

Unveiling “hidden” inequality patterns in Europe: “reality-check” at the lower geographical scale

Shinan Wang, Iryna Kristensen and Timothy Heleniak

Based on EU Horizon 2020 research project titled RELOCAL '*Resituating the local in cohesion and territorial development*'

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Rationale

- Article 174 of the Treaty on the Functioning of the European Union:
 - Promoting *“overall harmonious development”*
 - Reducing *“disparities between the levels of development of the various regions and the backwardness of the least favoured regions”*
- Europe 2020 – to pave the way to a smart, sustainable and inclusive future:
 - The final objective: to deliver high levels of employment, productivity and social cohesion in the MSs, while reducing the impact on the natural environment.
 - To achieve it – 8 targets were adopted (i.e. employment, R&D, climate change and energy, education and poverty reduction)
- The 7th Cohesion Report states that:
 - *“regional disparities are shrinking”*
 - *“the first signs of convergence resuming”*

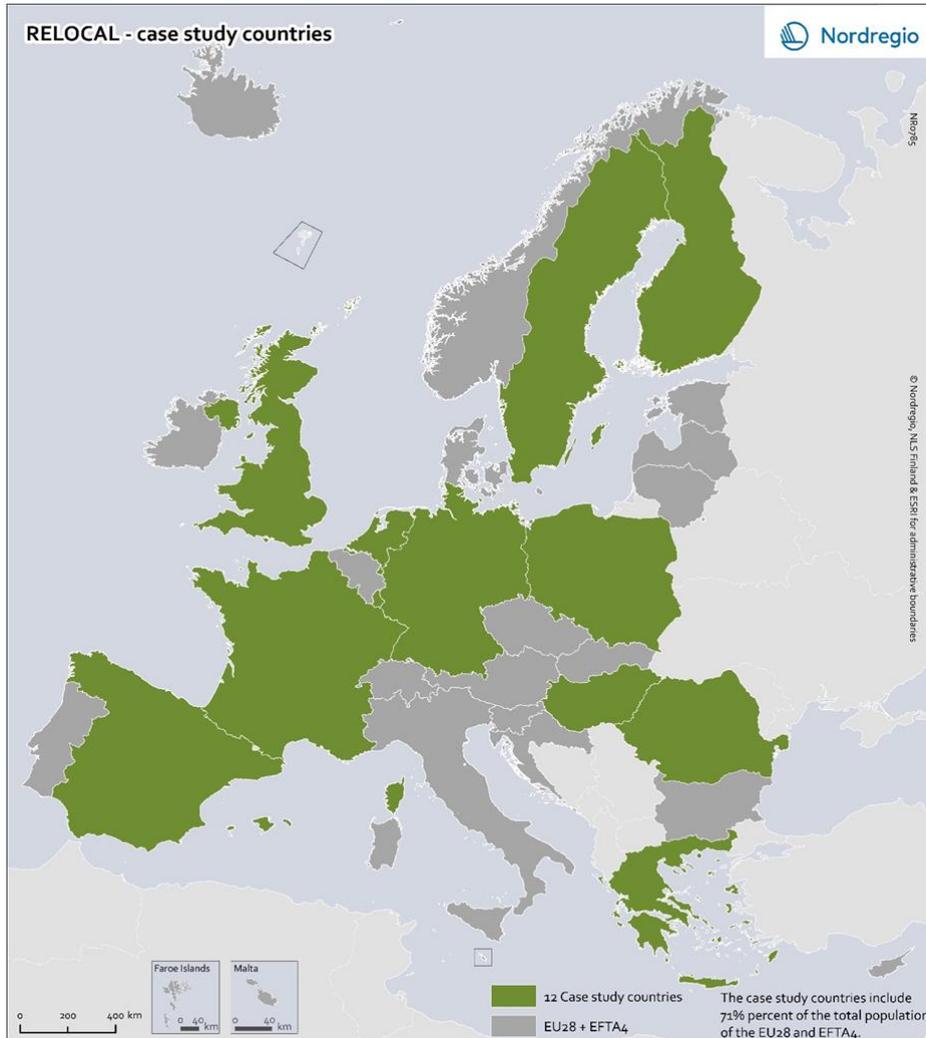
Conceptual framework

- Ongoing debate on growth of an economy: neoclassical vs endogenous growth theories (Petrakos et al, 2015, p.700)
- How best to overcome inequalities: Space-blind policies vs Place-based regional policy (Camagni and Capello, 2015)
- Literature narrowly focused on GDP per capita (Otil et al, 2015; Namerjee and Jesenko, 2015, Istrate and Horea-Serban, 2016): boarder set of attributes in order to “explain the engine of growth”
- Switch in EU thinking: recognising “territorial diversity”
 - deficits (or handicaps) in weaker regions/countries → potentials that exist in all regions/countries

Objectives

- to respond to the call to move beyond GDP by extending the focus to include the social dimension of regional disparities
- to increase the geographic granularity by extending the scope of the database to NUTS₃ level
- to identify and describe characteristics of European lagging regions (what are the common patterns?)

Data and measures



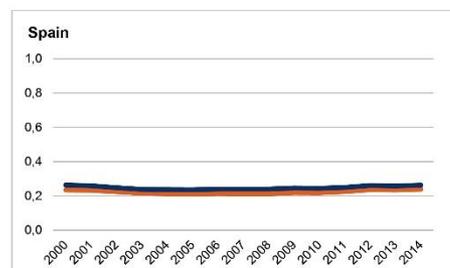
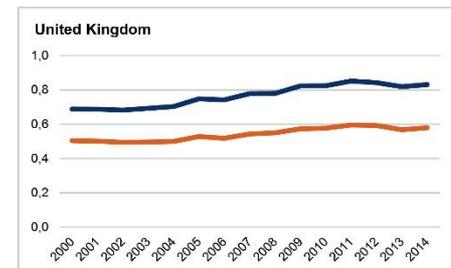
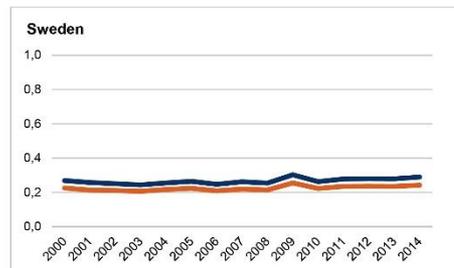
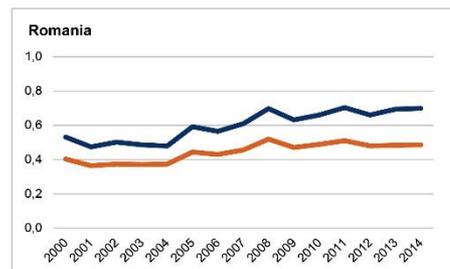
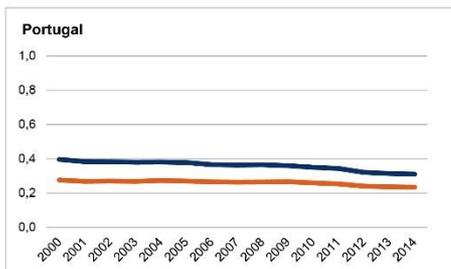
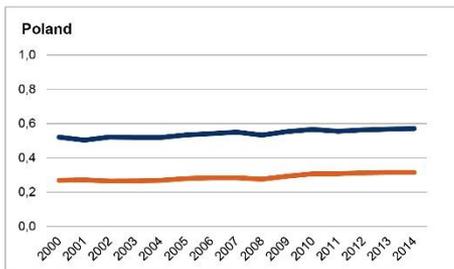
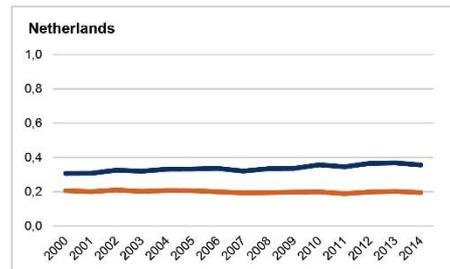
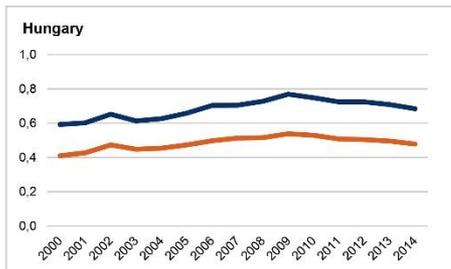
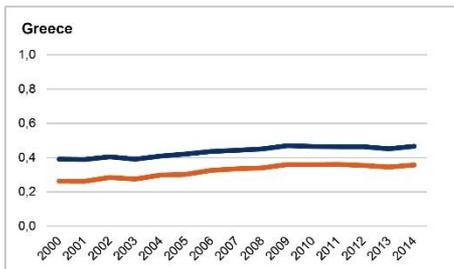
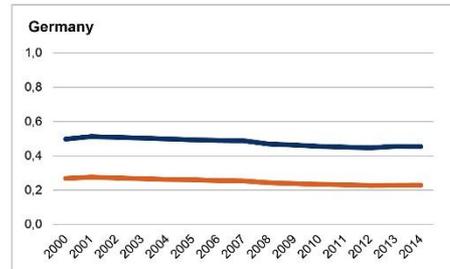
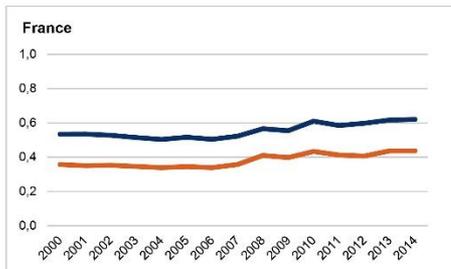
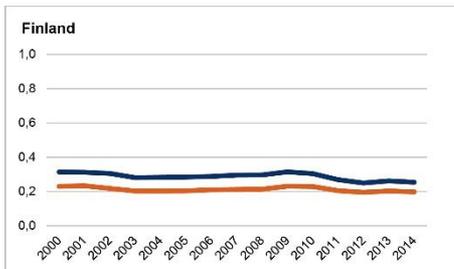
- EU Horizon 2020 research project titled RELOCAL 'Resituating the local in cohesion and territorial development'
- Regional data on apprx. 50 key socio-economic indicators up to NUTS₃ level (Eurostat & NSIs)
- **12 lagre countries**
 - representing 70% of Europe's population
 - good geographical coverage
- Disparities are examined among regions within selected countries

Method

- Weighted coefficient of variance of GDP per capita in PPP on NUTS₂ & ₃ levels for the 12 selected countries was computed during 2000-2014;
- National, NUTS₂ and NUTS₃ time-series data on the 8 headline indicators included in EU 2020 Strategy were harmonized, and proxy indicators were applied if data on the exact indicator was not available;
- These countries were evaluated based on their performance with regards to their respective national targets in 2020 for each headline indicator;
- Regional patterns on NUTS₃ level were examined, lagging regions were identified and described (charts and maps).

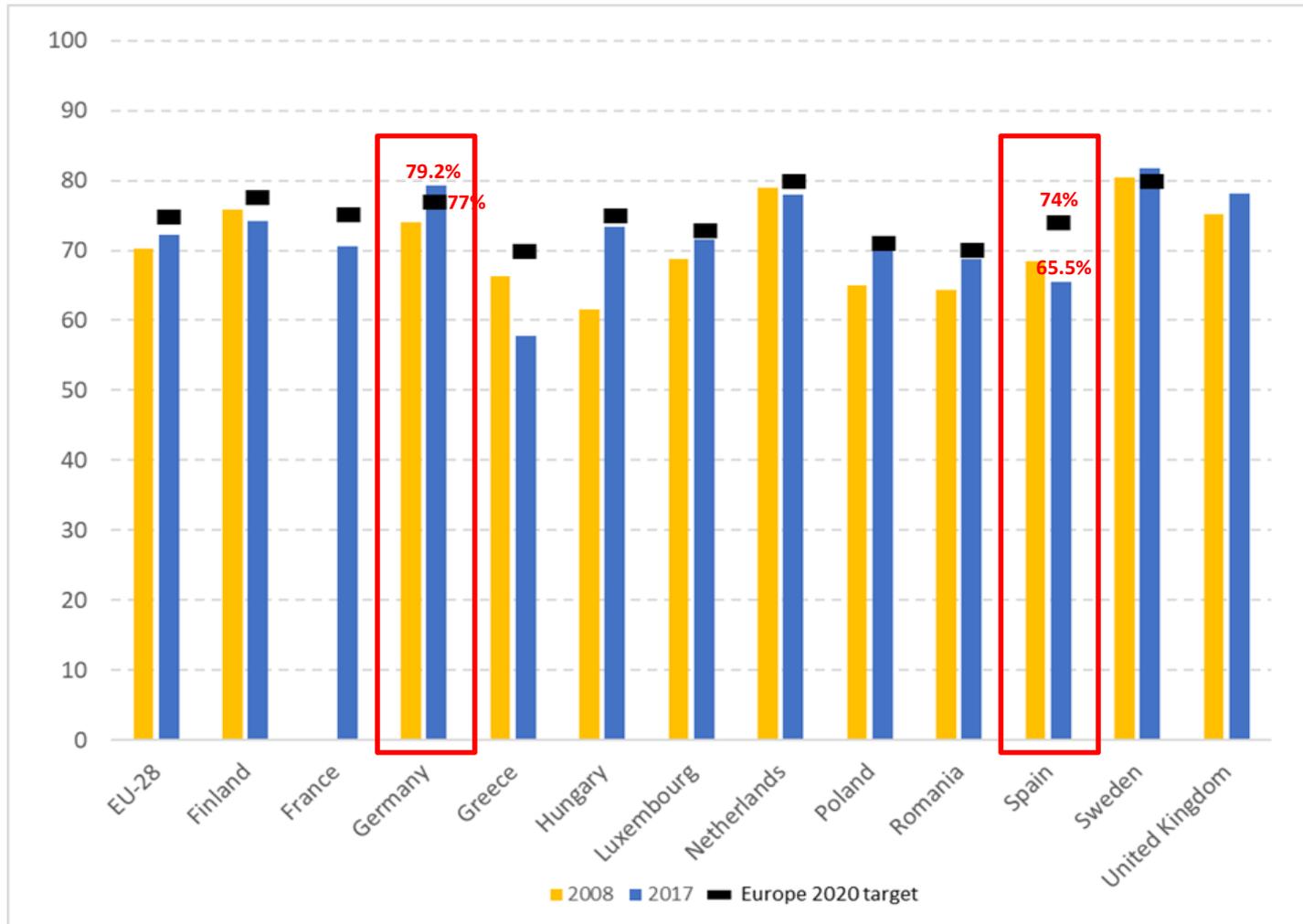
Weighted Coefficient of Variance derived from Gross Regional Product (GRP) per capita in Purchasing Power Parity (PPP) on NUTS2 and NUTS3 level for 2000-2014 in Europe

— NUTS2
— NUTS3



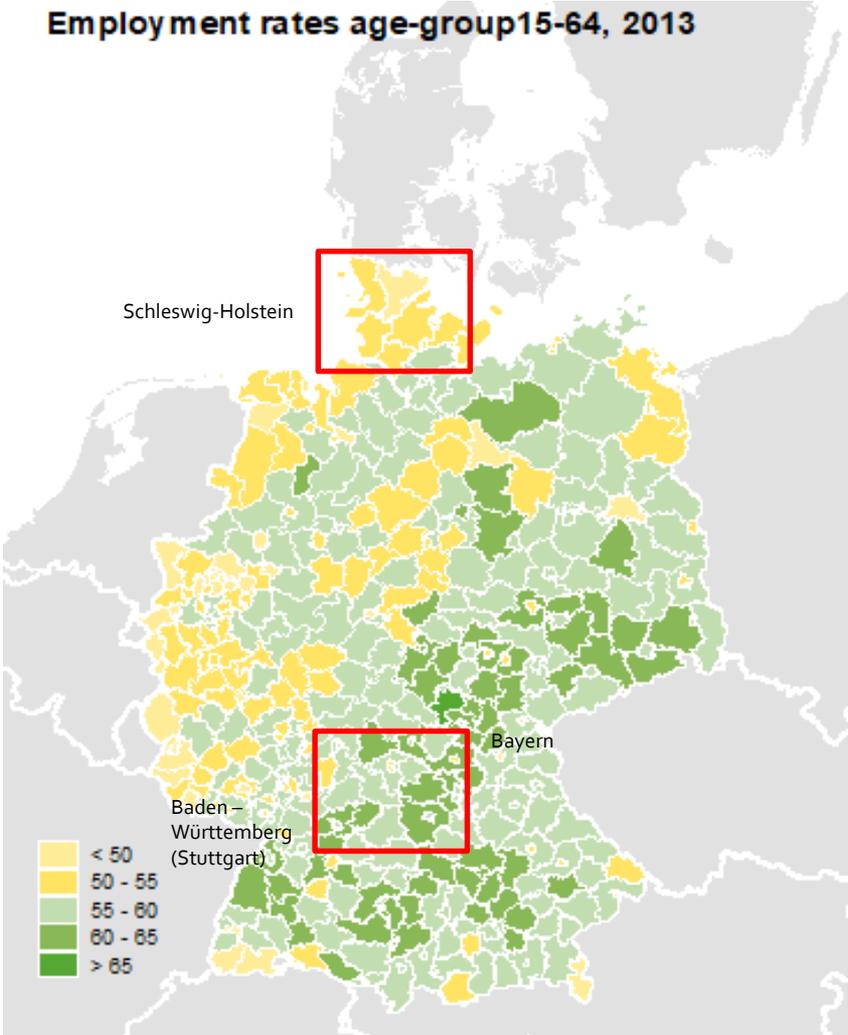
EU Target: Employment (75%)

Employment rate age-group 20 to 64, by country, 2008 and 2017

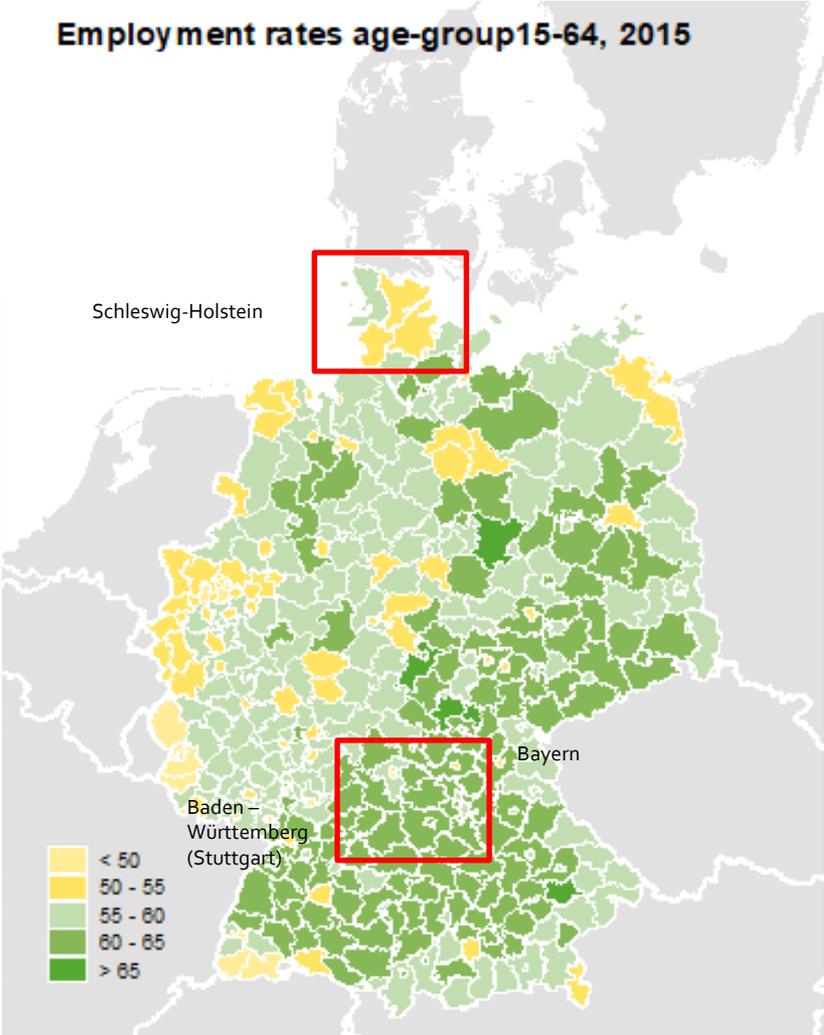


Let's zoom in on NUTS3 level- country that reached its national target - Germany

Employment rates age-group 15-64, 2013

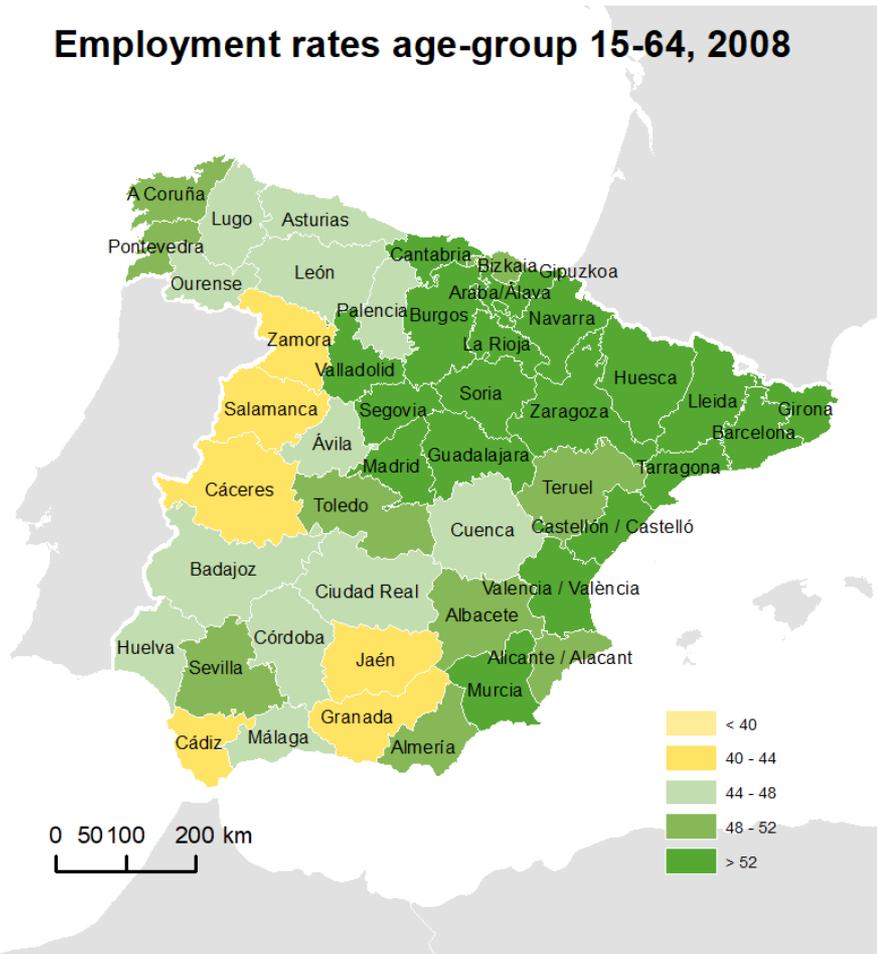


Employment rates age-group 15-64, 2015

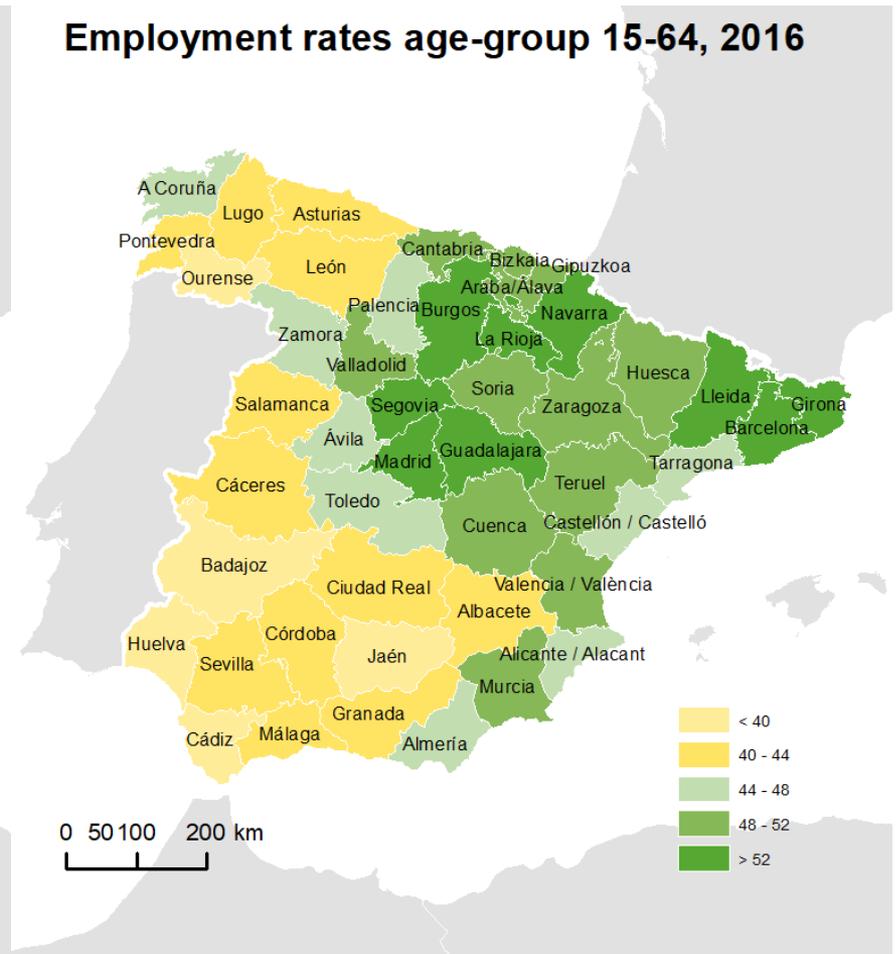


Let's zoom in on NUTS3 level- country that didn't reach its national target - Spain

Employment rates age-group 15-64, 2008

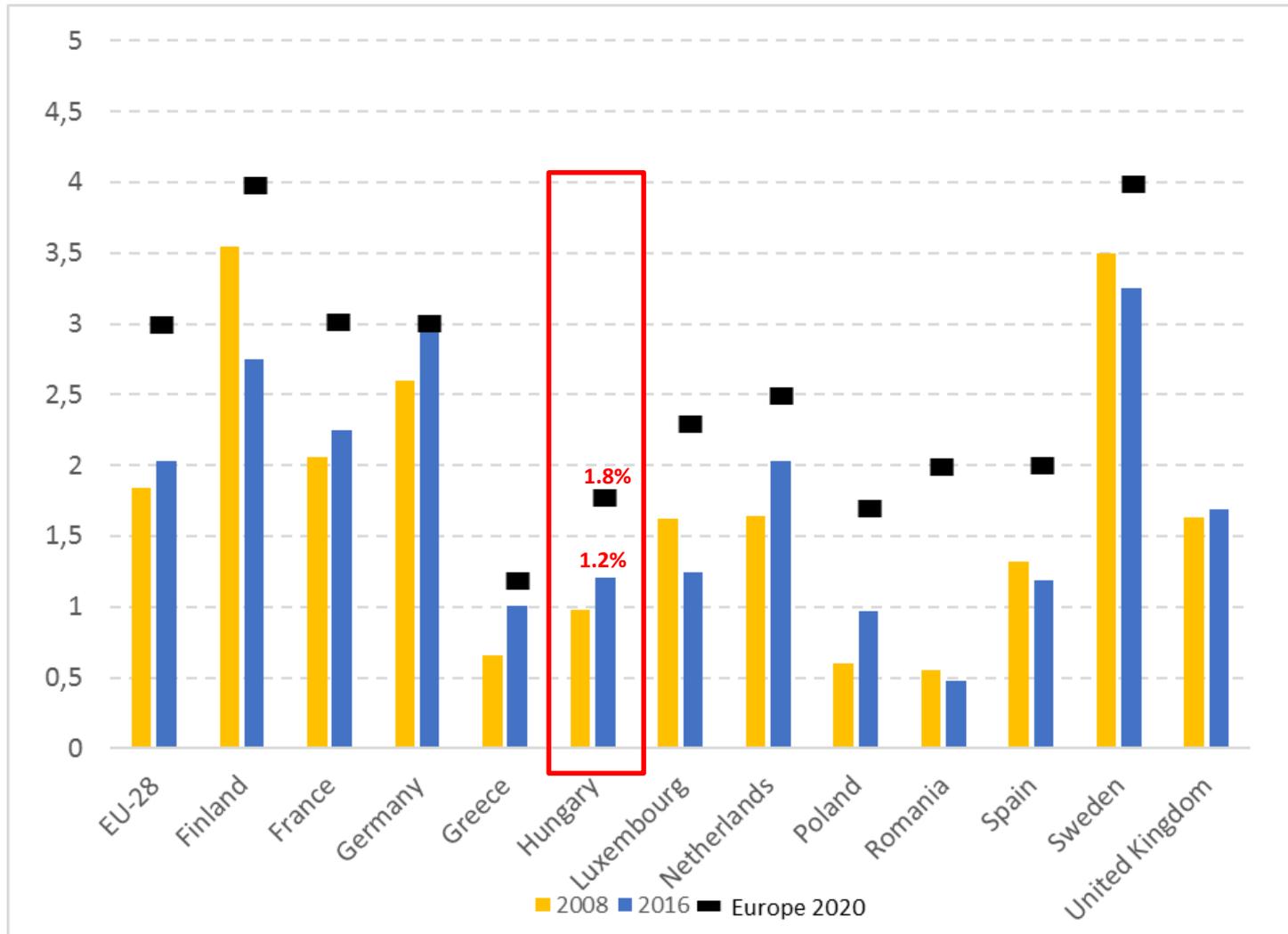


Employment rates age-group 15-64, 2016



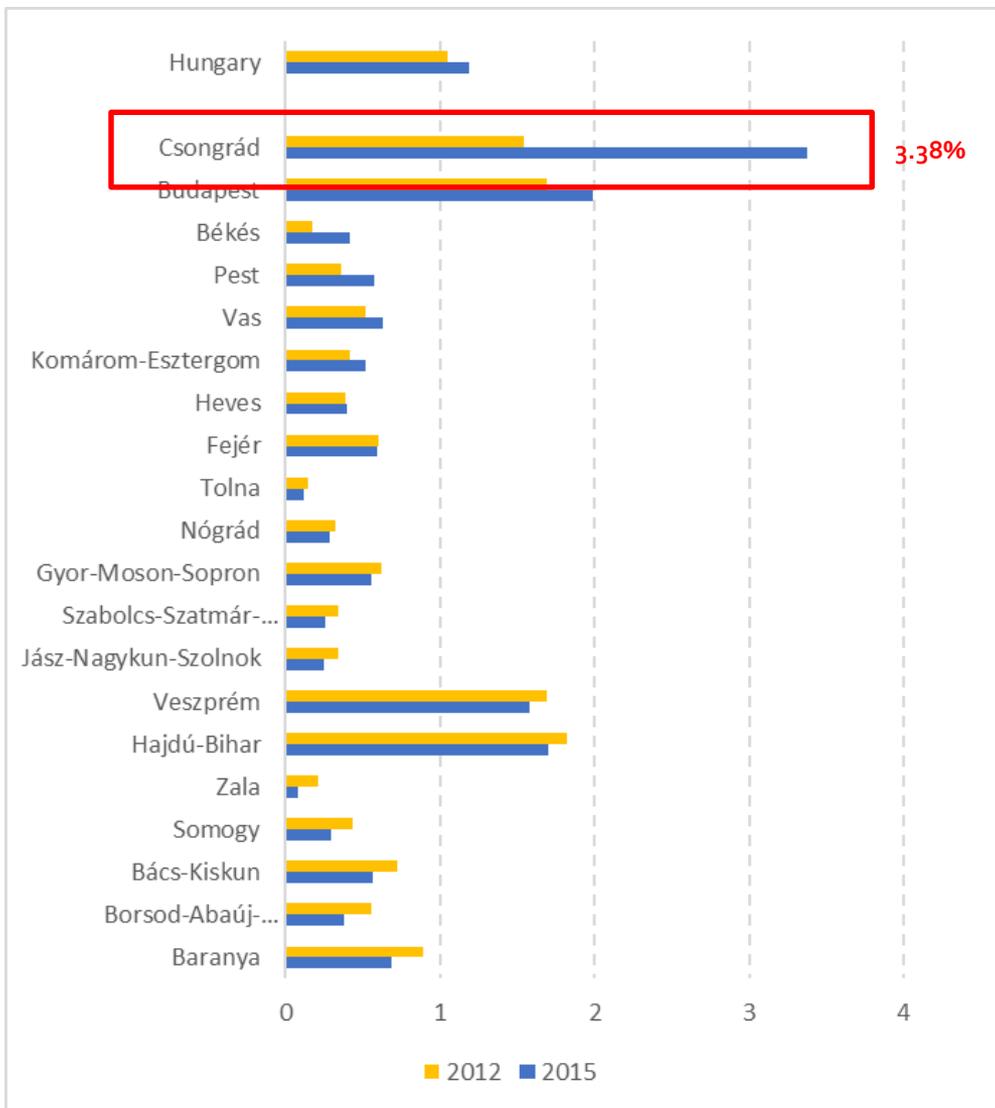
EU Target: Research and Development (3%)

Gross domestic expenditure on R&D, by country, 2008 and 2016



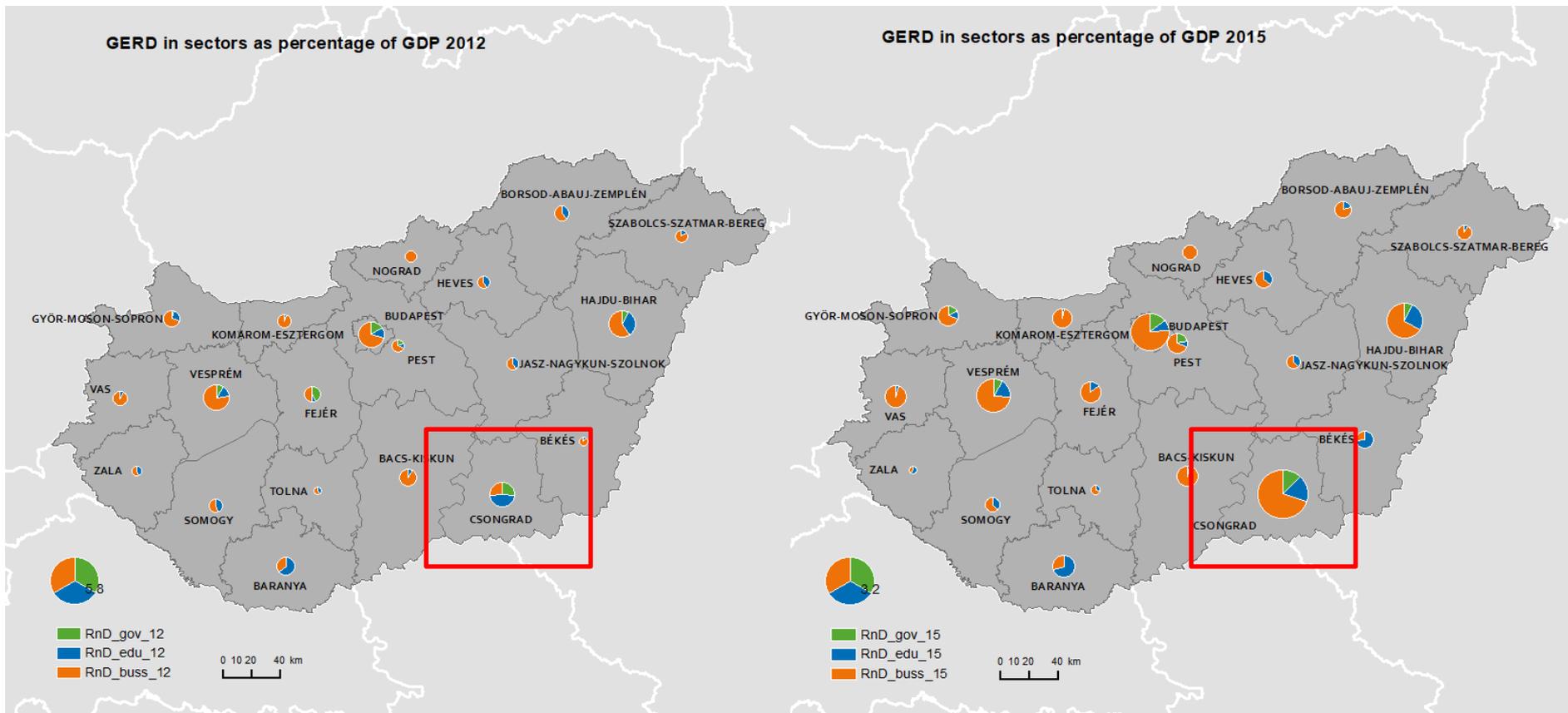
Zooming in on NUTS₃ - Hungary

Total R&D expenditure in all sectors (GERD) as % of GDP, by NUTS₃ region, 2012 & 2015



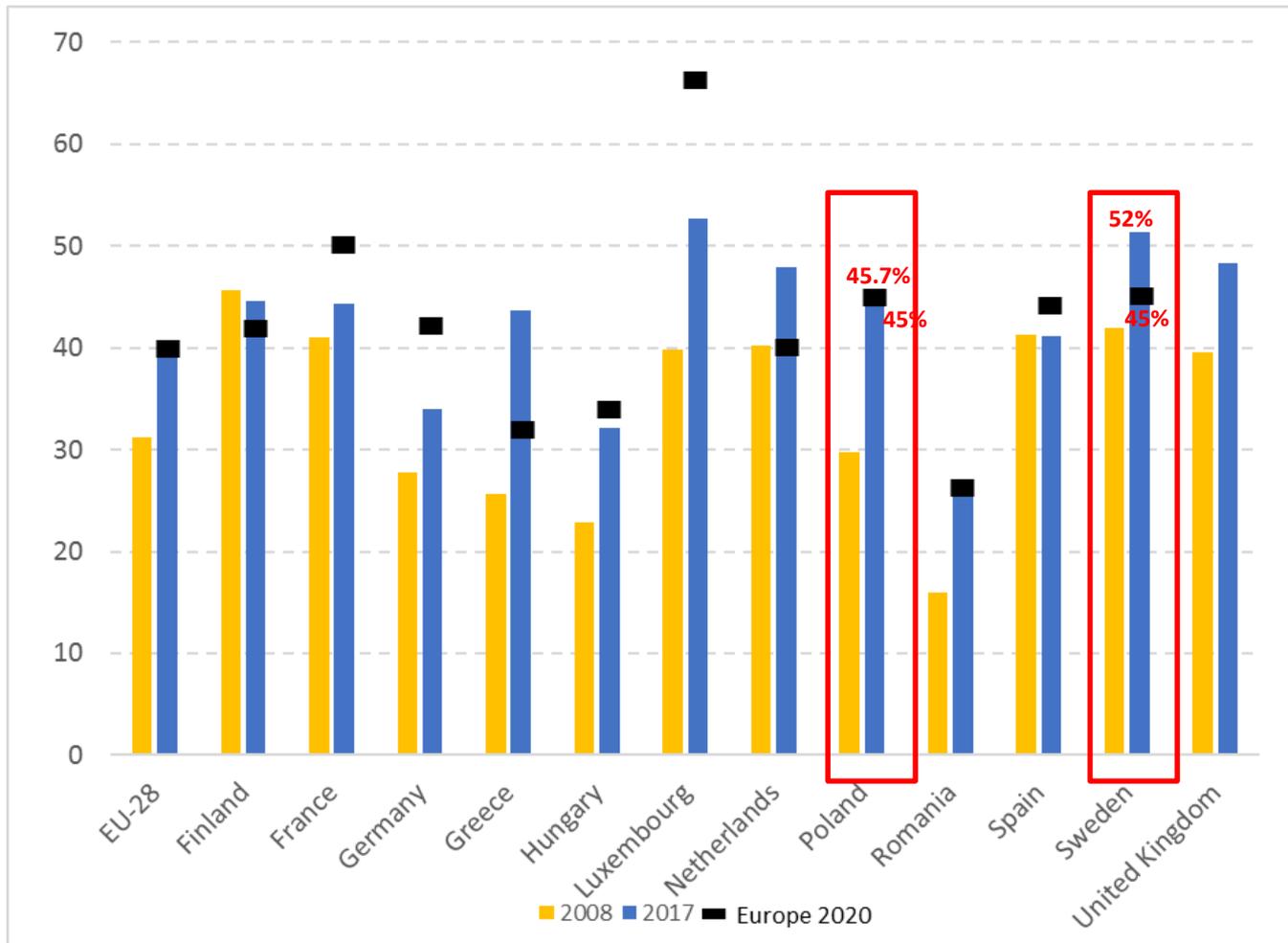
Indicator	Target 2020	National	NUTS ₂	NUTS ₃
Gross domestic expenditure on R&D (%)	1.8%	1.2% (2016)	Dél-Alföld 1.69% (2015)	Csongrád 3.38% (2015)

Total R&D expenditure in all sectors (GERD) as % of GDP in 2012 and 2015, Hungary

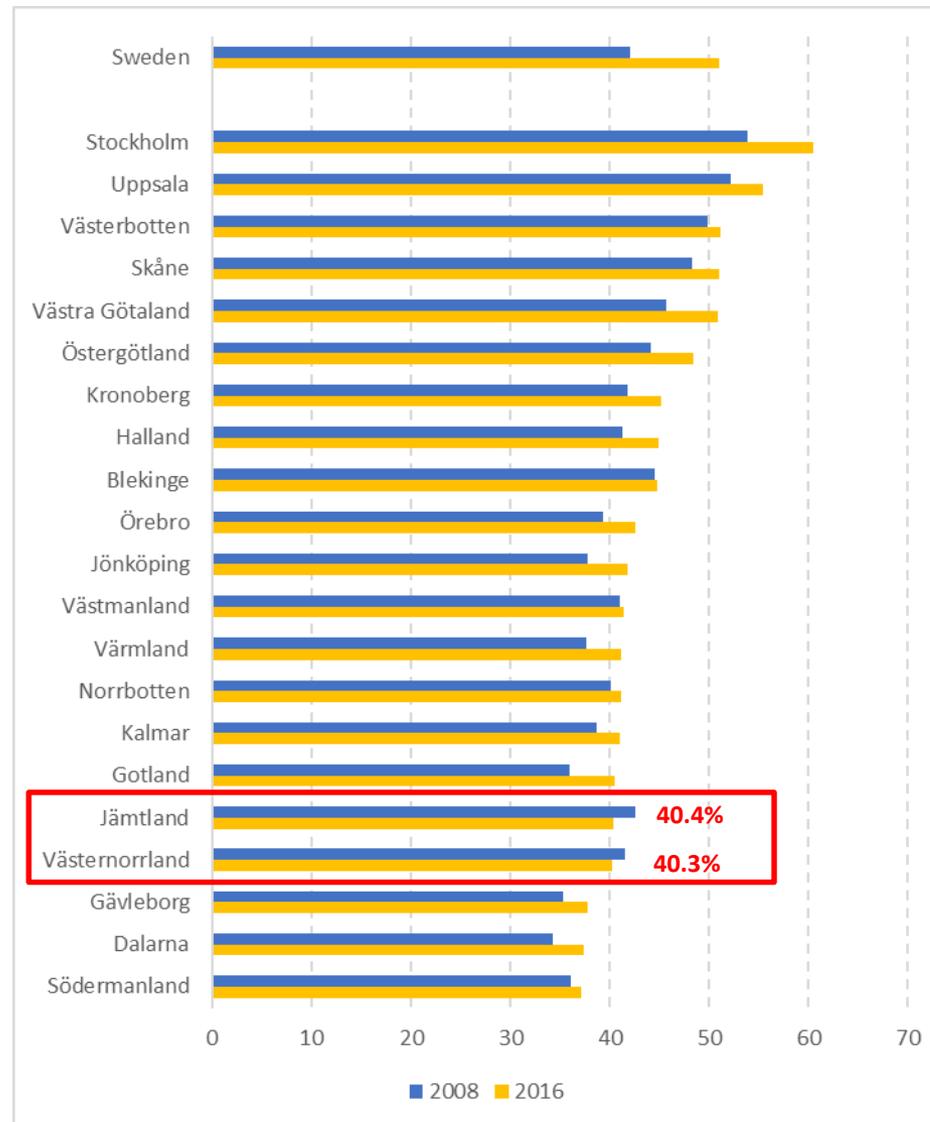


EU Target: Education (40%)

Tertiary educational attainment, by country, 2008 and 2016



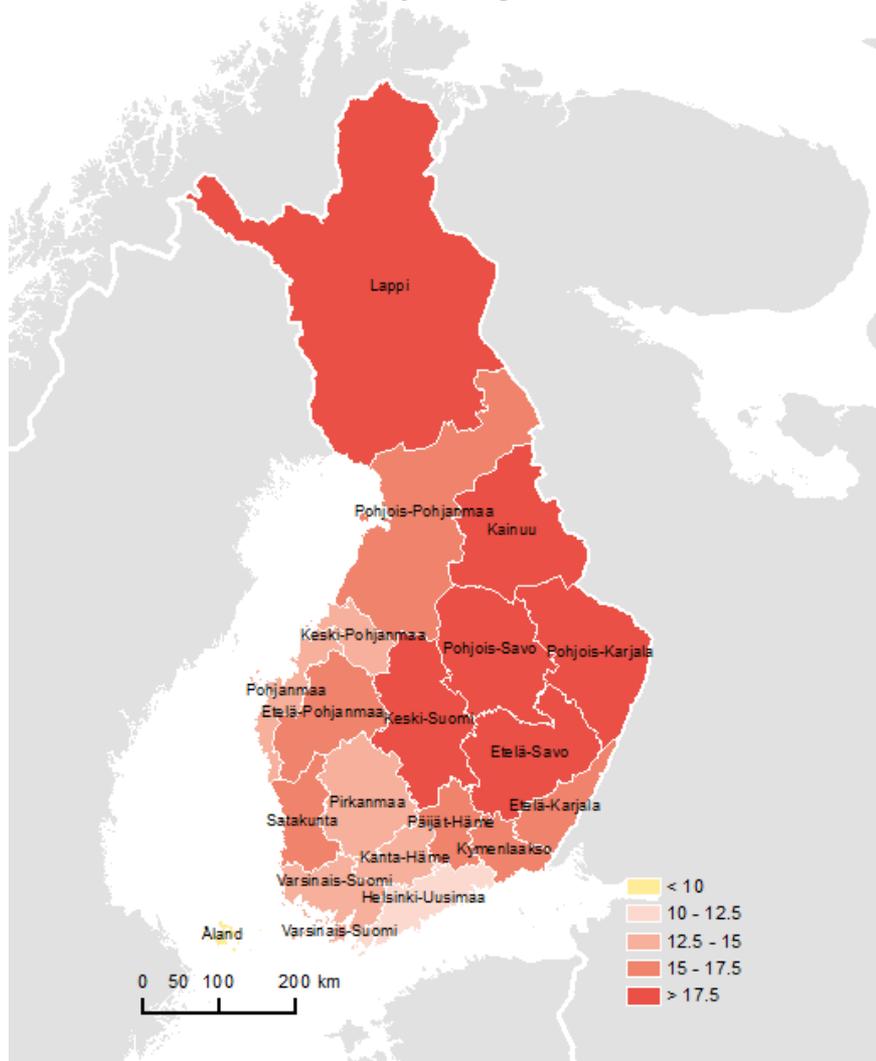
Tertiary educational attainment for the population aged 30-34, by NUTS3 region, in 2008 and 2016, Sweden



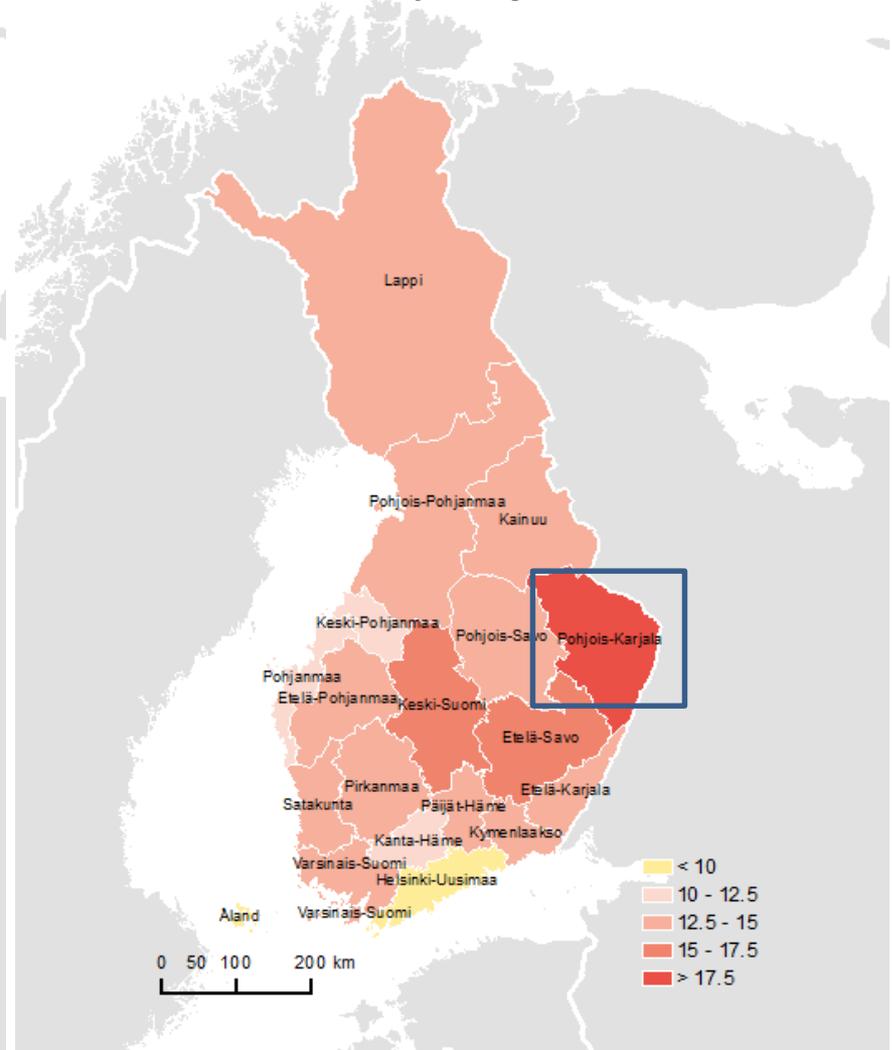
EU Target: Poverty and social exclusion

General at-risk-of-poverty rate in 2008 and 2015, Finland

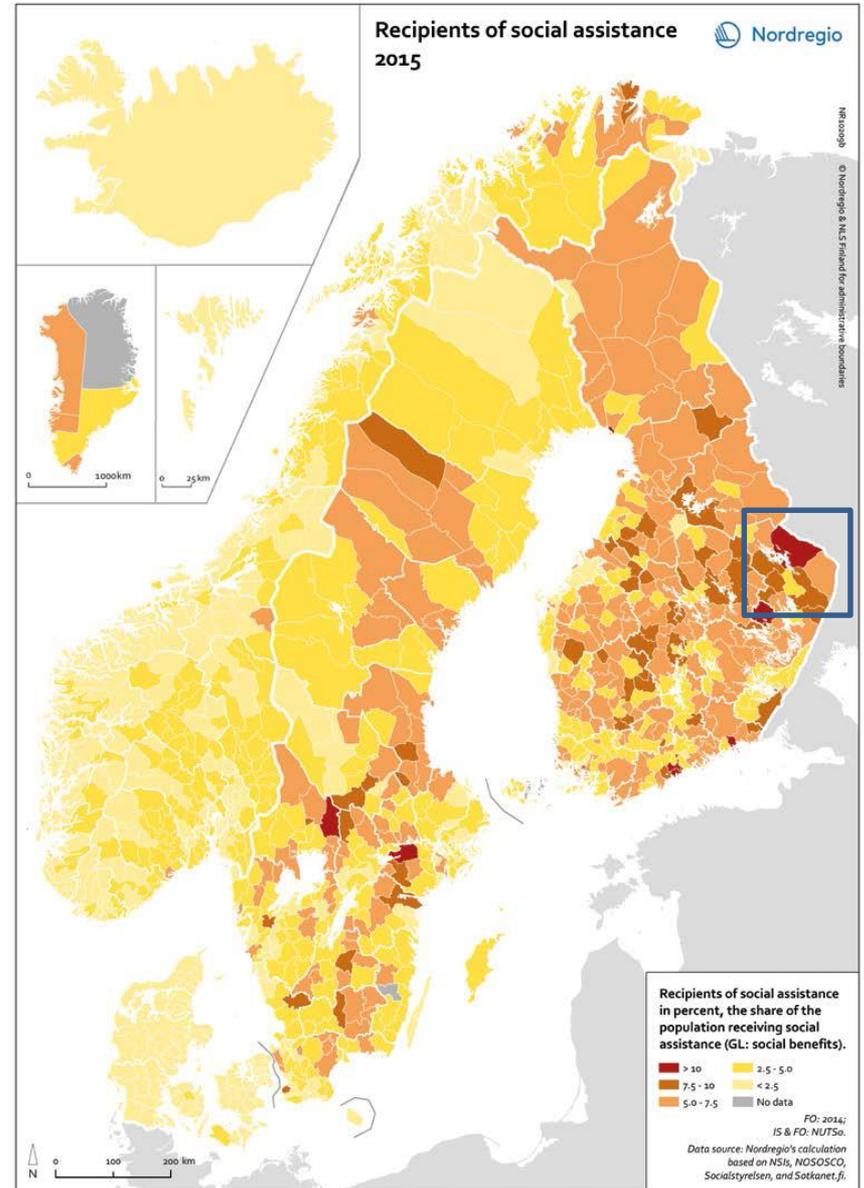
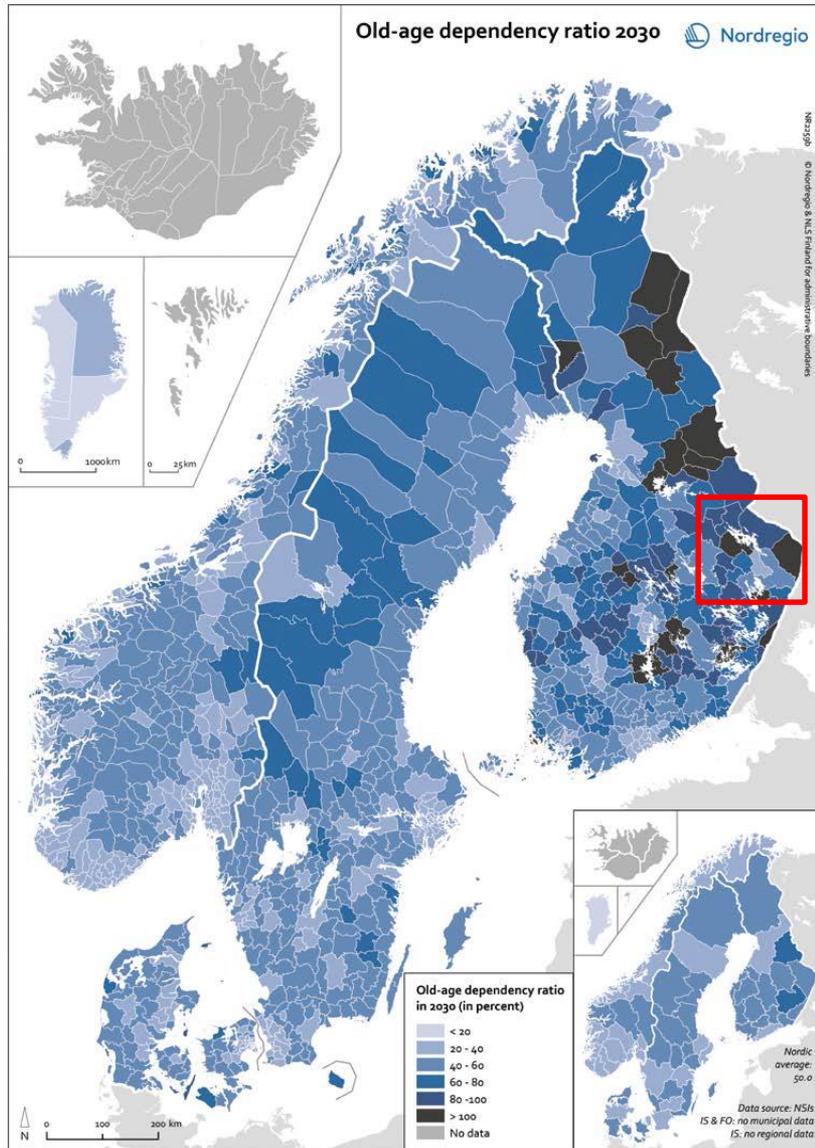
General at-risk-of-poverty rate 2008



General at-risk-of-poverty rate 2015



Possible explanation



Concluding points

- One common pattern which seems to be emerging from preliminary analysis is that regional disparities within countries have a certain inertia and change slowly over time and that the performance of the country is quite important.
- It is obvious from the preliminary analysis that there is a need to go beyond GDP per capita and to examine trends at the NUTS₃ or lower level to discover territorial specificities.
- Next steps are to explore a better way to present the data (spatial Moran's I analysis), to compare commonalities of lagging regions across countries.