

Cornett, Andreas P.

Conference Paper

A new regional balance: Regional specialization and growth: An analysis of spatial divergence in Northern Europe

55th Congress of the European Regional Science Association: "World Renaissance: Changing roles for people and places", 25-28 August 2015, Lisbon, Portugal

Provided in Cooperation with:

European Regional Science Association (ERSA)

Suggested Citation: Cornett, Andreas P. (2015) : A new regional balance: Regional specialization and growth: An analysis of spatial divergence in Northern Europe, 55th Congress of the European Regional Science Association: "World Renaissance: Changing roles for people and places", 25-28 August 2015, Lisbon, Portugal, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at:

<https://hdl.handle.net/10419/124645>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

First draft, please do not quote without permission!

55th Congress of the European Regional Science Association

*Andreas P. Cornett**
University of Southern Denmark
E-mail: Cornett@sam.sdu.dk

A new regional balance: Regional specialization and growth: An analysis of spatial divergence in Northern Europe. (Extended abstract; work in progress!)

Changing pattern of global specialization and trade has affected the regional economic landscape in Europe significantly during the last decades, often even more than endogenous factors or policy measures. After a period of conversion, processes of diversion has reentered the scene, particularly along functional rather than administrative regional divisions. The main focus in this paper is on the Northern part of Europe to avoid the direct economic impacts of the European debt crisis.

The purpose of the current paper is to investigate these patterns with special attention on rural regions, intermediate city regions, the vicinity of the large urban agglomerations and the metropolitan regions. The project is both explorative and explanatory, aiming at to detect and discuss how different types of functional regions are affected by changes in the international division of production, and to identify the global and national drivers behind the process. The empirical analysis is mainly based on the development of local employment, total as well as industry wise. The empirical study is designed as a 2 step analysis based on data from Eurostat for Northern European regions in the first step, and an in depth study of Denmark in the second step. The conceptual anchor of the study is mainly based on new economic growth theory and to a minor extent on concepts international trade.

The central research questions are to identify theoretical and conceptual explanations and well as to provide empirical evidence based on data from Northern Europe. Who are the winners or losers in this polarization process, and what characterize the well performing regions compared to the declining regions.

Danish evidence from previous studies points toward a mixed pattern. Central and economically well-structured city-region can maintain growth; more peripheral located city-regions face problems. In the longer run the fundamental shift in business and industry away from traditional manufacturing and service toward knowledge intensive service and products may become decisive for the success of these regions.

Key Words: new pattern of specialization - structural change - new economic growth theory - regional conversion and diversion - work places by sector

JEL: R 1 - R11

Paper for the Special Session S_I: 'Spatial aspects of regional specialization' at the 55th ERSAs Congress in St. Lisbon, Portugal, August, 25th-28th, 2015.

* Alsion 2, DK-6400 Sønderborg, Denmark. Phone +45 6550 1211

1. Introduction

Historical changes in regional growth patterns and economic performance often occurred as a consequence of structural changes, either caused by endogenous forces or by trickle down effects due to changes in adjacent or other regions. In this process industries with higher on average return on capital providing higher income for their employees replaced less effective employment. Structural change caused an increase in earnings and regional GDP. This was the usual pattern found in the traditional western industrial societies after the Second World War, often driven by the move out of manufacturing industries to cheaper locations in the periphery, and the availability of labor laid off due to the mechanization of agriculture. This was the usual response to the problem of increasing costs of agglomeration. This was a new way to solve the old contradiction whether to 'bring the people to the job or the job to the people' as it was posted by Arne Gaardmand in a NordREFO report in the late 1980's.¹

The current changes seem to follow a total different pattern. Trickle down is almost absent, many low skilled jobs in manufacturing disappear to low wage countries and historical stable public employment is concentrated in larger or intermediate cities. The most peripheral regions face the problem of depopulation and aging, with serious impacts also on the person related service sector, public as well as private.

The purpose of this explorative study is to identify the drivers of regional change with special attention on the urban rural and city- size issue, as a supplement to the traditional focus on inter- and intraregional convergence and divergence. The size of a city and the functional division of tasks have always been a central issues in regional development and spatial economics, and these concepts have to some extent reentered the spatial agenda in Northern Europe as well as in other parts of the world in the context of the processes of economic transformation and specialization².

¹ 'Jobbet til manden eller manden til jobbet? Om dansk regionalpolitik fra 1945-1985' (Gaardman 1988)

² For a brief introduction to the classical works of Christaller, Lösch etc, see McCann (2001) pp. 71-81, and ESPON (2013) for an empirical assessment with special attention on 'second tier cities'. See section 2.2 below.

2. Conceptual framework¹

Convergence and divergence in economic development have been crucial issues in the European Union since the early years of European integration. Nevertheless the focus has shifted during the years. The dominant dimension has always been on convergence or the lack of convergence between countries, since the early 1990's reinforced by the process of economic and monetary integration². The second focus, in particular within the member state, has usually been on the urban rural dimension. Structural change in business and industry, initiated through external shocks or by the process of integration itself has been the most important driver of regional alterations in Europe. Nowadays changes in the international system of production and the ability of countries and regions to adapt to these processes are of specific importance. This has reinforced the interest in the modification of the role for cities, their vicinity and in particular, the role of different categories of cities. In this context innovation and entrepreneurship are among the key factors of economic growth and competitiveness. Current strategies of policy (European as well as national and regional) are often derived from the concepts based on new economic growth theory, highlighting non-linear growth factors. These are predominantly based on a factor endowment favoring larger urban areas. This section of the paper provides a brief introduction to the empirical and theoretical aspects of the issue.

The reason d'être of regional development efforts is closely linked to the fact that some regions perform worse compared to others, and that this leads to a (comparative) derogation of the quality of living, and will create unequal conditions within a country or Europe as a whole. These complex processes may vary over time, and are dependent on external as well as internal factors. This section will sketch some light on theoretical based explanation, before section 2.2 turns into a brief empirical assessment.

Traditional economic growth models have their focus on capital and labor as growth drivers. This type of growth has contributed significant to the reduction of international disparities within the EU area for several decades until the beginning of the 21th century. Since the end of the 1990's the pattern has changed, in particular in the mature industrial societies in North Western Europe. More refined concepts of growth and new growth models are operating with a wider range of growth drivers nowadays, and will have increasing importance in future, in particular in a global perspective. Central factors like human capital, knowledge and innovation and even intangible

¹ This section is based on Cornett 2015.

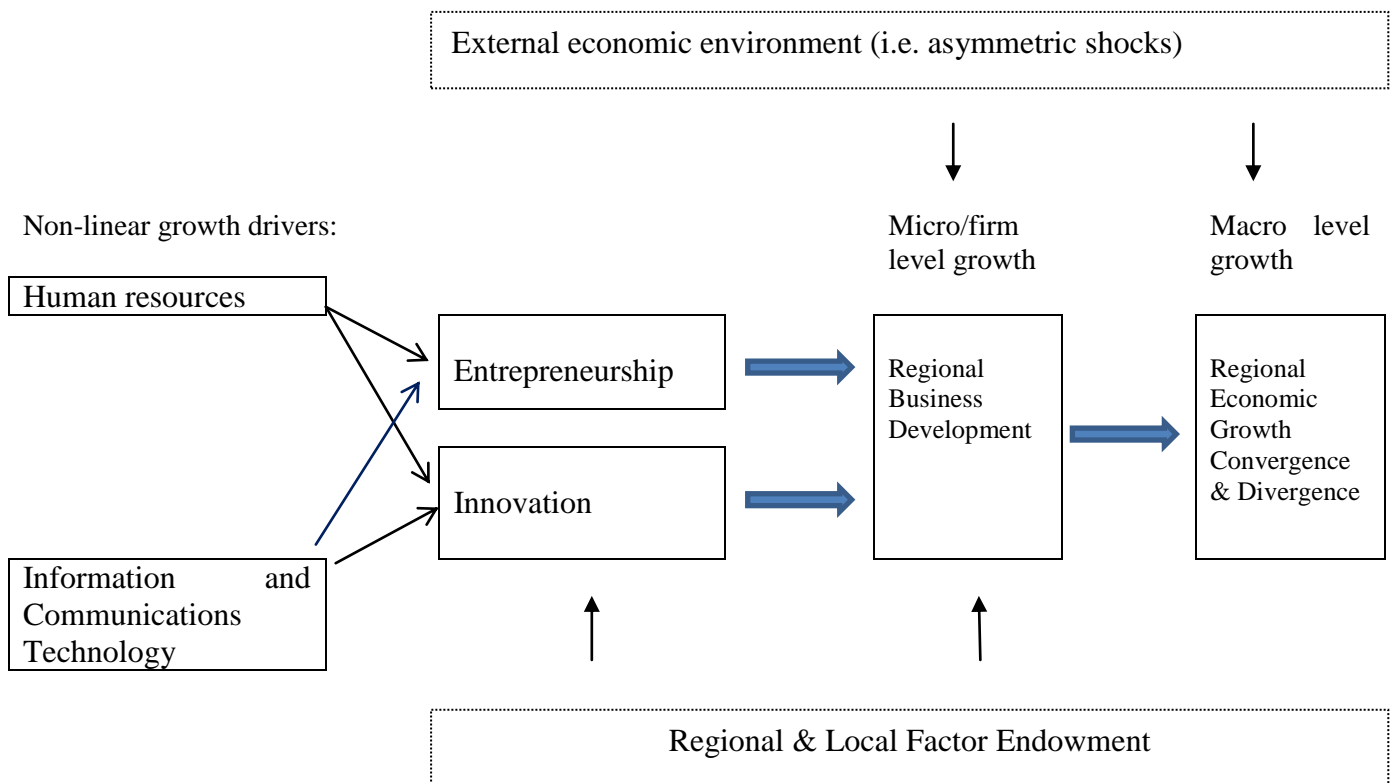
² For a general discussion and assessment until the introduction of the Euro see Cuadrado-Roura & Parellada(ed.) 2002.

factors like entrepreneurial spirit (Audretsch 2006) are in the center of economic development policy. It has been recognized that some of the mechanisms behind economic growth are endogenous in a certain economic system rather than independent of previous performance (see Romer 1994). Innovation and the capacity to innovate are central factors for economic growth and regional development in this new context. The set-up of the regional and national system of innovation becomes crucial for the functioning of a modern business environment. Innovation has to be seen as both independent variable (i.e. a growth driver) and as a dependent variable with regard to policies aiming at stimulating innovative behavior in the firm or educational sector. In this perspective, the role of knowledge and innovation is at least twofold. In the short run, innovation and knowledge creation becomes necessary instruments in the process of regional adaptation to industrial change as a response to changes in the competitive environment. In a longer perspective, innovation and knowledge are preconditions for a successful restructuring of the economic base, nationally as well as regionally and locally. As a consequence, attention has been on the role of innovation policy in economic policy in general (i.e. OECD 2001), or Lisbon Strategy¹ or Euro 2020 (European Commission 2010) and on regional development in particular (see Acs & Varga 2002).

Contrary to traditional growth theory in the non-linear approach to economic growth², the knowledge sector, innovation and entrepreneurship have become the crucial growth-drivers, and have attracted much attention a public policy perspective. Figure 1 below modifies the more common framework (see Cornett & Ingstrup 2010) with special attention on the nature of the mechanisms, the micro and macro aspects of growth, as well as the regional setting (i.e. the regional innovation system). In the current context the main focus is on the linkage between growth drivers and how they influent economic growth and development, direct as well as indirect in various types of city-regions, see figure 1 below. In particular the importance of the particular factor endowments for regional growth and balance is assessed in a period of severe economic challenges regional, national as well as international.

¹ For an assessment of the original and the revised Lisbon Strategy see Mancha-Navarro & Garrido-Yserte (2008).

² For an assessment of traditional vs. new growth theory with special attention on to what extent growth factors are endogenous, see Solow (1994).

Figure 1: From growth driver to regional economic growth

Source: adapted from Cornett (2013b): 32

3. The European Context

The process of economic convergence and divergence determinates the degree of internal homogeneity and coherence with regard to the economic aspects of the societies or regional economic associations. In a study of the long-term development of regional disparities between European regions by Molle & Boeckhout (1995: 106) delimited the concept of coherence tentatively as:

“The concept of cohesion is a rather vague one. It is probably best explained as the degree to which disparities (imbalances) in economic welfare between countries or regions within the European Union are socially and politically tolerable. In practice, indicators like income per capita are used to measure disparity. We assume that an increase in disparity is detrimental for cohesion and vice versa”

Regional economic cohesion is to a large extent the result of existing homogeneity or created through a process of convergence. If processes of divergence dominate, inter regional cohesion will usual disappear or be reduced over time. Convergence implies that in economic terms in the long run a pattern of steady state growth will be reached. The long term trend before the economic crisis and the factor behind the pattern of spatial and regional change (European Commission 2009, better

known as the ‘Barca report’) are still operating. The impacts of these factors have become more varied after the financial crisis and the European debt crisis.

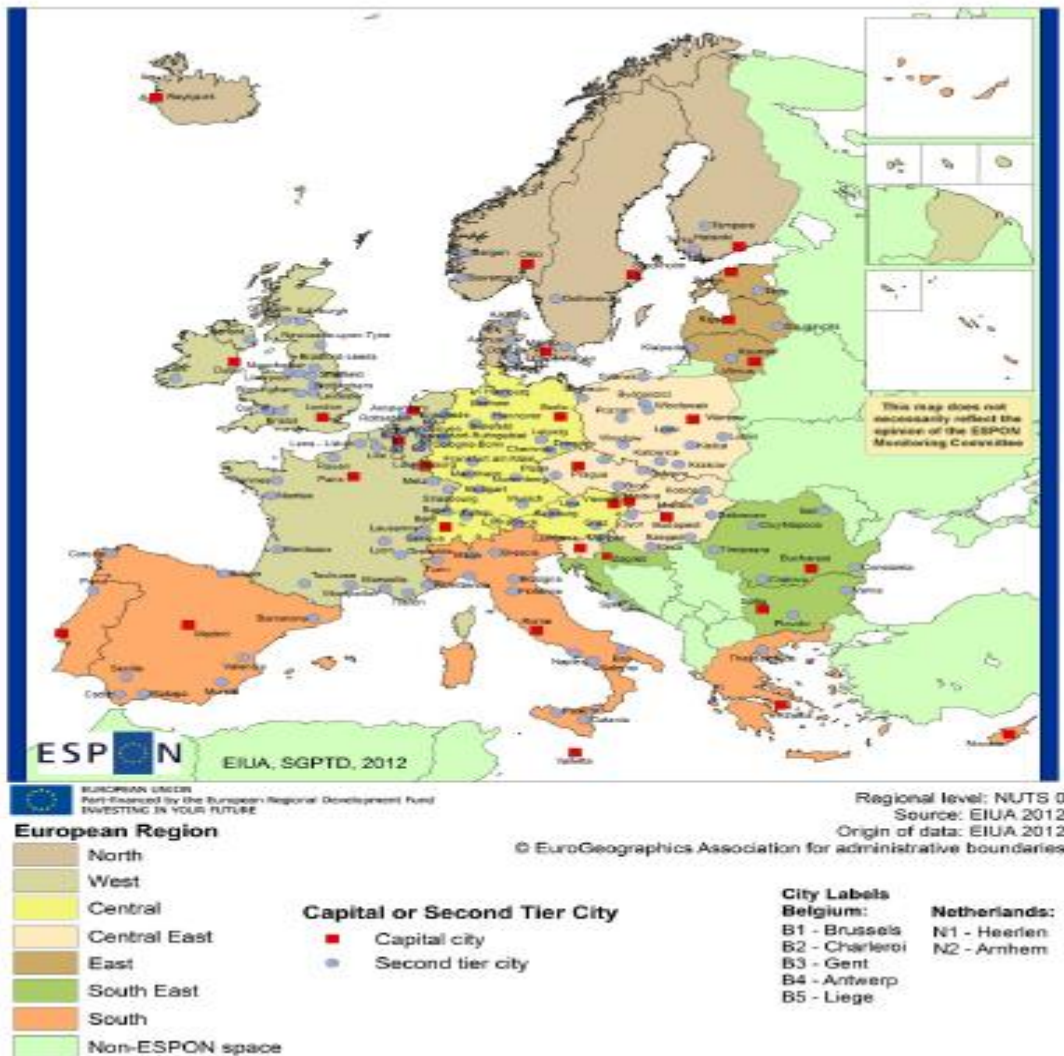
Economic development in the last two decades has in most developed countries been characterized by two overlapping trends. The long-term trend toward a change in the global system of production, away from traditional manufacturing and products with relative low knowledge content, has been visible since the early 1990’s. This trend was further powered by the break-up of the Iron Curtain and the introduction of a market economy in the former command economies of Eastern Europe. The development of new market economies, but probably more important, the opportunity to take advantage of new locations with an affordable and well educated labor force for production and service functions just outside the doorstep of the industrial centers of Europe. The global financial crisis in 2008 and the European debt crisis becoming visible 2010, have been reinforcing the trend by a number of short-term shocks, first and foremost in the so-called ‘PIIGS’ states¹. Overall economic growth slowed down, and the differences in the regional development pattern were reinforced ,

Turning to the national level the trend toward convergences between the EU member states debilitated (the North South divide among the Euro countries growth deeper) and on the regional level the trend toward divergence continued in most of the EU. The pattern is scattered, but common for all is a trend to become more divergent compared to the EU at large. Internal the urban-rural divide persists in most countries with increasing disparities between metropolitan and peripheral regions (see European Union 2010). In many countries the problem has become more complex, since the urban rural divide nowadays also has become increasingly visible on lower layers of the city system.²

¹ Portugal, Ireland, Italy, Greece and Spain, for details see Cornett 2013a.

² The impact of the recession on various group of EU countries has been assessed in the Eighth progress report on economic, social and territorial cohesion (European Commission 2013). Surprisingly the 12 newest members (accessed 2004 & 2007) have been affected the least, with Poland as the best performing country (European Commission 2013: 19). A similar mixed picture can be found with regard to GDP and changes of GDP per capita in an urban-rural perspective (European Commission 2013: 22, 23 32 & 44).

Figure 2: Capitals and ‘Second Tier Cities’



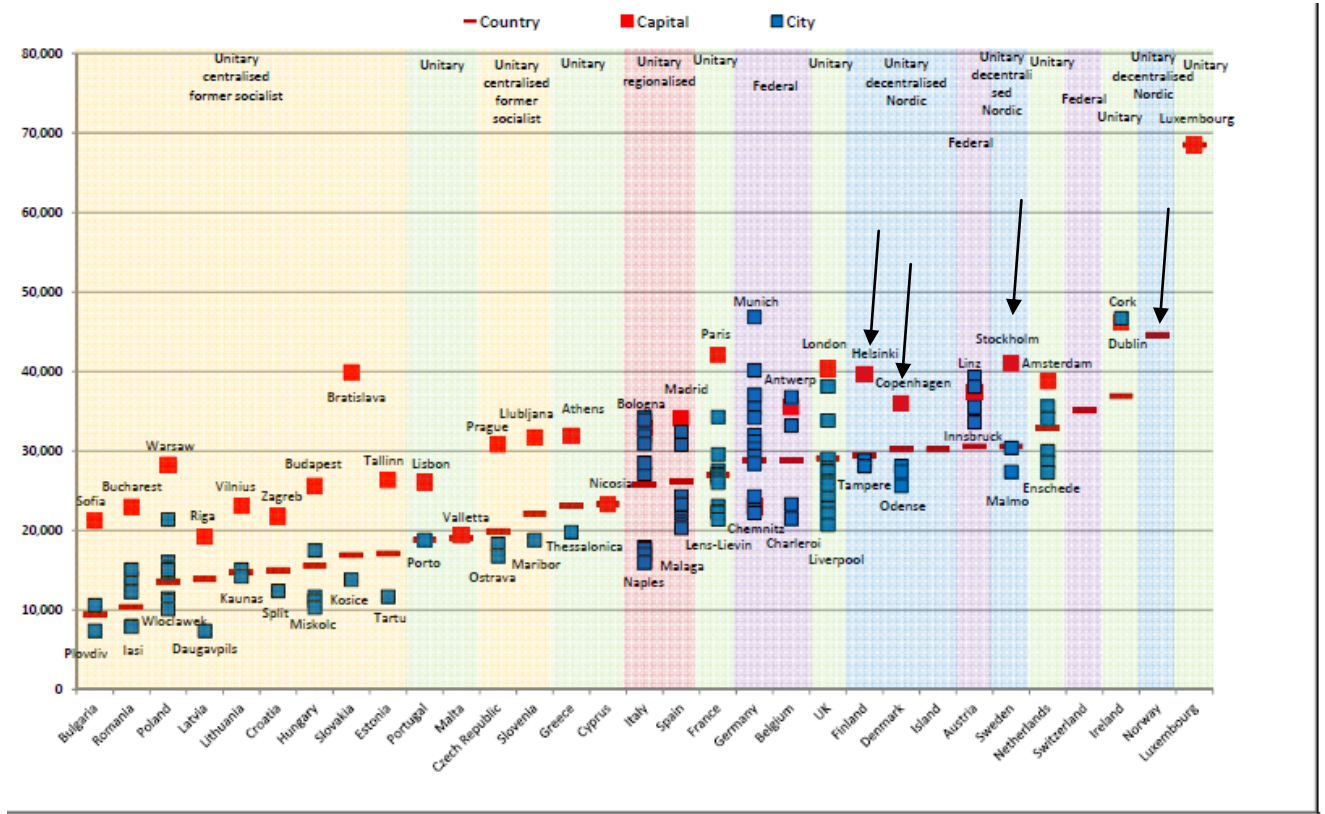
Note: The ESPON study is based on 31 capitals and 124 ‘second tier cities’ in Europe.

Source: ESPON 2013

In most countries the second tier cities are lagging behind the capital cities, but catch up often took place in the years before the financial crisis. In general federal organized countries like Germany or Belgium have more and faster growing ‘second tier cities’.

The remaining part of this paper attempts to dig deeper into the issue and determinants of the process based on figures for the Nordic countries and Denmark, analyzing a third layer of cities, significantly smaller than the cities analyzed in the ESPON study. Furthermore the geographical location of the cities in the national city system will be included in the analysis, since not only size, but also connectedness to the larger urban agglomerations is decisive for the future development perspectives.

Figure 3: Spread in GDP/cap. (in PPS) in capital and second tier cities 2007

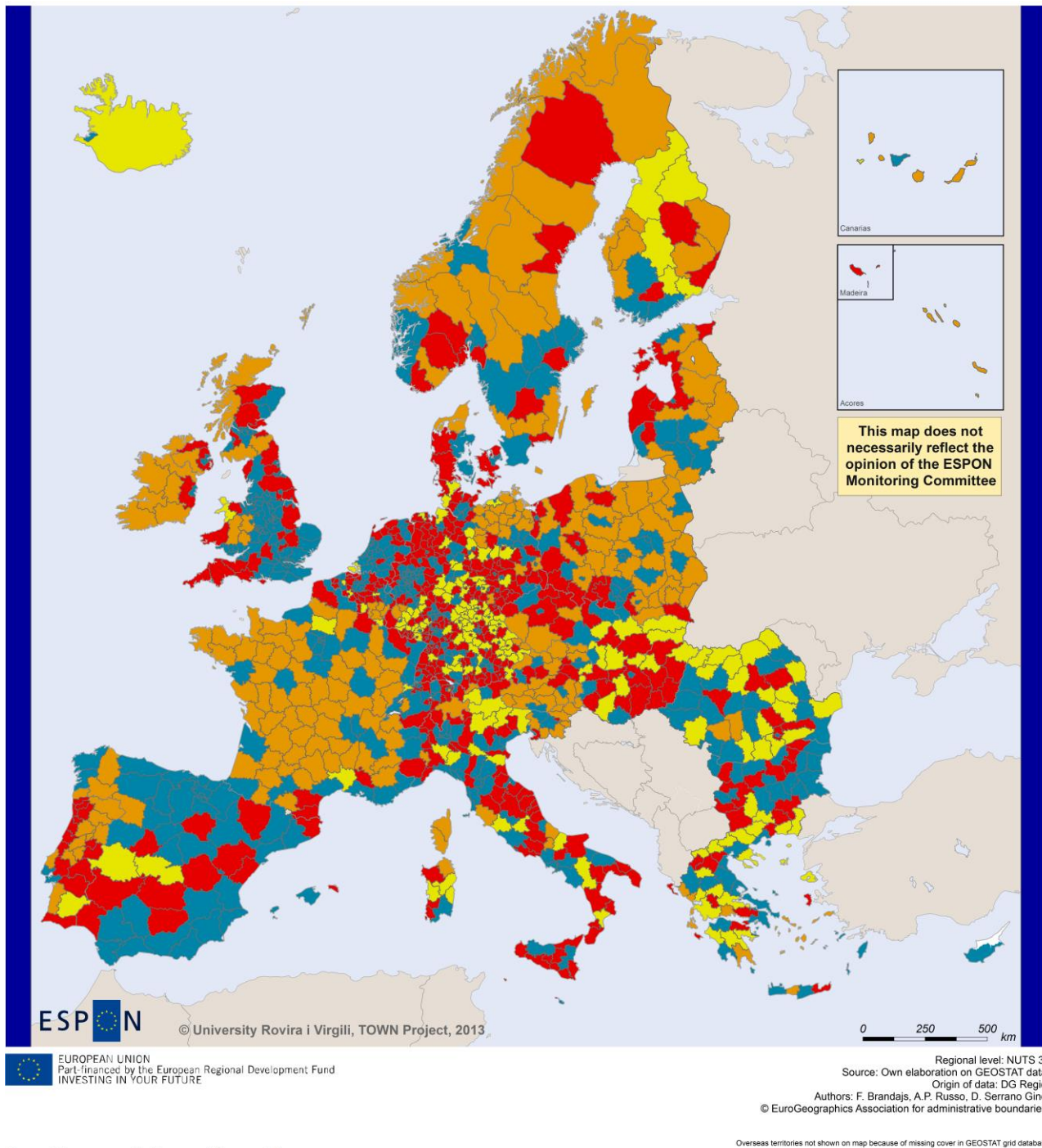


Source: Eurostat

Note: Arrow Nordic countries included in this analysis

Source: ESPON 2013:14, based on Eurostat

Figure 4: Settlement pattern in Europe



Source: ESPON 2015

4. A new ‘periphery of the periphery’?

(To be continued)

5. Summary and perspectives.

Selected Literature

Acs, Z. J. & Varga, A. (2002): Geography, Endogenous Growth, and Innovation in *International Regional Science Review* 25, 1, 2002: 132-148.

Audretsch, D.B. (2006): "The Knowledge Spillover Theory of Entrepreneurship and Spatial Cluster" pp. 177-188 in Iréne Johansson (ed.), *Innovations and Entrepreneurship in Functional Regions*. Papers presented the 8th Uddevalla Symposium & the 8th McGill International Entrepreneurship Conference Uddelvall, Sweden 15-17 September, 2005. Research reports 2006:01 University West, Trollhättan; Sweden.

Audretsch, D.B. & Belitski M. (2013): „Creativity Spillover of Entrepreneurship Theory: Evidence from European cities“ pp.145-156 in Iréne Bernhard (ed.), *Innovation, High Growth Entrepreneurship and Regional Development*. Revised papers presented at the 16th Uddevalla Symposium 13-15 June 2012, Kansas City, Mo, USA. *Research Reports 2013:04*, University West Trollhättan, Sweden. (ISBN 978-91-977943-7-4).

Christensen, C.F. (1994): *Byernes opland I 1990-erne. En analyse af oplandsudviklingen i Danmark 1960-90*, Civiløkonomernes Forlag. Denmark. Copenhagen 1994.

Cornett, A.P. (2014): "A new regional balance: Challenges and opportunities for intermediate city regions in Europe". Paper for the Special Session 'Regional and urban impacts and consequences of the economic crisis', in Proceedings of the 54th ERSA Congress in St. Petersburg, Russia, August, 26th-29th, 2014. . (Published in ERSA - proceedings of 54th Congress of the European Regional Science Association, St. Petersburg, Russia).

Cornett, A.P. (2013a) "Stimulating Innovative Entrepreneurship, Knowledge Creation and Firm Growth a Regional Development Strategy in a Period of Economic Crisis and Transformation" pp. 211-228 in Iréne Bernhard (ed.), *Innovation, High Growth Entrepreneurship and Regional Development*. Revised papers presented at the 16th Uddevalla Symposium 13-15 June 2012, Kansas City, Mo, USA. *Research Reports 2013:04*, University West Trollhättan, Sweden. (ISBN 978-91-977943-7-4).

Cornett, A.P. (2013b): "Conceptualisation of Clusters as a Tool in Local and Regional Business Development", pp. 30-45 in Brown, Kerry, John Burgess, Marion Festing & Susanne Royer (Eds.), *Resources and Competitive Advantage in Clusters*, Rainer Hampp Verlag München, Mering, Germany, 2013. ISBN 978-3-86618-865-5 (print) ISBN 978-3-86618-965-2 (e-book).

Cornett, A.P. & M. B. Ingstrup (2010): Cluster Development as an Instrument of Regional Business development Policy: Concepts and Danish Reality, 43-61 in Brown, Kerry, John Burgess, Marion Festing & Susanne Royer (Eds.), *Value Adding Webs and Clusters - Concepts and Cases*, Rainer Hampp Verlag München, Mering, Germany.

Cornett, A.P. & N.K. Sørensen (2007): "Regional Restructuring – Creating New Advantages or Reinforcing Old Disadvantages – A Critical Assessment of Development Policy Impacts of the Regional and Municipality Reform in Denmark" pp. 347-365 in Iréne Johansson (ed.), *Institutions for Knowledge Generation and Knowledge Flows – Building Innovative Capabilities for Regions*, Papers presented at the 10th Uddevalla Symposium, 14-16 June, 2007, Uddevalla Sweden, Research reports 2007:04, University West, Trollhättan.

Cuadrado-Roura, J.R. & Parellada, M.(eds) (2002), *The European Monetary Union and Regional Convergence, Facts Prospects and Politics*, Advances in Spatial Science, Springer-Verlag Heidelberg New York, 2002.

Danmarks Statistik (2014) Statistikbanken (available at: <http://www.statistikbanken.dk>, accessed June 26, 2014).

ESPON (2015): "Towns across Europe show a diverse settlement pattern" http://www.espon.eu/export/sites/default/Images/Publications/MapsOfTheMonth/Article_May2015_Towns-Cooperation/MAP_B.1-large.png (accessed 29-06-2015)

ESPON (2013): "SGPTD Second Tier Cities and Territorial Development in Europe: Performance. Policies and Prospects" Applied Research 2013/1/11, Final Report Version 30/06/2012. (http://www.espon.eu/export/sites/default/Documents/Projects/AppliedResearch/SGPTD/SGPTD_Final_Report_-_Final_Version_27.09.12.pdf) (accessed 26-6-2014).

European Commission (2014): "Investment for jobs and growth – Promoting development and good governance in EU regions and cities. Sixth report on economic, social and territorial cohesion". July 2014. (http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion6/index_en.cfm) (accessed October 8, 2014)

European Commission (2013): "The urban and regional dimension of the crisis Eighth progress report on economic, social and territorial cohesion".

European Commission (2010): "Communication from the Commission Europe 2020 – Strategy for smart, sustainable and inclusive growth" Brussels 3.3.3010 COM(2010) 2020.

(<http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%200007%20-%20Europe%202020%20-%20EN%20version.pdf>, accessed June 11, 2010).

European Commission (2009): “An Agenda for a Reformed Cohesion Policy. A Place-Based Approach to Meeting European Union Challenges and Expectations”, (Barca Report), Independent Report prepared at the request of Danuta Hübner Commissioner for Regional Policy by Fabrizio Barca, April 2009. Available at http://www.euterritorial-agenda.eu/Related%20Documents/report_barca_v0605.pdf (accessed January 9, 2012).

European Union (2011): “The urban and regional dimension of Europe 2020” Seventh progress report on economic, social and territorial cohesion available at: http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/interim7/interim7_en.pdf (accessed May 3, 2013).

European Union (2010): “Investing in Europe’s Future, Fifth report on economic, social and territorial cohesion” Luxembourg 2010.

Gans P. & A. Schmitz-Veltin (eds.) (2006), *Demographische Trends in Deutschland Folgen für Städte und Regionen*. Räumliche Konsequenzen des demographischen Wandels Teil 6. Akademie für Raumordnung und Landesplanung Band 226. Hannover, Germany.

Giffinger, R. ed. (2005): *Competition between Cities in Central Europe: Opportunities and Risks of Cooperation*, ARL Hannover, TU Wien & SPECTRA Bratislava published by ROAD, Bratislava, Slovakia.

Gaardmand, Arne (1988): “Jobbet til manden eller manden til jobbet? Om danske regionalpolitik fra 1945-1985” pp. 67-108 in *NordREFO om regionalpolitikken som politikområde*, Painokaari ov, Helsinki.

Heidenreich, M.: “The changing system of European cities and regions”. *European Planning Studies*. Jun 98, Vol. 6 Issue 3, pp. 315-32.

Krugman, Paul (1999): “The Role of Geography in Development” pp. 142-161 in *International Regional Science Review* 22,2 (August 1999), Sage Publications, London.

Mancha-Navarro, T and R. Rubén Garrido-Yserte (2008): “Regional policy in the European Union: The cohesion-competitiveness dilemma”, pp.47-66 in *Regional Science Policy & Practice* Volume1, Number 1, 2008.

McCann, Philip (2001), *Urban and Regional Economics*, Oxford University Press, Oxford - New York.

Ministry of the Environment (2007): Spatial Planning in Denmark, Copenhagen. Available at: http://www.naturstyrelsen.dk/Planlaegning/Planlaegning_i_byer/Udgivelser_og_vejledninger/Udgivelser/Udgivelser.htm (accessed November 27, 2012).

Ministry of Housing, Urban and Rural Affairs (2014): “Regional- og Landdistriktpolitisk Redegørelse 2014 Regeringens redegørelse til Folketinget” available at: http://mbl.dk/sites/mbl.dk/files/dokumenter/publikationer/regions-landdistriktpolitik_enkeltidet_2.pdf (accessed Oct. 10, 2014).

Ministry of Housing, Urban and Rural Affairs (2013): “Regional- og Landdistriktpolitisk Redegørelse 2013 Regeringens redegørelse til Folketinget” available at: <http://www.livogland.dk/vidensbase/litteratur/rapporter/regional-landdistriktpolitisk-redegoerelse-2013> (accessed May 1, 2013)

Molle, Willem with Sjaak Boeckhout (1995): “Economic Disparity under Conditions of Integration - A Long Term View of the European Case” pp. 105 - 23 in *Papers in Regional Science*, Vol. 74, Number 2.

OECD (2001): ‘The New Economy: Beyond the Hype the OECD growth report’, Paris 2001.

Van Oort, F.G. (2014): “Second Tier City Regions in Europe and Regional Economic Growth: Mixed Evidence from Analyses of Related Variety and FDI”, *Keynote at 17th Uddevalla Symposium on Geography of Growth – The Frequency, Nature and Consequences of Entrepreneurship and Innovation in Regions of Varying Density*. 12-14 June 2014, Uddevalla, Sweden.

Region Syddanmark (2007): “Regional UdviklingsPlan Dialogprocessen, forår 2007 – Arbejdsrapport: Den regionale udviklingsmodel- beskrivelse af model samt regionale og kommunale resultater fra modellen” Denmark, Vejle.

Romer, P.M. (1994): The Origins of Endogenous Growth, in *Journal of Economic Perspectives* 8 (1), 1994: 3-22.

Solow, R.M. (1994): Perspectives on Growth Theory, in *Journal of Economic Perspectives* 8 (1), 1994: 45-54.

Storstadutredningen (1990): “Urban Challenges. Report to the Commission on Metropolitan Problems” Statens offentliga utredningar 1990:33, Statsrådsberedningen, Stockholm, Sweden.

Sørensen, J.F.L. (2014): “Landdistrikternes Befolknings- og beskæftigelsesudvikling” CLF Report 29/2014, Syddansk Universitet Esbjerg Denmark (available at: <http://static.sdu.dk/mediafiles/5/2/C/%7B52C102C7-514D-44F7-A8A6->

[87CE42725C34%7DCLF%20Rapport%2029%20-%20Landdistrikernes%20befolknings-%20og%20besk%c3%a6ftigelsesudvikling.pdf](#), accessed July 14, 2014).