay between regional governance and reform in the Nordic countries and its impact on the administrative and political structures in four Nordic countries – Denmark, Finland, Norway and Sweden. Our hypothesis is that in the Nordic countries, where many regions are marked by low population density and peripheral location, working towards a polycentric growth strategy may not have the same relevance as in the central Europe, for instance. We thus ask whether and how the concept of polycentricity has played a role (or not) in the debates on regional development policy and governance reforms in these countries.

It must also be kept in mind that this study emanates from a small project in terms of time and funding and can be seen more as a pre-study or state-of-the art review than “pure” science. Both the restricted resource base and the fact that the structure of Iceland differs from the other four Nordic countries are reasons why Iceland is not included in the study.

The report is split into four more or less separate country studies, but it is not an anthology. Instead it is a more of a collective product written by eight researchers from the four studied Nordic countries representing a wide range of social science disciplines. The researcher partners are:

- Heikki Eskelinen, Matti Fritsch, Timo Hirvonen; Karelian Institute; University of Joensuu
- Olaf Foss and Dag Juvkam, NIBR, Oslo
- Niels Boje Groth, Centre for Forest, Landscape and Planning, University of Copenhagen
- Lisa Van Well; Nordregio, Stockholm
- Mats Johansson; KTH, Division for Urban and Regional Studies, Stockholm

The collective approach has also characterized the research and working process even if some division of labour was made in the sense that some researchers were more responsible and active than others concerning the different chapters in the study. All chapters were, however, discussed, developed and written through e-mail communication between all the eight researchers.

The research team is grateful for the support and useful comments they received from the experts that participated in the seminars at Nordregio where the drafts of the paper were discussed. The research team is also grateful for the helping hands of José Sterling and Stefanie Lange at Nordregio and Simon Falck at KTH during the finalization of the paper. Last but not least we would also like to thank the research programme coordinator Margareta Dahlström at Nordregio for her patience and constructive support during all phases of the project.

On behalf of the authors
Stockholm, June, 2009

Mats Johansson
Project manager

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Project secretary

1. Polycentric development and regional governance

The aim of this pre-study is to examine the interplay between regional governance and reform in the Nordic countries and how the policy concept of polycentric development is used. The recent and proposed structural reforms in the Nordic countries provide an interesting chance to examine the development strategies of regions and how a polycentric and/or monocentric balance impacts opportunities for regional development and policy design.

Different regions have different preconditions for polycentric and monocentric development. Either spatial structure can be rational as a consequence of e.g. location and territorial capacity. However the concepts and policy applications have been questioned as to their applicability in all types of countries and regions. Particularly in the Nordic countries, where many regions are marked by low population density and peripheral location, working towards a polycentric growth strategy may not have the same effects as in the central Europe, for instance.

Debates on polycentricity in regional policy and governance have proceeded along different lines in the Nordic countries, but the outcomes are still comparable in several respects. Thus this report comprises four country studies (Denmark, Finland, Norway and Sweden) in which we examine *whether* and *how* the concept of polycentricity has played a role in the debates on regional development policy and governance reforms in these countries.

To address this question we have assessed the current discourse regarding polycentric development policy and discourse in the Nordic countries. We make the assumption that, at least in the Nordic countries, polycentric development may not be the panacea for regional disparities that it is sometimes painted to be¹. But what are the alternatives to polycentric development? Which territorial trends and patterns in the Nordic countries influence regional governance?

Each Nordic country studied has focused on different issues related to the polycentricity discourse and these country cases form the core of this report. The Danish case (chapter 2) emphasizes how policies have been drivers of spatial development in the country and the attitude towards polycentricity under recent periods of regional development policy. The Finnish case (chapter 3) discusses how polycentric development is understood at national level in light of networks, flows and cooperation, rather than geographical proximity but not much in use at regional or local level. The Norwegian case (chapter 4) focuses on the particular settlement patterns of the largely monocentric country. The Swedish case (chapter 5) describes history of regional development policy and the strong focus on regional enlargement. Simply the fact that the regional governance debate in each country has highlighted different aspects is an indication that the Nordic debates and policies are conditioned by specific national traditions and circumstances. These thus act of “filters” used in understanding European policy concepts such as polycentric development and related concepts which are briefly introduced in this first chapter. In chapter 6 we provides some preliminary observations and conclusions.

¹ This is also alleged by Sandberg and Meijers (2006) Polycentric development: panacea for regional disparities in European countries? Topic II: How can polycentricity of territorial development improve functional integration?) presented at the 10th UNECE Conference on Urban and Regional Research, May 22-23, 2006, Bratislava. http://www.unece.org/hlm/Conference/10_Bratislava/Response_Papers/Topic_4_polycentricity_versus_regional_disparities_paper_UNECE_KSEM.pdf

1.1 Contextual influences from Europe

1.1.1 Polycentric development as a European policy concept

Polycentric development, or rather a monocentric contra polycentric regional urban structure, linked to regional enlargement has been a focus of European regional development in later years. The policy concept, which had become a buzzword among spatial planners (Waterhout et al 2005) has been used in connection with localization of infrastructure and activities such as employment, housing and commercial locations and the interaction of these activities. As a concept it has many definitions (see Text box 1) and is used in a variety of contexts. However the question of which type of structure is most appropriate for regions of varying size, population and accessibility is not self evident. And regions often differ as to their specific preconditions that make a polycentric development feasible.

Text box 1: Definitions of the policy concept.

In lieu of definitions: Territorial Cohesion...

... goes beyond the notions of economic and social cohesion for balanced development, reduction of disparities and imbalance (Third Cohesion Report)

... is a means of transforming diversity into an asset that contributes to sustainable development of the entire EU (Green Paper on Territorial Cohesion).

The basic concept of polycentric urban development has long been the subject of many studies. Christaller's central place hierarchy and Brothie's triangle are two models that have influenced urban and regional economic theory, as well as planning theory and practice (Adolphsson et al 2006). In the 1990s and early 2000s a number of studies examined the relationship between various urban structures at different geographical levels and the economic, social and ecological consequences².

In the early 21st century the concept of polycentric development was an important policy concept regarding European, national, regional and local configurations. The idea of polycentric development pulsed throughout Europe, primarily western and central Europe. It was fuelled by the regional policy of the European Commission particularly in the European Spatial Planning Perspective (ESDP) where polycentric development with a balanced and polycentric development city system and a new urban-rural partnership was one of the three main normative goals. To further establish the concept of polycentric development (among other goals) European Spatial Observation Network (ESPON 2000-2006) was instigated to provide policy relevant research about the utility of spatial development in Europe.

The first project within the ESPON 2000-2006 programme concerned polycentric development, not as a goal in itself, but as "...one of the means to achieve policy objectives such as economic competitiveness, social equity and sustainable development" (Nordregio 2005:7-8). As one of the most cited policy goals of the ESDP, the interest for polycentric development is conditioned by the hypothesis that a polycentric urban system is more effective, equitable and sustainable than a monocentric system composed of small dispersed settlements. The ESPON foundation for work on polycentric development is composed of stimulating a spatial pattern of functional urban areas (FUAs).

² See for instance Anderson, Kanaroglou & Miller, 1996; Haughton & Hunter, 1994; Hayashi & Roy, 1996; Kenworthy, 1989; Kupchella & Hyland, 1993; Nelson, 1999; Newman & Newton, 1997; Spiekerman & Wegener, 2003.

Yet polycentrism is at the heart a very political concept, the only substantial spatial concept advanced in the ESDP that could have the potential to integrate a spectrum of interests from all actors (Waterhout 2002). Polycentric development can thus describe a range of different spatial relationships, depending on which level the concept is applied and the way in which the concept is used politically.

1.1.2 Nordic conceptions of polycentric development

The theme of this report is the extent to which and how of the concept of polycentric development comes to light in the Nordic debates on regional governance and/or reform. Thus we look into how polycentric development in the specific Nordic context is addressed.

Perhaps polycentric development is not the defining concept or goal for Nordic regions. If so, how could we characterize Nordic regional development and the governance processes that strive to achieve the twin goals of economic growth and territorial cohesion? Should regions strive for large hierarchical polycentric labor markets, or rather smaller local complementary labor markets? What is the role of the more peripheral regions with isolated monocentric labor markets? Different types of regions have various possibilities for development. A polycentric settlement pattern is not the same as a polycentric structure from an economic and labor market point of view, even if it often is seen to be a precondition for a polycentric region. Concerning the way a polycentric structure has affected regional development and regional governance it is also important to distinguish between hierarchical and complementary polycentricity even if there are no watertight bulkheads between these two concepts.³ The big difference is the degree of dominance of one large center in a more or less polycentric structure. This means also that regional governance can be of symmetrical or asymmetrical character in various degrees within a country and between differing regions. From a Nordic point of view with its very different preconditions concerning polycentric development it is relevant to examine in what sense differing conditions with regard to size, population density, accessibility, economic and social structure have affected the possibilities to develop a polycentric strategy and stimulate endogenous growth.

Polycentric and monocentric development are to a large degree an effect of factors as population density, accessibility and market forces as the “spread” or “backwash” effects.⁴ Instead of the negative feedback processes or centripetal factors, which means that original inequality will result in a process towards equality and convergence, the positive feedback processes or centrifugal factors will result in divergent development and regional polarization. In both cases, regional governance has a central role at inter- and intraregional relationships as well as at micro, meso and macro levels. Thus proactive regional governance helps to set the preconditions and restrictions for dealing with transformation processes in a monocentric or polycentric direction. This means also that the preconditions differ concerning polycentric respectively monocentric development – in sparsely populated areas a monocentric development can be at rational economic strategy as an economizing of restrictive recourses while in densely populated regions a polycentric strategy can be a better solution as the differing local labor markets complement each other in quite another way. This is especially valid in peripheral areas as the Nordic ones with its geographically huge areas and sparsely populated regions (Adolphsson et al 2006).

This type of problematization of the concept of polycentric development is echoed in the Nordic inputs to the EU Green Paper on Territorial Cohesion (Damsgaard et al 2008) which contemplates polycentricity in the Nordic countries: “From a Nordic perspective, the only substantial potential usage for the concept of polycentricity lies in its functional or relational understanding as here it offers some reflection on how to optimise the cities’ functions in a transnational, national and

³ Concerning the Nordic countries, see e.g. Groth, N.B. et.al. 2005, Adolphsson, M. et.al. 2006, Cortes Ballerino C, et.al. 2005, Eskelinen, H. and Hirvonen, T. 2006, Van Well, L. et.al. 2006, Juvkam, D. et.al. 2006.

⁴ These concepts emanate from Myrdal, G 1957 and have had a great impact on the centre-periphery discussion.

regional context. In this sense then it could perhaps contribute to the idea of territorial cohesion across Europe”. Indeed, “closing the gap” between cohesion concerns and the goal of regional competitiveness is one of the ways in which polycentric development has carved out a place on the territorial agenda (Waterhout et al 2005; Meijers et al 2007).

1.1.3 Goal conflicts on multi-levels

It has alleged that polycentric development can be a linking pin between the European goals of territorial cohesion and competitiveness in a way that is politically acceptable to formulations of national spatial strategies or visions. A range of studies have shown that European countries with a polycentric urban structure are in general more economically successful and more ecologically sustainable than countries that are dominated by a large urban agglomeration – often the capital region. On the other hand, polycentric countries are not always more socially cohesive if rural and peripheral regions are included (ESPON 2006).

Other types of goal conflicts may involve the governance level at which polycentric development is pursued and/or analysed. For example, if the goal, spurred on by competitiveness at a global scale is to strengthen large urban centres outside of the “Pentagon”⁵, this can lead to an increase of social and economic disparities between the already dominant capital cities and other parts of countries such as Estonia, Hungary or Sweden. On the other hand if the goal is to balance function urban systems in these countries there is a need for greater support in the form of Structural or Cohesion funding specifically linked to infrastructure investments for increased accessibility among the medium sized towns. But the risk is that this could occur at the expense of the urban region development. Ideally, though, the sum of the parts will be greater than the individual policy elements, allowing for the realisation of synergy effects (Adolphsson et al 2006).

Table 1: Goal conflicts at various levels.

Goal	Policy	Goal conflict
Competitiveness at global scale ('The Lisbon Agenda')	Strengthen highest-level global cities in the 'Pentagon'	Polarization between the global cities in the 'Pentagon' and the cities in the rest of Europe will increase. The European urban system will be less balanced and polycentric.
Territorial cohesion at European scale	Strengthen major cities outside of the 'Pentagon'	The competitiveness of the global cities in Europe may decrease. The urban systems of individual countries will be less balanced and polycentric.
Territorial cohesion at national scale	Strengthen medium-level cities in the new member states and accession countries	Competitiveness of major cities in the new member states and accession countries may decrease.
Sustainability ('The Gothenburg Agenda')	Strengthen lower-level cities in the new member states and accession countries	Competitiveness of major cities in the new member states and accession countries may decrease.

(Source: Adolphsson et al 2006 and ESPON 2006:141)

⁵ The "Pentagon" is the "core" area of Europe consisting of the territory marked by the cities London, Paris, Milan, Munich, Hamburg and London.

Thus polycentric development could and should be considered in a more nuanced way at different governance levels. At the local and regional scales the concept could be used mainly as an analytical tool, while at the national and European levels it helps to express a normative agenda (Davoudi 2003 in Meijers et al 2007:3).

“The main interest in the debate on the lower scales is on the spatial-functional structure of cities. On the regional scale, polycentricity is also associated with competitiveness issues, while polycentricity on the European scale is predominately discussed in the context of EU Structural Funds mainly in terms of regions and countries lagging behind and thus as a means of achieving cohesion” (Meijers 2007:3)

1.1.4 Territorial Cohesion

In more recent years, the emphasis on polycentric development as the most desirable spatial and functional configuration of territory has waned somewhat. Rather the role of the EU, the state and regions in promoting normative goal of territorial cohesion has been highlighted. Territorial cohesion, like the policy concept or goal of polycentric development, is a vague term that can be reinvented to fit many political or planning purposes. Even the recent Green Paper on territorial cohesion failed to precisely define the concept. However the concept widely used in the European policy discourse (see Text box 2).

Text box 2: Definitions of Territorial Cohesion.

In lieu of definitions: Polycentricity at various levels

European: “Several larger zones of global economic integration in the EU”.

Transnational/interregional: encouraging “a polycentric and more balanced system of metropolitan regions, city clusters and city networks”

Intra-regional: “... strategies for city clusters in all Member States within the framework of transnational and crossborder co-operation, including corresponding rural areas and their small cities and towns”

(From ESDP and quoted in Gløersen in ESPON 2005)

EU member states comprehend territorial cohesion in various ways, even within the instruments of Cohesion policy, including the EU Structural and Cohesion Fund programmes. Most of the Operational Programmes address territorial cohesion in terms of the reduction of regional or spatial imbalance including measures to address urban-rural disparities, accessibility, development of growth poles (primarily in the New Member States) and urban regeneration. However several of the programmes in central and southern Europe specially point to the role of territorial cohesion as a strategy for exploiting regional potentials and building territorial capital (Nordregio 2009:92-93).

The wide variety of definitions used highlights the complexity of the term in a policy context. If territorial cohesion is to become a more dominant concept in Cohesion policy, it is important to clarify the definition (Nordregio 2009:93). The recently published Green Paper on Territorial Cohesion is a start in this direction. Regardless of whether the Treaty of Lisbon which would institutionalise the goal is ratified, territorial cohesion will be important in Europe in order to harness territorial diversity and increase competitiveness. This also implies a greater need to embrace multi-level governance at all levels. These points have been stressed in the Green Paper and reiterated

by Commissioner Hübner (Faludi 2009:23).

As a policy goal territorial cohesion aims at the reduction of inter and intra-regional disparities and the increase of regional competitiveness. At a European level, polycentric development can be seen as one “tool” to approach territorial cohesion (Meijers et al 2007). Achieving this demands not just a reliance on one tool but a range of territorially differentiated approaches to policy making (Damsgaard et al 2008). While territorial cohesion in the Nordic context must incorporate elements of polycentritiy, defined as a strategy to optimise the function profile of cities and regions (Damsgaard et al 2008:11), there is not necessarily the need “... to address the “balance” between peripheral regions and a European core area. Instead territorial cohesion policies need to focus on the potentials for local communities and regions to continue to develop globally competitive activities” (Damsgaard 2008:9).

1.1.5 Competitiveness and the Lisbon Agenda

Thus the role of regions can be seen in the light of decreasing disparities and increasing competitiveness at all levels: European, national, regional and local. The Lisbon agenda or strategy emphasises how both nation states and regions need to be part of this process.

In the year 2000, the European Union adopted the Lisbon strategy⁶ with a view to creating a competitive knowledge economy that aimed to build sustainable economic growth with more employment, greater social cohesion and respect for the environment. The main idea of the strategy was that knowledge and innovation are the major resources open to the Member States, enterprises and people in their attempts to sustain the European competitiveness and welfare model. Common dissatisfaction with the implementation of the Lisbon approach and lack of engagement subsequently led however to a review of the Lisbon strategy's priorities, guidelines and targets in 2005.

The Lisbon Agenda requires the mobilisation to a much larger scale of national and European resources. A new point of view is required which takes on board, for instance, the conclusions of the European Spring Council in 2005, which stated that: “Alongside the governments, all the other players concerned — parliaments, regional and local bodies, social partners and civil society — should be stakeholders in the Strategy and take an active part in attaining its objectives.”⁷. Thus regions are one of the key actors in achieving the strategy.

The response to the Lisbon agenda's call for innovation and entrepreneurship in the Nordic countries has thus far been dominated by the national level. In Finland, Norway and Denmark the state has established special resource centers to support innovative capacity and growth at regional and level (Karlsson 2009:31). Regional actors are also propelled with incentives from the EU level (such as the Structural Funds) to actively contribute to growth policy. In the Nordic countries this has taken form in a large number of regional partnerships, which are also intended to implement such policies (Hallin 2000).

1.2 Structural Reform Processes in Denmark, Finland, Norway and Sweden

In the past few years territorial reform processes have been addressed in all of the Nordic countries. Reasons for the recent round of reform are varied. These include finding new regional configurations to maintain the Nordic welfare model, achieve more efficient service provision from regional and local entities and to promote sustainable growth, competitiveness and job creation throughout the

6 Presidency Conclusions of the Lisbon European Council, 23-24 March 2000, Council documents Nr. 100/1/00.

7 European Commission (2007). Growing Regions, Growing Europe – Fourth Report on Economic and Social Cohesion. Luxembourg: Office for Official Publications of the European Communities, 2007

national territories (Karlsson et al 2009:29). Dealing with the challenges and opportunities brought on by globalisation processes is considered to be the task several administrative structures, both those that are “top-down” governed as well as those instigated from the “bottom-up”. Thus the regional reform debate has been driven in light of multi-level governance.

All of the Nordic countries are today considering larger regions and/or municipal amalgamation (Aalbu et al 2008). Comparisons, however, must be approached with caution, as there is no “one-size-fits all” model for regional reform (Lähtenmäki-Smith and Van Well 2007, Karlsson et al., 2009). We nevertheless briefly present the reform processes as these processes frame the opportunities for analysing how polycentricity as a the concept and/or political goal is used in the Nordic countries.

1.2.1 Denmark

Modernisation and efficiency of the public sector are the goals behind the Danish public sector reform, including the idea that the entry into the public sector should be made as simple as possible for citizens. Municipal amalgamation was the first step to this goal in 2004 when municipalities were voluntarily consolidated from 275 to 98.

In April 2004, the Danish government presented a proposal for a reform of the structure of the public sector “The new Denmark – a simple public sector close to the citizen”, based on the analyses of the Commission on Administrative Structure and on public hearings. The proposal subsequently formed the basis for negotiations between the government and the other parties of the Danish Parliament (Folketinget) which then resulted in an agreement on structural reform.

The process of regional consolidation, however, was driven more from the top-down. In 2007 Denmark completed a reform where by five new directly elected regions replaced the former 14 counties or *amts*. The new regions have received a new role and new areas of responsibility, even though there is no regional taxation. Results are to be reached in the new Danish regions through networking and coordination and cooperation with municipalities. (Karlsson 2009:29).

1.2.2 Finland

The current focus of structural reform in Finland is on encouraging intermunicipal coordination and voluntary municipal mergers through the PARAS project launched 2005. Providing viable local economies and service provision are main goals of the measures.

Institutional reforms at the regional level were carried out in connection with Finland’s accession to the EU in the mid-1990s. EU requirements helped to strengthen the intermediate level of governance (see chapter 3 of this report) and 20 (now 19) Regional Councils were created.

While Finland basically still has a two-tiered system of governance with strong local and national levels, it is now experimenting with a third, with the pilot of regional self-government in the Kainuu region, where from 2005-2012 the region has primary responsibility for health care and social welfare, as well as partial responsibility for education and regional development (Neubauer et al. 2007)⁸.

⁸ Neubauer, J. et al (2007) Regional Development in the Nordic Countries 2007. Nordregio Report 2007:1.

1.2.3 Sweden

The structural reform debate in Sweden has focused on the role of "functional regions" and regional enlargement. In 2007 the parliamentary Committee on Public Sector Responsibility (*Ansvarskommittén*) presented a report which suggested replacing the current 21 counties (*län*) with between six and nine directly elected larger with the responsibility for regional development.

These regions should assume the responsibilities of County Councils (hospitals and health care, and public transport), as well as a shared task of regional development and growth, including industrial development, infrastructure, EU Structural Funds, culture, equal opportunities, environment, public health etc. The Committee recommended that each region should include 1-2 million inhabitants (and not below 500,000), one regional hospital or institutionalized co-operation in the hospital sector, as well as one major university.

The reform of administrative divisions is primarily motivated by three factors: The need of a uniform national division to facilitate more territorially directed governance; the need to adapt the division according to regional development factors (such as local labor market regions) and the need for more focused knowledge-based governance of healthcare and medical services; and increased possibilities for continued structural reform and specialization.

The Committee report notwithstanding, regional reform has not been forthcoming. While there is a consensus that fewer and larger regions are desirable, regional borders is still a much debated point. At the moment, debate is proceeding in the current counties (*län*) about solutions that best fit their own needs and interests.

1.2.4 Norway

Strengthening the regional democratic layer by moving responsibilities and tasks from the central state and from the regionalised state to county councils or regional councils has been one of the motives behind the debate on regional reform in Norway. In later years Norway has seen an increase in the hierarchical coordination of the regional policy field (Moxnes Steineke 2009:10). While Norway has a directly elected regional level of governance (financed by income tax and state transfers), the state has recently re-centralized healthcare.

But in Norway, like Sweden, the current debate on regional reform and municipal amalgamation has not yet been followed by action, despite numerous reports and proposals from the government on the need for regional reform in Norway. Reasons for this are multiple, but perhaps most linked to fact that the need for reform has thus far not been pressing enough. There has not been a very firm and coherent alliance of vested interests at the regional and local level, while supporters of sector interests have been more unanimous and unyielding to new proposals. Actors such as the Norwegian Association of Local and Regional Authorities (KS) are proponents of stronger regions.

At the heart of the regional reforms in Denmark, Norway, Sweden and Finland is the recognition that regions have a new role in ensuring their own endogenous development in light of the Lisbon strategy. The spatial and functional configuration of regions would thus seem to be one of the vital elements of structural reform. However the concept of polycentric development only slightly colors the debates in Denmark and to a somewhat greater extent in Finland. Discussions of polycentricity appear to be absent from the discourse in Sweden and Norway.

2. Country study: Denmark

2.1 The Danish urban system

The Danish urban system, constituted by cities larger than 1000 inh. (1998), is shown in figure 1 below (Nielsen, B. 2000:25). Figure 1 shows growth rates during 1988–1998, with the highest growth rates in the Eastern Jutland and Copenhagen regions. This tendency has continued, making these two regions the leading growth regions of Denmark.

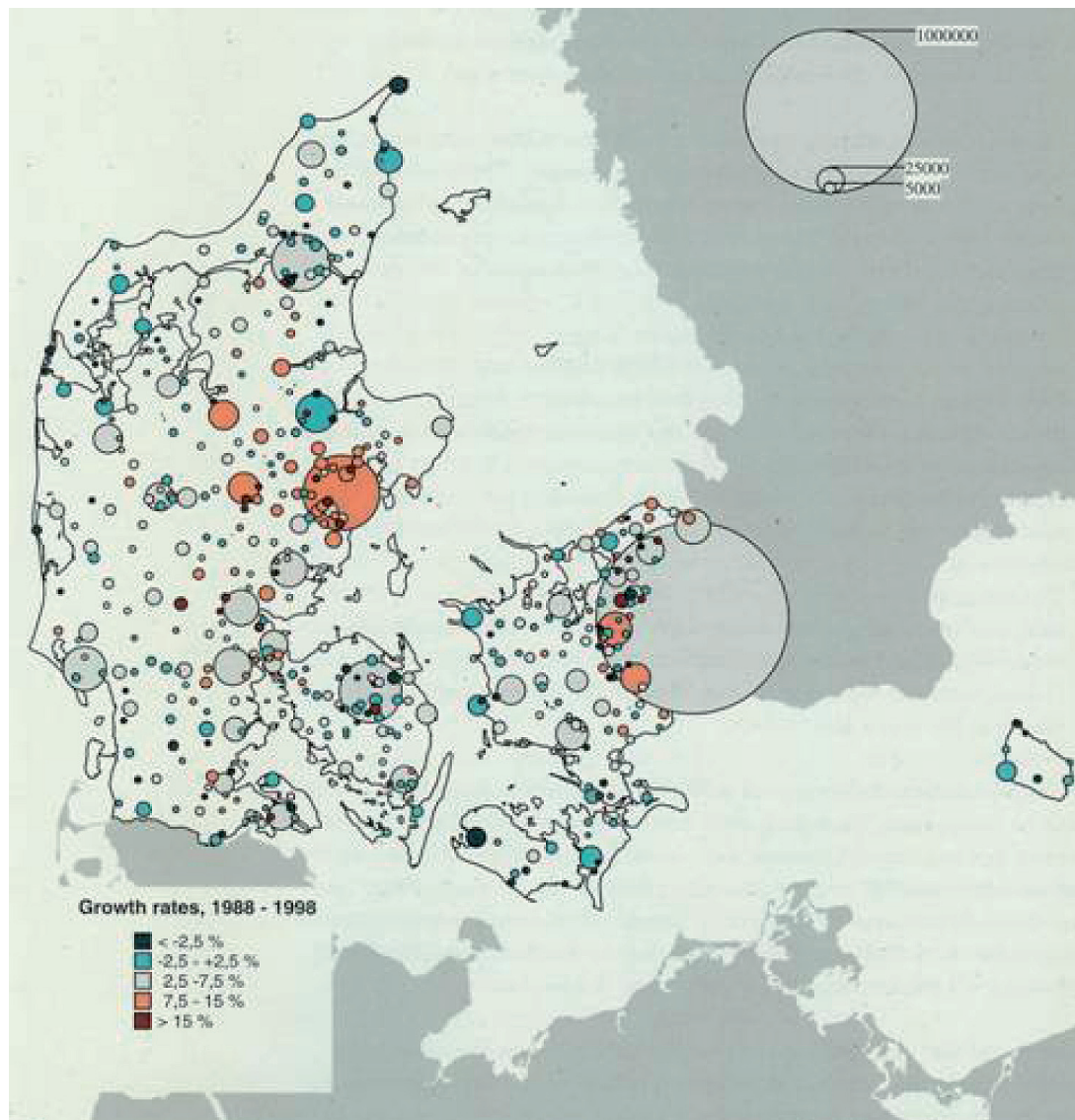


Figure 1: The Danish Urban System.
Source: Nielsen 2000.

A few of the characteristics of the urban system are highlighted by Nielsen (2009). These include):

- Primacy. Copenhagen is by far the largest city, at 5-7 times larger than Århus, the second largest city.
- Compared to the other Nordic urban systems, the primacy of the Danish system is outstanding, as revealed by the table below. (Groth ed. 2001: 84)

City	Share of national population in %
Copenhagen(Including Copenhagen and Frederiksberg municipalities and counties of Frederiksberg and Roskilde)	34
Oslo og Akershus Fylke	22
Stockholms Län	20
Helsinki (Uusimaa region)	25

- The larger and medium-sized towns (larger than 20,000 inh.) are evenly distributed throughout the country.
- No urban clusters have developed. However, a number of suburbs have developed around Copenhagen and the largest provisional towns.
- Most of the largest cities are situated on or near the coast.
- Most of the towns date back to medieval times, serving as market and service towns the agricultural hinterlands. Much of the industrialisation of Denmark is rooted in local machine works providing service to farmers and processing agricultural products. Industrialisation in Denmark thus developed evenly within the established urban structure and only a few new industrial towns were created in the 19th century.

Rather, new 'station towns' developed along the new railways at the turn of the century, their function being to service the large agricultural populations.

Finally, a third category of towns, the municipal centres, developed in the aftermath of the municipal reform in 1970. These cities developed from existing ones as more than 1300 municipalities were amalgamated into 277 municipalities. They were made responsible for several new administrative duties and public services through decentralisation processes, which in turn stimulated the growth of the main town of the municipality.

In sum, apart from the primacy of the Copenhagen city region, the Danish urban system is characterized by high density and evenly distributed small and medium-sized towns.

2.2 Planning strategies' influence on urban systems

The regularities of the Danish urban system were well-suited for the idea of building up evenly distributed services in the new welfare system after the Second World War. These ideas date back to the 1960s, when professional planners began to discuss national planning, and in 1961 the first national planning agency was formed. In his overview of the planning debate during the first 20 years, Illeris (1983) stresses that two main positions were taken, one emphasising the importance of

sustaining the growth of economic centres, and another underscoring the need for even distribution of public and private services. The first position gave priority to few large centres, whereas the second position gave priority to the forming of a hierarchy of centres from the largest and most equipped to small, local centres that could provide daily, routine services. From both positions, the small regional centres not unlike the hinterlands of the old market towns (*egncentre*) were given special attention. These medium-sized centres provided an evenly distributed number of services (Figure 2). Although the *egnscentres* were supposed to play a role (especially in the peripheral areas) as economic centres, the prevailing idea was that of sustaining an urban service hierarchy.

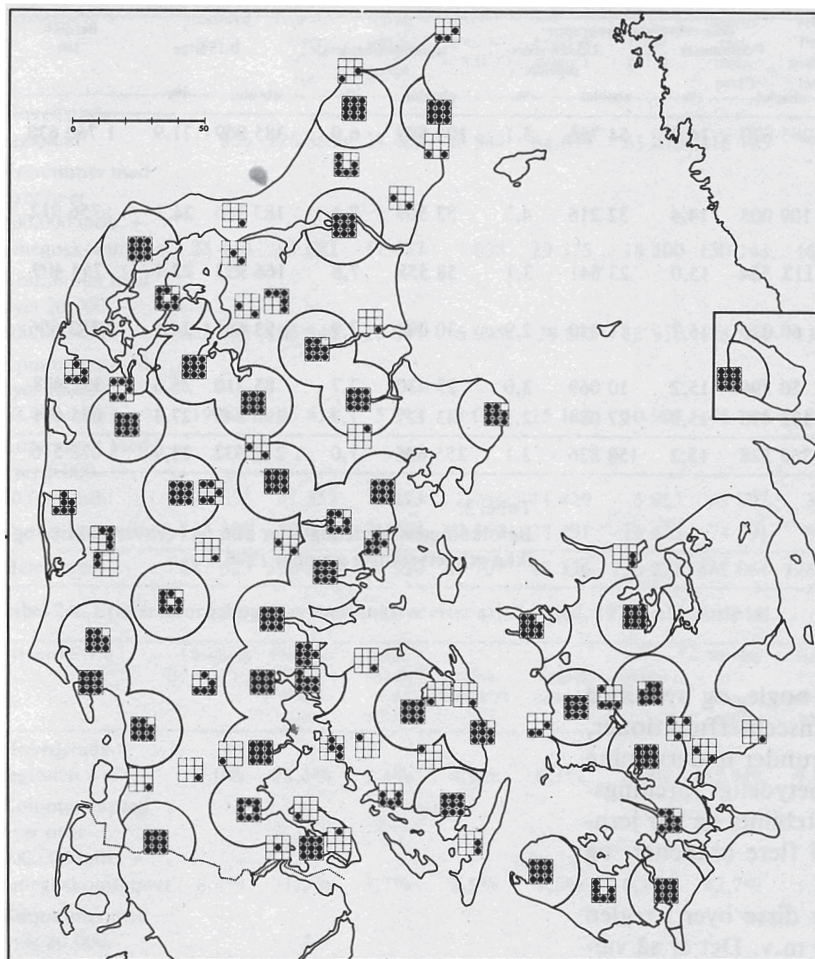


Figure 2 Regional centre functions.

The presence of nine selected centre functions in the urban system (high schools, commercial schools, technical schools, hospital services, main police stations, retail, jobs, enterprises and bus lines) elaborated by the National Planning Agency in 1979 to identify regional centers (*egnscentres*) (Planstyrelsen 1979: 18).

2.2.1 Changing attitudes to polycentricity

In the 1970s and 80s the hierarchical urban system of Denmark did not leave room for polycentricity. This attitude was made explicit by the Ministry of the Environment during the approval process of the first regional plans in 1983. During the period 1975–1980, the first generation of regional plans was developed by the 14 counties that had been formed by the municipal reform in 1970. Some of the counties suggested that centres could be formed jointly by two or more cities. However, during the process of approving the first regional plans, the government refused to accept the polycentric centres as suggested by some counties. Counties in favour of establishing two cities with

the joint status of a municipal or regional centre argued that the recent municipal reform had not succeeded in demarcating the new municipal territories in terms of a clear urban system. In several municipalities, cities formerly belonging to two separate municipalities were of rather similar size and rank. If they were situated not far from each other, some counties argued that it was difficult and irrelevant to select one city and not the other as the primary municipal centre. The government argued that the appointment of two or more cities as one centre would result in ambiguities as to which city investments in service and urban functions should be allocated. These problems, it was argued, would develop due to the slow-down of urban development starting in the mid 1970s (Nielsen 1981).

The idea of polycentricity, however, was not entirely new. Erik Kaufmann Rasmussen (1959) initiated a debate on the national urban system in 1959 by suggesting that the country should be subdivided into regions formed by 'unions of cities'. These unions of cities are not exactly polycentric urban systems, but the idea of joint responsibilities in unions of cities resembles some of the core idea of polycentricity, i.e., a locally defined division of labor between the cities.

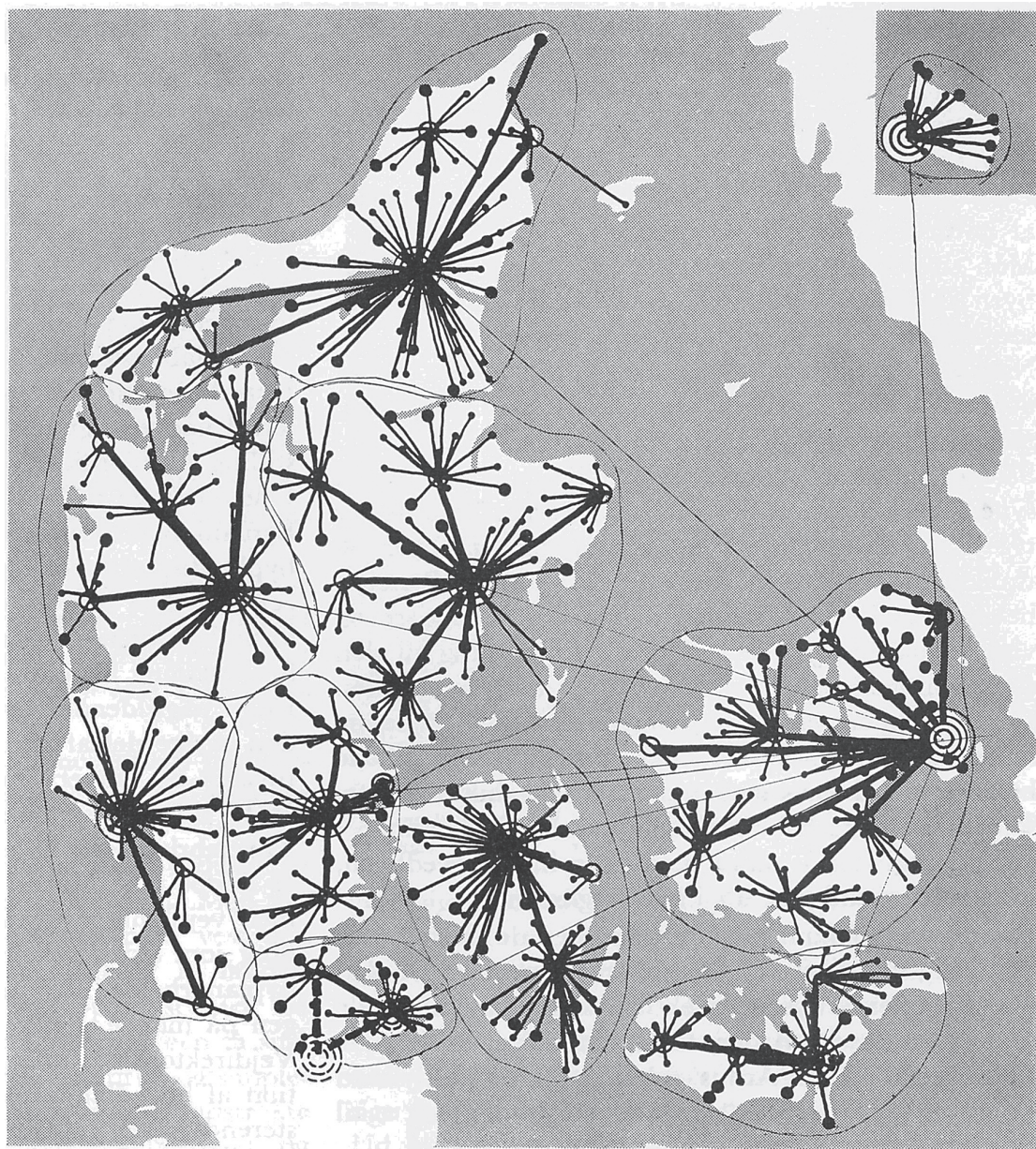


Figure 3: The 'star-city model' by Erik Kaufmann Rasmussen (1959).

The first generation of regional plans, about 20 years later, was prepared in the aftermath of the oil crisis in 1974. Until then, much of urban planning was about regulation of growth, due to the steep increase in housing construction (see Figure 4). The decline in building activities after the oil crisis (see Figure 4) was followed by a concern for stimulation of urban growth. At this time, SWOT analysis became a popular tool for urban planning, new principles of regional (endogenous) growth were considered and 'urban networking' also became a popular.

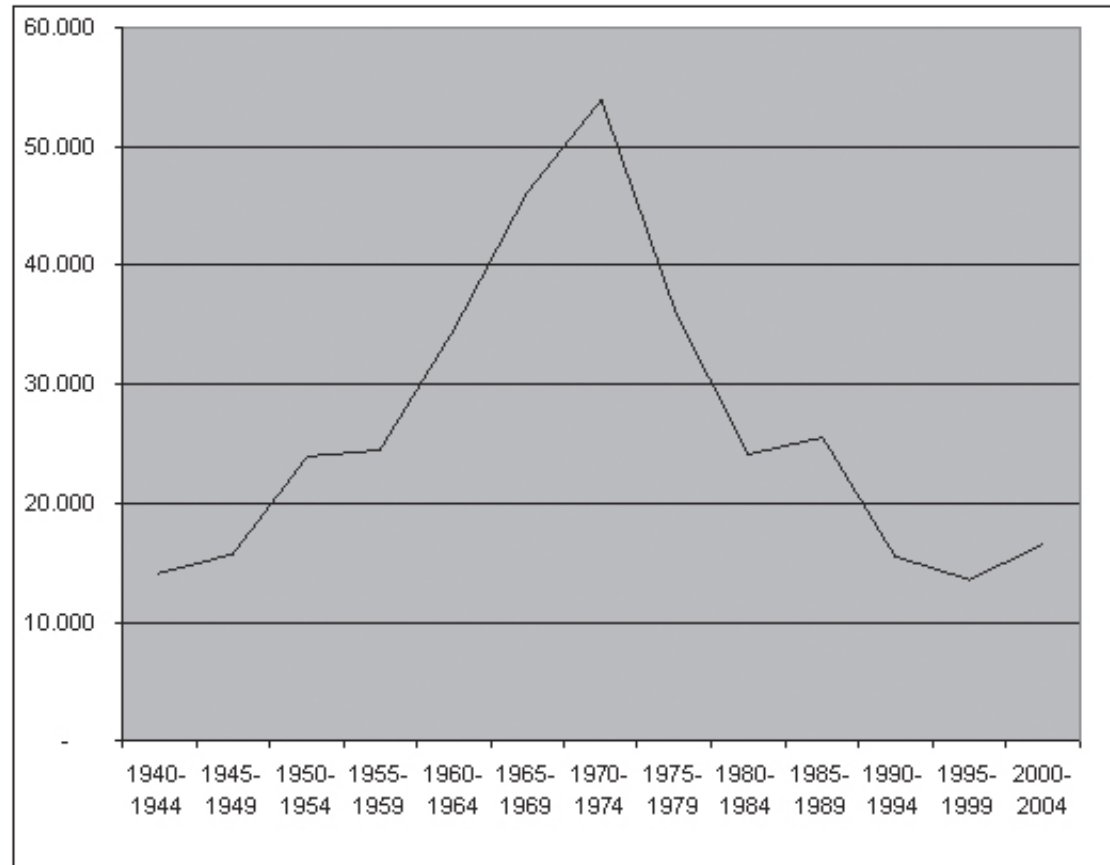


Figure 4: Number of residential units in Denmark listed by year of construction (yearly average per 5 year).

In the National Planning Report for 1992, (Miljøministeriet 1992a), the government introduced the agenda of enhancing the position and competitiveness of Danish cities, economically and environmentally, building upon local capacities. The National Planning Report provided an urban SWOT analysis of Danish cities, and a tender was launched, inviting cities to join forces and become stronger by forming 'urban circles'. The winning urban circle would receive an input of state assistance. The Triangle Region, located in East Jutland and the Western most part of Funen, won the tender. The idea of forming urban circles had become popular. Accordingly, several long lasting urban co-operation arrangements were established. The urban circle initiative was a step taken towards changing the negative attitude to polycentricity.

Due to pressures from lobbying cities, the 1997 National Planning Report announced that four urban circles were interested in becoming national (polycentric) centres (Miljø & Energiministeriet 1997). Further, it was announced that the government was positive to the idea and referred foreign examples, e.g. to the cooperation in the MHAL project. The concept of polycentricity was mentioned in the report (p. 13).

Finally, the next National Planning Report, announced that two national centres, the Mid-West and the Triangle Region Denmark, were accepted as the first polycentric national centres in the Danish national urban system (Miljø & Energiministeriet 2000).

The new national urban system, which now includes polycentric national centres, including some polycentric regional centres, is shown in Figure 5.

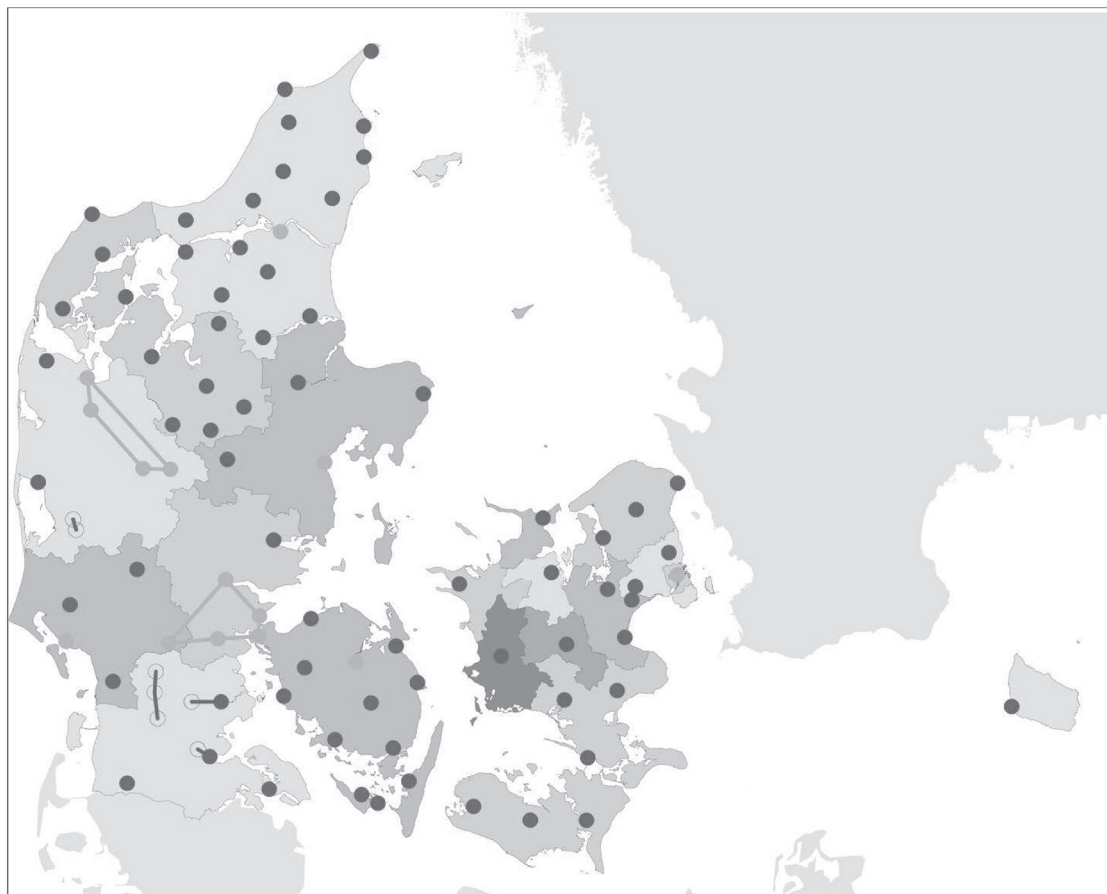


Figure 5: Regional centres (*Egnscentre*) 2003.

For the first time, polycentric centres were accepted by the government. National centres are shown by the lighter colour. The Mid-West (upper) and the Triangle Region (lower) are shown by light lines connecting the cities involved in each of the two polycentric centres (Miljøministeriet 2003).

2.3 The 2007 municipal reform

Based upon a decision in the parliament in 2005, an administrative reform was implemented in January 2007. The number of municipalities was reduced from 275 to 98. The 14 counties were replaced by 5 'regions'. Some aspects of the mergers had compulsory principles behind them. However, the mergers were made largely by voluntary, bottom-up processes. It would have been expected that mergers between municipalities involved in the two national polycentric centres would take place. However, none of the cities involved (even those very close to each other) merged. The Mid-West region closed down its secretariat, and the polycentre-cooperation was set on 'stand by'. The Triangle Region continued and is still in operation.

2.3.1 Urban systems on stand-by

The governmental focus on political polycentricity changed during the same period, along with a complete shift of the national urban system paradigm. Due to a considerable increase in daily commuting, cities were woven together in overlapping labor, retail and housing markets. Thus,

cities formerly considered as centres of a local functional hinterland became functional hinterlands of neighbouring cities, and vice versa. The situation was illustrated by investigations of commuting areas, made by the national planning agency (Nielsen 2001). The study revealed that due to increasing commuting, the number of commuting areas had diminished from 45 in 1992 to 34 in 2000, to 27 in 2004.

If cities are no longer centres of their own hinterland, it becomes increasingly difficult to define their role in the urban hierarchy. Rather than centres, they have become neighbours in joint overlapping hinterlands, competing for customers, labor and incoming families looking for housing. A graphic representation of the close connections between cities is shown in Figure 6.

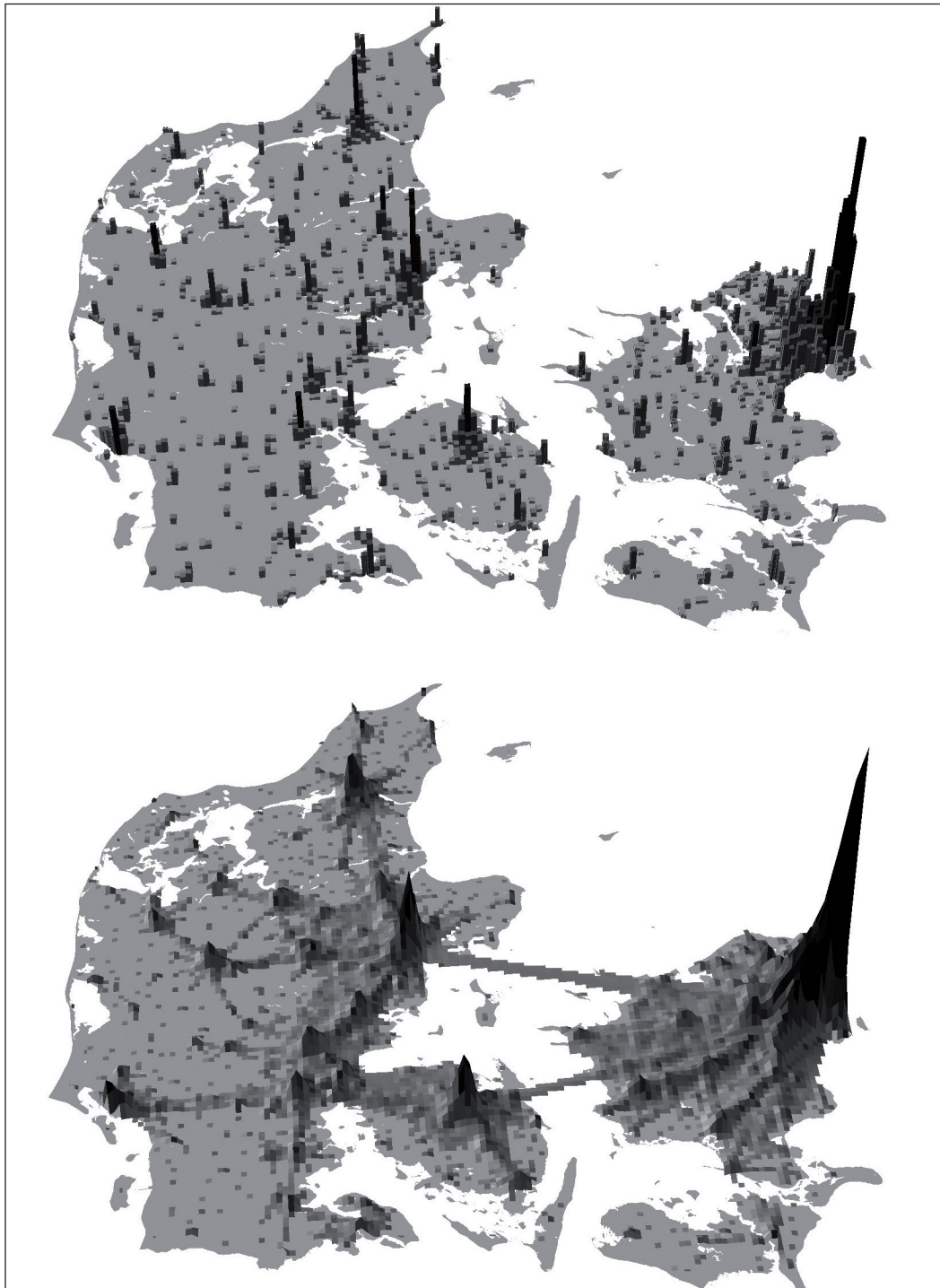


Figure 6: Geography of people and flows in Denmark.

Figure 6 displays human densities by 2 x 2 km grid cells. Cities appear as clusters of columns. The lower map shows the flows of commuters in each grid cell situated in the airline connections between home and work-zones (Miljøministeriet 2006). In each cell, the flow values are indicated by the number of commuters passing through the cell, starting or ending in the cell. See Nielsen and Hovgesen (2005) for a full explanation of the methodology.

It appears that commuting is most prevalent in East Jutland and the Greater Copenhagen region and Zealand. These two commuting clusters correspond to the two major regions of economic growth in Denmark. Further, the clustering of commuting has made the ranking of cities as centres in urban systems less relevant. Accordingly, the government decided to abandon the urban system as a planning instrument. Instead, focus was placed on regions: two major metropolitan growth regions, intermediary regions hosting some larger cities and peripheral regions, as shown in Figure 7.

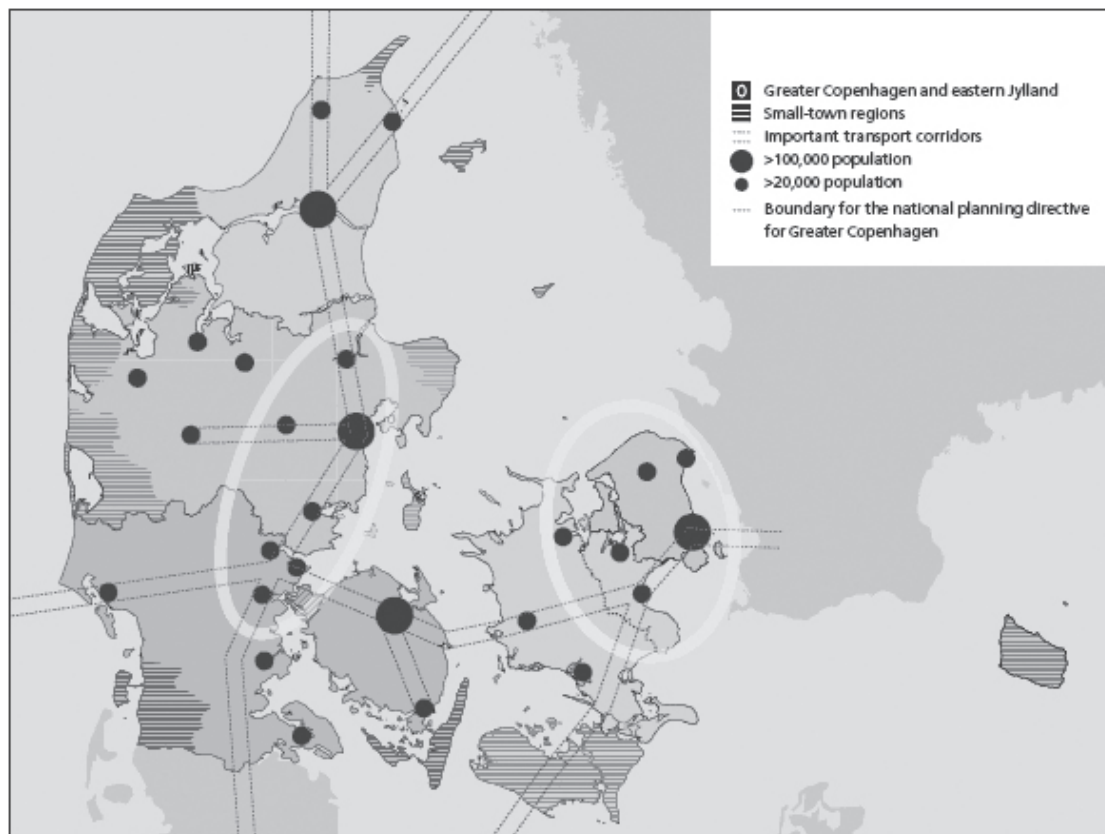


Figure 7: Administrative regions – growth and peripheral regions in Denmark.

Against the background of the five new administrative regions in Denmark, the map emphasizes two kinds of economic regions, i.e. the two growth regions (Greater Copenhagen and eastern Jutland) and small-town (peripheral) regions. In between we find regions with medium-sized and large towns. Added to the map are two dotted ellipses indicating the two polycentric regions, Mid-West (upper left) and the Triangle Region (lower right). Source: National planning report 2006 (Danish Ministry of the Environment 2006:15).

2.4 Polycentric national centres in the new mapping of Denmark

Figure 7 shows the position of the two former polycentric national centres in the new Danish geography. The two centres are situated quite differently. The Mid-West region is situated outside

the national growth regions whereas the Triangle Region is part of the eastern Jutland growth region. These two different situations reflect two different characteristics of polycentricity. The Triangle Region is part of a metropolitan polycentricity developing from the increasing commuting in the eastern Jutland region. Political cooperation takes place on a backdrop of functional polycentricity. It focuses on win-win situations, i.e. on strategies and projects that are of common interest to all the participating municipalities. The idea of intentionally developing complementary functions has appeared to be difficult to implement. This became obvious during the efforts to build a common multi-functional arena in the Triangle Region. At the very meeting arranged for signing the construction agreement, one of the municipalities declared that it had decided to withdraw from the project and build its own sports arena, rather than being part of the common project, which was going to be located in the neighbouring municipality.

Balancing common and individual policies and projects is crucial in polycentric cooperation. This could be further illustrated by the ongoing municipal planning process. Just after the municipal reform, the Danish municipalities were legally obliged to provide new spatial municipal plans. The planning process begins by publicizing a strategy for the development of the municipality. The municipalities in the Triangle Region decided to work closely together on common background studies and overarching goals. Thus, they decided to elaborate a common planning strategy for all the municipalities in the Triangle cooperation and thus a strategy document was produced. During the process, however, most of the municipalities also elaborated supplementary individual planning strategies, with a focus on the individual municipality's growth and containing more concrete project proposals for the future. Thus, it seems as if the municipalities are profiting from the critical mass obtained by acting jointly rather than from the complementary division of labor. Outwardly the municipalities stick together in strategies towards the outside world facilitated by the strong Triangle Region brand. At the same time, however, they are competing with each other.

As mentioned earlier, The Mid-West cooperation did not make progress and was set on stand by. Accordingly, the municipalities did not follow the example of the Triangle Region in terms of cooperating on municipal planning. On the contrary, the largest city of the region, Herning, formed its own planning strategy announcing that the city of Herning should be taken as the development locomotive of the region. According to the ideas of the ESPD and the research produced by ESPON, the fact that the Mid-West national centre is located outside the national economic growth regions should encourage cooperation for organising polycentric common actions based upon complementary assets. However, as with the Triangle Region, the Mid-West region also experienced difficulties in building a division of labor between the municipalities. In the Mid-West, a prime example was the siting of a new regional hospital. The two largest municipalities, Herning and Holstebro, entered into a fierce rivalry to have the hospital placed in their town. In other fields, however, local cooperation between actors and institutions in different municipalities is taking place, such as in the areas of business policy, branch-cooperation, education and culture. Typically, this kind of cooperation takes its point of departure in a specific project or strategy. The partners are those most relevant or interested in the project or strategy, whether they are local or distantly located outside the region. This kind of networking, in which the partners are defined by the project or strategy, differs from polycentric networking, in which fixed partnerships are taken as the point of departure for defining the relevant projects and strategies (Groth & Smidt-Jensen 2007).

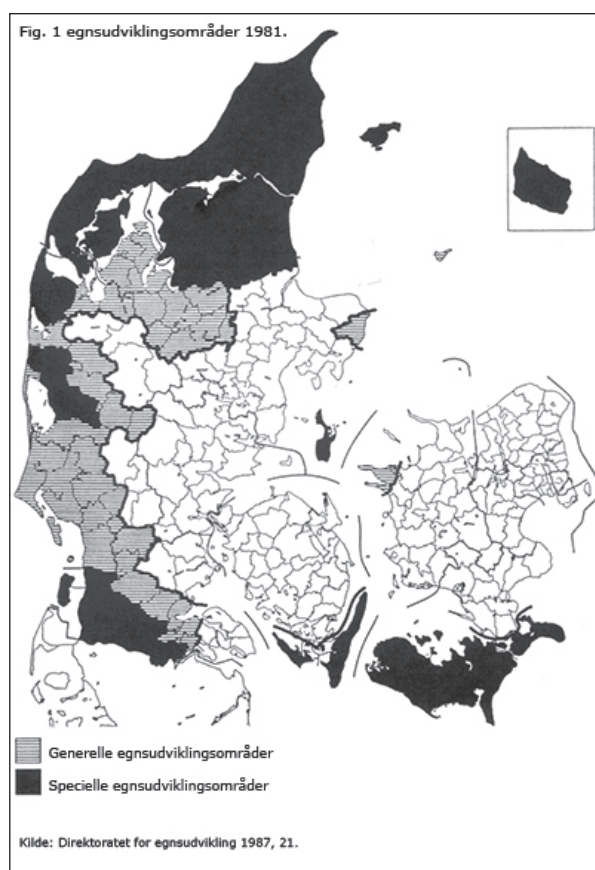
2.5 Policies as a driver for national, regional, local development in Denmark

Since 1995, the role of policies as drivers of spatial development has been regularly reported in governmental Regional Statements on regional policies in Denmark. The statements include the effects of policies for spatial development (e.g. spatial planning and regional policy programmes) as well as unintended spatial impacts of sector policies (e.g., education and public services). Based

upon the 1995 regional statement (Erhvervsministeriet 1995) and a review of regional policy by Halkier (2009), we shall present an overview on how regional and spatial policy has developed in Denmark.

2.5.1 Urban growth, peripheries and planning reform: 1958-1980

From the end of the Second World War until the oil crisis in 1974, Denmark, like many other West European countries, experienced urban and economic growth, with the exception of certain peripheral regions that suffered from unemployment. To deal with the problems of the peripheral regions, a law on regional development was passed in 1958. The aim of the law was to facilitate a more evenly distributed employment, and the key instruments were subsidies for project development and productive investments directly or indirectly given to private companies.



*Figure 8: Regions selected for regional development aid, 1981.
Source: Direktorat for Egsudvikling 1981:21 (Halkier 2009).*

All of the territories are situated far from Copenhagen, forming a banana-shaped figure from the northernmost point of Denmark down the west coast to the southern islands.

The law was administered in a top-down manner such that territories eligible for regional assistance were selected by the government. From then on, the governmental agency needed only to approve applications from private companies seeking subsidies for investments in these regions. Figure 8 shows those territories selected as eligible for funding in 1981.

In 1970, the first administrative municipal reform took place, followed by a planning reform, both of which greatly influenced spatial development in Denmark. As explained earlier, the development of cities appointed as municipal centres in the new larger municipalities was enhanced. Further, the municipalities and the new counties were made responsible for a number of planning duties, and

they were empowered to set up new development programmes, plans and strategies. All the new planning instruments were developed during times of urban expansion. Hence, the instruments focused on regulation of urban growth. The instruments, however, were not suited for stimulation of urban growth, which soon became the core issue in the wake of the 1974 oil crisis.

The introduction of EU's regional fund in 1975 had only limited effect on spatial and regional policies in Denmark. Most EU regional funds went to Greenland. After 1985, when Greenland left the EU, the EU regional funds became quite influential in southern Denmark.

2.5.2 From peripheries to regional development: 1980–1992

As a consequence of the general slowdown in urban development following the oil crisis, the need for development initiatives outside the periphery became visible. Thus, beginning in the late 1970s, many municipalities outside the peripheries set up local business boards and agencies, and new proactive tools were used to form municipal business policies, e.g. environment centres, design centres, business parks, transport centres, science parks, event centres and business incubator houses. After 1985, many of these activities were financed by the EU regional funds (Erhvervsministeriet 1995 :18).

The program and partnership principle, introduced in 1984 by the EU, greatly influenced Danish regional policy.

In the late 1980s, two areas were selected under the 'Objective 2' provisions of the EU program. Both areas were labor hinterlands of two former shipyards, in Nakskov and Aalborg. The shipyards closed down in 1986 and 1988, respectively. In addition, 33 islands were declared eligible under the 'Objective 5b' provisions. In 1994-1999, Aalborg and Nakskov are still in the centre of the two Danish 'Objective 2' areas. In Figure 9, Aalborg is situated in the centre of the northernmost blue area and Nakskov is situated in the westernmost part of the southern blue area. 'Objective 5b' areas were expanded and no longer restricted to islands. Additional Community Initiatives - on cross border, transnational and interregional cooperation, rural development, labor market programs and development of inner city and deprived urban areas - broadened the spatial policies and expanded the territories eligible for EU funding (light grey areas in figure 9).

At the very end of the 1980s, the new trends of turning spatial policies from assisting peripheral areas to regional development in general was marked by the revitalisation strategy of Copenhagen. Copenhagen was the centre of development in Denmark. From the late 1970s, however, Copenhagen began to suffer from deindustrialisation and a decline in economic activity. The situation became quite critical. Therefore, in 1988 the government formed a task force to devise a strategy for the revitalising Copenhagen's economy and its international competitiveness (Initiativgruppen om hovedstadsregionen 1989; Initiativgruppen om hovedstadsregionen 1989). The recommendations of this task force were followed up by yet another task force focusing upon infrastructure investments and the development of the Ørestad southeast Copenhagen (Udvalget om Hovedstadsrådets Trafikinvesteringer 1991). Supported by a general shift in economic development in the 1990s, the plans were carried out with great success. Also, a shift of paradigm had taken place. Thus, it was made explicit by the government and generally accepted that former reallocation policies (i.e. from East to West Denmark) would be replaced by a national growth pole policy based on the principle that the development of Copenhagen is crucial for the development of the entire country. The slogan became: 'What is good for Copenhagen, is good for the country.'

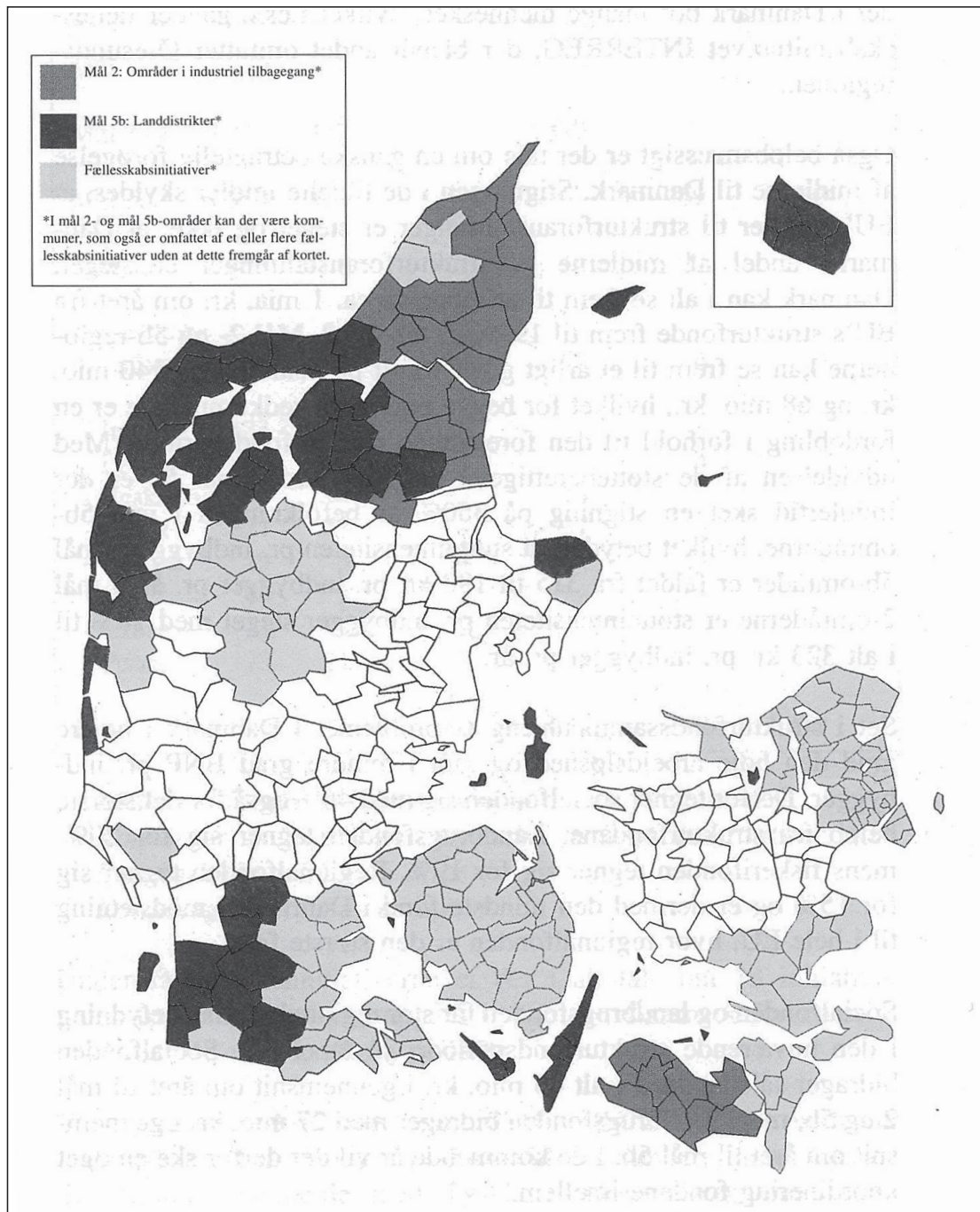


Figure 9: Objective 2 areas, Objective 5b areas and areas of community initiatives in Denmark 1994-1996/1999.

Dark grey: Objective 5b, grey: Objective 2, light grey: community initiatives.

Source: (Erhvervsministeriet 1995 p. 129)

The time was ripe for further changes of the policy instruments. The Regional Development Act from 1958 (Egnsudviklingsloven) was repealed and replaced by the Act on Business Development (lov om erhvervsfremme) in 1990. The act facilitated national co-financing of EU projects. Direct economic subsidies to private, often sunset companies were replaced by investments and soft strategies to improve framework conditions of business development. It was acknowledged that the EU structural funds had entered the scene (Halkier 2009 p. 3/7)). In 1992, city and county councils were allowed to take limited part in business development activities and to form partnerships with shareholder companies.

The focus on local strategies in regional policies and business policies was further emphasized in spatial planning. As mentioned above, the National Planning Report 1992 (Miljøministeriet 1992a) included SWOT analysis of the Danish towns and cities, the idea of which was to encourage local authorities to form bottom-up strategies on local urban assets in order to enhance the international competitiveness of the cities (Miljøministeriet 1992b). A SWOT analysis of the Øresundsregion was included, thus following up the revitalisation initiatives of Copenhagen that had recently been made public (Miljøministeriet 1992c).

The introduction of such instruments reveals a complete shift from the former reactive top-down-response-on-applications-for-subsidies to proactive bottom-up strategies based upon a diversity of measures, many of which consisted of networking, cooperation and other 'soft' measures. Further, the overall goal shifted from even-handed regional development to the enhancement of the competitiveness of regions, cities and companies based upon local strengths and development assets.

2.5.3 Regional competitiveness: 1993-2001

The idea of competitiveness was developed further during the next decade. In 1993, the Conservative government was replaced by a Social Democratic government. In the 1995 Regional Statement, the government introduced the idea of emphasizing the role of regional development in the overall national economic development (Erhvervsministeriet 1995 p. 7). Further, the concept 'resource-groupings', closely connected with clusters was introduced by the Business Development Council in 1994 (Erhvervsudviklingsrådet 1994) and the national statistical bureau, Statistics Denmark introduced a set of cluster statistics, based upon the eight resource-groups⁹. The concept was used as analytical background for promoting regional endogenous development based upon unique competencies of each region. Thus, the Ministry of Business Affairs issued several reports dealing with the potentials and policies on regional clusters; see Erhvervsministeriet (1996) (1997a) (1997b) (2000a) and (2000b) and Erhvervs- og Boligstyrelsen (2001). For almost a decade, the idea of basing national growth on the development of regional clusters was emphasized by the government.

The idea of enhancing regional endogenous development was followed-up by the national planning reports. The national planning report, entitled Local Identity and New Challenges (Miljø & Energiministeriet 2000), presented a planning strategy based upon unique regional assets.

2.5.4 National, regional and local policies: 2001-2009

In 2001, a new liberal-conservative government came into office. The idea of boosting national economic development using regional development strategies gave way to a strategic focus on national rather than regional competencies. Thus, high-tech industries, medical/pharmaceuticals and IT were supported, even though many of these industries were localized in the two growth regions, Copenhagen and Århus. Still, cluster development was on the agenda (Erhvervs- og Boligstyrelsen 2003), but it was now called into question by the Economic Council (Det økonomiske råds formandsskab 2003). In the Regional Development Strategy 2003 (den regionale vækststrategi), the government stated that first priority was to insure the general conditions for growth in the entire country rather than extending a safety net under all the regions of the country. The strategy was followed up by allocation of investments that were supposed to enhance the competitiveness of the country as a modern IT- and knowledge society. Such investments would be directed toward the largest cities. Acknowledging that some regions might be left behind, the government suggested that peripheral regions in greatest need should be offered special aid (Regeringen 2003 p. 56). The national planning report of the same year launched three so-called 'dialogue projects' focusing on the peripheral areas (Miljøministeriet 2003 p. 19). The government clearly notified that its

⁹ The eight resource groupings were formed by conglomerates of interrelated branches: food products, consumer goods/leisure, building/housing, communication, transport/technical supply, medico/health, general services. (Danmarks Statistik 1997).

shift towards a national rather than regionally based development policy was a 'reversal of policy' (Regeringen 2003 p. 8).

It was difficult, however, to fully implement this turnaround. With the municipal reform of 2007, it seems as if regional bottom-up policies were given yet another chance. Halkier (2009) stresses that the second most important task of the five new regions (second only to running regional hospitals) was the new regional development strategies. A first impression of the endeavours was given by the 2008 Growth Statement of Regional Policy (Regeringen 2008). The statement clearly shows that the Copenhagen region is taking the lion's share of several economic growth indicators. However, the statement also reports regional growth indicators showing a diversity of regional development opportunities followed-up by a corresponding diversity in regional development strategies. These regional development strategies are still very new. Whether they will succeed depends on the ability of the new regional 'development forums' to implement the strategies in cooperation with the numerous partners involved.

Another reason why it is unlikely that national top-down strategies will gain the upper hand in spatial planning is that most executive powers in spatial planning have been in the hands of the municipalities since the planning reform in 1970s. The municipalities have shown an ability to transform regulatory spatial planning into more active development strategies in order to match the problems of re-industrialisation following the international division of labor that took pace in the 1990s and the challenges and opportunities following from the regional integration of local labor and housing markets.

2.6 Policies as drivers of spatial development

In historical perspective, it is easy to describe intentional spatial policies. More difficult, however, is to address the question of whether they have been the drivers of spatial development. Do spatial policies create or simply reflect development trends? In the above mentioned case of revitalisation of Copenhagen, the policy succeeded: The urban subway line (the Metro), the Øresund Bridge and other traffic investments were successively executed and large parts of the new Ørestad zone were planned and constructed. Thus, it seems, as policies were the drivers. As mentioned earlier, the successes were greatly facilitated by shifts in production (i.e. the growth of a knowledge- and high-tech based economy), an artificially boosted housing market and the needs of corporations and companies to cluster in the capital city. Rather than just being the drivers, the construction of an entire new urban zone in the Ørestad and the infrastructure investments happened to work in concert with, and hence sustaining, new economic trends.

The question of policies as drivers brings up the issue of long-term investments in the main national infrastructure, known as 'the big H' (which describes the shape of Denmark). Back in the 1930s, the first ideas of a national infrastructure based upon motorways were put forth by three engineering companies. However, it was not until the steep increase in car ownership and goods transport, in the 1960s, that a national plan for infrastructure was proposed. The plan was named "the big H" (see figure 10) The plan initiated a fierce debate on the spatial impact of infrastructure investments. Should the motorway through Jutland be located in the eastern part in order to facilitate the coastal cities, or should it be built closer to the middle of the peninsula in order to generate urbanization in the more remote areas? The motorway was eventually constructed close to the existing cities; the strategy of using the motorway as a proactive driver of spatial development was not followed. However, infrastructure has been quite influential in the development of the band of east Jutland towns (Figure 7 and 10 lower right). The national infrastructure sustained the position and quality of the Triangle Region as a traffic hub linking both east-west and north-south traffic. It is most likely that this favourable geographical position has contributed to the development of several clusters in the region. Thus, companies within five national clusters have settled down in the Triangle Region, and two regional clusters have developed.



Figure 10: The 'big H'.

In 1936, the structure for a future national highway system was proposed by three engineering companies. The plan included bridges between Zealand, Funen and Jutland, a bridge to Sweden and ferry connections with Norway and Germany. Although viewed as utopian in 1936, the structural principle – the Danish transport network as a giant 'H' – survived and became a leading principle for the national road and rail system. The motorway system was completed in 2007, and in 2008 the infrastructure commission confirmed that the big H should prevail as the backbone of the national road and rail system, to which other regions should adapt and which should be part of the development of the urban system. Source: Upper left (Christiani & Nielsen et al 1936) upper and lower right: (Infrastrukturkommissionen 2008).

What characterizes the above-mentioned cases of revitalisation of Copenhagen and the impacts of the 'big H' are close inter-linkages between policies and trends, rather than spatial development driven simply by policies.

We would like to illustrate the interplay between policies and trends by yet another example of local spatial policies. When the fall of the Iron Curtain gave access to cheap labor in Eastern Europe, Herning's textile cluster managed to stay competitive by outsourcing and replacing manufacturing processes with an emphasis on design and marketing. 95% of the unemployed workers were re-trained and re-employed in other branches, and the local textile industry continued to develop, as the local firms had the capacity to enter into international value chains of production, design and trade.

The success of Herning was due to the ability of business leaders and politicians to quickly grasp opportunities, to 'hit the ball in the air'. At an early stage, the business leaders understood the impacts of the political transition in East Europe and were capable to respond and, hence, profit

from the new international economic division of labor. They were not the drivers. They were just skilled 'adapters'.

2.7 Conclusions

In this brief overview of Danish policies as drivers on spatial development, we have concentrated upon the national regional policies and the interplay between national, EU and local policies.

Danish regional policies have moved from national assistance to peripheral regions, who were passive recipients of government aid, toward active interplay between regions, the state and EU on program-based and negotiated (partnership principle) policies. These changes in policy can be traced to three factors: (1) the programme and partnership principles introduced by the EU in the 1980s, (2) the national shift from subsidising companies to a more diversified effort to improve the frameworks for regional business development, and (3) a change in attitude by local and regional authorities – confronted by economic slowdown in the 1970s and 1980s -- from regulatory planning to strategic development strategies. During these changes, the overall agenda turned from poor regions seeking passive assistance within a national arena to a focus on enhancing local and regional competitiveness in an international arena.

Within this overall development of the regional policy, there have been varying emphases placed on national versus regional strengths. In the 1990s, the Social Democratic government emphasized the importance of regional endogenous growth, the sum of which should be for the benefit of the country. When the Liberal-Conservative coalition government came into office in 2001, a new agenda was declared, and development policies shifted towards branches considered to be of national importance. Along with this policy, regional assistance to the poorest, usually peripheral, regions was revived. The shift in 2001 was not a total shift due to the regional strategies formed by the new regional development 'growth forums'. These forums reflected a faith in development based upon identifying and optimizing regional endowments.

Whether policies are drivers of spatial development is difficult to answer, simply because policies work in concert with more 'spontaneous' trends in economy, business cycles and demographic shifts. It goes without saying that the many initiatives to construct business parks, invest in education, establish knowledge institutions, improve labor market institutions, make infrastructure investments and organise business centres have had important impacts on spatial development. However, we have refrained from making any specific evaluations of the impacts. Instead, a few examples of the interplay between policies and trends have been discussed, i.e. the revitalisation of the Copenhagen region, the investments in the national infrastructure and the restructuring strategies in the Danish municipality of Herning. These examples show that policies can play a key role as drivers of spatial development, especially when the policy-makers are capable of identifying opportunities and matching these with existing policy networks.

Finally, it should be mentioned that polycentricity, the key concept of this report, seems to have played only a minor role from a broad policy perspective. Networking on programs and projects seem to be more relevant than networking within territories.

3. Country study: Finland

3.1 Introduction

This report analyses the application of the concept of polycentricity in Finland in light of the existing spatial structures and current administrative reforms. In section 2, we briefly present some basic features of the Finnish spatial structure and review conceptualizations and analytical depictions of the Finnish spatial structure over the last decades. Concerning the latter, the main issue relates to a discursive and analytic shift away from the welfare-policy -inspired hierarchical conception of the Finnish spatial structure towards the notion of a networked space that is based on functional urban regions as nodes and engines for spacio-economic development. In section 3, it is examined whether and how Finnish regional policy has striven to support the development of a networked spatial structure. In addition, the aim is to clarify how changes in regional and municipal administrative structures interact with the afore-mentioned spatial policy strategies. Section 4 discusses main findings and draws conclusions.

3.2 New development trends in urban systems

The development of the Finnish spatial structure has been characterized by a strong trend towards increasing urbanization during the last decades. Although the degree of urbanization in Finland is still lower than in many other European countries, the share of the population living in the largest cities, particularly the metropolitan region of Helsinki, has grown significantly. This is illustrated by the fact that the population share of the six largest city regions has exceeded 45 per cent and around 80 percent of the total Finnish population live in the 30 largest city regions¹⁰. Table 2 shows the population development of the largest urban regions within the Finnish (functional) urban system from 1990 to 2004.

Table 2: Population Numbers for the seven Largest Finnish Functional Urban Areas (absolute numbers and indexed to 1990 in parentheses).

	1990	1998	2004
Helsinki	1 044 309 (100)	1 171 596(112)	1 240 000 (119)
Tampere	264 101 (100)	287 189 (109)	316 000 (120)
Turku	259 414 (100)	278 844 (107)	290 500 (112)
Oulu	148 519 (100)	168 548 (113)	203 000 (137)
Lahti	151 105 (100)	153 909 (102)	163 500 (108)
Jyväskylä	121 106 (100)	132 761 (110)	157 000 (130)
Finland	4 998 478 (100)	5 159 646 (103)	5 236 611(105)

Sources: Committee for Urban Policy (1999), OECD (2005)

Policy debates on changes in the Finnish spatial structure have primarily focused on the following two main issues. Firstly, urban sprawl in the surroundings of urban centres (European Environment Agency 2006) has been argued to be in conflict with eco-efficient and sustainable

¹⁰ City regions refer to functional urban regions which are delineated on the basis of commuting areas (and usually also comprise rural municipalities).

urban infrastructure development¹¹. Secondly, the continuing drift to the cities is seen to lead to a thinning-out of permanent habitation in rural and remote parts of the country. However, despite this increasingly polarized spatial structure, Finland remains relatively evenly populated as compared to, for example, Sweden. There are medium-sized cities in most parts of the country; the exception being the northernmost areas.

In terms of population size, the characteristics of the Finnish urban system can be illustrated by using the rank-size rule applied to urban systems by Zipf (Zipf 1949). According to Zipf's Law there tends to be a relationship between the rank and size of cities. When cities are ordered by population size, regressing the logarithm of their size on the logarithm of their rank yields a straight line with a slope coefficient close to -1. This relationship holds well for the spatial organization in most countries, although the theoretical base of this empirical regularity is quite limited. In Figure 11 the rank size distribution of settlements in Finland is presented. Here the urban hierarchy represents the top 217 densely and contiguously populated areas with a population more than 2000 inhabitants in year 2000.

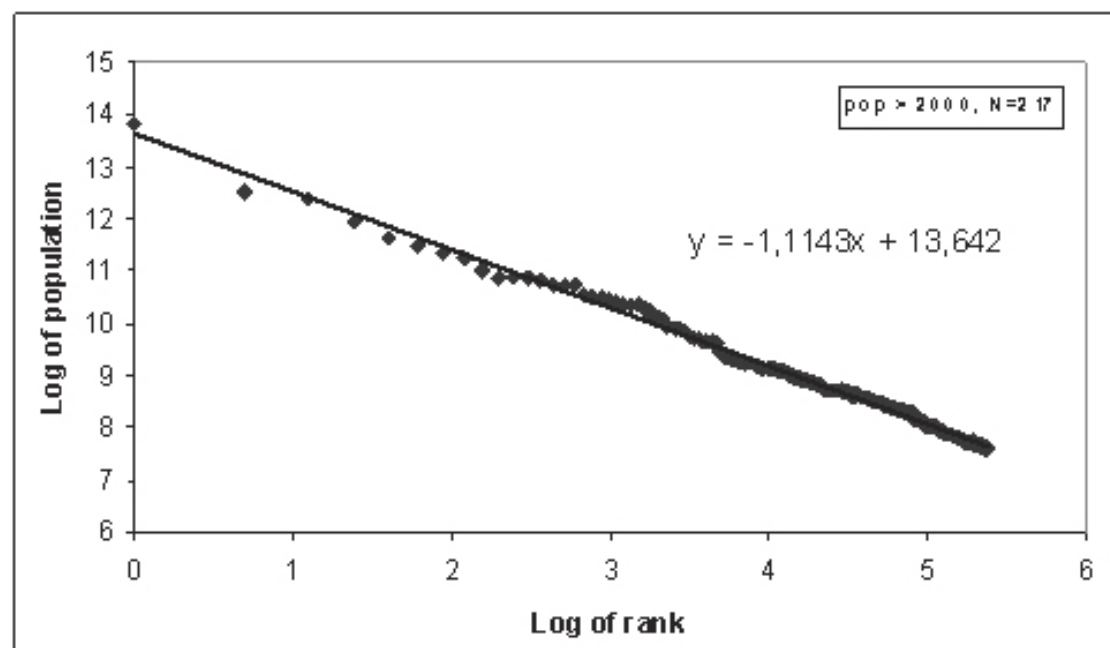


Figure 11: The rank-size rule in Finland, densely populated areas (with more than 2000 inhabitants in 2000).

Data source: Statistics Finland 2003.

As a whole, the Finnish urban system is in line with the rank size rule. The main deviation concerns the ten largest urban settlements, with the exception of the capital city Helsinki, which appear to be smaller than the rank size distribution would predict¹². This relates to the fact that, with the obvious exception of Helsinki, the larger Finnish urban centres are relatively similar in size, owing to their similar function within the welfare state as regional and municipal centres that acted as administrative and service capitals for their surrounding hinterlands. Thus, the fact that

11 In 1980, the area covered by the 33 largest settlements (calculated on the basis of 'densely, contiguously populated areas' as defined by Statistics Finland) was 1914 square kilometers. By the year 2000, this area had grown by almost 50% to 2798 square kilometers. Of these densely populated settlements, 22 had a higher population density than 1000 inhabitants per square kilometer. This number decreased to 10 in the year 2000. (Ristimäki et al. 2003)

12 Yet this observation is affected by the properties of the rank size regression technique. Due to the skewness of city size distributions, the slope coefficient is sensitive to the sample size. In the Finnish case, the slope tends to become flatter as (numerous) small settlements are excluded from the data set. And, as can be seen in the Figure 1, the flattening of the curve also implies an increase in the primacy of Helsinki.

Finnish regional capitals are of such similar size relates to their homogenous urban functions¹³. While the rank-size rule is a simple diagnostic tool with a primary goal of illustrating hierarchical patterns of urban systems, it is closely related to theories of how cities interact as functional systems of central places. In Finland, this approach (derived from the classic contributions by Walter Christaller 1936 and August Lösch 1940) has had a long tradition, both within academics, in delineating the market areas of centres at different levels, and among policy-makers and planners, as a framework for regional development policy and a strategic planning tool (for the key studies, see Liiket aloustieteellinen tutkimuslaitos 1967; Palomäki & Mikkonen 1972). Within this analytic setting, the growth dynamics in Finnish urban centres were seen to result from their competition for roles in the production and provision of goods and services.

This hierarchical conceptualization of the urban system was actively applied in central administration and regional planning until the 1990s, and it also played a role in locational decisions made within the private sector. In addition, municipalities tried to upgrade services which were critical for their hierarchical roles. However, the deep recession in the early 1990s followed by rapid recovery, EU membership in 1995, and the initiation of the debate on globalization, created a momentum for the shift in Finnish regional policy. The delineation of hierarchical systems of settlements and their spheres of influence lost its dominant position in the 1990s both in academic research and policy discussions. Given the fact that changes in urban systems are by their very nature relatively slow, this paradigmatic and doctrinal shift did not derive primarily from an observed turn in urban development patterns. Rather, it was supported by the argument that changes in regional development in the 1980s and onwards worked in several different directions, resulting in growth dynamics that tended to become increasingly multilayered rather than hierarchical. The policy thinking during this time also resulted in an increased interest in potential networks and development corridors in a country equipped with a thin and scattered settlement pattern.

The research line that led to the new of conceptualisation of the Finnish urban system was initiated in the mid-1990s. In the publication “Urban Networks - Development of a Description System for National and International Needs”, commissioned by the Ministry of the Environment, Perttu Vartiainen suggested a method for so-called urban network studies (Vartiainen 1995). It is based on the following principles:

1. Cities are seen as functional urban areas (FUA).
2. The national urban network is studied in relation to its international development factors.
3. Functional urban areas are examined on the basis of their economic potential rather than their service infrastructure – emphasising their roles as centres of expertise and governance.
4. The integration of an urban network is investigated more broadly than only on the basis of the principle of hierarchy, including networking activities (division of labor and co-operation) of individual cities (or rather the organisations and actors active within them).
5. An urban network is analysed on the basis of its role as a living environment, and also in relation to the social and physical environment (Vartiainen 1995:18; translation by the authors).

The typology based on the above principles was empirically tested in 1995 and applied at full-scale in the urban network study of 1998 (Antikainen & Vartiainen 1999). The original methodological report (Vartiainen 1995), as well as its subsequent applications (Antikainen 2001, Antikainen et al. 2006), illustrate that this line of research has been well-informed about concurrently developing international (European) research traditions/methodologies and policy-initiatives that led to the publication of the European Spatial Development Perspective (ESDP) and the follow-up ESPON research programme. Generally, the research line of Finnish urban network studies can be seen as a pioneering national variant of applied research that has been triggered by the ESDP process.

13 See Garmestani et al. (2007) on the clustering of cities into size classes.

The research discourse on the Finnish urban structure has evolved largely in parallel with the policy orientation initiated in the 1990s. The series of urban network studies has been undertaken to provide Finnish urban policy with an evidence base to which policy decisions can be related¹⁴. The 2006 version of the urban network study identifies 41 urban regions, and classifies them into five main types. These depict the overall significance of urban regions according to their diversification and functional specialization (see Figure 12).

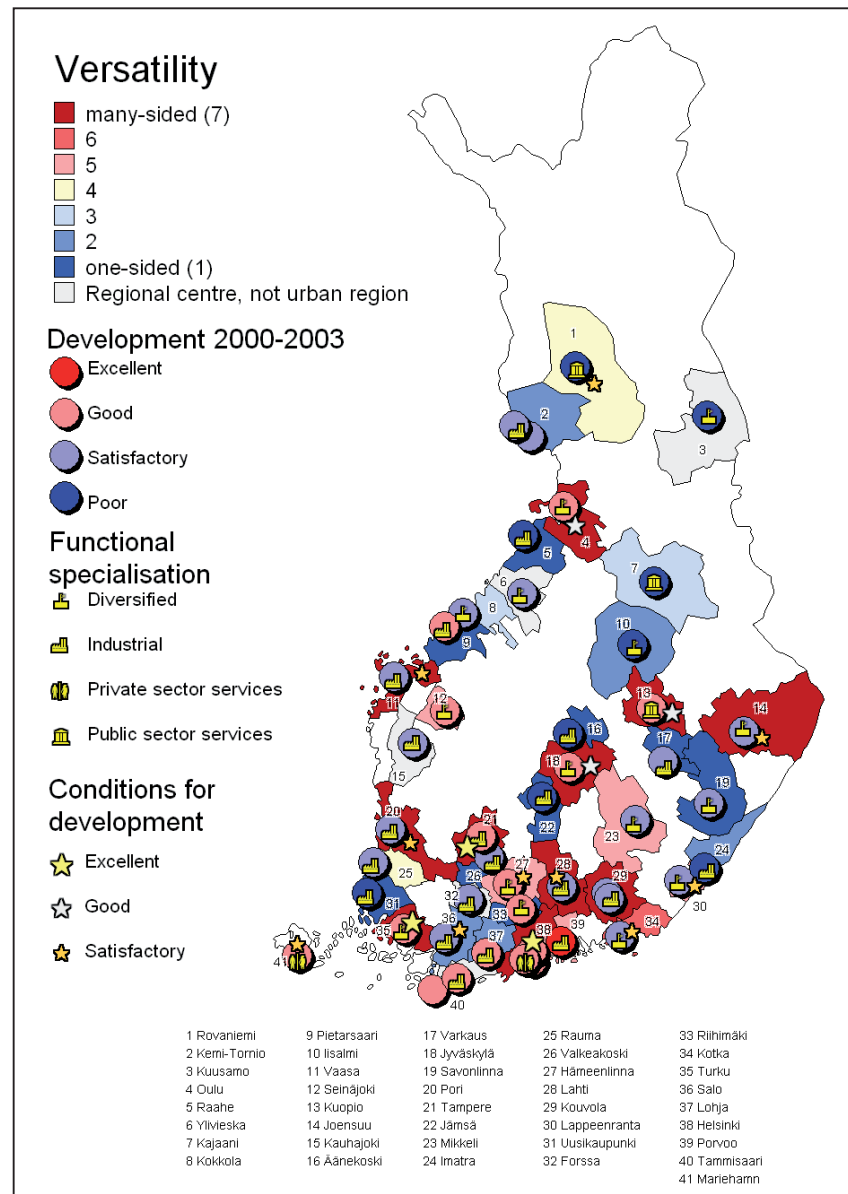


Figure 1. Urban network in Finland 2003 (Ministry of the Interior 2006).

14 Yet the earlier conceptualisation has not ceased to exist. For instance, Wuori and Mikkonen (2007) follow it in their forecast of the evolution of the Finnish system of central places for the period of 2005–2040. The analysis is based on the market potential of centres of different size, which is estimated by the volume of retail trade and the number of establishments in the service sector. The analysis results in the division of functional labor market regions (seutukunta) into five functional types. While the estimation period is long, the results are not very striking, but the evolution of an urban system is seen as a slow process. At the top of the hierarchy, the central position of the Helsinki region is predicted to stay strong and even strengthen in the future. The second-order city regions include Tampere, Turku and Oulu, in which Turku is having the smallest service area, and Tampere the fastest estimated growth. At the third-order level, the urban regions of Jyväskylä, Lahti, Pori, Kuopio and Joensuu are identified. The model gives estimates for a slight growth for Jyväskylä and Lahti, but a minor decline for the three others. The mapping of the fourth- and fifth-order level does not differ much from the present territorial divisions of regions (maakunta) and labor market regions (seutukunta). The numbers of respective functional urban regions are 22 and 50, and only a few of these smallest regions are expected to experience growth for the period of 2005–2040. (Ibid., 75–76)

The first Urban Network Study, carried out in 1998, was commissioned by the first national Committee for Urban Policy, and thus its focus – as also that of its later versions – was confined to the urban space. In the context of rural development, very different descriptive tools, and policy approaches (so-called national rural programmes, see Vihinen 2007) have been developed since the early 1990s. Rural areas have been classified into three groups: (1) rural municipalities close to urban areas (cities and towns) (2) core rural municipalities, and (3) isolated/sparsely populated rural municipalities. According to the most recent follow-up study of this classification, these cover more than 40 per cent of the population and around 94 per cent of the country's land area. (Malinen et al. 2006). This alternative mapping of the Finnish spatial structure is presented in Figure 13.

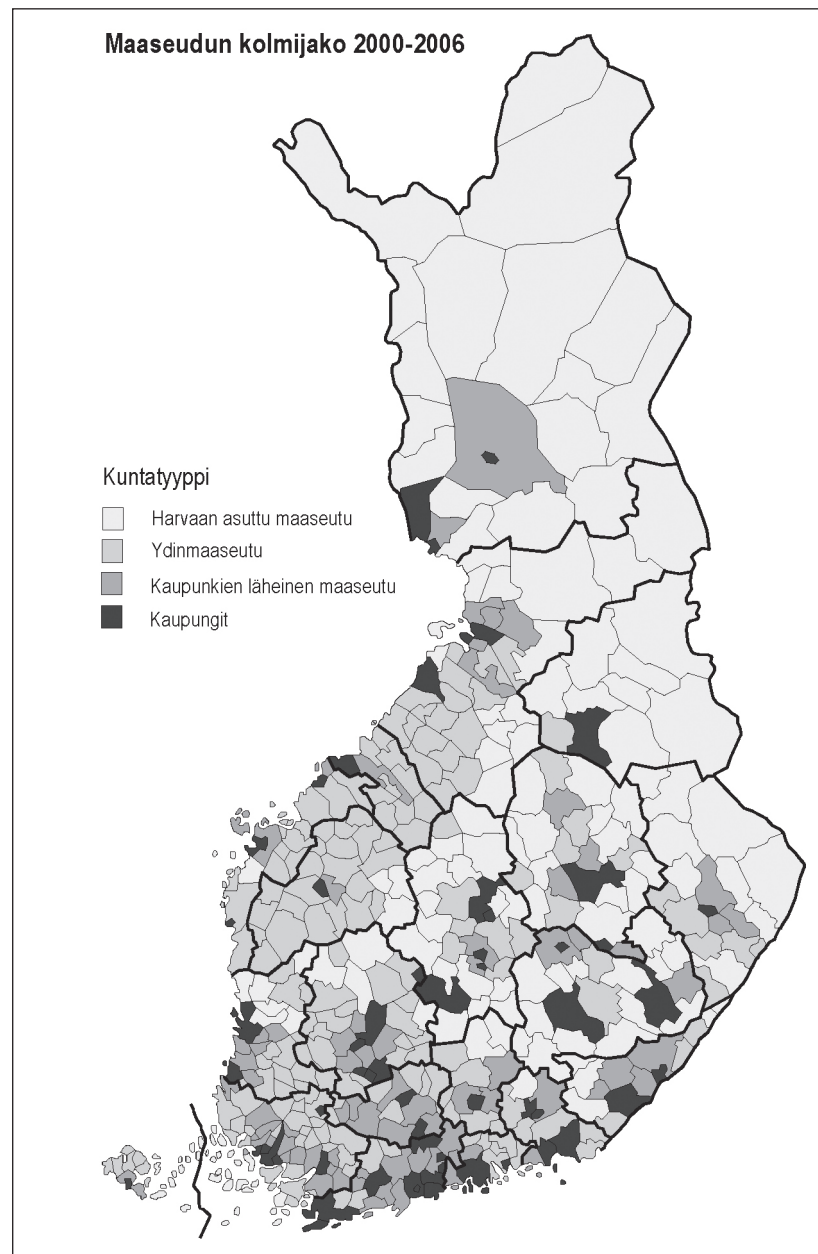


Figure 13: The typology of the Finnish rural areas.
Source: Malinen et al 2006.

The two typologies (Figures 12 and 13) illustrate the two contrasting spatial configurations for regional and sectoral policies in Finland. As regards polycentric development, the key issue concerns vertical and horizontal linkages between relevant territorial units. Due to the fact that these are difficult to measure, they are not explicitly included in the two typologies. However, in the urban typology (which represents the mainstream policy approach), horizontal (non-hierarchical) links

between specialized functional urban regions are emphasized, and thus polycentric development is seen to proceed both at a (sub-)regional level, between municipalities in functional urban regions, and at the national level, within the set of urban regions. In sharp contrast, Finnish rural policy is derived from the assertion that the countryside is not “a hinterland affected by the positive and negative forces deriving from population centres, but a region with a will and vision of its own” (Vihinen 2007: 60). This approach does not emphasize the need for vertical links to urban centres which may support “polycentric” networking at the regional level. Thus, the rural typology of the Finnish spatial structure positions the rural characteristics of the country at the forefront of the discussion on spatial development. This relates to the fact that rural policy in Finland is seen and treated largely as being separate from mainstream regional and spatial policies, which are heavily geared towards urban centres and their surrounding functional areas.

3.3 Policies as drivers of national, regional and local development in Finland

In Finland, spatial planning (or territorial development policy), as defined in the ESDP, is a shared responsibility of two ministries. Spatial development, land-use planning and environmental policy belong to the responsibilities of the Ministry of the Environment, whereas the Ministry of Employment and the Economy (established in 2008 by merging the Ministry of Labor and Ministry of Trade and Industry) deals with regional development policy. In the following, we examine how the policy goal of polycentricity has been taken up in regional development policy and strategic spatial planning in Finland, and whether it can be linked to regional and local administrative reform.

3.3.1 Regional development policy: striving for competitiveness, focussing on functional urban regions

The goals, content and mode of operation of regional development policy were redefined during the early 1990s. Finland's accession to the EU in 1995 was an important, but not the only, driver in this development trajectory, which has reflected profound shifts in national strategies: when the development of the knowledge-based economy and society became Finland's prime national goal, a simultaneous shift in regional policy away from the objective of redistributing industrial activities and retaining employment towards competitiveness-oriented policy occurred. This turn was initiated by the Centre of Expertise Programme, which was launched in 1994. At that point in time, the eight largest urban regions were included in the programme. Since then, the programme has evolved and includes 21 urban regions organized in 13 “competence clusters” for the period 2007–2013.

The Centre of Expertise Programme has a clear focus on cities at the top of the urban hierarchy, which are seen to play a key role in the Finnish innovation strategy. In order to foster urban development nationwide and among a larger set of urban regions, the Government launched a pilot programme on urban policies in the late 1990s. This led to the Regional Centre Programme in 2001, which derived much of its impetus and orientation from the afore-mentioned 1998 urban network study. This programme aims at promoting polycentricity in its Finnish version, that is, it focuses on inter-urban specialization, strategic partnerships, and the recognition and upgrading site-specific growth potentials of the regional centres, i.e. the nodes of the urban network. This programme continues, and it currently comprises a network of 35 functional urban centres promoting their endogenous strengths, specialization and strategic partnerships.

Since 2003, the over-arching aim of competitiveness, and the specialization of urban regions in specific sectors as a strategy for its attainment, are also emphasised in regional policy legislation. The Regional Development Act of 2003 includes an explicit urban-centred articulation of the

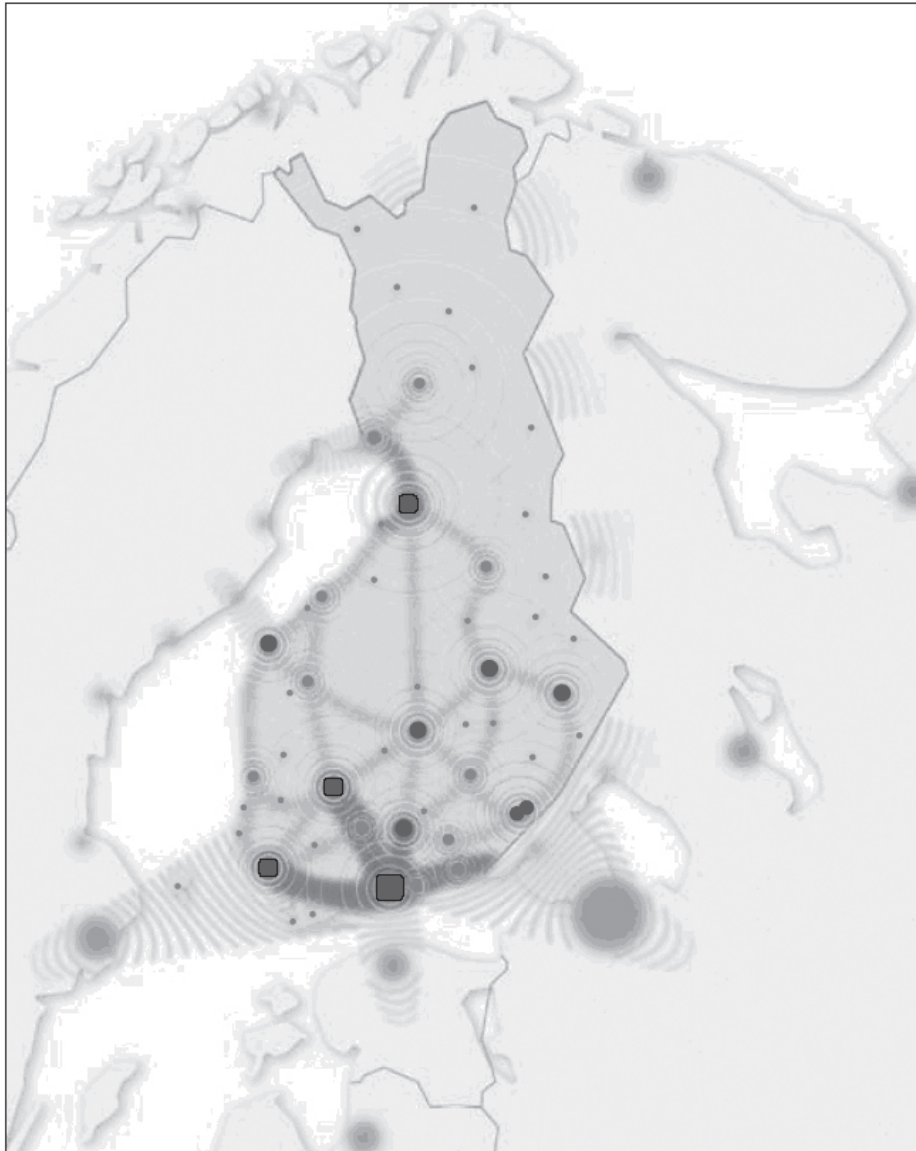
growth dynamics (Antikainen 2006), and the aims of regional development for 2007–2011 follow this policy approach. In the context of this study, the strategy report on the long-term regional development 2003–2013 (Sisäasiainministeriö 2003) is particularly interesting for the reason that it includes a concrete interpretation of the factors which are of importance in the promotion of polycentric development in the Finnish context.

According to this strategic approach, strengthening the polycentric spatial structure in Finland requires, firstly, the existence of at least one urban centre in each region (maakunta) that provides a competitive environment for a range of companies and a diversified local labor market for a working population with different qualifications and age structures. Secondly, in each region there ought to be smaller, successful centres and rural areas, whose companies and economic actors are tightly networked both within the region and towards the outside. The development of a comprehensive and polycentric urban network supports the availability of diversified services and employment opportunities also for the population in the surrounding rural areas. The metropolitan region of Helsinki also holds a significant role in the development of the whole country.

Overall, the definition of polycentricity in the guidelines of regional policy illustrates the domestication of European planning concepts in Finland. This may appear somewhat paradoxical in the sense that polycentricity is to a large extent a concept that has emerged from and has been developed in the core areas of Europe, and thus neglects the specificities of spatial structures such as sparse population and scattered urban form. In addition, Finland's spatial structure is better characterized as monocentric rather than polycentric, and also the potential for the promotion of polycentricity is seen limited as compared to other European countries (ESPON 2005; 5-8, 13-16). However, in the Finnish context these constraints are circumvented by adapting the concept of polycentricity to the specific spatial realities that exist in Finland by emphasizing the relational aspects of polycentricity, that is, by interpreting polycentricity primarily as a regional development concept rather than a spatial planning concept (Eskelinen & Fritsch 2009).

3.4 National spatial planning: towards a European vocabulary

As already mentioned, spatial planning (or territorial development policy) is institutionally divided between the domains of two ministries in Finland. As regards the interpretation of polycentricity as an organising concept, their views are, however, largely in accordance with each other. The planning document "Competitiveness, welfare and eco-efficiency: Perspectives for spatial structure and land use in Finland", which was published by the Ministry of the Environment in 2006, sketches out the long-term strategic goals in land-use and spatial planning in Finland. (Ministry of the Environment 2006). In this document, polycentricity is put forth as both the key aim and prevalent development trend as regards the Finnish spatial structure: in the long run, Finland's spatial structure should become polycentric,..." (Ministry of the Environment 2006, 22) (see Figure 14 for the outline of this spatial vision). The impact of the ESDP on this reasoning is also illustrated by the fact that the document derives its title directly from the ESDP's triangle of objectives, i.e. economy, society and the environment.



Map 2. A polycentric and networking spatial structure.

The development of Finland's spatial structure is based on a polycentric urban network. The polycentric structure should be based on the strengths of different parts of the country, bearing in mind the advantages of location and existing infrastructure. Diversified centres of know-how and economic activities should be built up as focal points in the spatial structure, and mutual interaction and networking with surrounding influence areas, other regions and neighbouring areas should be promoted.

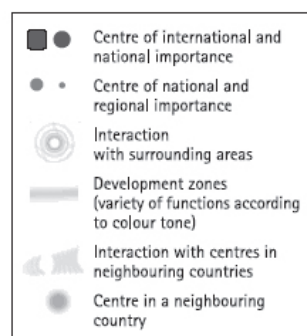


Figure 14: Polycentric and networking spatial structure in Finland.

Source: Ministry of the Environment 2006, 25.

The increasing diffusion of the notion of polycentricity into national planning activities in Finland over time is illustrated by the fact that the 1995 version of the document mentions polycentricity only once and merely in an intra-urban context, emphasising the need to make neighborhoods self-sustaining and thus, reduce the need for travel and, consequently, traffic levels (Ympäristöministeriö 1995). This is very much in line with the traditional scholarly application of the concept, which deals with developments at the level of cities and promotes polycentric urban systems instead of urban sprawl.

3.4.1 Institutional reforms at regional and local levels

Significant institutional reforms have been carried out in Finland since the early 1990s. Broadly speaking, these can be divided into two groups. Firstly, the EU accession triggered reforms at the regional level in the mid-1990s. Secondly, a local government reform was initiated in 2005, which is scheduled to continue until 2012. It aims at the formation of larger and socio-economically more viable local authorities.

In the relevant literature, the European influence on governance structures is often approximated to the strengthening of the intermediate (regional) level of government by providing additional financial assistance and opportunity structures at the European level. However, empirical evidence suggests that generalization in this respect can not be made, as significant variations in terms of regionalization exist across EU countries (Kettunen & Kungla 2005). In the case of Finland, which is a unitary country with a bi-polar governmental structure with strong local and national levels, the EU has been instrumental in strengthening the intermediate level of governance. A milestone in this process was the establishment of 20 (now 19) Regional Councils in 1993, which was mainly due to the need to respond to EU requirements regarding partnership and subsidiarity as well as the implementation of the Structural Funds programme (Kettunen 1999; Kettunen & Kungla 2005).

Leaving aside the question, whether the establishment of the Regional Councils has actually paved the way for a genuine, legitimate and strong intermediate level in Finland, they have certainly played an important part in the re-organisation and re-focussing of regional policy and spatial planning. This is due to the fact that, as a (by-)product of the establishment of the Regional Councils (*maakuntaliitto*), the status of cross-sectoral spatial planning on a regional scale was improved significantly by the fact that the Regional Councils acquired the statutory responsibility for both land-use planning and regional policy in their area (Böhme 2002). Thus, for the first time in Finland land-use planning and regional policy, traditionally seen as distinct fields of policy, were regionally organised in a single organisation, i.e. the Regional Councils. However, this policy integration has not fully extended beyond the regional level, and therefore the advance in integrated spatial planning has been limited in practice. This is particularly due to the still strongly sectorised policy-making that exists at the national level in Finland.

The policy integration (of regional policy and land-use planning) at the regional level also provided, in theory, a foundation for the adoption of spatial policy concepts such as polycentricity in Finland. However, there is little evidence of the adoption and application of the concept of polycentricity at the regional level in practice. Whereas the concept is widely used as a guiding principle and major aim in national planning documents, its applications in regional plans and strategies have been limited to evaluations of its interpretations and potential (e.g., Regional Council of North Karelia 2007).

Prior to the foundation of the Regional Councils, which in essence are municipality-based (bottom-up) organisations, the Finnish regional administrative structures took the form of central government-led regional representations (top down). The most important one of these were the provincial governments, a remnant of the times when Finland still belonged to Sweden. This remaining top-down regional form of central government has been reformed since EU accession, as a result of which provincial governments will be abolished in 2010. The general aim of these reforms has been to improve the co-ordination of different policy sectors and to reduce the number of administrative organizations existing in the country. The strengthening of a Finnish polycentric structure never was part of the discussion on these regional reforms.

As regards municipal administration, the so-called PARAS project, launched in 2005 for an overall reorganisation of the Finnish municipal and service structure, represents a strategic response to growing fiscal and economic challenges particularly in smaller municipalities. Its key aim is to

improve the financial viability of service provision by encouraging and calling for economies of scale, i.e. a larger population base is expected to increase efficiency in providing social and health services at the local government level. However, the strategy differs to a major degree from, for instance, the municipal reform in Denmark in the sense that the decision on how a sufficient population base is achieved is left in the hands of municipalities. Mergers of municipalities are encouraged by central government through financial incentives, but they are in essence voluntary and carried out in a bottom-up process (see Figure 15 for the change in numbers of municipalities and their average population size during this decade). In addition to merging municipalities, the legislation offers municipalities several potential solutions to jointly and collaboratively arrange services in order to achieve a sufficient population base for efficient service provision.

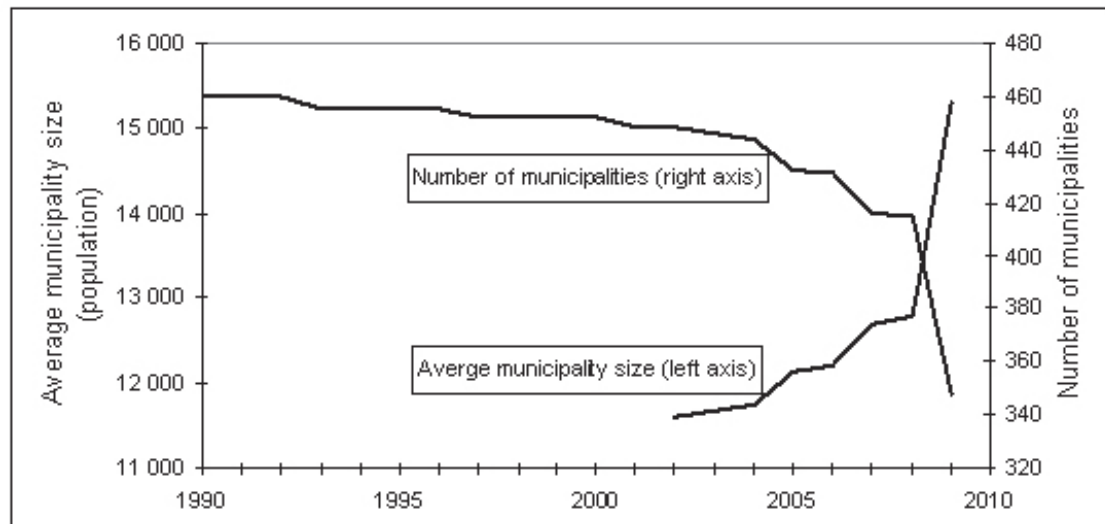


Figure 15: Change in number of Finnish municipalities and their average population size.

The mandatory proposals by municipalities for the cooperative catchment service areas were submitted in autumn 2007. In primary health care, for example, the catchment population limit was set to 20 000. While there has been a long tradition in providing also basic local services through various forms of intermunicipal cooperation, such as service agreements and joint authorities, this population baseline of 20 000 has led to a significant enlargement of traditional catchment areas. In 2007, the number of primary health care organizations in Finland was 237, and in 172 of them (73 %) the population was below the required catchment limit (Kuopila 2008). At this point in time (spring 2009), the reform process is still ongoing. The preliminary assessment in summer 2008 showed that the number of catchment areas may decline to slightly over 100. However, in tens of municipalities the arrangements in social, health care and education sector remain still more or less open.

Interpreting the experiences of the PARAS-project from the perspective of the notion of polycentricity, not polycentric development as such but the question of how the reform of local and regional government relates to polycentricity as a policy goal. The sparse population results in the fact that there inevitably are areas in the country that are outside the sphere of influence of any functional urban area where public services, within the current municipal structures, can not be arranged in a cost-efficient manner. Nowadays, through the PARAS-project, a solution for this problem is being sought by forming functional, collaborative areas based on the urban network. Although municipal structures are in a process of change (see Figure 15), the outcomes seem not to be fully in line with the primary objectives. This is due to the fact that inter-municipal co-operation areas required by law are generally set up through diverse and heterogeneous co-operation agreements, which only to a very limited extent contribute to a systematic formation of larger municipalities. As a whole, the PARAS-project does not appear to solve the two fundamental challenges at hand, i.e. the strengthening of the functional (urban) regions from the inside and the

safeguarding of public service provision in peripheral areas.

3.5 Discussion and Conclusions

Polycentric development (polycentricity) has become an increasingly important normative organizing concept in the European debate on spatial development (see Davoudi 2003). The emergence of a European spatial planning discourse, of which the ESDP has thus far been the apex, has been a key driver of its policy success. This discourse has opened up national systems of planning and paved the way for the adoption and application of supranational planning concepts at lower levels of governance. In research on EU policy-making, this relates to issues such as the “governance without government” (Rosenau & Czempiel 1992), which have stimulated the debate on (new) modes of governance in the EU (Eberlein & Kerwer 2004). This literature also demonstrates how these new modes of governance, and the open method of co-ordination (see Faludi 2004) in particular, have expanded the EU’s capacity and impact beyond the traditional “community method” of regulation through legislation.

European spatial planning in general and organizing concepts such as polycentricity in particular might be considered as prime examples of this emergence of alternative modes of EU governance, and their impact on the state-centred view of governance that traditionally prevails in this policy field (Böhme & Waterhout 2008; ESPON 2007).

How has this development trajectory impacted on spatial strategies and the development of a polycentric spatial structure in Finland? Firstly, European ideas have stimulated and guided spatial development thinking also in Finland. Strategic policy making at the national level has been clearly affected by European developments (particularly the concept of polycentricity), less so on the regional and local level. However, the impact of this increasingly European take on spatial development issues on Finnish spatial structures is difficult to estimate, particularly as possible changes are extremely slow to emerge. Aspects such as the deeply rooted centrally organized planning tradition, the sectors-based policy-making, and the fact that changes in spatial structures can normally only be detected with a delay of tens of years have also be taken into account.

It also has to be asked to what extent the notion of polycentricity actual plays a role in Finnish policy, and to what extent is possible to influence spatial development in general? The most obvious approach for answering this question is to forecast the future development of the urban network. In this context, it can be safely assumed that the divergence in size of the Finnish cities will continue to grow, with particularly strong development in Finland’s only metropolitan (capital) region. The Finnish urban network, however, will continue to cover the entire country, although population in the areas between the urban nodes will continue to thin out.

Nevertheless, the development of a polycentric spatial structure is identified as a strategic policy goal both in regional policy as well as spatial planning in Finland. However, there is a cleavage between polycentricity as a broad policy guideline and its application in policy practice.

Firstly, it has to be emphasized that in Finland polycentricity is defined and understood in a different fashion as compared to the ESDP/ESPON-discourse. This is understandable in light of the “spatial realities” that exist in Finland and which differ significantly from the spatial structures and conditions found in other European countries. Consequently, the Finnish concept of polycentricity is construed in a different fashion as compared to the European spatial planning discourse. In Finland polycentric development potential is not perceived to be dependent on geographical proximity but rather on co-operation and connections. Thus, the Finnish polycentricity rests on the relational (networks, flows and co-operation) features rather than morphology (number, size and distribution of cities).

From a policy-making viewpoint this interpretation entails two advantages. The relational aspect translates polycentricity to a policy-tool or action, which can be realised regardless of location or any other site-specific conditions. It also provides the opportunity for and foundation of an extension of the concept's application fields beyond the densely populated central regions to peripheral and sparsely populated areas, and consequently adds further dimensions or interpretations to the concept. However, it also has to be generally questioned whether polycentricity is - even in its Finnish variant - an effective policy strategy in the respect that also relatively small and peripheral parts of the municipal network can retain their viability. The recent past has shown that this appears not to be the case.

Secondly, the conceptualization of the spatial structure put forth in the Finnish rural policy discourse is very different from and represents a form of counterdiscourse to the policy notion of polycentricity. These two distinct spatial conceptualizations have evolved in two separated policy sectors, i.e. urban and rural policy. The basic rationale of former one rests on the conviction that specialized and nationally as well as internationally tightly networked urban regions form the base of the Finnish spatial structure, which also support the development in the surrounding rural areas. The message carried in the rural discourse, on the other hand, is that Finland is one of the most rural countries in Europe where only isolated urban growth centers exist, whose sphere of influence does not reach into the peripheral and genuinely rural areas.

Thirdly, the development of a polycentric spatial structure has not been an integral part of recent regional and municipal administrative reforms. The reforms in this sector, which strive to create larger municipal entities to provide increased financial viability for the provision of services, is in principal in line with the notion of polycentricity. However, in practice the redrawing of the Finnish municipal map has not progressed as planned in many areas. The increasing differentiation in terms of development between urban regions and genuinely rural regions has contributed to this, which also requires new solutions in relation to the sharing of responsibilities between the state and the municipalities.

4. Country study: Norway

This contribution reflects on the influence of the concept of polycentricity in spatial planning and regional development policies in Norway in relation to urban/spatial structures and recent policy and territorial development trends. In the following section we briefly present some basic features of the Norwegian spatial structure and system of urban settlements and the ways they are usually described and analyzed in a regional policy context. The next section gives a rough overview of Norwegian policies in the field of urban and regional development and reflects briefly on the role of ESDP concepts and guidelines (polycentricity in particular) on their recent evolution. Lastly, we draw some tentative conclusions according to the main aims of the project related to "the interplay between regional governance and polycentric development".

4.1 Aspects of settlement pattern and recent trends in urban and regional development

4.1.1 Pattern of urban settlements

According to the definition of urban settlements as developed by Statistics Norway, the minimum population is 200 inhabitants (identical size threshold defined in all Nordic countries) within a settlement with maximum 50 metres between houses, and where separate building clusters within 400 metres of the settlement are included. There are no longer any demands on industrial composition in the definition, as villages in the sense of agricultural settlements do not exist in Norway. According to this definition almost 80% of the Norwegian population lives in a total of 909 urban settlements which all together cover slightly more than a half percent of the total land area. Urban settlements with less than 5000 inhabitants constitute 90 percent of all urban settlements but comprise less than a quarter of the total "urban" population. Oslo is by far the largest urban settlement with close to a quarter of the urban population. Three other urban settlements have from ca.147.000 to ca.214.000 inhabitants. The median size of the 909 urban settlements is 684 inhabitants (January 1, 2005).

The apparently monocentric urban settlement pattern in Norway, including the potentially dominant status of the capital city urban settlement, may be indicated by the distribution according to size (population numbers) and rank (according to relative size), here represented by the absolute numbers:

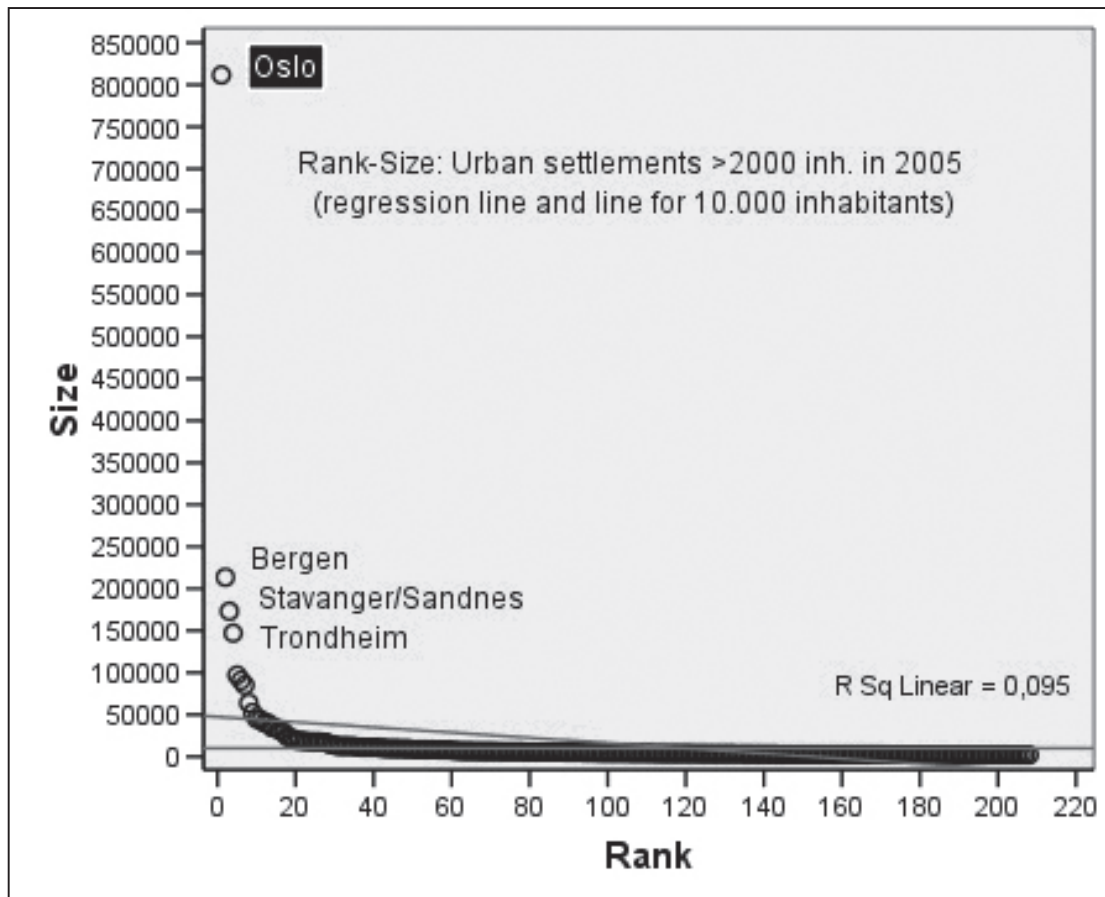


Figure 16: Rank-Size: Urban Settlements >2000 inh in 2005.

The number, size and distribution of urban settlements vary among the regions (the seven “landsdeler”). In the Figure 16 we have left out the smallest (less than 2000 inhabitants = 701 urban settlements) and largest (50,000 inhabitants or more = 9 urban settlements) urban settlements, and are hence left with what we may call “very small urban settlements” and “small and medium sized towns” – among which we find the great majority of municipality centres.

In all regions the very small urban settlements are the numerically dominant type (2000-4999 inhabitants), cf. also Table 3 below. Among the small and medium sized towns (5000-49999 inhabitants), in all regions except “Hedmark og Oppland” the smallest category (5000-9999 inhabitants) is the most frequent.

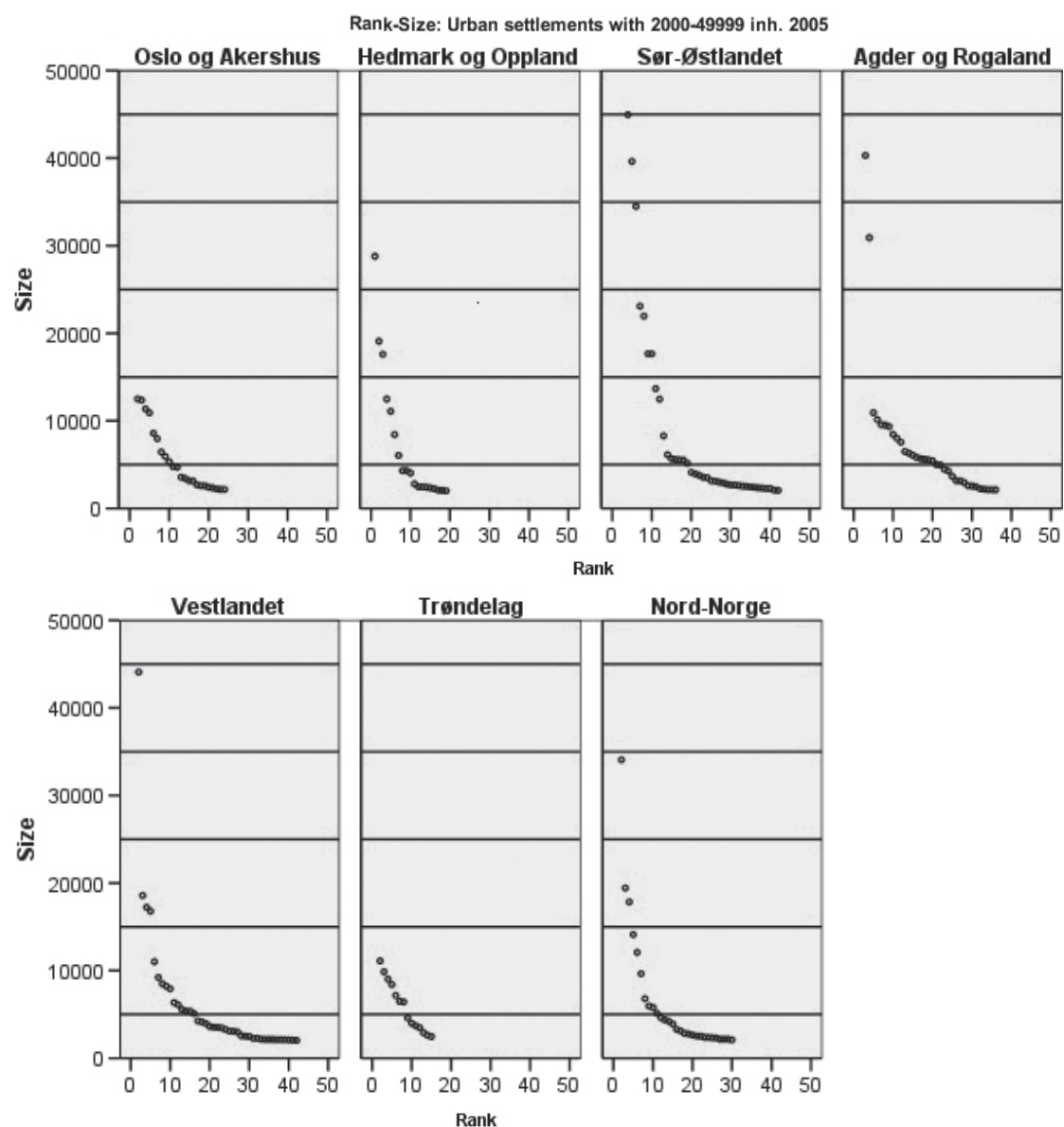


Figure 17: Rank size urban settlements in Norway with 2000-49999 in 2005.

In the capital region ("Oslo og Akershus") the largest urban settlements next to Oslo (ca. 812,000 inhabitants) have only close to 13,000 inhabitants, and the small and medium sized towns range from ca. 13,000 to ca. 5340 inhabitants per 1 January 2005

Table 3: Urban settlements 1 January 2005 by size and region ("landsdel"). Number of settlements, population and average population.

Size of urban settlement (population)	Oslo og Akershus	Hedmark og Oppland	Sør-Østlandet	Agder og Rogaland	Vestlandet	Trøndelag	Nord-Norge	NORWAY
Number of urban settlements 1. January 2005								
Less than 5000	63	98	159	79	204	85	130	818
5000-9999	5	2	7	14	10	6	5	49
10000-14999	4	2	2	2	1	1	2	14
15000-19999	.	2	2	.	3	.	2	9
20000-24999	.	.	2	.	.	.	.	2
25000-49999	.	1	3	2	1	.	1	8
50000 and more	1	.	3	2	1	1	1	9
All urban settlements	73	105	178	99	220	93	141	909
Population 1. January 2005								
Less than 5000	76651	97024	164294	95012	183378	71524	128345	816228
5000-9999	34267	14493	41954	99457	67741	47378	33294	338584
10000-14999	47152	23579	26160	21074	11028	11113	26191	166297
15000-19999	.	36692	35327	.	52603	.	37286	161908
20000-24999	.	.	45083	.	.	.	.	45083
25000-49999	.	28801	119084	71237	44096	.	34073	297291
50000 and more	811688	.	272952	236946	213585	147139	52436	1734746
All urban settlements	969758	200589	704854	523726	572431	277154	311625	3560137
Average number of inhabitants 1. January 2005								
Less than 5000	1217	990	1033	1203	899	841	987	998
5000-9999	6853	7247	5993	7104	6774	7896	6659	6910
10000-14999	11788	11790	13080	10537	11028	11113	13096	11878
15000-19999	.	18346	17664	.	17534	.	18643	17990
20000-24999	.	.	22542	.	.	.	.	22542
25000-49999	.	28801	39695	35619	44096	.	34073	37161
50000 and more	811688	.	90984	118473	213585	147139	52436	192750
All urban settlements	13284	1910	3960	5290	2602	2980	2210	3917

The numerically dominant category of small and medium sized towns in the different regions ("landsdeler") is 10,000-14,999 ("Oslo og Akershus"), 15,000-19,999 ("Hedmark og Oppland"), 25,000-49,999 (Sør-Østlandet), 5,000-9,999 ("Agder og Rogaland" and "Vestlandet"), and 15,000-19,999 (Nord-Norge).

Within, as well as between the regions, urban settlements belonging to the same size categories vary considerably with regard to degree of centrality (travelling distance to other urban centres of different size and functional status) and with regard to size of their spatial influence area.

If we restrict the category of "cities" to urban settlements of at least 15,000 inhabitants (the 28 largest urban settlements), these cities comprise almost half of the national population, and if their functional urban regions are included, between 70 and 80 percent of the national population. The population dominance of the actual urban settlement within their regions, ranges from 70-80 percent (the regions of the cities of Tromsø, Halden, Oslo, Fredrikstad/Sarpsborg, Bodø) to between one fourth and one fifth (Gjøvik region, Hamar region, Molde region).

4.1.2 Regional structure – functional urban regions

When delimiting Norway according to the urban – rural dichotomy, the urban settlements as such are not ideal. Usually, some kind of characterisation of the municipalities is used. Most commonly, the analyses are based on either the centrality index of the Standard Classification of Municipalities (Statistics Norway 1994), or a regional typology based at least in part on principles from the classification. A new edition of the Standard Classification is now being prepared.

When it comes to dividing Norway into labor market regions or a similar level, the main divisions are the labor market regions, as defined by Juvkam (2002), and the economic regions, as defined by Statistics Norway (2000). The former gives a more accurate picture of the pattern of labor markets throughout Norway, not being limited by county borders. The latter can be compared to the LAU 1 level within the EU (former NUTS 4), and is as such the more relevant division for analyses within counties. Other regional sub divisions used for analytical purposes and resembling labor market regions are generally based on one of the two sub divisions mentioned above. They are also often used in combination with the centrality index of the Standard Classification of Municipalities, in some cases combined with indicators, to create a hierarchy of regions according to the centre-periphery dimension.

For analytical purposes, the Ministry of Local Government and Regional Development has for their recent White papers used a division according to population, that for the three groups of towns is identical to the one introduced by Statistics Norway for their Standard Classification of Municipalities 1994:

- City regions/”Storbyregioner” (the main urban settlement has at least 50,000 inhabitants)
- Town regions/”mellomstore byer” (the regional centre has 15,000 to 50,000 inhabitants)
- Small town regions/”småbyregioner” (the regional centre has 5,000 to 15,000 inhabitants)
- Smaller centre regions/”småsenterregioner” (the regional centre has 1,000 to 5,000 inhabitants)
- Sparsely populated regions/(urban settlements with less than 1000 inhabitants)

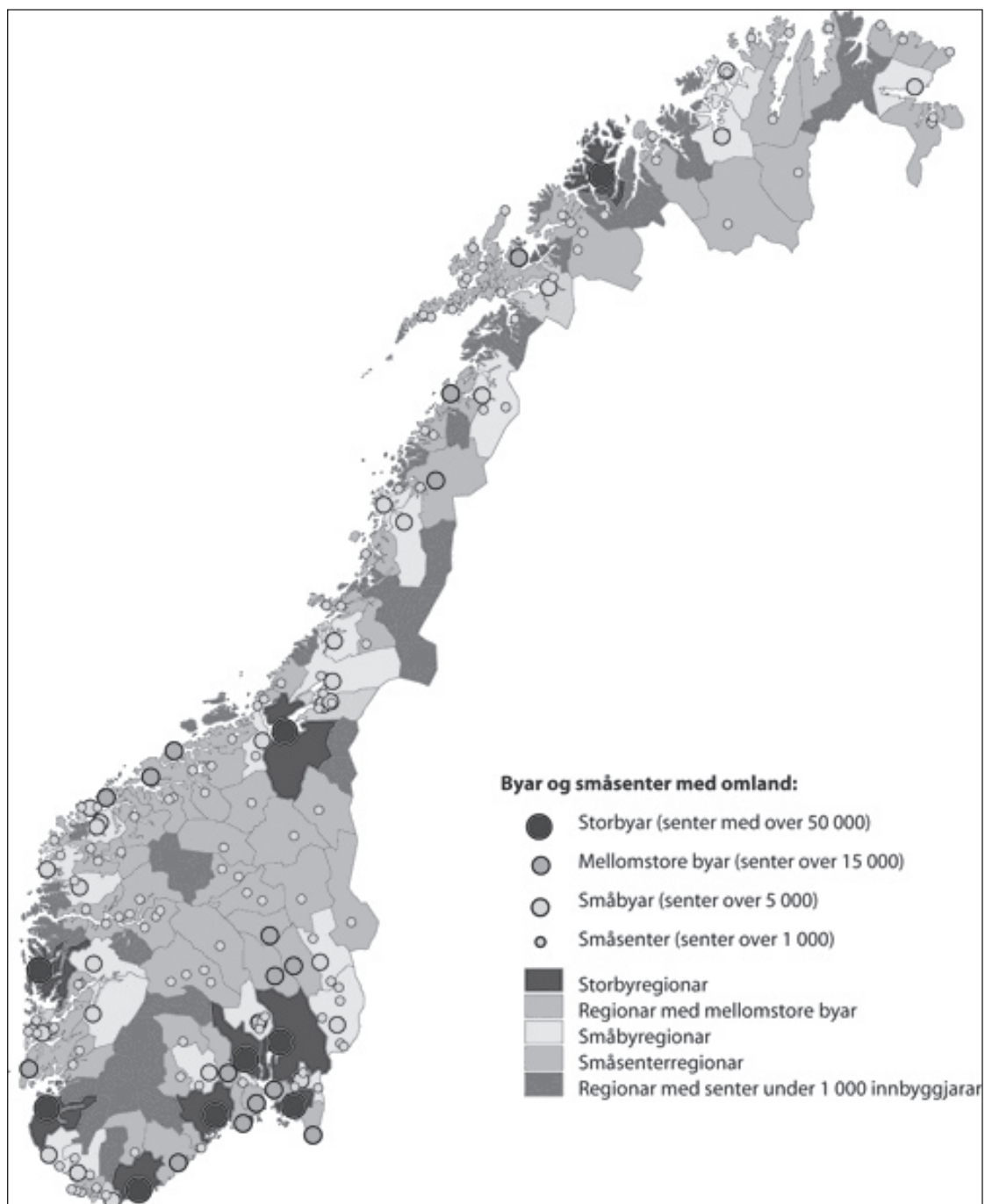


Figure 18: Cities, towns and regions by size of the largest urban settlement (cf. above).

Source: Kommunal- og regionaldepartementet, 2004.

The urban structure in Norway is characterized by one metropolitan area, namely the greater Oslo region in East Norway, and six major cities in South Norway, West Norway, Middle Norway and North Norway. In a European perspective, these cities are rather small. The country is characterized with numerous medium sized and small cities and towns (centre population 50.000 – 5.000). Most of the country is defined as periphery with only minor urban settlements.

4.1.3 Natural geography and population

Major parts of the country, especially in West and North Norway, have high mountains, deep fjords, a lot of islands, rugged landscape, and a harsh climate. The country is rich in natural resources. Industry has to a large extent been based on the extraction and processing of natural resources which are found throughout the country and which have had great influence on the settlement pattern. The best farming land is in East Norway and South West Norway, forests in East Norway, fish stocks and other marine resources and petroleum resources along the whole coast, and waterfalls (for electricity) all over the country.

The spatial patterns in Norway are characterized by scattered settlements, long internal distances and a topography that is an obstruction to communications, with a more easy accessibility in the central areas of eastern Norway and in the city regions.

By European standards, Norway is extremely sparsely populated (14 inhabitants per square kilometre). Only 1.4 percent of the area is built-up area (buildings, roads and railroads) and only 3.2 per cent is agricultural area. Almost 45 percent are mountains or mountain plains. The pattern of settlement is heavily influenced by the topography. These factors contribute to only 18 percent of all square kilometre grid cells being populated. More importantly, they hinder provision of services from service centres to sparsely populated areas and it hinders daily commuting to the nearest town with employment opportunities. 40 percent of all labor market regions (Juvkam 2002) therefore consist of only one municipality. Of the country's population approximately 6.5 percent live in peripheral areas with agglomerations under 2000 inhabitants, where there on the average are only 2.3 inhabitants per square kilometre. Peripherality can therefore be regarded as synonymous with a relative lack of accessibility to economic activity, posing serious challenges to regional policy.

In 2005, as many as 142 out of Norway's (then) 433 municipalities (the LAU2 level formerly known as NUTS 5) lacked access to a centre/urban settlement with at least 2,000 inhabitants. Their average population density was just above two inhabitants per square kilometre. In such municipalities the populations only have access (on a daily commuting basis) to very limited labor markets in terms of the number of jobs as well as the range of industries and labor market segments. They are also located far from the country's few larger cities (only four cities have a municipal population exceeding 100,000 inhabitants).

Most peripheral municipalities are still heavily dependent on the primary sector and on public sector jobs (local government and municipal services). A very low share of the population of the most peripheral municipalities lives in urban settlements (ca. 25 percent in contrast to the national average of almost 80 percent) and the urban settlements are on average very small (around 600 inhabitants). These peripheral municipalities cover, however, more than 42 per- cent of the nation's area, although only around 7 percent of the nation's population is living here. Broadly speaking these municipalities delimit the potential problem regions in Norway – together with maybe 50-70 municipalities with only slightly "better" conditions in terms of population density, settlement structure and sizes, distances/remoteness and industrial base/labor markets.

4.2 Major and recent trends in Norway

The spatial trends that have been dominant for the last 50-60 years in Norway may be briefly characterized as geographical centralization. This centralization takes place on different geographical levels, from the national to the local level. The main trends of continuous urbanization of population and jobs were especially strong in the 1950s and 1960s and the last two decades of the previous century. Migration balances in particular have been extremely sensitive to business cycle effects. Negative business cycles have usually postponed and "stored" potentially centralizing inter-

regional migration, while the intra-regional migration has continued. In positive business cycle turns, the centralizing inter-regional migration streams (notably from the north and inner parts of the country to southern and partly south-western parts of the country) have accelerated. Fertility decline commenced in the southern/central part of the country, while the more remote, especially northern coastal areas started later, but declined faster than the central parts.

Around half of the Norwegian municipalities have experienced population decline in the decades following the mid 1980s. Population centralization has been a significant trend at all territorial levels (region/NUTS 2 and county/NUTS 3, and the two LAU levels (former NUTS 4 – economic regions as defined by Statistics Norway and NUTS 5 – the municipalities) when we apply different measures of centrality, degree of rurality etc. The least central municipalities have in average a great overrepresentation of the age-groups above 60 years of age – increasing with age. Persons between 20 and 40 years of age are grossly underrepresented in the same type of municipalities. This pattern – along with a general “thinning-out” of the population base – have a bearing on reproductive potential and economic vitality and sustainability as well as creating problems in the service provision in many local communities.

The centralization has to a large extent been influenced by technological developments, by increased international competition in product markets and in capital and labor markets. In a 2004 report from a publicly appointed commission on rural policy (NOU 2004:2) investigating regional policy and regional effects in 19 different state sectors, concluded that regional development considerations have become less important over the last 10-15 years.

Roughly speaking, employment has followed population (or vice versa). Private services and state-services (central government etc.) jobs are significantly overrepresented in the (ca. 100 municipalities of the) largest urban areas, while the primary sector, and to a certain degree manufacturing industry and municipal services, are significantly overrepresented in the 142 most rural/less central municipalities. Lagging regions are found in the parts of the country that have been subject to depopulation over a long time period. On a local scale such regions are found in all parts of the country. On a regional scale, however, North Norway is the only main region that has had population loss (-0.9 percent) during the period 1994 – 2004 whereas the most populous South-East region had a population growth of 7.5 percent.

The last three decades (1978-2008) saw an increase in the pace of population centralization from decade to decade, particularly (and increasingly) favouring municipalities in the capital region and other larger city regions, and disfavoring in particular (and increasingly) peripheral municipalities and municipalities in small-centre regions (Lie og Karlstad 2008). An initially less favourable spatial/morphological state of affairs with regard to polycentricity as a potentially fruitful and realistic vision and guidance of regional development policy, seems to develop into an even less favourable state of affairs, excepting selected regions – especially in the south and east. The concept of polycentric development needs to be elaborated into different operational concepts in concrete territorial terms and at different territorial scales – taking into consideration the particular territorial context; that is the different aspects of spatial structure and trends and their interplay.

4.3 Regional and urban policies in Norway related to polycentricity

Although the last decades have witnessed important changes in the context of regional/territorial policies (both endogeneous and exogeneous factors) the, evolution of district and regional policy in Norway at a certain level may be characterized by broad consensus and small changes. A change in approach to regional development challenges was introduced at the beginning of 2002, involving

i.a. a stronger focus on balanced development, aiming for population growth in all regions, a shift away from selective centrally administered grant-based assistance towards more broad bottom-up initiatives reflecting local needs and requirements, a regionalisation of regional development budgets and responsibilities, a stronger emphasis on innovation (nationally and regionally). The new focus was also on efforts to improve the business environments rather than direct aid/subvention, changes in administrative responsibilities (particularly strengthening the role of the county level in regional partnerships for development, related to regional development plans). Later White Papers on regional policies broadly confirm and elaborate these policy trends.

In particular the 2006 White Paper emphasizes and underlines the goals of i) making small towns attractive places to live and work (especially for young people and women) and ii) making medium-sized cities attractive alternatives to larger cities.

Regional policy in Norway has traditionally focused on rural and peripheral areas. There has traditionally been no explicit and clearly articulated urban policy specifically targeting all cities and towns. However, all sector policies take into account the situation in these areas. In addition, many of the regionally-oriented instruments cover these areas. This is particularly true when it comes to different innovation programs addressing learning processes and collaboration between SMEs and knowledge institutions. In order to cover a larger part of Norway, the funding of quite a few schemes and programs is co-financed by several ministries, especially between the Ministry of Trade and Industry and the Ministry of Regional Development. In sum, these policy initiatives represent what many countries define as an urban or regional centre policy.

The presentation below is based on a division of Norway into three types of regions, built up around the country's 161 labor market regions. The schemes and programs are placed where the majority of the means is used. But several of them cover, to a certain extent, other regions as well. The second type of regions, namely labor market regions with a centre population of 15.000 – 50.000 inhabitants (medium sized cities), contain a wide spectre of communities, ranging from the city of Tønsberg (Vestfold) to Sandnesjøen (Nordland). This is also true for the third category and may be illustrated by the difference between the centre Farsund (Vest-Agder) and Karasjøk (Finnmark).

Not all instruments are dealt with here. This section treats primarily measures defined as region type specific with relatively clear regionally intended consequences. On the other hand, it is often difficult to decide the real regionally intended content of a scheme or a program. The measures, schemes and programs referred to differ considerably in size. Many of the programs addressing clusters, networking and innovation cover, naturally, city regions and town/small town regions.

4.3.1 The Oslo region and eight other city regions (> 50 000 inhabitants in the main centre)

The area seen as a whole

These city regions differ very much in size, assets and possibilities. More than half of the population lives in these regions, which are thus very important for national growth and in order to obtain a balanced settlement between different parts of the country. Substantial resources have been used on infrastructure, and consequently the regions offer well developed education possibilities at all levels, R&D, culture and business. It is crucial that regional actors take advantage of these possibilities, for the benefit of themselves and surrounding regions.

Below follows a delineation of the important urban regional policy measures: These policies are in several cases addressed by different sectoral ministries and an important part of Norway's broad regional policy.

- Investments in transport and communications and establishing them as important national hubs in the regional and national transport system. Investments in for example railways will be directed towards short-distance transport in the regions of Oslo, Stavanger, Bergen, and Trondheim, regional transport in East Norway (Intercity network) and Trøndelag, and transnational goods transport network between regions and foreign countries
- Establishment of the University of Tromsø in 1972, as a vital step in stimulating further regional development in North Norway, at present with 6 000 students and 1 800 staff members.
- Support to research institutions and the establishment of science parks, in which also SIVA is involved.
- Programs like RCN's FORNY, IN's NCE and SIVA's Incubators. And the state localization policy, benefiting city regions outside of Oslo.
- The creation of an arena for political and professional dialogue between representatives from the 6 major cities, including Oslo (Storbyforum). The forum discusses the challenges and the action room of the cities, main strategies, national sector coordination, division of labor between administrative levels, modernisation of public sector etc. The agenda is primarily set by the cities themselves.
- An innovation program for the 6 major cities (Storbyprosjektet). The project addresses the role of these cities for regional and national innovation, especially through enhanced cooperation between authorities, branch organisations, private business and different knowledge institutions.

The city of Tromsø benefits from lower social security tax compensation and the possibility of higher investment grants, that is nearly 5.9 per cent and 5.7 per cent respectively of the target areas' present population. Tromsø also benefits from the North Norway grant.

The Oslo region

The Oslo region comprises 46 municipalities, about 36 percent of the Norwegian population and approximately half of the inhabitants in all the six major city regions. The strong growth in the region is both a strength and a challenge for the rest of the country: a strength because the region attracts international economic and human resources, a challenge when it comes to social cohesion and ensuring a good balance between the main parts of the country and the exploitation the growth potential in all parts of the country. The objective of a separate action plan for Oslo Inner East for the period 1997 – 2006 was to strengthen the adolescence conditions, the housing conditions and the city's open and public areas. Statistics Norway has recently evaluated the plan, concluding that living conditions have improved, but also that there still are great differences. The Government will launch a plan for the outer east area of Oslo (the Grorud Valley). The Government gives priority to an active localization policy where the establishment of new state bodies is placed outside the Oslo region.

An important regional forum for policy discussions was established in 2004, incl. the capital of Oslo, the county municipality of Akershus and Østfold and 55 surrounding municipalities. The objective is to strengthen the Oslo region as a competitive and sustainable metropolitan area in Europe. The cooperation is an answer to a situation where the region in question faces challenges due to national centralisation tendencies and to an increasing competition from European regions. Focus areas are: 1) Spatial development patterns, transport and communications, 2) competence and value creation, 3) national and international image building (profile building), and 4) social infrastructure.

In 2003 the previous government presented a parliamentary report on major cities. Later this year the Government will present a parliamentary report concerning the capital of Oslo and the Oslo region. The most important issues in this document will be the region as a motor for the rest of East Norway and Norway as a whole, the unused innovation potential in the area, the transport situation and the immigration, integration problems and the challenges related to the management and governance in the area.

4.3.2 Medium sized cities and small town regions (5000 – 50,000 inhabitants in the main centre)

Approximately 40 percent of the Norwegian population lives in these regions which includes about 43 cities and towns defined with a centre counting between 5000 – 50,000 inhabitants. These cities include 29 percent of the total urban population and comprise correspondingly 43 labor market regions. 23 of these are defined within the target area for regional investment grants have a population of 535,000 inhabitants, and comprise nearly 40 percent of the regional investment target area.

Numerous present regional measures and programs cover these areas.

- Welfare. The North Norway grant and the Regional grant.
- Hard infrastructure.
 - o Ferries, regional airports, purchase of air services from airlines etc. Building the present regional airports started late in the 1960s. The last one was built at the end of the 1990s.
 - o Establishing hubs in key centres in all major parts of Norway, covering railway, airport, roads etc.
- Soft infrastructure.
 - o Establishing state university colleges in each county, starting at the end of the 1960's, was part of policy to make higher education more widely available while increasing the amount of academic expertise available to the different regions of Norway¹⁶.
 - o Regional research institutes were erected in the 1970's and 1980's, normally based on regional initiatives in connection with the state university colleges. The county municipalities were often co-founders. The Ministry of Regional Policy contributed with basic capital. Later on these institutes have received economic support from national authorities. The point of departure of these institutes was primarily the need for R&D of local businesses, but also public authorities. There are now 12 regional institutes. Funding of the regional institutes and the research activities of the state university colleges will be strengthened and formulated in a way that promotes cooperation and regional development.
 - o Knowledge parks. There are now 15 knowledge parks all over Norway. SIVA has played an important part in establishing and running them.
 - o The Norwegian Touring Theatre, the Norwegian Concert Institute/Rikskonsertene (touring musicians, ensembles, bands etc.) and art touring exhibitions (part of the National Museum of Art, Architecture and Design).
- Industrial development schemes and programs.
 - o Ordinary regional grants and loans, including compensation caused by the termination of reduced social security tax.
 - o Rural district development scheme, delivery requirements for fish boats to fish processing plants and sea farming localizations.
 - o Programs like IN's VS 2010, Arena, and NCE, RCN's Value Creation 2010, MOBI, and FORNY Highschool, and SIVA's Incubator program, Industrial Incubator program, Business Parks, and SIVA industrial parks/plants.
- State localization policy, benefiting regions outside Oslo.

¹⁶ There are also state university colleges in Oslo, Kristiansand, Bergen, Trondheim and Tromsø. The state university college in Stavanger has recently been upgraded to university status.

4.3.3 Smaller centre and sparsely populated regions (< 5 000 inhabitants in the main centre)

Less than 10 percent of the population lives in such areas. These areas consist of 109 labor markets. 107 of the labor market areas are within the target area for regional investment grants, have a population of 575,000 inhabitants, and comprise approximately 55 percent of the target area. 90 percent of the 909 Norwegian urban settlements are smaller than 5000 inhabitants.

Many present regional measures and programs cover this “region”.

- Welfare. The North Norway grant and the Regional grant. Several sectors have specially designed measures like recruitment actions to get qualified personnel, rural district medicine centres etc.
- Ferries, regional airports, mobile phone coverage, broad band coverage, distance education, etc.
- The Norwegian Touring Theatre, the Norwegian Concert Institute/Rikskonsertene (touring musicians, ensembles, bands etc.) and art touring exhibitions (part of the National Museum of Art, Architecture and Design).
- Ordinary regional grants and loans, including compensation caused by the termination of reduced social security tax.
- Production of milk and meat, Rural district development scheme, delivery requirements for fish boats to fish processing plants, and sea farming localizations.
- Programs like MERKUR and SIVA's Industrial Incubator program, Business Parks, and so-called SIVA industrial parks/plants.
- An urban settlement program (Tettstedsprogrammet) has recently been finished. The aim was to develop more attractive municipality centres and mobilise meeting places and networks between people in rural areas. 16 pilot communities participated.
- A pluriannual program targeting small peripheral municipalities was ended in 2001. The Government is presently working on a new program for small communities. The initiative shall contribute to better provision of services, industrial development and attractive urban settlements.

4.4 Discussion and conclusion

Norway is a typically monocentric country according to morphological criteria and the rank-size distribution. Three to six other “larger” cities (although all less than around the forth of Oslo's size) may represent a potential base of a more polycentric pattern, although three of these are located in the eastern part of Norway, not far from Oslo. Small towns and small urban settlements are the characteristic trait of the Norwegian urban structure, some of them located far apart – especially in other part of the country than the central south-eastern part. The vast differences in the number and variety of jobs and certain personal/household services between centre and periphery challenges cohesion policy. For the next 20 years, the Government is aiming towards a geographically balanced settlement pattern, in which all parts of the country experience population growth.

However, the ESDP seems so far not to have been central in debates on regional development and spatial planning in Norway. So far influence from the ESDP seems to have been of a more indirect nature than a planned implementation even though there is a belief in the Ministry of Local Government and Regional Development that ESDP-goals like polycentric development and Urban-rural partnership are strongly reflected in national policies. At the regional level there has been some interest in the ESDP for the regionalised development within single NUTS 3 regions. There has also probably been some indirect influence from research that has been influenced by thoughts from ESDP. This means that decision makers are not necessarily aware of influences from normative EU spatial goals, believing in the uniqueness of seemingly national concepts with meanings close to those used in international discourses. There seems to be an increasing interest for

ESDP at the local level, partly as a result of participation in Interreg projects. It is, however, difficult at this stage to assess future developments, as there has yet to be made operationalisations of the different concepts within ESDP in a concrete territorial terms and the specific spatial contexts as described above.

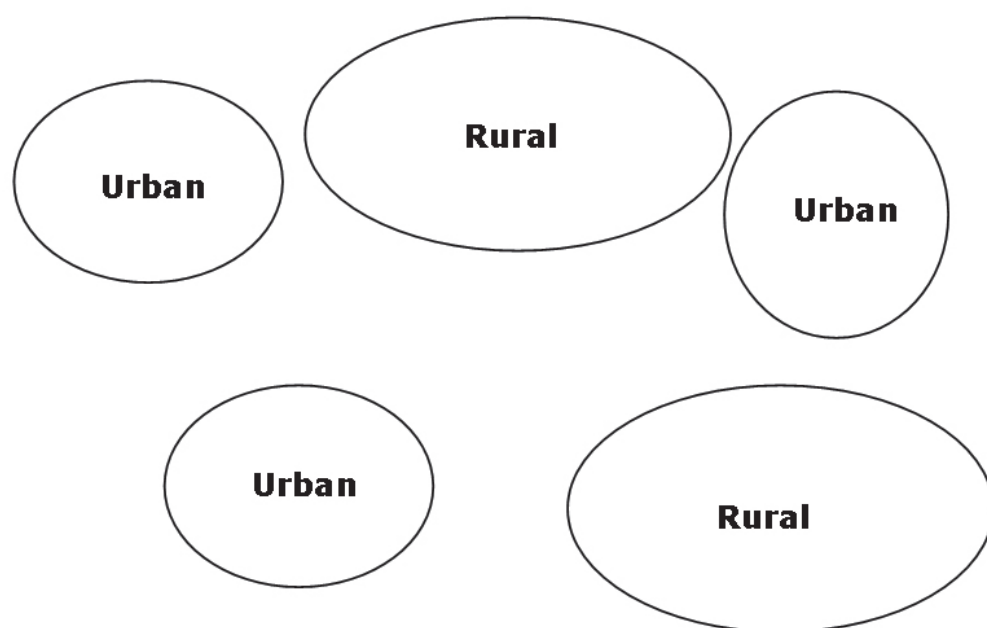
5. Country study: Sweden

5.1 Development trends in urban systems in Sweden

5.1.1 Sweden - Sparsely Populated with Small Polycentric Structures

The Swedish urban structure is quite different compared to the continental or English ones. Sweden is, like Finland and Norway, a sparsely populated country – in some parts extremely sparsely populated – and this phenomenon characterizes even the urban structure in Sweden. In a European context even the medium-sized towns are few and most of the towns are characterized as small towns. Only three towns in Sweden – Stockholm, Gothenburg and Malmö – have more than 200,000 inhabitants and eight are localized in the interval 100,000-200,000, where only one has more than 150,000. A medium-sized town in Sweden is thus not like medium-sized towns on the European continent concerning population size. As a consequence of the character of the Swedish urban-rural system it must, thus, be kept in mind that the Swedish municipalities are geographically wide and this in results in a situation where the municipalities consists of both built-up areas and rural surroundings (for a schematic view of community structures in Europe and Sweden, see Figure 19).

European community structure consisting of urban and rural municipalities.



Swedish community structure consisting of municipalities with both urban and rural areas.

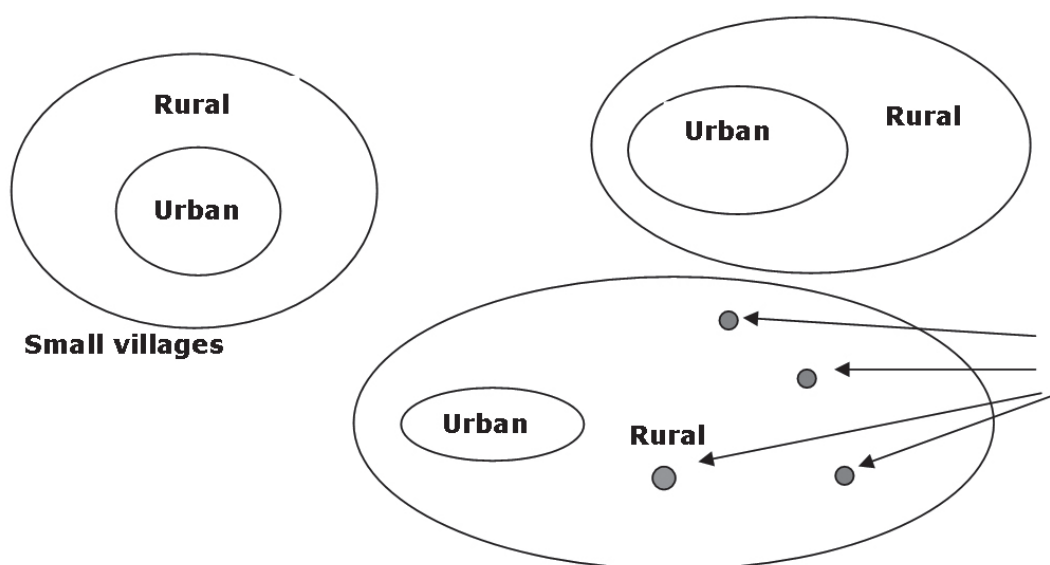


Figure 19: A schematic view of the difference between European and Swedish polycentric community structures with respect to urban-rural ingredients.

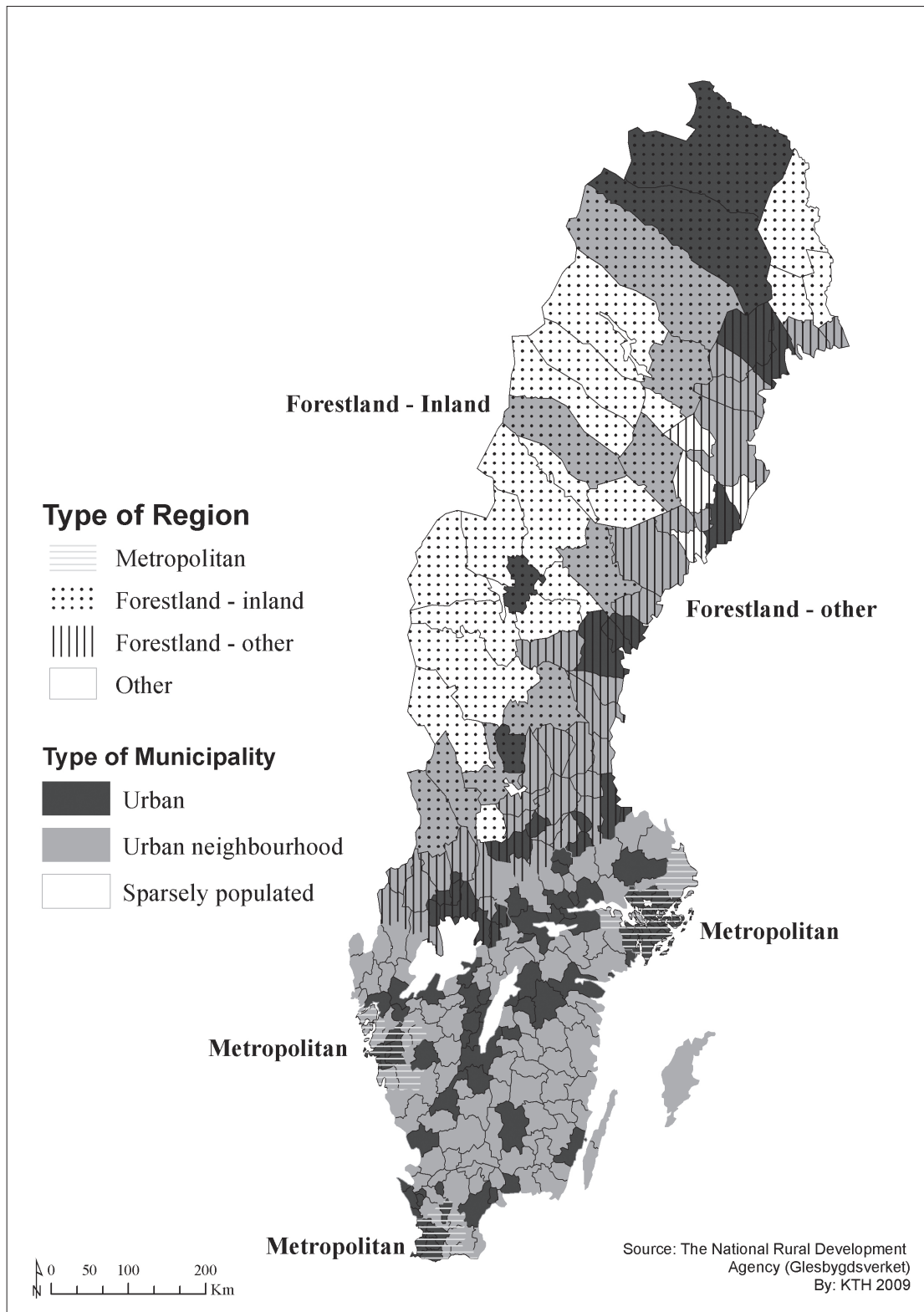


Figure 20: Type of cities and municipalities in Sweden 2002.

5.1.2 The urban-rural system and the north-south divide

Figure 20 show the Swedish urban-rural system in a schematic way by combining the type of municipalities and their localization in differing kind of regions. The type of regions can be seen as preconditions for regional enlargement and polycentric development and the type of municipality what kind of municipalities they are. The metropolitan regions consist of Stockholm's, Gothenburg's and Malmö's local labor markets 1998. Forestland-inland consist of the former EU-target areas (objective 6) and forestland-others of the local labor markets in the forest counties that not were included in the objective 6 areas. Other regions consist of the rest of the counties and local labor markets. Sparsely populated areas have less than five inhabitants per km² and not more than 20000 inhabitants. Urban neighborhood is defined as a municipality where less than 70 percent are living outside built-up areas and urban areas consist of municipalities with an urbanization share of more than 70 percent. This means that we got the following delimitations including the share of the Swedish population (Table 4):

Table 4: The Swedish urban-rural system based on municipalities and regions.

Source: Estimations based on figures from and the delimitations by the National Rural Development Agency.

<i>Type of region</i>	<i>Type of municipality</i>	<i>% of population</i>
Forestland – inland	Sparsely populated	1.3
Forestland - inland	Urban	1.2
Forestland - inland	Urban neighborhood	1.3
Forestland - other	Sparsely populated	0.3
Forestland - other	Urban	8.2
Forestland - other	Urban neighborhood	6.8
Metropolitan	Urban	34.2
Metropolitan	Urban neighborhood	5.6
Other regions	Urban	23.8
Other regions	Urban neighborhood	17.4

As can be seen most of the Swedish population live in urban areas and in Map 1 the north-south divide is obvious. The more densely populated regions in the south results in more commuting and regional enlargement than in Northern Sweden where the long distances and few built-up areas hamper this kind of mobility pattern and only a small of the Swedish population are living in the forestland-inland – less than five percent. As will be shown later the regional enlargement process has also been accentuated especially in the metropolitan areas since the end of the 1990s. Especially in the southern part of Sweden this process has resulted in a more polycentric development.

5.2 Administrative reforms in Sweden during the past decades

In Sweden, there have been no large administrative reforms at regional level since the beginning of the 1970s. The most important reform since then was the municipality reform 1971/72 when a large amount of small municipalities were reduced to around 290. Another effect of that reform was that Stockholm city (A-county) was grouped with Stockholm County (B-county) to the new administrative region Stockholm county (AB-county). The next large formal and administrative reform was in 1996 when Gothenburg, Älvsborg's County, and Skaraborgs County were established as one county – Västergötland's County. The year after – 1997 – Kristiansstad County and Malmö

County) were grouped together with Skåne County). This resulted in two new large administrative regions which grew in importance and population and increasingly became a counter-factor to the dominance of the Stockholm County. The opening of the Öresund Bridge, in particular, has helped Skåne become a challenger to the Stockholm region at the national level.

One of the central ingredients in the Swedish regional policy and official rhetoric is the concept of 'regional balance'. The problem with this concept is, however, that it has – and can be – defined in numerous ways. There is also a more or less arbitrary contradiction between growth and regional balance or between growth and distribution. The official opinion is that the purpose of the policy is to minimize regional imbalances but not at the cost of the national growth. Instead, the consequences of the regional policy are alleged to result in a more harmonized and sustainable national growth. Regional policy in Sweden aims not only to reduce the regional imbalances but also to stimulate the growth and reduce the bottlenecks in the economy.¹⁷

The purposes of the regional policy in Sweden has traditionally been twofold – to reduce the negative impacts of the market forces and to give people the possibility to live wherever they want, even at the expense of rising public expenditures. The Swedish long-term study from 1955 with the title *Balanserad expansion* (Balanced expansion) provided fodder for these aims. The concepts of polycentricity and monocentricity are, however, were mentioned neither in the official regional policy in Sweden nor in debates about the regional development. Instead the concept of balanced and/or unbalanced regional have been used in positive or negative manner. It wasn't until the 1990s that the concepts of polycentricity and monocentricity were used in the Swedish regional political debate. Rather, differing forms of functional local labor markets were used – e.g. concepts as H-regions, F-regions were created to show differences in the economic and demographic structure – and in order to find some form of more or less optimal territorial size to reallocate resources and create preconditions for a positive market development. But it was not enough to give the state regional actors and the regional political authorities a helping hand to change viscous circles to virtuous ones. During the past decades functional local labor markets have been a central ingredient in Swedish regional development policy as they seem to be a precondition for an endogenous regional development, more efficient resource allocation and a diminished mismatch on the labor market.

5.2.1 The first phase - lagging regions and industrial policy

Up to the 1950s and 1960s, it was, not however the increasing imbalances resulting from the expansion in the economy that was in focus. Rather it was the contraction and structural transformation in differing regions with a resulting growing out-migration– especially in the Northern parts of Sweden – that was the centre of attention. This has been the case - more or less implicitly - since the end of the 19th century and is synonymous with the "Norrbotten problem". It was not until 1952 that the Swedish government and parliament understood that an active localization policy was needed. The term "regional policy" however was not mentioned. Instead the argument highlighted economic, military and social factors (Aldskogius 1991). Better integration between the local labor markets was analogous to the small labor markets in more or less peripheral areas. And as mentioned above the concepts of polycentric/monocentric development were still unknown.

It was, however, not until the 1960s that the modern regional policy was introduced under the guise of "localization policy". During the 1960s, the industrial districts in the Southern part of Sweden – including the Stockholm region – experienced a shortage of labor at the same time as there was a surplus of labor in Northern Sweden, particularly in Norrbotten's interior. A combination of a solidarity wage policy and an active labor market policy intensified a transfer of labor from the low productive branches to the high productive ones. This transfer of labor aimed to stimulate the economic growth – at least at national level. This policy was inspired by the trade union economists Gösta Rehn and Rudolf Meidner and consequently called the "Rehn/Meidner model". One problem

¹⁷ Parts of the historical exposé is based on Foss et al 2000.

was, however, that the transfer of labor to expanding areas – despite an active labor market policy – was not fast enough. In addition the new industrial jobs were to be created in the out-migration areas in the Northern Sweden as an alternative to the redistribution of people. ‘Balanced contraction’ was perhaps a more relevant concept than ‘balanced expansion’ to characterize this policy. During the end of the 1960s and the beginning of the 1970s there was also a rising opposition to this policy as the effects on the regional balance became more and more obvious. At the same time as the big cities were growing there were also more depopulated areas than before and especially in Norrland’s interior but even in other more peripheral areas in Sweden.

The meaning of ‘balanced contraction’ was thus that dramatic changes in the population distribution were to be avoided and that large out-migration should be hampered (Axelsson et al, 1999). The idea behind this policy was, among other things, that there was a time lag in the development with respect to different regions in Sweden. The problem was, thus, that some regions were lagging in the transformation process, especially with regard to industrial development. The policy was, more or less explicitly, inspired by the theories of economic dualism and economic stages consisting of sectors and regions in different development phases – it was some form of modernization or industrialization policy that was recommended. Without mentioning it explicitly, this has more in common with monocentric development than a polycentric development.

In the beginning of the 1970s, the concept ‘localization policy’ was replaced by ‘regional policy’ (SOU 1970:3). This ‘new’ policy bore many similarities to the older one and was perhaps also inspired by the theories that were in fashion with regard to the recommendations for development in the ‘Third World’ (the ‘stage theory’, where different regions are supposed to be at different stages of development, e.g. Rostow and Lewis). Still polycentricity vs monocentricity and functional local labor markets were not established in the Swedish or European regional and territorial vocabulary.

5.2.2 Regional policy, structural problems and the public sector

In 1972 several new ingredients were introduced into Swedish regional policy. In *Sverigeplanen* (The Swedish Plan), regional policy was extended to include the central public sector. This was a shift from a growth-oriented industrial policy, to a policy oriented towards distributing and transferring public expenditures. Numerous branches of government services were relocated into towns in the assisted areas, which were supposed to act as growth poles in these areas, and in the long run stimulate national economic growth (Governmental Bill 1972:111). Another aim was that these ‘growth poles’ were to hamper inter-regional migration and the concentration to the metropolitan areas and instead stimulate the intra-regional migration toward these centers. In other words, the intra-regional balance was de-prioritized at the expense of the inter-regional balance. The rise of the public sector also stimulated the entrance of women on the labor market and female labor force participation increased sharply during the 1970s as many new jobs were created and a more female-friendly labor market was established. One of the results was also a slow-down in long-distance migration. Even this policy can be seen as a monocentric development but on a micro instead of a meso level. The inspiration for the policy emanated more from Perroux’ growth pole theory (Perroux 1950) than Rostow’s or Lewis’s stage theories. The point of departure for growth pole theories is that some cities will take the lead in the development process and thus renew the regions with a concentration a growth point. This has more in common with monocentric development in peripheral areas than with polycentric development, especially in a large and sparsely populated country as Sweden.

During the economic recession of the 1970s, new ingredients were necessary to cope with the structural industrial problems that hit some regions very hard. Short-term selective measures were introduced particularly to solve the labor market problems in the hardest hit regions and areas, which resulted in a closer connection between the regional and the labor market policies. These policies, which focused on employment creating measures, continued up to the middle of the 1980s

when the boom in the Swedish economy eroded some of the relevance of this direct employment-creating policy. Instead, the focus was more on training and upgrading the labor force and thus on development of the human capital. 'Technical centers' were established and small regional universities were established and on the rise. A central element in this policy was that human capital was considered to be a localization factor for new firms in the knowledge-based sectors. This can be seen as a change from the industrial policy approach to the post-industrial one where human capital substituted for both physical capital and standardized labor as regional growth factor.

During the 1980s, reduced pay-roll taxes were introduced in some regions in Northern Sweden. The primary motives for this policy were compensating for long distances and stimulating labor intensive production in peripheral areas. This would give the private sector incentives for substituting capital with labor. In the end, this policy was to result in a larger demand for labor and also a shift towards more service oriented activities. The problem was that it hampered the productivity development and stimulated labor-intensive activities. This policy can thus be seen as contrary to the human capital policy where human capital was the strategic growth factor. It can also be seen as a conflict between economic growth policy and welfare policy. The growth of the public sector during the 1970s and 1980s was also an important factor to hamper the concentration to metropolitan areas and give women a lot of new jobs even in the more peripheral areas or the regional centers.

5.2.3 EU membership and the crisis of the 1990s

From the early 1990s on, Sweden went through the worst labor market crisis since the great depression of the 1930s. This crisis lasted at least up to the second half of the decade. Every region experienced high unemployment – even the metropolitan areas – and the regional problems became even more fragmented. The segmentation and the mismatch on the labor market increased. Even when the economy started to improve at the end of the decade, the labor market mismatch began to turn into a regional mismatch. Although the demand for labor was rising, there was a surplus of labor in certain parts of the country. This phenomenon was both intra- and inter-regional and it seemed as if high structural and long-term unemployment had come to stay. As a consequence of the crisis of the 1990s, one of the primary aims of the regional policy in Sweden was to stimulate cohesion between the differing regions in the country and to create the preconditions for development in every region in order to stimulate national growth. Hence there was a harmonization with the EU's regional policy, which is more focused on general measures than on the selective measures that in many cases are not neutral according to the rules of the free market.

Swedish regional policies started to change direction even before Sweden joined the European Union. The restrictions on what sorts of policies which were possible without conflicting with EU free market rules and policies became more and more obvious. This resulted in a narrowing of the Swedish regional policy towards the EU regional policy. Already the Governmental proposition of 1993/94 acknowledged that regional policy should be regarded as a part of a national growth-oriented policy (see e.g. Nilsson 1993). This shift in policy became even more pronounced in the regional proposition of 1998, where the point of departure was a regional industrial policy with the point of departure being the differing regions' specific characteristics and where the 'Regional Growth Contracts' (*Regionala tillväxt avtal*) were of strategic importance.

When Sweden became a member of the European Union in 1995, the preconditions for an independent Swedish regional policy were changed. This development was, however, not quite new. – There had been a gradual integration of Swedish regional policy with that of the EU both before and after the signing of the EEA agreement (Persson, 1994, Hallin and Lindström, 1998). After joining the Union, one of the most concrete results for regional policy was that Sweden now could get access to the Structural Funds. In addition to the Structural Funds the most obvious harmonization of Swedish regional policy with the EU policy, was the 'Regional Growth Contracts'

where the focus was more on general growth aspects than on regional aspects. These contracts were not even restricted to the traditional regional problem areas – instead all regions in Sweden had the same possibilities to participate in the process on more or less the same preconditions. The point of departure for the different projects within the contracts was to develop the ‘unique’ characteristics in each region and consequently start up a self-generated development process. Keywords with regard to these contracts were e.g. partnership, growth potentials, bottom-up processes, and participation. A strategy of regional partnerships was developed, where official and private actors were encouraged to co-operate and where the private sector’s involvement was of high priority.

The thus ‘Regional Growth Contracts indicate a shift from a regional policy to a regionally focused growth policy that is not so discriminating with respect to competition as the ‘traditional’ regional policy. This is also seen in the Governmental Bill on regional policy, where the regions’ different prerequisites are underlined as preconditions for a regional development that will have positive effects on the development of the whole nation.

5.3 Regional enlargement – The new cure or a Swedish compromise?

A problem with small local labor markets is the weak diversified economic structure with an increased segmentation and mismatch on the labor as one consequence. This results in a situation where there is long-term unemployment among some job categories at the same time as there is a shortage of others. This is valid for all labor markets but the small and undiversified markets are especially fragile with respect to mismatch and segmentation on the labor market.

In the regional policy report that was submitted in September 2000 more or less constant population shares over time were abandoned as a central goal for the regional policy. Instead, functional local labor markets and regional enlargement were featured as a central ingredient for development and dynamics (SOU 2000:87, see also Johansson and Persson 2000). Regional enlargement means that the local labor markets must be enlarged to accommodate more job opportunities for more categories of people (for a definition of functional local labor markets see Carlsson et al, 1991). Regional enlargement also means more commuting over longer distances and greater choices on the local labor market, which to a great extent means “the right person in the right place,” increasing employment positions through an improved matching process. For regional enlargement to work, however, increased access in a broad sense is needed – better communications, infotech support, telecommuting, and so on – as well as better and more cooperation between small and middle-size municipalities. However this also implies that the local labor markets in the interior of Norrland still will be in a backwash position (see e.g. Eliasson, Lindgren and Westerlund 1998).

Double residency will be more and more common in the future. People will have a small place where their jobs are officially located and also have a larger residence in the remote small cities or countryside. With more flexible working hours and the opportunity to work from home, this will become a commonplace alternative. Commuter patterns already vary greatly among different educational and professional categories. Somewhat simplified, we could say that every profession has its local labor market. A more flexible and mobile labor market – within the region and between regions – in combination with attractive housing environments will have a pull and competitive edge in the first decades of the new millennium. Even if young people continue to move away and the population continues to decline in small and middle-sized towns, from this perspective there are still excellent opportunities for these places to profile themselves and develop. However, it won’t be the small and medium-sized towns that are growing but instead the rural communities with good accessibility will succeed the best. The actual size of the municipality in population figures is not the most important factor, but rather how municipalities position itself on the local labor market and the quality of life they offer will be key. This means that we should look at future

small and medium-size towns in a completely different way than we do today in terms of housing and employment. This process began to be discernible in the late 1990s. Mobility seems to be the 'lubricant' and a necessary condition for change and transformation. This applies to small towns as well as big cities.

5.3.1 Regional enlargement – a theoretical approach

The theoretical approach concerning the effects of regional enlargement is based on labor market segmentation where different labor force categories are supplied and demanded in different quantities. This means that small local labor markets offer fewer job opportunities than larger ones. In order to eliminate – or at least minimize – the mismatch on the labor market, regional enlargement and larger functional labor markets is one possible solution. This implies more commuting on the one hand and “new” settlement patterns on the other. In the industrial society, closeness to work places was of utmost importance but in the post-industrial society this connection has decreased in value. This also means that housing amenities and good living conditions have grown in significance for the settlement patterns.

Another consequence is that employment opportunities within municipalities and smaller cities have lost importance, especially within larger local labor markets. Instead, the attraction of cities or municipalities as residential areas has grown in importance and especially amongst well-educated people with high incomes. It should be recognized that it is not population size itself that is most imperative with respect to development, transformation and economic well-being. Instead, it is more and more the “right” kind of people that generate an image with new prerequisites for transformation and endogenous growth as a consequence – the post-industrial investment and localization pattern is quite different from the industrial one. It should, however, be kept in mind that preconditions for regional enlargement and endogenous growth differ as a consequence of the localization and accessibility to larger local labor markets.

5.3.2 An exposé over differing kinds of regional enlargement

It is obvious that the concepts of functional regions and local labor markets are becoming more frequent and relevant to the discussion of regional development, and that the urban and rural dualism is becoming increasingly insignificant in many aspects. This is a departure from the industrial society where distance is of great importance. As local labor markets expand, the rural parts within a local labor market will be gradually more dependent on and interconnected with the development and transformation in urban areas. This has also been accentuated during the past decades as a consequence of deindustrialization and renewal in some old factory towns. Changes to the urban hierarchy have also had effects on the rural areas in Europe, including the Nordic peripheral areas, where rural areas in the neighborhood of expansive metropolitan areas have grown.

The municipality level is thus not the best platform from which to analyze migratory movements – both migration and commuting - with relevance to labor market conditions and settlement patterns. Instead, functional local labor markets have been created, where the municipalities are the point of departure in the creation of local labor markets.

The regional enlargement process is thus prevailing in Sweden. There are, however, different gender patterns related to commuting and local labor markets. Men tend to work in larger local labor markets than do women and highly educated people tend to be in employment in larger labor markets than less well-educated people.

The regional enlargement process also operates in tandem with economic fluctuations. Commuting increases during good times and stagnates during bad times. This is hence as much an effect of the changing labor demand and supply. If there are no jobs to commute to it is better to stay at home.



Figure 21: The number of local labor markets 1970-2004.
Source: (Nutek & SCB)

5.3.3 Different locations - different preconditions

Small and medium-sized cities vary considerably with respect to development preconditions within the Swedish regions. When considering remoteness and population density, and links to the national economic and regional centers, three kinds of cities and city regions can be distinguished – all applicable to the Swedish territorial structure as well as to polycentric or monocentric development (see also Johansson 2002, 2005 and Adolphson et al 2006).

The first is *cities just outside big cities*. These cities are integrated in the urban area's economy and labor market, and have to a greater extent been integrated in the economic and spatial development of associated big city regions. These small and medium-sized cities have often been characterized by population growth as – among other things – a consequence of in-migration and decentralization of the settlement pattern. Especially families with children and middle-aged people tend to settled down in these cities - with relatively large rural surroundings but with good transport connections to the more dynamic centers. This can be seen as a typical consequence of the integration of small and medium-sized cities in a monocentric development.

It should however also be kept in mind that this decentralization of the settlement pattern is not a new type of suburbanization like the changed residential patterns of the 1970s which was characterized more by suburbanization than expansion of “old” small and medium-sized cities in a transformation process from the industrial phase to the post-industrial one. This also means that focus rests on different strategies. Today attractive housing conditions are a pull factor in itself – suburbanization was in much an effect of a housing shortage that resulted in the growth of small villages on the outskirts of the cities.

The second type of city is *small and medium-sized cities with some distance – too long for daily commuting - to big city areas* but with relatively good transport connections to them. These cities – also with rural hinterlands - are not dependent on the economic development in the big urban centers. Due to good transport links, they have been increasingly involved in the local labor markets of the small and medium-sized regional urban centers. These relatively densely populated communities are noticeable ingredients in the urban-rural structure in the Sweden, Norway and Finland. Such small and medium-sized cities with their rural surroundings can be seen as - and

included in - small polycentric structures.

Despite their polycentric characteristics most of them are, nevertheless, influencing out-migration from local labor markets. It is not distance that is the big problem here – rather it is the weak diversification of the local and regional economies that hamper renewal and transformation. Additionally, these cities are additionally not new—instead they have often been small regional or local centers. Many of them are still in the industrial phase and dominated by a few big companies.

The third city category is *remote and isolated cities in the periphery*. These cities are characterized by out-migration, ageing, low-skilled labor force and – of course – long distances and weak connections to the rest of the economy. The economy is of a dual character compared to the national economy, especially with respect to the dynamic metropolitan areas. Local labor markets are spatially large but with few inhabitants, often consisting of only one municipality with a ‘shaky’ and undiversified economic structure and dominated by one or two big companies – the location factor was e.g. some type of raw material or the “place factor”.

One of the consequences of the very long distances to built-up areas and small regional centers is that the preconditions for a polycentric development are virtually nonexistent. The possibilities concerning a self-generated endogenous growth are also missing and many of these remote areas are very dependent on the official transfer system to survive. A polycentric community structure concerning these cities is thus more or less lacking. These cities – with large rural surroundings - have also experienced a negative population development for a long time.

The figure below illustrates the cases discussed above in a schematic way - cases that are all relevant with regard to various Swedish cities and regions and even other peripheral regions in the Europe – e.g the Nordic countries and the Baltic States (see e.g. Johansson 2005)

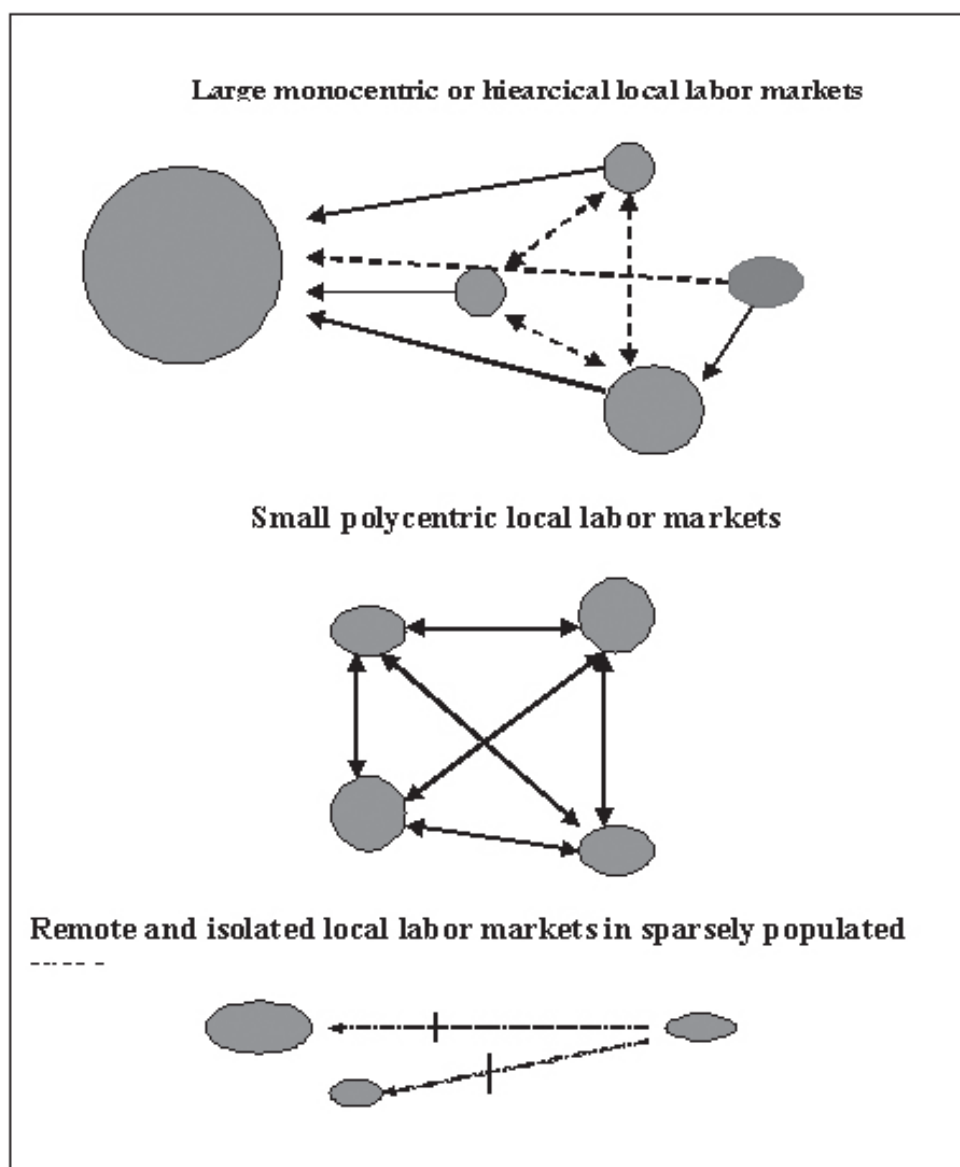


Figure 22: Schematic typology of Swedish cities and city regions.

5.3.4 The metropolitan regions – towards polycentricity?

Regional enlargement in Sweden seems primarily to be a big city or city-region phenomenon. The table below illustrates the development among the three metropolitan regions in Sweden – the local labor markets of Stockholm, Gothenburg and Malmö between 1970 and 2004. The “connection index” is shown within the brackets.

Table 5: Regional enlargement in the metropolitan areas. Number of municipalities and “connection index”.

Source: Estimations based on data from NUTEK.

	1970	1980	1990	2000	2004
Stockholm	26 (0,88)	23	27	35	36 (0,75)
Gothenburg	12 (0,83)	14	15	16	17 (0,94)
Malmö	6 (1,00))	8	13	25	27 (0,41)

Malmö's local labor market has seen greater and more polycentric growth than Stockholm and Gothenburg, even taking into account that the Stockholm metropolitan region was enlarged with the inclusion of Uppsala at the turn of the century. Helsingborg's large local labor market has e.g. been integrated in Malmö's and this means also that the municipalities that are connected to Helsingborg in the first instance now are included in Malmö's local labor market even if the commuting to Malmö is too small to be characterized as a part of Malmö's local labor market.

The hierarchical polycentric Stockholm region has possibilities to be developed in a more complementary polycentric way through regional enlargement. This is especially valid concerning the string Uppsala-Västerås-Eskilstuna where the possibilities to transform the Stockholm region in a polycentric direction seem to be the best. According to the findings of the project on polycentricity (ESPON 1.1.1) the Stockholm region is an isolated functional area and Västerås-Eskilstuna is an area with a polycentric potential. This development may have positive effects on the region's development, partly as the mismatch on the labor market will diminish, partly as a consequence of the productivity increase enlargement process ought to result in.

If the integration of Uppsala's local labor market in Stockholm's was of great importance for the regional enlargement as well as the development in a more polycentric direction, this phenomenon is even more pronounced with regard to Lund's and Malmö's local labor markets and their integration in Malmö's. This process has become much more symmetrical today than for a few decades ago. This has resulted in a situation where Skåne now consists of only two local labor markets -Malmö-Lund and Kristianstad. This is – at least partly - an effect of the better infrastructure and transport possibilities in the whole region as a resulting from the Öresund Bridge. Skåne is also a good illustration of the fact that regional enlargement seems to result in a more polycentric development. The Öresund Bridge is an important potential in creating a polycentric transnational labor market in Skåne and Zealand.

The Gothenburg region has not followed the way of Stockholm and Malmö. Instead the region has experienced a more monocentric development between 1970 and 2004. This seems to be an effect of the strong functional links to Gothenburg. In the future Borås' local labor market will probably be integrated with Gothenburg's and this will result in a more polycentric structure. Even the Fyrstad region will probably be integrated in Gothenburg's local labor market as an effect of the political ambitions to integrate the region by better transport accessibility.

5.4 Small and middle-sized city regions – polycentricity in the small format?

The small and middle-sized Swedish labor markets have increasingly been integrated with each other during the past decades – at least in the Southern and more densely populated areas. Some cases are illustrated in the table below.

Table 6: Regional enlargement in the small and middle-sized regions. Number of municipalities and “connection index”.

Source: Estimations based on data from NUTEK.

Region	LA	1970	1980	1990	2000	2004
Norra Sörmland	Eskilstuna	1 (1,0)	1	2	1	4 (0,5)
	Katrineholm	2 (1,0)	2	2	3	-
Östergötland	Linköping	2 (1,0)	6	8	8	8 (0,63)
	Norrköping	2 (1,0)	3	4	4	4 (1,0)
Skaraborg	Skövde	1 (1,0)	4	6	8	10 (0,80)
Fyrstad	Trollhättan	6 (0,83)	5	5	10	9 (0,44)
Sjuhäradsbygden	Borås	2 (1,0)	4	5	4	5 (1,0)
Södra Dalarna	Falun	1 (1,0)	3	6	6	6 (0,50)
Västmanland	Västerås	1 (1,0)	4	4	6	7 (0,71)
Umeåregionen	Umeå	5 (1,0)	4	6	6	6 (1,0)
”Norrlandsrektangeln”	Luleå	1 (1,0)	4	4	4	4 (0,75)

Even concerning the small and middle-sized labor markets, regional enlargement seems to have the same effect on polycentric vs monocentric development as in the case of the metropolitan areas. In the cases where monocentric development continues to dominate the cause seems primarily the size effect – large cities are in-commuting areas to a greater degree than small ones as they have a more flexible labor market and it is easier to find the “right” jobs. This is especially valid for ”Sjuhäradsbygden”, Närke, Södra Värmland och Umeåregionen that all are dominated by one big city.

A region that probably will be integrated in the Stockholm’s local labor market is Norra Sörmland with Eskilstuna as center. Eskilstuna already has its largest out-commuting to Stockholm’s local labor market and rather than any of the cities that are members of the local labor market in Norra Sörmland. As mentioned earlier this will result in a more polycentric development for the Stockholm-Solna local labor market – once again an effect of the enlargement process. The same reasoning can be applied to the Västerås local labor market and in both cases the analogy to the integration of Uppsala’s local labor market are obvious.

Another region that may be developed in a polycentric way is Östergötland. There are already signs that Norrköping’s local labor market relatively soon will be integrated in Linköping’s local labor market. This means that Sweden will have a fourth metropolitan labor market. This development will result in a large polycentric region with two central cities like Stockholm-Solna, Malmö-Lund, Falun-Borlänge and Trollhättan-Vänersborg that all are characterized by symmetrical commuting patterns between the cities.

Fyrstads can –as mentioned above - be seen as a complement to the development in the Gothenburg regions but will probably be integrated in that region in the future that means a more polycentric development in the metropolitan region of Gothenburg, especially then in combination with the integration of Borås' local labor market.

Skövde and Skaraborg is a region that consists of a lot of small rural municipalities that all are more or less oriented towards Skövde despite symmetrical commuting between the small built-up areas. The reason that Skövde dominates is that the region is a traditional rural region and Skövde is the central service city in the region with a flexible labor market with prosperous rural areas in the surroundings.

Once again – one conclusion is that regional enlargement often results in a more polycentric development even concerning small and medium-sized local labor markets and the especially in the southern parts of the country. The exceptions are local labor markets that are dominated by one big city and lie relatively isolated from the more densely and large local labor markets.

5.4.1 Growth poles in remote and sparsely populated areas

Swedish municipalities in remote and sparsely populated areas are often characterized by long distances and weak connections to other local labor markets. The local labor markets are spatially large with few inhabitants, often consisting of only one municipality.

The local labor markets of Östersund, Lycksele, Kiruna and other municipalities in Norrland's interior are cases where the hinterland is restricted concerning population size and density and where, consequently, the commuting is small and asymmetrical. The only city that can be seen as a “real” center is Östersund that consists of five municipalities all dependent of the local labor market in the center. This means also that the commuting pattern is monocentric and asymmetrical and if Östersund can be classified as a growth pole or not will the future show. Östersund has gone through a great transformation during the past decades from a military town and trade city to a city more characterized by localization of knowledge-based activities initiated and supported by the national growth policy.

One possibility to stimulate a “virtual” regional enlargement in these areas is through linking special economic activities to other large local labor markets in the country. It must be kept in mind that the regional enlargement is not the same in all parts of the country and that it differs between various activities and personal categories.

5.5 Conclusions

The regional reform debate in Sweden has not explicitly taken up questions of polycentric development. However explicit in Swedish regional policy is the idea of regional enlargement, which may result in a more polycentric development of the small and medium-sized labor markets. The discourse on structural reform also echoes the idea of larger functional regions, but the preconditions for these regions are still being debated, as well as the governance responsibilities of the central regional level.

At the EU-level polycentric development has been seen as a means for a more balanced regional development and an increased economic growth and competitiveness. The objective of balanced polycentric urban systems at European level was first introduced by the European Spatial Development Perspective (ESDP). The interest in polycentric development was fuelled by the hypothesis put forward in the ESDP that polycentric urban systems are more efficient, more sustainable and more equitable than both monocentric urban systems and dispersed small

settlements. As polycentricity is defined as a country/region where many cities are of the same size, same accessibility and complements to each other it is more or less obvious that the preconditions varies between differing regions in Europe and also then the impact on a balanced regional development and territorial cohesion. During the past decades the densely populated “Pentagon” – i.e. the area London, Paris, Milan, Munich, Hamburg and London – has experienced a polycentric development that has resulted in a more balanced regional development, more functional urban regions, territorial cohesion and increased competitiveness. Polycentricity has also been the “model” concerning regional development even in more peripheral areas. This development seems, however, have been an effect more of the “market forces” than political or administrative initiatives at least in central areas.

In peripheral areas – including Sweden – a monocentric development has instead more been the rule. The big cities and metropolitan areas have continued to grow, the migratory movements have created depopulation in many areas along with regional concentration and unbalanced regional development. In Sweden this has been obvious since the 1960s and the north-south divide is one indication of this. Another is the increased concentration to the metropolitan regions that – except the Southern part of Sweden – still can be characterized as monocentric or hierarchical polycentric regions despite more symmetrical commuting patterns.

Is there a goal conflict between polycentricity and monocentricity in a sparsely populated country as Sweden? The preconditions differ a lot between various parts of the country and the question is also if a monocentric development per definition is a negative path for these kind of countries. As the resource base concerning population size, population density and urban-rural structure differ greatly compared to central Europe in general and Pentagon in particular the relevant question is perhaps instead that there is not one and only one solution. Instead, a monocentric development can be a rational way to get rid of the problems connected to restricted and small resources. This implies – among other things – that big cities and metropolitan regions are one way out of this dilemma even at the cost of relatively increased regional and territorial imbalances. A precondition for this “policy” is probably that it does not hamper the economic growth and development as well as the welfare effects is not negative for the inhabitants even if the regional unbalance is accentuated. For a country like Sweden, regional enlargement can then play the role as the “Swedish way” towards symmetric and more effective resource allocation especially then in the southern part of the country and then not only in the metropolitan regions. In the northern regions, monocentric and isolated solution will, however, still be the “model” as the preconditions for regional enlargement are almost absent. The point is, however, if the development will be retarded or expand.

6. Nordic conceptualizations of polycentric development

While it is beyond the scope of this pre-study to systematically compare how conceptualizations and uses of the polycentricity are understood in light of governance reforms in the Nordic countries, several observations crop up with regard to commonalities and dissimilarities in Denmark, Finland, Norway and Sweden.

6.1 Spatial trends in Nordic regions

The Nordic countries except for Denmark are sparsely populated especially in the northern peripheries and the capital regions dominate in all countries. This limits somewhat the degree of polycentric development based on geographic proximity in these countries. Sparsely populated areas account for a large share of the territory in Finland, Norway and Sweden and this process appears to have become amplified during the past decades despite the various types of regional policy measures that have been introduced to combat the trend. Even if the urbanization rate in the Nordic countries is lower than in most European countries the trend is that the concentration of people to urban areas – and then especially to the big city areas – continues to increase.

In Finland, as in Norway and Sweden, the north-south divide concerning urbanization accentuates existing regional imbalances. The major part of population and economic growth has been localized to the belt around the southern part of Finland and especially to the attractive areas in the south at the rim of the Baltic Sea.

The monocentric development trend in Norway continues. The urban settlement pattern and an urban structure are characterized by one metropolitan area – the greater Oslo region. The six other major cities are relatively small in a European perspective. Norwegian spatial patterns are characterized by scattered settlements, long internal distances and a topography that is an obstruction to communication. Peripheries cover over 40 percent of the country's area. In Norway, the dominant trend has been geographic centralization and urbanization, which has worked to strengthen the monocentric settlement structure.

Sweden's settlement structure, like Norway's consists of sparsely populated areas, especially in the northern part of the country. There are only three major urban areas (Stockholm, Malmö and Gothenburg) and most of the municipalities are in general spread out geographically consisting of both built-up and rural areas. This is not only the case in the northern parts of the country – most municipalities in Sweden are comparatively large in area and this is more obvious with a comparison with the European urban-rural system. Even cities with large rural surroundings that have experienced a negative population development. This makes the preconditions for polycentric community development quite difficult.

Denmark is the exception among the Nordic countries. Here the dividing line is not north-south – instead there is a east-west divide with the expansive capital region in the eastern part of Zealand. The greater Copenhagen seems to dominate the development in Denmark more than the corresponding regions in the other Nordic countries. The existing sparsely populated areas are localized to the Jutland and the islands south of Zealand. Even the development in Bornholm seems to have been worsen during the past decades and can be seen as a problematic region seen from a Danish point of view.

The opening of the Öresund Bridge has also highlighted the opportunities to create a transnational functional local labor market consisting of the Copenhagen region and the Malmö-Lund region. The commuting has increased and the settlement pattern changed in the sense that many Danes now live in the Malmö-Lund region but are still working on the west side of the bridge.

6.2 Structural reform at different stages in the Nordic countries

Regional and/or municipal reform is on the drawing board of all Nordic countries at the moment. Denmark recently completed its last regional and municipal reform waves 2004 in 2007 with municipal amalgamations and new, larger regions. Finland carried out significant institutional reforms in the 1990s and a second local government reform was initiated in 2005 and should continue until 2012. In Norway regional reform processes have been stalled, but the focus of debate is on making small towns attractive places to live. Decentralizing regional reform in Sweden has been investigated, but to date no decisions have been made. While there certainly will be fewer and larger regions, the process is not being driven as a political priority.

The structural reform processes in the Nordic countries are at different stages, but their common trend is towards larger regions and municipal amalgamations. This is not only to realize economies of scale, but also to help ensure efficient service provisions. Even in cases where formal amalgamations are not being made, there is still a shift towards territorial coordination and networking (for example in Finland and in Sweden) either in lieu of, or as a precursor to institutional reform.

6.3 Policy development

Policy development around concepts of spatial structure and function have taken somewhat different paths in the Nordic countries. In Denmark there was no room for polycentricity in the hierarchical urban system in the 1970s and 80s. Although some of the counties during this time had suggested that centers could be formed jointly by two or more cities the government refused to accept these in their process of approving the first regional plans. However by 1992 the negative attitude towards polycentricity was starting to change as the Danish National Planning Report invited cities to form “urban circles” and the Triangle Region was formed (and subsequently the Mid-West Region).

Finnish spatial structure has seen an analytical and discursive shift away from the welfare policy inspired hierarchical conception towards the idea of a networked space that is based on functional urban regions as nodes and engines and their potential corridors. The same is valid concerning Sweden where functional local labor markets and regional enlargement more or less have been an official policy in order to create economic growth and decrease the “mismatch” on the labor market. These tendencies ought to be accentuated if the new suggested administrative reform will be a reality.

Traditionally, regional policy in Norway has focused on rural and peripheral areas, with no clearly articulated urban policy specifically targeting all cities and towns. However there are specifically delineated policies and measures for the three types of regions found in Norway: Oslo and other city regions; medium-sized city and town regions and small center and sparsely populated regions.

Thus the stage has been set for policies and measures more or less related to polycentric development. Yet policies specifically focusing on polycentric development have not been forthcoming.

6.4 Polycentric development hardly seen in the structural reform/spatial structure debate

The policy concept of polycentric development as perceived in Central and Western Europe has hardly been noticeable in the Nordic debates on structural governance forms. Only in Finland and to some degree in Denmark has the idea of polycentric urban regions gained any ground, and then mainly at the national level.

Finnish policy makers and researchers alike have been among the pioneers in applying the concept at national, albeit interpreted to the specific Finnish conditions and with a focus on cooperation and relational networks and flows. Yet the concept is not used much at regional or local level and has not been an integral part of governance reforms. Denmark's earlier attempts to promote polycentric urban regions "from above" have shown mixed results. While both the "Triangle region" and the "Mid-west" region were considered functioning polycentric regions, only the Triangle region is still functioning jointly in planning processes while the Mid-west region was put on stand-by. Still in both regions the relationship between urban centers is characterized by not only cooperation and coordination but also a great deal of competition for regional services and infrastructure.

Norway, as an extremely monocentric country in terms of rank size of the urban centers, has not taken up various conceptualizations of polycentric development in its regional reform debates. In Sweden, polycentric development is not mentioned, however the related policy concept of regional enlargement has strongly influenced regional policy in latter years as well as the regional reform discussions and analyses.

6.5 Shift from redistributive regional activities to competitiveness and endogenous growth measures

Competitiveness and endogenous growth are important goals of Nordic spatial policy in light of the Lisbon agenda for growth, jobs and sustainable development and Structural Fund support. Thus regional configurations and municipal amalgamations have been done or are considered mainly with the aim to boost regional growth and employment rather than to support lagging regions. This is in line with a policy that intends to increase the competitive power at the national as well as the regional levels.

Endogenous growth is key to achieving the goals of the Lisbon agenda and boosting the competitiveness of regions. Endogenous growth is a term developed out of the new growth theory, which explains growth and (technological) development endogenously with the factors of production positively interdependent to each other. In the new growth theory there is also more room for "soft" and heterogeneous factors and for analyzing both the impact of national and regional governance and their effects on innovations, territorial capacity, transformation and polycentricity and consequently also on endogenous growth. This means that the preconditions for increasing returns to the factors of production – opposite to the traditional neoclassical growth theory – are a possible way to stimulate regional endogenous growth and development. Even this gives more opportunities for regional governance to stimulate a development that is sustainable, economically, ecologically and socially.

As the development of the knowledge-based economy and society became a national goal in Finland, this prompted the shift in regional policy towards competitiveness-oriented measures and in 1994 gave impetus to the Centre of Expertise Program. Endogenous growth and competitiveness also colors the Nordic regional policy agenda, even in non-EU country of Norway. In 2002 the approach taken to dealing with regional development challenges in Norway was shifted from central, grand-based assistance (particularly to the rural and peripheral areas) to bottom-up local and regional efforts built on specific capacities and innovation.

In Denmark there was a complete shift from the reactive top-down-response-on-applications-for-subsidies to proactive bottom-up strategies based upon a diversity of measures. These were mainly “soft” measures many of which consisted of networking and cooperation. Moreover the overall goal became regional competitiveness for cities, regions and companies based on local capacities, rather than redistributive development.

Enlarged regions based on functional labor markets are thought to be the spatial form most conducive to regional growth and national competitiveness as well as the creation of more and better jobs in Sweden. Such regional enlargement in Sweden could result in greater polycentric development, even in the smaller labour markets and particularly in the non-isolated southern parts of the country.

6.6 Polycentricity: “Nordic Style”?

By European standards, the Nordic countries are morphologically quite monocentric with a high primacy of the capital urban areas. Although specific conceptualizations of polycentric development are nearly absent from the regional reform debate, regional development policy in all Nordic countries is attuned to various aspects of the polycentricity “paradigm”. All Nordic countries are considering governance measures that bear a likeness to functional polycentricity based on bottom-up networks and coordination between territorial entities. However the process of regional and local coordination may be more important at this stage than the particular spatial configurations that may result, at least in Sweden.

In Finland, polycentricity focuses on inter-urban specialization, strategic relational partnerships, and endogenous growth potential of regional centers and is promoted by the Regional Centre Program established in 2001. It is interpreted not so much as a spatial planning concept, but as a regional development concept (Eskelinen & Fritsch 2009) and is seen at national level, but is not much in use at regional level.

Starting in the 1990s the government in Denmark based national growth on the development of regional clusters for regional competitiveness, and even though later governments advocated a return to the focus on national rather than regional competitiveness, the cluster network have not disappeared (and there has been a subsequent return to more bottom-up regional development strategies).

The networking aspects of polycentricity seem to be the most important elements for the Nordic countries and as such polycentric development is less based on geographic proximity and more based on functional cooperation networks. While we cannot say that there is a specific “Nordic Style” of polycentric development, we can say that the concept is interpreted differently in each of the Nordic countries but there appears to be a similarity in understanding polycentricity as an analytical concept at the national level and in encouraging functional relationships at the local and regional level, even if this is rarely interpreted as “polycentricity”.

18 The new growth theory emanates from the works of Romer (1986) and Lucas (1988).

It is difficult to see the causality of how policies or policy goals such as polycentricity influence spatial development as policies work in concert with more 'spontaneous' trends in economy, business cycles and demographic shifts. Nevertheless there is a definite interplay between policies and spatial development trends, particularly when policymakers can capitalize on trends and opportunities and respond with the capabilities of existing policy networks, as was shown in the Danish case of Herning in Chapter 2. In most cases polycentric or monocentric development are more an effect of market forces than a result of general or specific regional policy measures. This seems to be applicable for all the four Nordic countries.

This pre-study has focused on how polycentric development is seen and used in the regional governance and regional development debates in the Nordic countries. Therefore the level of analysis has been the national, the regional and even the local. We have not however, discussed polycentric development from a cross-border or transnational perspective. In the Nordic countries this is most salient in light of the Öresund cross-border region and potential Functional Urban Area (FUA). It is not only the common labor market formed by the Copenhagen/Malmö-Lund region that is interesting from a polycentric perspective, but as well the potential role that the various Nordic networks and Baltic Sea city networks play in making the region more competitive and cohesive. This is a subject for further research.

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