Nordic and Baltic Sea Region metropolises from the European perspective – project ESPON „Future Orientation of Cities” & beyond

Jurmala, Latvia, Conference „Territorial cohesion in Europe and in the BSR“”, NORBA,
30-31 August 2012
Plan of presentation

1. Metropolisation as a territorial outcome of globalisation and informational economy

2. Metropolisation from the perspective of ESPON FOCI project results

3. Impact of economic crisis on metropolisation process – first insight

4. General conclusions for Nordic and Baltic Sea Region countries
Metropolisation - stylized facts (1.1)

1) **Shift** from industrial to informational (knowledge based) economy.

2) **Segmentation** of global economy:

   - **high** segment: comparative advantage based on ability to create and adapt innovations. Concentrated in **metropolises**;
   - **low** segment: comparative advantage based on price. Located in **non-metropolitan areas**.

3) **Evolution of spatial linkages**: development of non-regional linkages of companies and the formation of world city network

4) **Main** drivers of this process are:

   - advanced producer services sector,
   - multinational companies,
   - research intensive industries,
   - IT technology development.
Stylized facts (1.2)

5) **Shift** from territorial to network organisation of space

**Tab.3.** Selected differences between territorial and network organisation of space

<table>
<thead>
<tr>
<th>Territorial organisation</th>
<th>Network organisation</th>
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<tr>
<td>Centre, periphery</td>
<td>Nodes, tendency to decentralise mutual linkages</td>
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<tr>
<td>Size-dependent</td>
<td>No dependency on size</td>
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<tr>
<td>Boundaries</td>
<td>Connections</td>
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<tr>
<td>Coherence, continuity</td>
<td>Dispersion, separation</td>
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<td>One- directional flows</td>
<td>Two-directional flows</td>
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<td>Closedness, outward impermeability</td>
<td>Territorial openness</td>
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<td>Constancy, inelasticity</td>
<td>Short-lividness, flexibility</td>
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<td>Proximity, location ties – transport costs</td>
<td>Insensitivity to distance, omnipresence – costs of information</td>
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<td>Territorial hierarchy, vertical links, dominance of size</td>
<td>Horizontal links, cooperation and competition</td>
</tr>
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Selected results of FOCI project related to metropolisation process:

1. Economic linkages of the largest global firms
   (ORBIS database including 3000 largest TNC – ownership structure)

2. Transport connections: airplane & train
   (contactability – daily transport accessibility)

3. Scientific co-operation
   (FP project in new technologies)

4. City-region relationship
   (intraregional difference in level of development between metropolis and its hinterland)
Economic linkages (1.1)

Internationalisation level (size)

Control functions (colour)

Figure 15. Multinational firms networks. Balance control/subsidiarity by FUA
Economic linkages (1.2)

MULTINATIONAL FIRMS NETWORKS
Location of foreign subsidiaries by FUA

City importance for global firms (size)

Domestic networks (colour)

Figure 16. Multinational firms networks. Location of foreign subsidiaries by FUA
Transport connections (2.1)

„Contactability” – daily transport accessibility

- significant importance for business cooperation

- Red colour - trains
- Blue colour – airplanes
Transport connections (2.2)

- the number of other metropolitan areas that are accessible by daily return journey
Scientific cooperation (3)

Research networks: „new technologies“:
- nanotechnology,
- biotechnology,
- IT technology,
- cognitive science

Figure 14. European cities' centrality within scientific and technological networks dedicated to NBIC (Betweenness Centrality, 1986-2006)

Notes: betweenness centrality measures the potential intermediary role of cities within a network: the more a node occurs on many shortest paths between other nodes within the graph, the higher is its betweenness centrality. Here, betweenness centrality (X 1000) calculated with Pajek software. Source: NBIC-Euro database
City – region relationships (4)

Change of intraregional differences in level of development

(GDP ratio between metropolitan area and the rest of metropolitan region)

Drivers:
- dissimilar economic structure
- „brain drain” process

Figure 17. Change of disparities in the development level between the metropolis and its regional hinterland in 1995-2004
Regional aspects of economic crisis – first insight 2008-2009 (5.1)

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Leaders

Real performance
(GDP growth)

Losers

Over performance

(GDP growth relativised by national average)
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Labour market structure change in Warsaw (5.2)

**Winners (1):** Finance and insurance, Business services, IT sector, Logistics, Hotels and restaurants

**Losers (2):** Real estate market, Manufacturing

**Soft landing (3):** Public administration, Education, Health Care, Construction (public investment)
Sectoral transformation in CEECs during the crisis 2008-2010 (5.3)

CHANGE OF SHARE IN GVA (%)

**Manufacturing** (decline and relative revival)

**Construction** (collapsed)

**Market services** (recent problems)
Conclusions

• mixed economic linkages of metropolitan areas in analysed macroregion–active players (Nordic countries), passive players (post-communist countries) in globalisation processes

• relatively low importance of domestic economic linkages (monocentric spatial structure)

• peripherality in comparison to global economic nodes (London, Paris) – but good performance in relation to the number of population (esp. Nordic countries)

• poor/medium contactability (but with some exceptions: Copenhagen, Stockholm, Warsaw)

• quite high potential for development of research networks including new technologies

• relatively low level of intraregional integration within metropolitan macroregions

• mixed regional outcome of the crisis, but in general metropolitan areas perform better than the other regions within each country
Dilemmas and development perspectives

1) FDI inflow or outflow – what should be supported and where?

2) External global linkages or domestic / neighbouring networks of metropolitan areas – what’s more important?

3) Support for capital city-regions or to promote secondary growth poles in order to develop/maintain polycentric spatial structure?

4) Science and business linkages – how these should be supported?

5) Metropolis-region relationship – how effectively promote diffusion processes in regional hinterland?

6) How to react on recent economic crisis in time of very high uncertainty and instability?
Thank you for attention!

More details: www.espon.eu
(applied research: project FOCI)

and also a book focused on city-region relationships

The European Metropolises and Their Regions: From Economic Landscapes to Metropolitan Networks

(www.euroreg.uw.edu.pl or google books)