

# Cities, regions and digital transformations: Opportunities, risks and challenges



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## Regional Science Policy and Practice Keynote Lecture

The new landscape of regional inequalities in the European Union in the aftermath of economic crisis: analysis and policy challenges for the programming period post-2020

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# Aim and goals

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## Aim

- The aim of this presentation is to present the regional inequalities in Europe in the aftermath of economic crisis
- to discuss why regional inequalities is an important issue for the prospects and functioning of the European Union
- to provide a policy debate on trends and challenges that the European Union faces after the economic crisis

## Approach

- Provide some basic stylized facts that could facilitate dialogue and discussion about the future prospects of European integration
- Make use of descriptive statistics and thematic cartography in order to visualize the finding and make the evidence more accessible
- Emphasize on the policy formulation, policy outcomes and future prospects of cohesion policy

# Regional inequalities

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## Why regional inequalities is an important issue for Europe?

Regional inequalities is a key feature of European integration even from the Treaty of Rome.

- **'Inequality'** has been placed at the forefront of policy debates (OECD 2015, In It Together: Why Less Inequality Benefits All, Picketty 2014)
- Regional inequality determines the development potential and the well being for different areas and large number of people across Europe
- The geography of inequality is related with the geography of discontent, unrest, populism and political attitudes towards integration of the EU (A. Rodriguez-Pose 2017; Ph. McCann 2017)
- Regional inequalities call for different policy responses. The identification and the underlying dynamics of inequality call for a differentiated policy interventions in order to correspond to specific problems and needs

# Methodological issues

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Regional inequalities in the EU have been studied from different angles and for different sub-sets of geographical areas.

- In this research EU has been divided into three groups of countries: North-West, South and Central-East EU countries
- This analysis proceeds by analyzing / goes deeper into separate countries and regions
- Specific analysis has been placed at the role of Capital Regions and Metropolitan areas
- Analysis employs predominately descriptive statistics and thematic cartography and is based on EU statistical data that have been retrieved from official Eurostat statistical data sources
- Changes in the definition of NUTS II regions in some countries call for cautious interpretations and comparisons

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# I. Tracing the changes in the development map of the EU

# Tracing development paths in the EU-28 by group of countries

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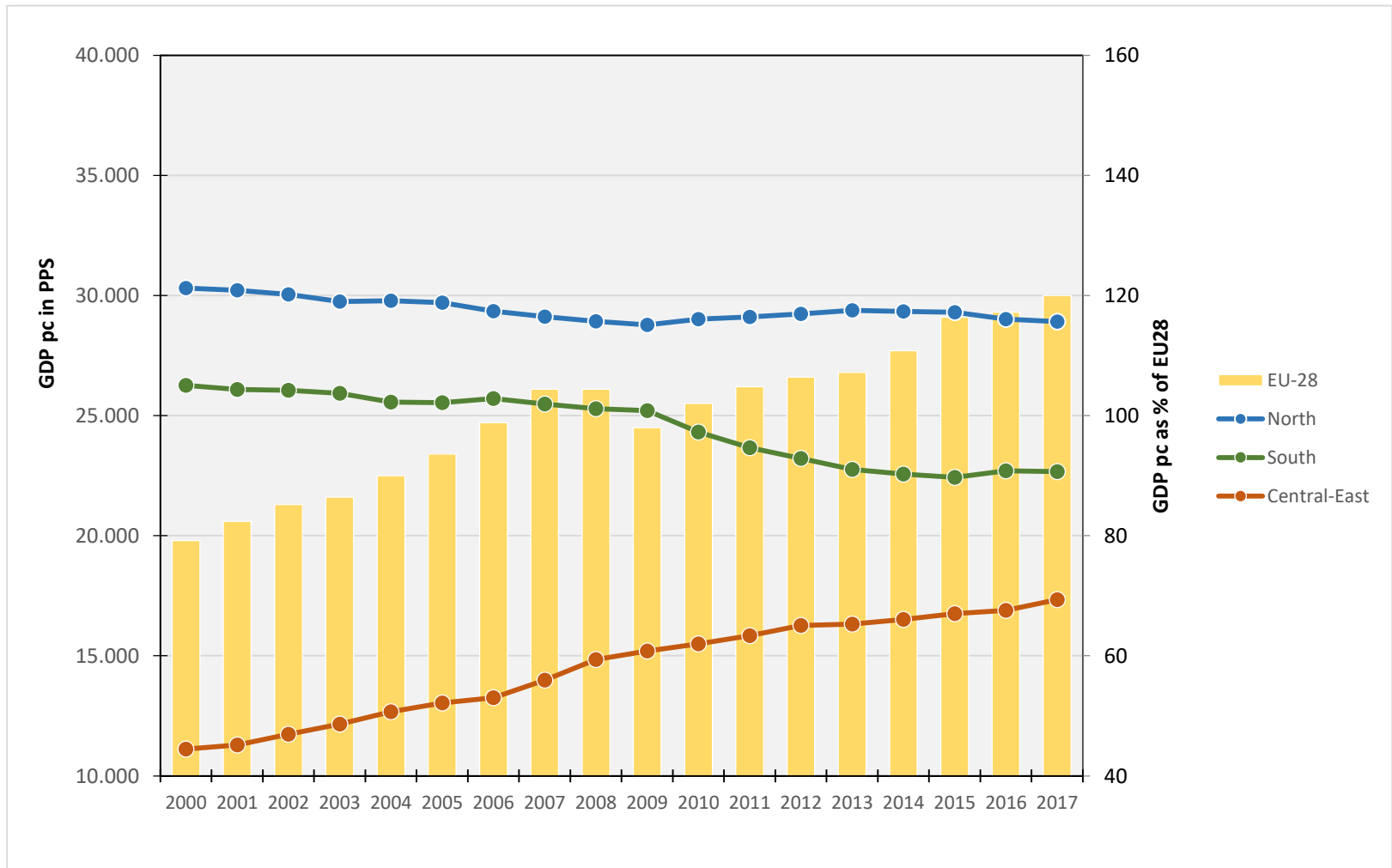
The long term level of economic development of the EU during the period 2000-2017 has increased. Economic crisis in 2008 had been a catalyst for the development map of Europe for both the disruption in the growth rate but also for the differentiated impacts to different groups of countries.

- Northern EU countries enjoyed per capita level of economic development well above the EU average throughout the period 2000-2017. However, after the great recession in the year 2008 the level of economic development of Northern countries reveal slow growth/recovery rates
- Southern EU countries before the economic crisis revealed level of economic development lower to the North EU ones but above EU average. However, after the years 2009 the level of economic development of the Southern EU countries has declined steadily and dropped below the EU average.
- Central East EU countries have the lowest among the three groups level of economic development. However, they show steady and rapid increase throughout the period 2000-2017. Economic crisis has a short term impact on this trend. The level of economic development still remains below the EU average.

Summing up, it could be stated that new geographies of development have been emerged in the EU in recent years. Inequalities between North and South have been increased. A North-South divide is reemerging. East EU countries as a group have followed a steadily converging with the EU development path. This new geography of development is still progressing.

# Gross domestic product (GDP) per inhabitant in purchasing power standards (PPS)

## EU-28, Groups, 2000-2017

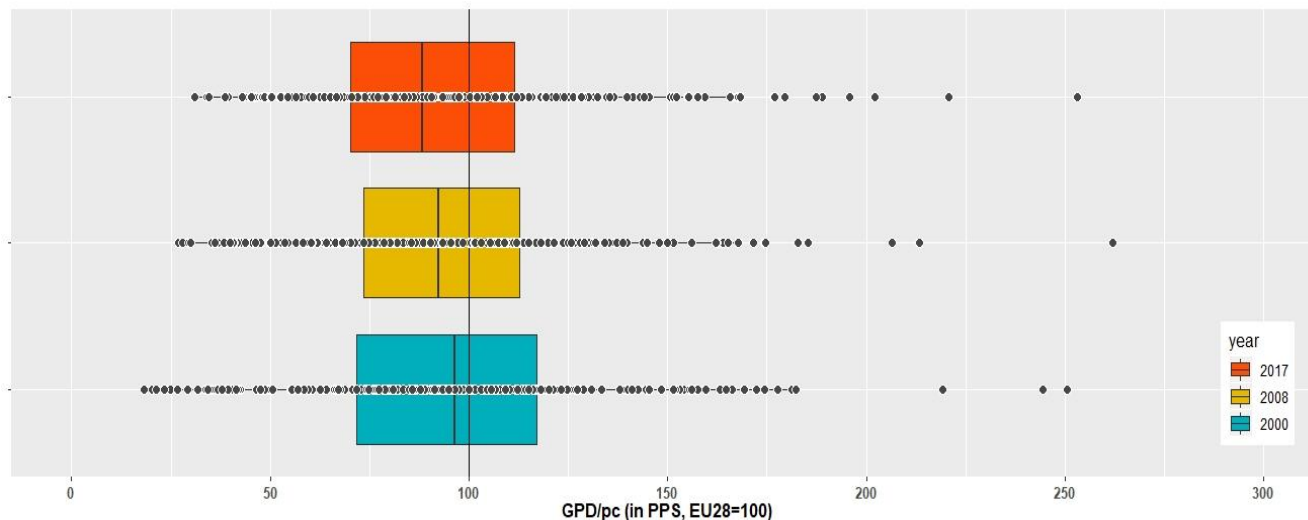


Source: Eurostat ([nama\\_10r\\_2gdp](#))

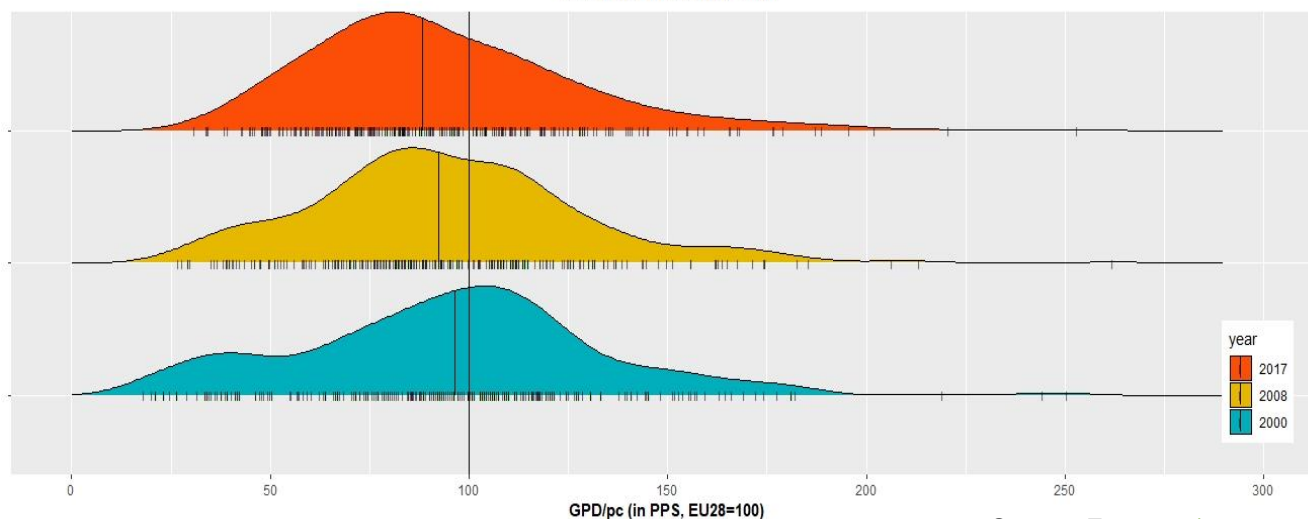
# Distribution of Gross domestic product (GDP) per inhabitant in PPS

(NUTS 2 regions, EU-28 = 100), 2000, 2008, 2017

Gaussian kernel estimation



| Decriptives | 2000    | 2008    | 2017    |
|-------------|---------|---------|---------|
| mean        | 19.252  | 25.295  | 28.740  |
| sd          | 9.334   | 11.670  | 14.084  |
| median      | 19.100  | 24.200  | 26.500  |
| min         | 3.600   | 7.000   | 9.300   |
| max         | 106.600 | 147.500 | 188.000 |
| range       | 103.000 | 140.500 | 178.700 |
| skew        | 3,10    | 4,40    | 5,50    |
| kurtosis    | 26,15   | 41,52   | 56,55   |
| se          | 556,80  | 696,20  | 840,20  |



Source: Eurostat ([nama\\_10r\\_2gdp](#))



# Going into more detail by analyzing group of countries and regions: 2000, 2008, 2017

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Boxplots and Kernel density estimations provide additional insights to the development map of the EU.

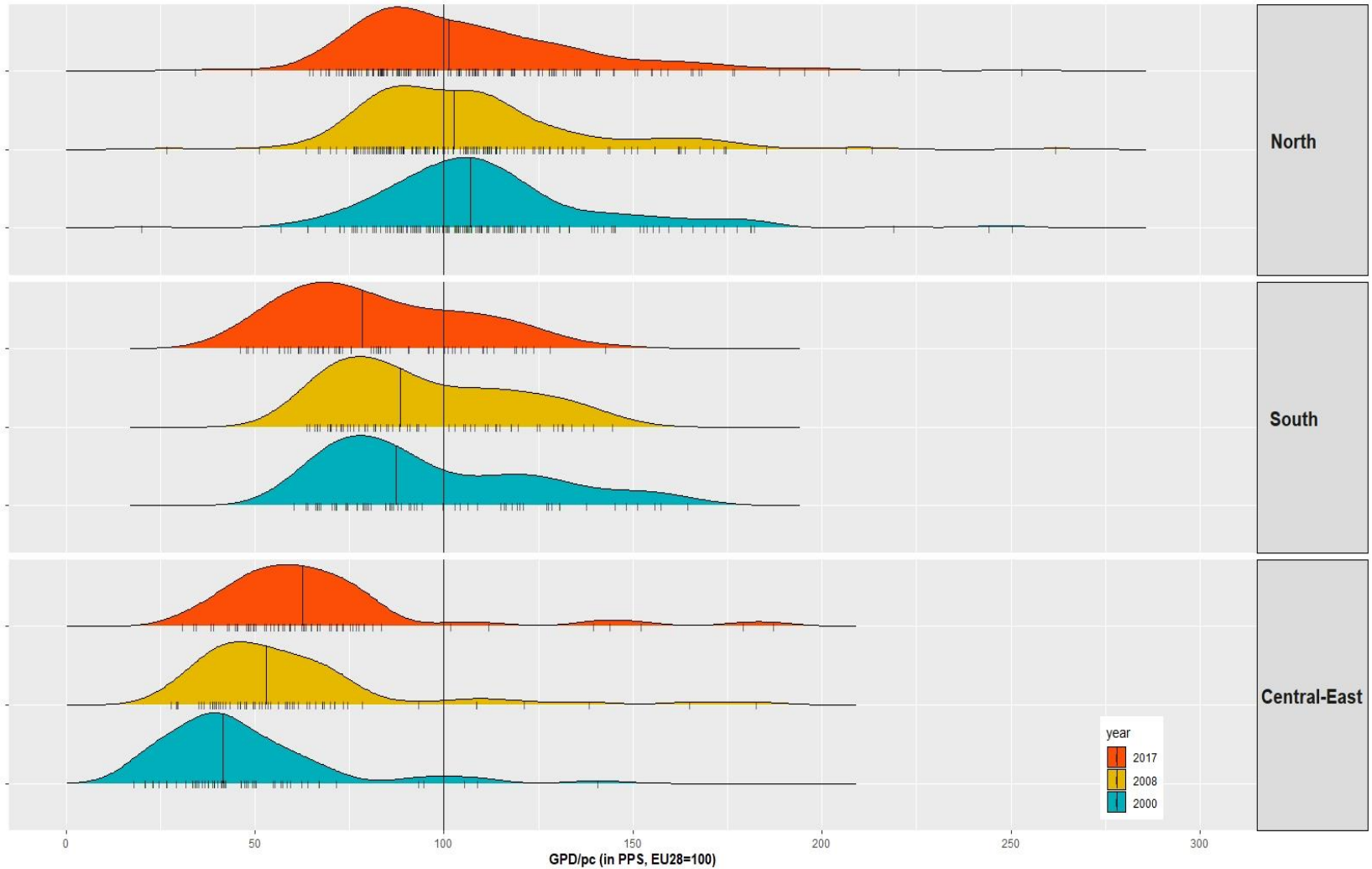
- For the East EU countries, the majority of regions remains below the EU average. However, 'long tails' in the upper part chart reveal that there are some outliers cities which show level of economic development well above the EU average. These are the metropolitan areas and the capital regions.
- North EU countries have also 'long tails' in the upper part of the distribution. These are the Metropolitan regions.
- Southern EU countries have lost ground in terms of the level of economic development. However, regional inequalities are smaller while there is absence in the dominance of Metropolitan areas comparing to the other two group of regions: the North and the South
- Looking the box plots with separate countries it is striking the decrease in the level of economic development for the Southern EU countries and also some important losses in Northern EU countries such as in France and in the UK

Summing up, it could be stated that the development of East EU countries has been accomplished with further polarization of economic geography between the capital regions and the rest regions of each country. Metropolitan regions are also outliers in the North. However, this observation doesn't apply to the same extent for the Southern regions.

# Distribution of Gross domestic product (GDP) per inhabitant in PPS

Groups, (NUTS 2 regions, EU-28 = 100), 2000, 2008, 2017

Gaussian kernel estimation

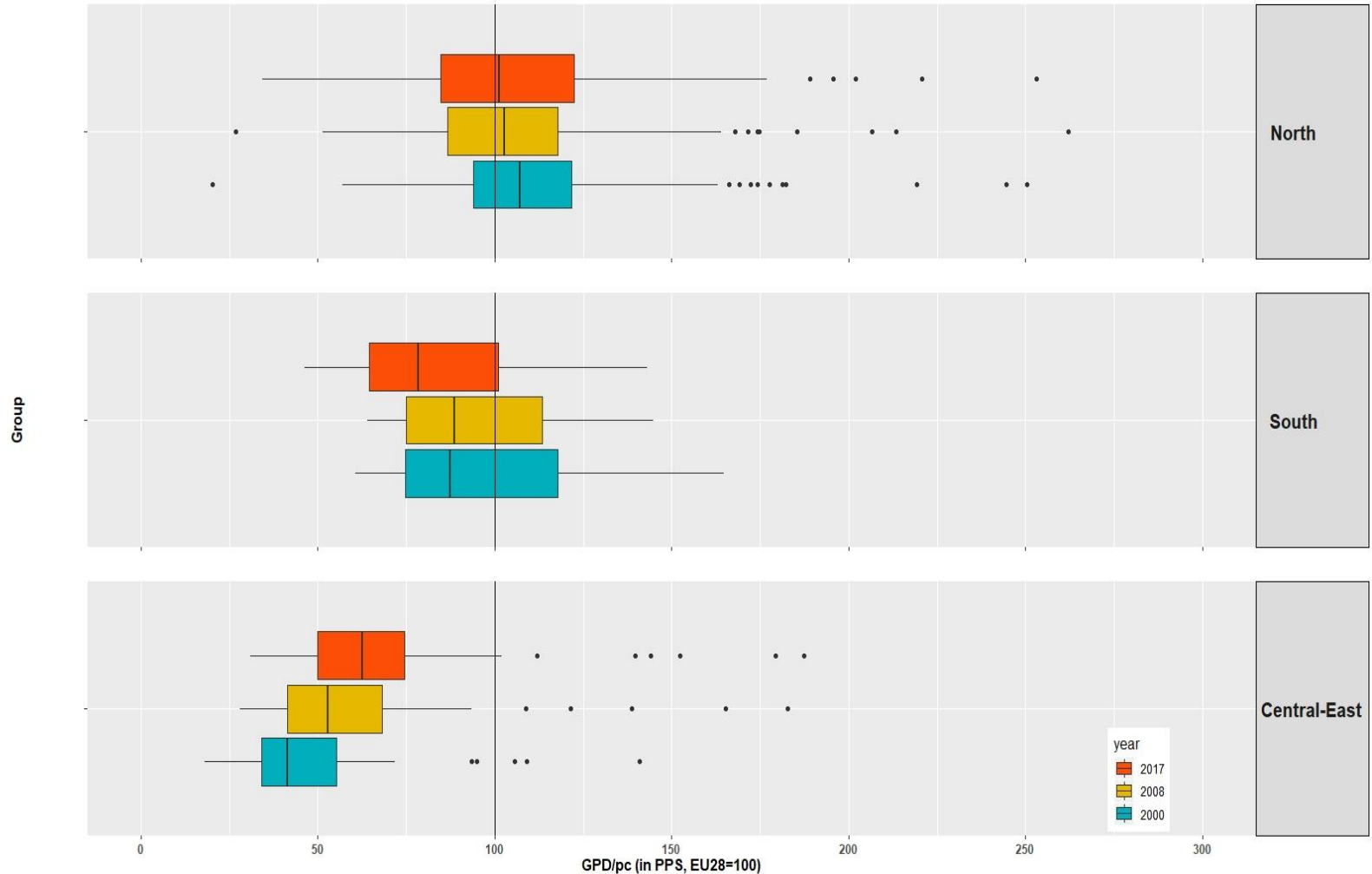


Source: Eurostat ([nama\\_10r\\_2gdp](#))

# Distribution of Gross domestic product (GDP) per inhabitant in PPS

Groups (NUTS 2 regions, EU-28 = 100), 2000, 2008, 2017

Boxplots

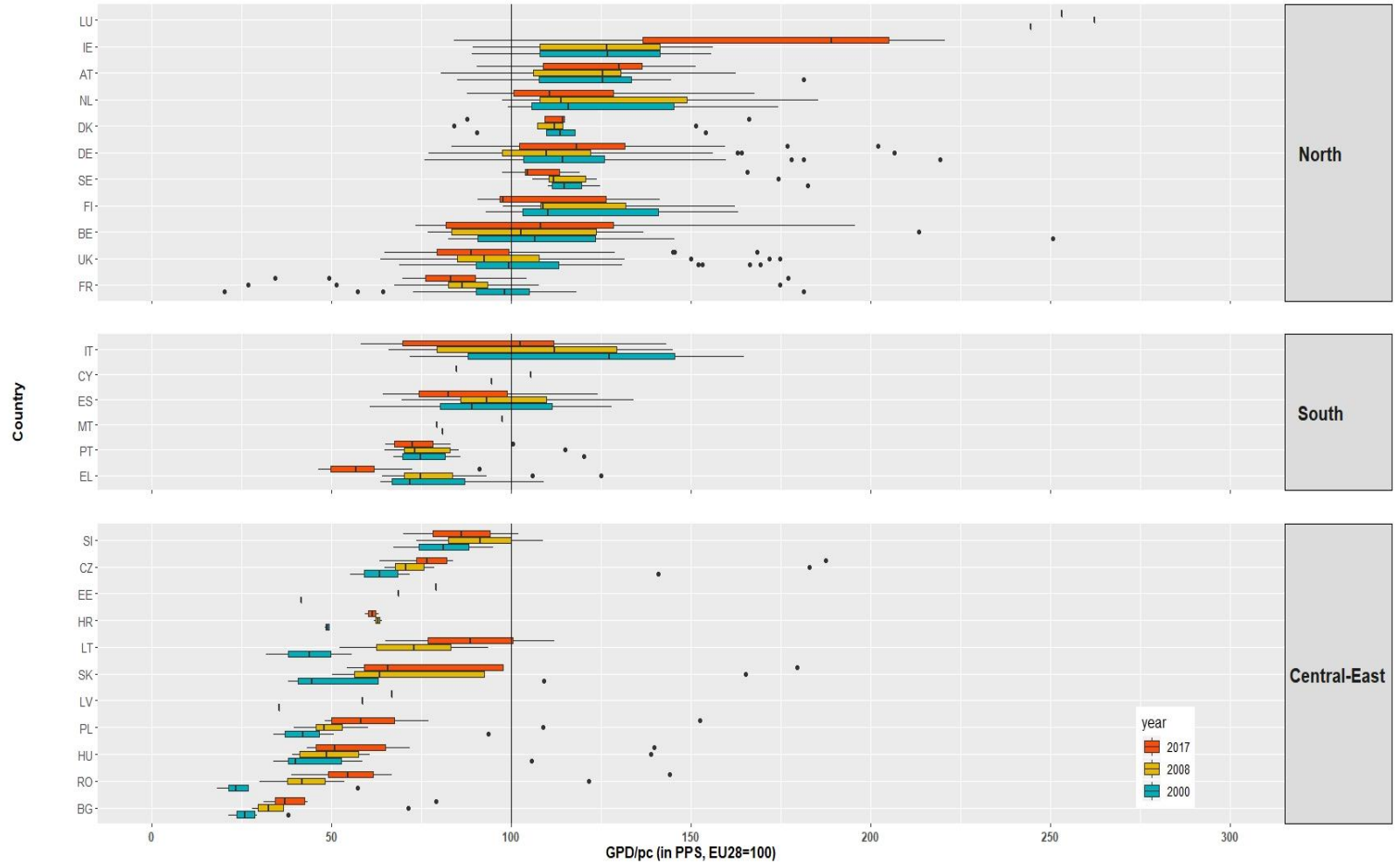


Source: Eurostat ([nama\\_10r\\_2gdp](#))

# Distribution of Gross domestic product (GDP) per inhabitant in PPS

Groups & countries= (NUTS 2 regions, EU-28 = 100), 2000, 2008, 2017

Boxplots



Source: Eurostat ([nama\\_10r\\_2gdp](#))

# Mapping regional development in EU for the years 2000, 2008, 2017

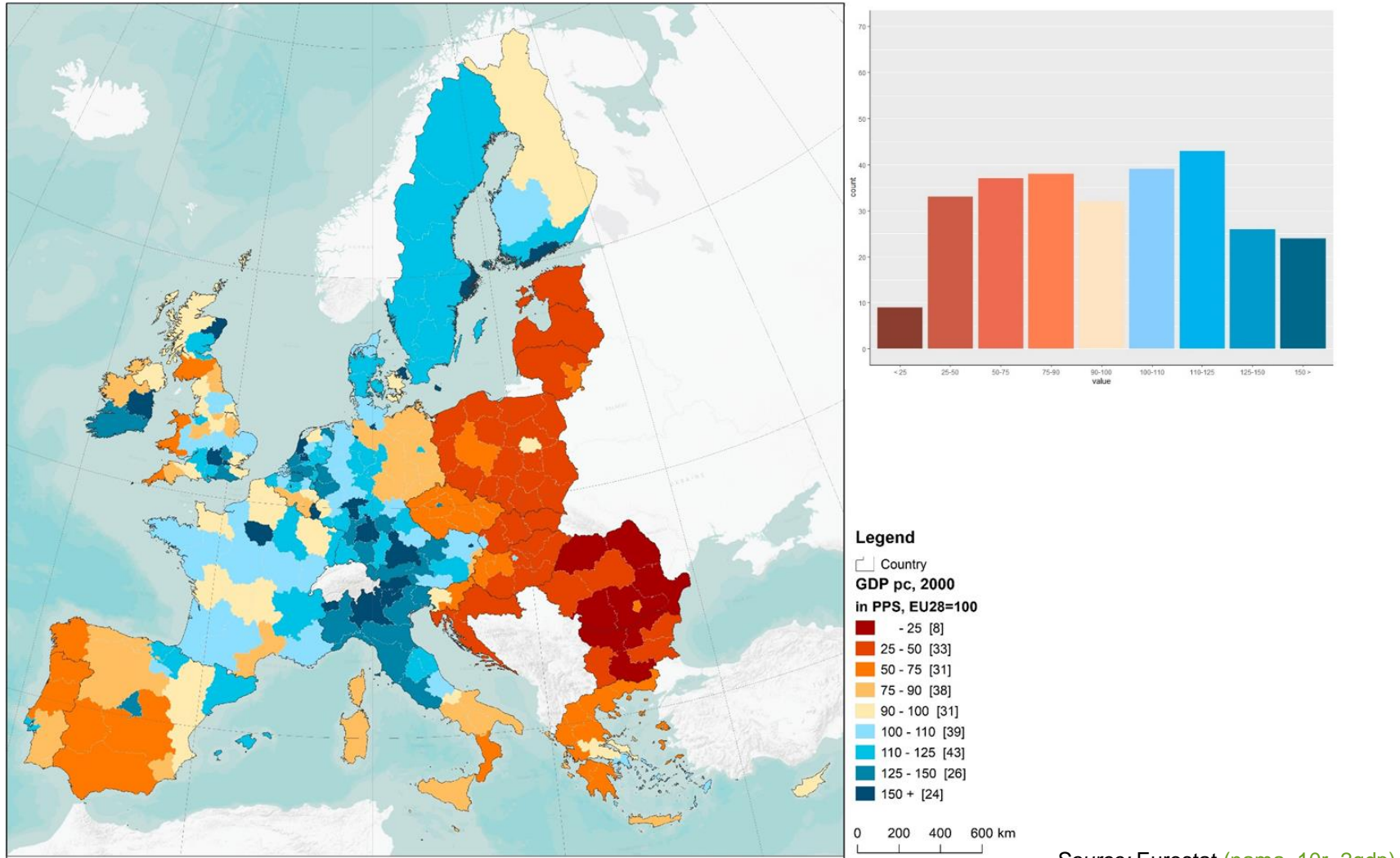
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These trends can be better portrait by thematic mapping. There are some important observations:

- The number of regions above the EU average is shrinking over time. Polarization in levels of economic development.
- The geography of development is restricted/shrunk in the corridor that crosses the EU from Sweden to Northern Italy.
- Increase in metropolitan development in the East and enhancement of development gaps between the Metropolitan regions and the rest of the country.
- French and UK constitute case studies that attract our attention. [‘Île-de-France’](#) is an outlier in the France’s development map. The same applies to ‘Inner London’ for the UK. See also Scotland among regions with level of economic development above the EU average.
- The synthetic map which constitutes a transition matrix summarizes which regions have lost ground between 2000 and 2017 and which regions have been upgraded. Specific attention is required to the regions of France and the UK.

Summing up, it could be stated that the development map of EU has been most polarized. Even regions belonging to countries of the EU core have downgraded substantially with France and UK being representative examples.

# Gross domestic product (GDP) per inhabitant in PPSNUTS 2 regions (NUTS 2 regions, EU-28 = 100), 2000

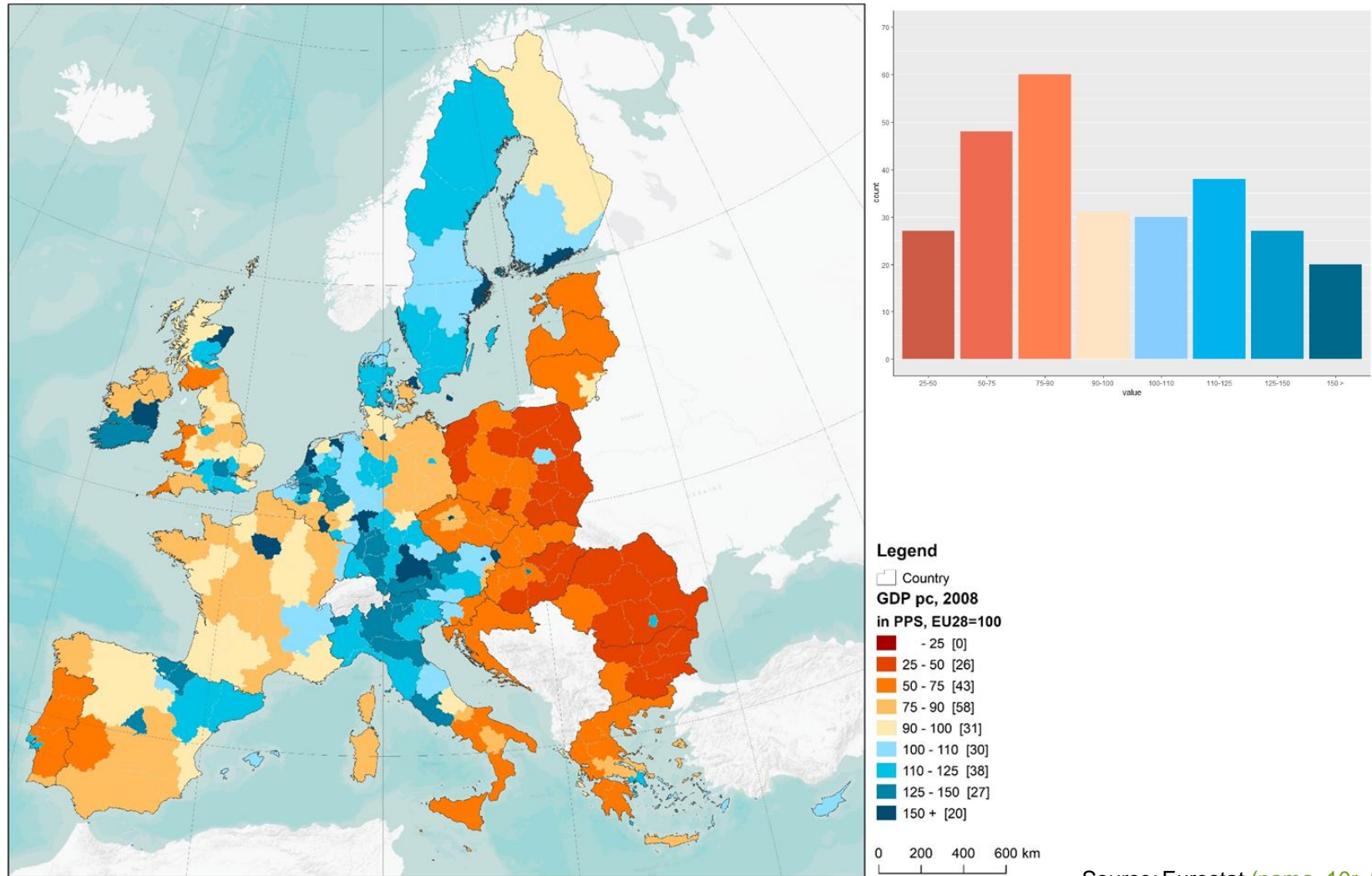


Source: Eurostat ([nama\\_10r\\_2gdp](#))



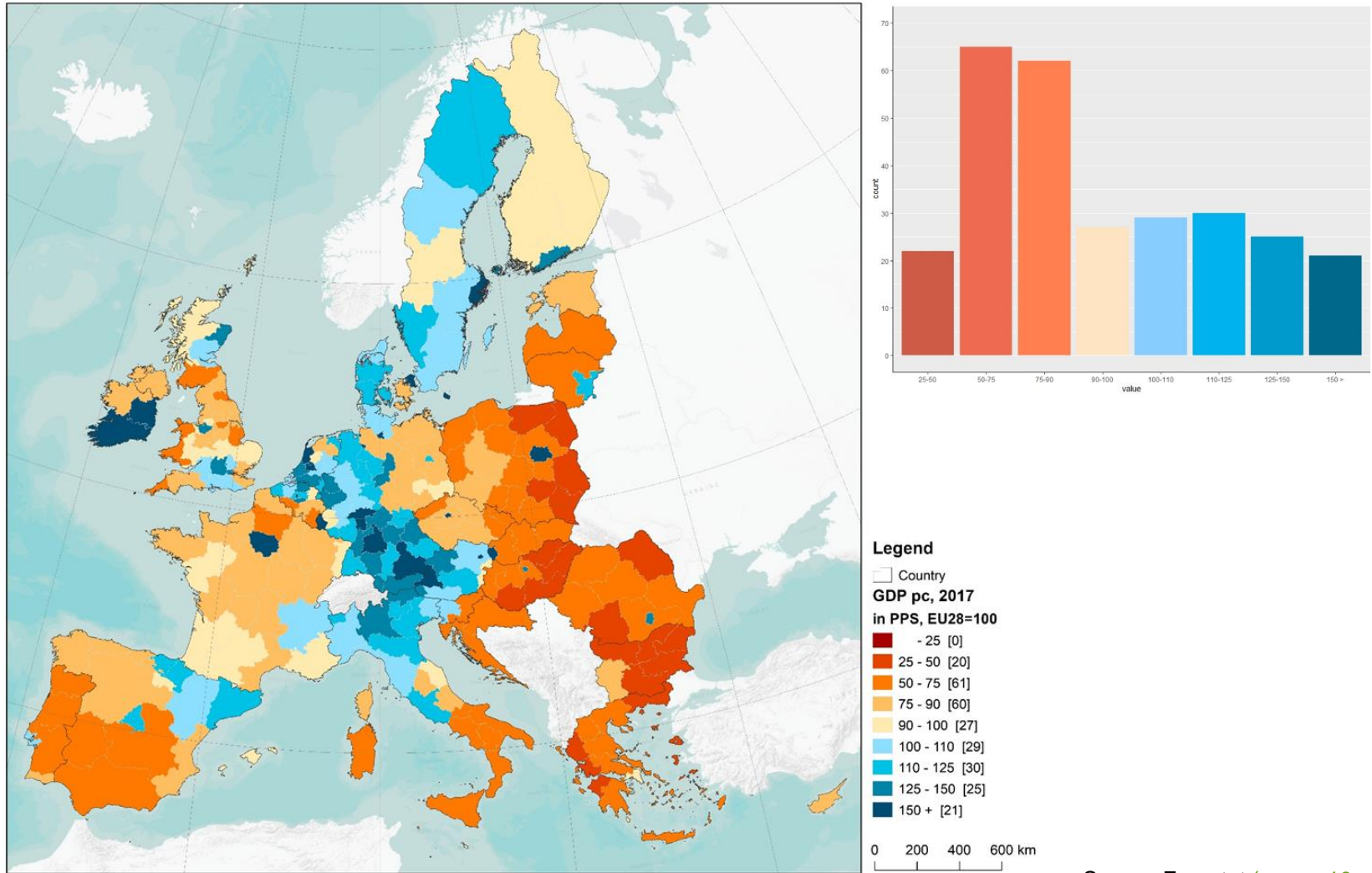
# Gross domestic product (GDP) per inhabitant in PPS

(NUTS 2 regions, EU-28 = 100), 2008



Source: Eurostat ([nama\\_10r\\_2gdp](#))

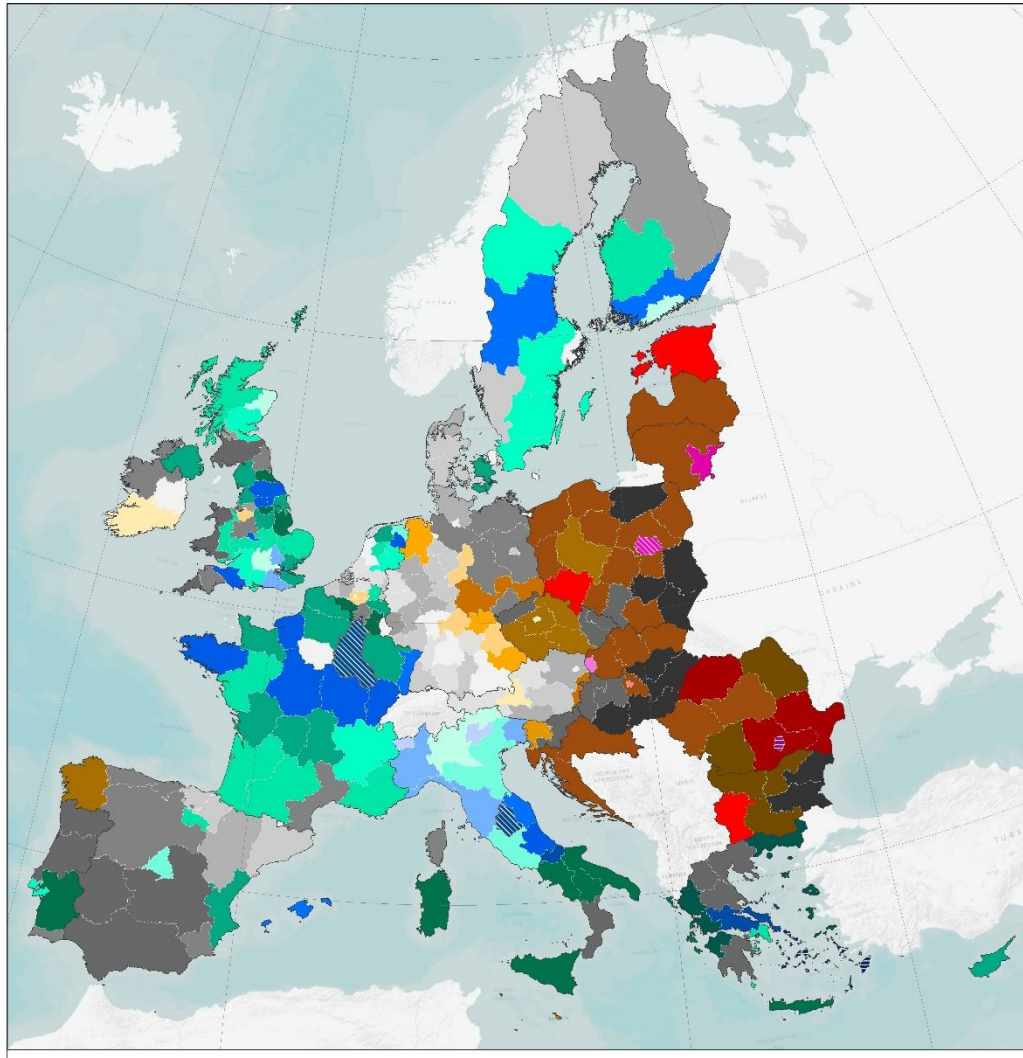
# Gross domestic product (GDP) per inhabitant in PPSNUTS 2 regions (NUTS 2 regions, EU-28 = 100), 2017



Source: Eurostat ([nama\\_10r\\_2gdp](#))



# Mapping of transition in Gross domestic product (GDP) per inhabitant in PPS (NUTS 2 regions, EU-28 = 100), 2000-2017



## Legend

Country

## GDP per capita, classes

| 2017 > 2000 | - 25         | 25-50        | 50-75   | 75-90        | 90-100       | 100-110      | 110-125      | 125-150      | 150 +        |
|-------------|--------------|--------------|---------|--------------|--------------|--------------|--------------|--------------|--------------|
| - 25        | [Dark Green] | [Brown]      | [Red]   | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] |
| 25-50       | [Light Blue] | [Dark Green] | [Brown] | [Red]        | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] |
| 50-75       | [Light Blue] | [Dark Green] | [Brown] | [Red]        | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] |
| 75-90       | [Light Blue] | [Dark Green] | [Brown] | [Red]        | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] |
| 90-100      | [Light Blue] | [Dark Green] | [Brown] | [Red]        | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] |
| 100-110     | [Light Blue] | [Dark Green] | [Brown] | [Red]        | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] |
| 110-125     | [Light Blue] | [Dark Green] | [Brown] | [Red]        | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] |
| 125-150     | [Light Blue] | [Dark Green] | [Brown] | [Red]        | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] |
| 150 +       | [Light Blue] | [Dark Green] | [Brown] | [Red]        | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] | [Light Blue] |

0 200 400 600 km

Source: Eurostat ([nama\\_10r\\_2gdp](#))

# Analysis of changes in the development map of the EU

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Transition probability matrixes show the possibility a region to move to another “state”- class. Analysis has applied for the regions belonging to different groups of EU countries.

- The regions in the EU North with high probability to move are those in the lowest class or those in the middle classes groups of the climax.
- The regions in the EU South that have the highest possibility to move (downgraded) belong to the upper class. Regions belonging to the 25-50 class are difficult to move.
- The regions in the EU East that have the highest possibility to move are those in the lowest class or in the middle position in the climax.

Summing up, the probability is differentiated according to the group of country. The differentiated results question the fitness and the effectiveness of policies.

# Transition probability matrix in GDP per inhabitant in PPS (NUTS 2 regions, EU-28 = 100), 2000-2017, EU-28

| 2017><br>2000 | 0-25   | 25-50         | 50-75  | 75-90         | 90-100        | 100-110       | 110-125 | 125-150 | 150+   |
|---------------|--------|---------------|--------|---------------|---------------|---------------|---------|---------|--------|
| 0-25          | 71,88% | <b>28,13%</b> | 0,00%  | 0,00%         | 0,00%         | 0,00%         | 0,00%   | 0,00%   | 0,00%  |
| 25-50         | 0,00%  | 93,89%        | 6,11%  | 0,00%         | 0,00%         | 0,00%         | 0,00%   | 0,00%   | 0,00%  |
| 50-75         | 0,00%  | 0,94%         | 94,36% | 4,70%         | 0,00%         | 0,00%         | 0,00%   | 0,00%   | 0,00%  |
| 75-90         | 0,00%  | 0,00%         | 5,56%  | 89,92%        | 4,52%         | 0,00%         | 0,00%   | 0,00%   | 0,00%  |
| 90-100        | 0,00%  | 0,00%         | 0,00%  | <b>12,18%</b> | 81,30%        | 6,35%         | 0,17%   | 0,00%   | 0,00%  |
| 100-110       | 0,00%  | 0,00%         | 0,00%  | 0,00%         | <b>11,21%</b> | 80,52%        | 8,28%   | 0,00%   | 0,00%  |
| 110-125       | 0,00%  | 0,00%         | 0,00%  | 0,00%         | 0,00%         | <b>10,84%</b> | 84,73%  | 4,43%   | 0,00%  |
| 125-150       | 0,00%  | 0,00%         | 0,00%  | 0,00%         | 0,00%         | 0,00%         | 7,00%   | 89,39%  | 3,61%  |
| 150+          | 0,00%  | 0,00%         | 0,00%  | 0,00%         | 0,00%         | 0,00%         | 0,00%   | 5,31%   | 94,69% |

Half-life 42,1

S 86,7%

# Transition probability matrix in GDP per inhabitant in PPS (NUTS 2 regions, EU-28 = 100), 2000-2017, North

| 2017><br>2000 | 0-25   | 25-50   | 50-75  | 75-90  | 90-100 | 100-110 | 110-125 | 125-150 | 150+   |
|---------------|--------|---------|--------|--------|--------|---------|---------|---------|--------|
| 0-25          | 87,50% | 12,50%  | 0,00%  | 0,00%  | 0,00%  | 0,00%   | 0,00%   | 0,00%   | 0,00%  |
| 25-50         | 0,00%  | 100,00% | 0,00%  | 0,00%  | 0,00%  | 0,00%   | 0,00%   | 0,00%   | 0,00%  |
| 50-75         | 0,00%  | 0,78%   | 92,19% | 7,03%  | 0,00%  | 0,00%   | 0,00%   | 0,00%   | 0,00%  |
| 75-90         | 0,00%  | 0,00%   | 2,66%  | 92,01% | 5,33%  | 0,00%   | 0,00%   | 0,00%   | 0,00%  |
| 90-100        | 0,00%  | 0,00%   | 0,00%  | 12,50% | 81,14% | 6,36%   | 0,00%   | 0,00%   | 0,00%  |
| 100-110       | 0,00%  | 0,00%   | 0,00%  | 0,00%  | 11,32% | 80,71%  | 7,97%   | 0,00%   | 0,00%  |
| 110-125       | 0,00%  | 0,00%   | 0,00%  | 0,00%  | 0,00%  | 11,43%  | 84,62%  | 3,96%   | 0,00%  |
| 125-150       | 0,00%  | 0,00%   | 0,00%  | 0,00%  | 0,00%  | 0,00%   | 5,26%   | 90,79%  | 3,95%  |
| 150+          | 0,00%  | 0,00%   | 0,00%  | 0,00%  | 0,00%  | 0,00%   | 0,00%   | 4,38%   | 95,63% |

Half-life 637,1 periods

S 89,4%

# Transition probability matrix in GDP per inhabitant in PPS (NUTS 2 regions, EU-28 = 100), 2000-2017, South

| 2017><br>2000 | 0-25 | 25-50   | 50-75  | 75-90  | 90-100 | 100-110 | 110-125 | 125-150 | 150+   |
|---------------|------|---------|--------|--------|--------|---------|---------|---------|--------|
| 0-25          |      |         |        |        |        |         |         |         |        |
| 25-50         |      | 100,00% | 0,00%  | 0,00%  | 0,00%  | 0,00%   | 0,00%   | 0,00%   | 0,00%  |
| 50-75         |      | 1,23%   | 94,17% | 4,60%  | 0,00%  | 0,00%   | 0,00%   | 0,00%   | 0,00%  |
| 75-90         |      | 0,00%   | 10,27% | 87,45% | 2,28%  | 0,00%   | 0,00%   | 0,00%   | 0,00%  |
| 90-100        |      | 0,00%   | 0,00%  | 12,15% | 84,11% | 3,74%   | 0,00%   | 0,00%   | 0,00%  |
| 100-110       |      | 0,00%   | 0,00%  | 0,00%  | 11,63% | 81,40%  | 6,98%   | 0,00%   | 0,00%  |
| 110-125       |      | 0,00%   | 0,00%  | 0,00%  | 0,00%  | 9,79%   | 86,71%  | 3,50%   | 0,00%  |
| 125-150       |      | 0,00%   | 0,00%  | 0,00%  | 0,00%  | 0,00%   | 13,76%  | 85,32%  | 0,92%  |
| 150+          |      | 0,00%   | 0,00%  | 0,00%  | 0,00%  | 0,00%   | 0,00%   | 38,46%  | 61,54% |

Half-life 94,4

S 85,1%

# Transition probability matrix in GDP per inhabitant in PPS (NUTS 2 regions, EU-28 = 100), 2000-2017, Central-East

| <i>2017&gt;</i><br>2000 | 0-25   | 25-50         | 50-75         | 75-90  | 90-100 | 100-110       | 110-125       | 125-150       | 150+          |
|-------------------------|--------|---------------|---------------|--------|--------|---------------|---------------|---------------|---------------|
| 0-25                    | 66,67% | <b>33,33%</b> | 0,00%         | 0,00%  | 0,00%  | 0,00%         | 0,00%         | 0,00%         | 0,00%         |
| 25-50                   | 0,00%  | 93,67%        | 6,33%         | 0,00%  | 0,00%  | 0,00%         | 0,00%         | 0,00%         | 0,00%         |
| 50-75                   | 0,00%  | 0,76%         | 95,21%        | 4,03%  | 0,00%  | 0,00%         | 0,00%         | 0,00%         | 0,00%         |
| 75-90                   | 0,00%  | 0,00%         | <b>16,22%</b> | 75,68% | 8,11%  | 0,00%         | 0,00%         | 0,00%         | 0,00%         |
| 90-100                  | 0,00%  | 0,00%         | 0,00%         | 5,00%  | 70,00% | <b>20,00%</b> | 5,00%         | 0,00%         | 0,00%         |
| 100-110                 | 0,00%  | 0,00%         | 0,00%         | 0,00%  | 5,88%  | 70,59%        | <b>23,53%</b> | 0,00%         | 0,00%         |
| 110-125                 | 0,00%  | 0,00%         | 0,00%         | 0,00%  | 0,00%  | 0,00%         | 63,64%        | <b>36,36%</b> | 0,00%         |
| 125-150                 | 0,00%  | 0,00%         | 0,00%         | 0,00%  | 0,00%  | 0,00%         | 0,00%         | 90,00%        | <b>10,00%</b> |
| 150+                    | 0,00%  | 0,00%         | 0,00%         | 0,00%  | 0,00%  | 0,00%         | 0,00%         | 0,00%         | 100,00%       |

Half-life 76,2

S 80,6%

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## II. Analyzing the evolution of regional inequalities in the EU

# Regional inequalities in the EU-28

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We present two measures of regional inequality:

- Theil index
- *Coefficient of Variation* (CV) weighted by population

Regional inequalities in the EU were decreasing until 2008, however, after the economic crisis regional inequalities are widening .

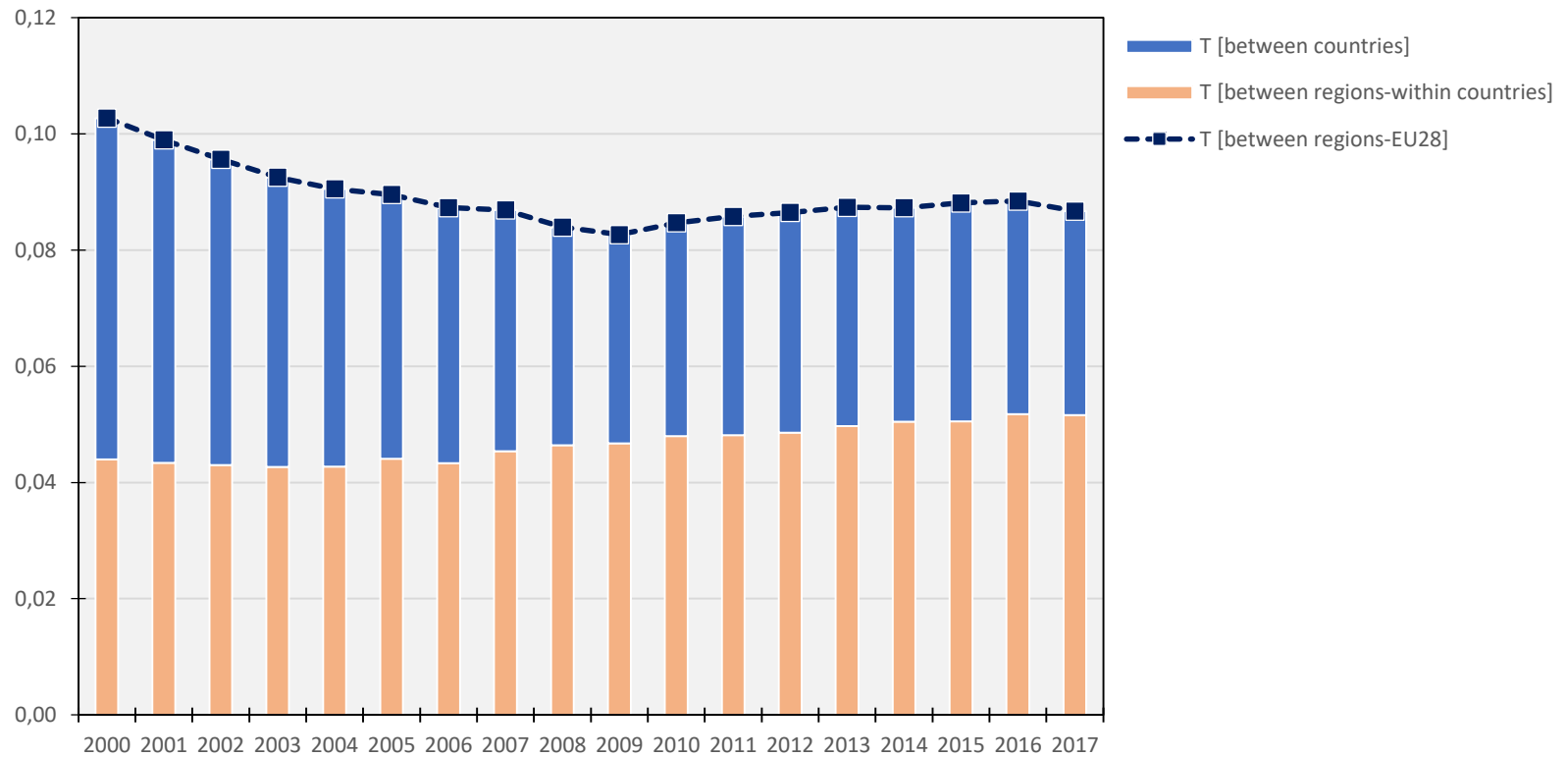
**Regional inequalities** are:

- The highest but decreasing in East EU countries
- High and increasing in Northern countries
- Relatively lower and after a period of decreasing started increasing again
- Higher within states than between states / Metropolitan regions is one of the reasons for this observation



# Theil index for the GDP per inhabitant in PPS, EU member states and NUTS 2 regions, 2000-2017

Theil/countries

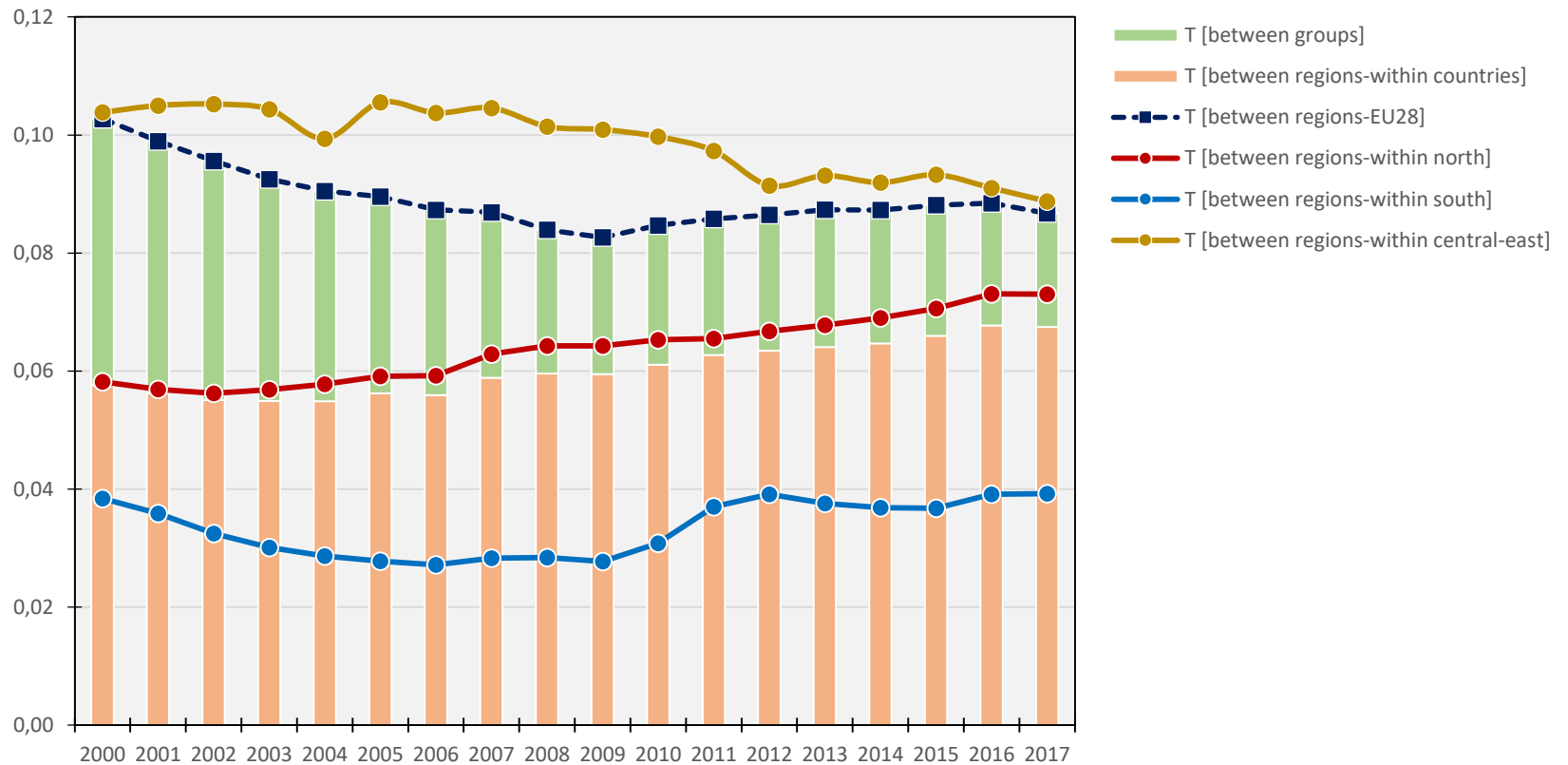


Source: Eurostat ([nama\\_10r\\_2gdp](#))

# Theil index for the GDP per inhabitant in PPS by group

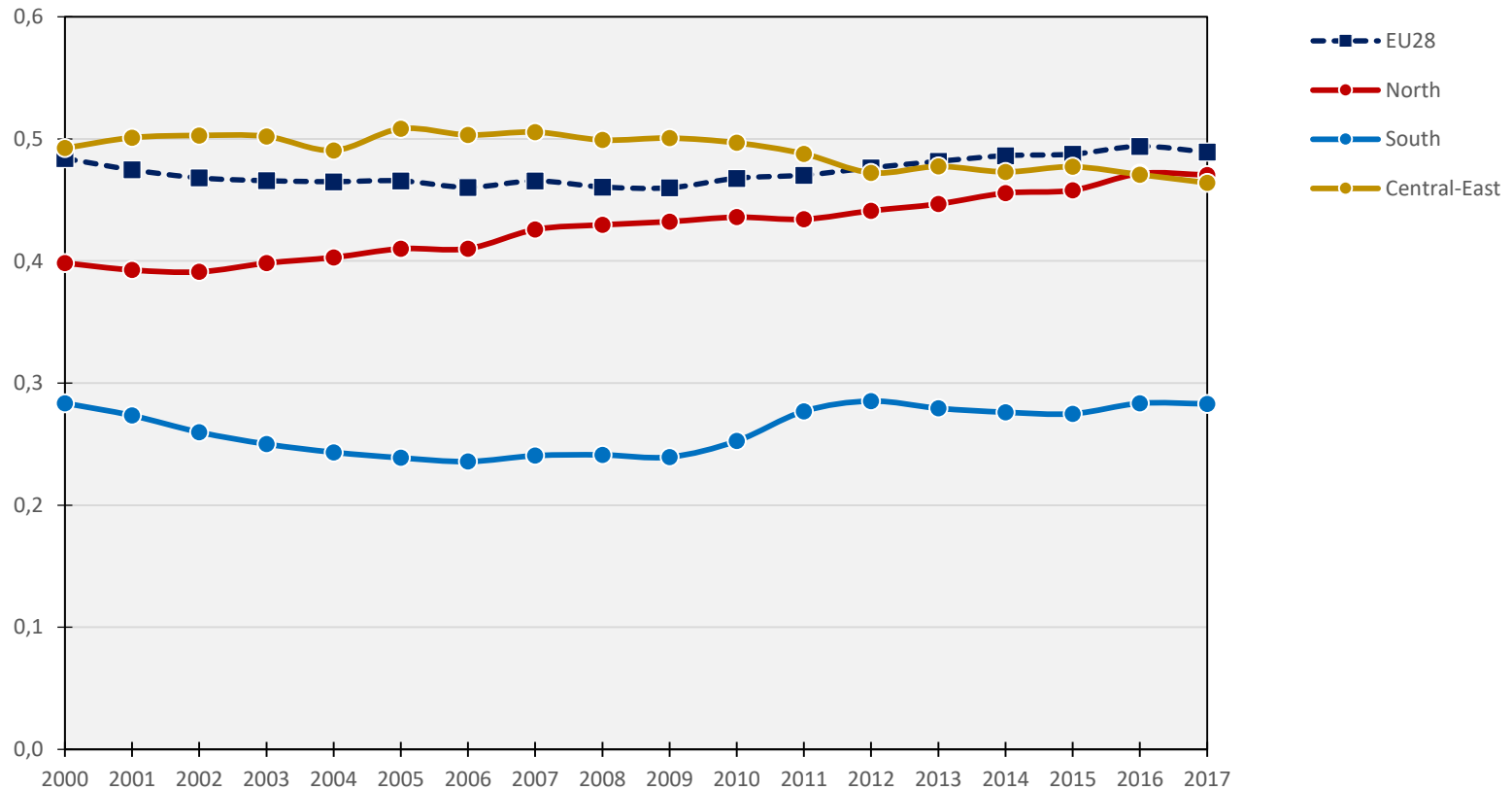
Groups, NUTS 2 regions, 2000-2017

Theil/groups



Source: Eurostat ([nama\\_10r\\_2gdp](#))

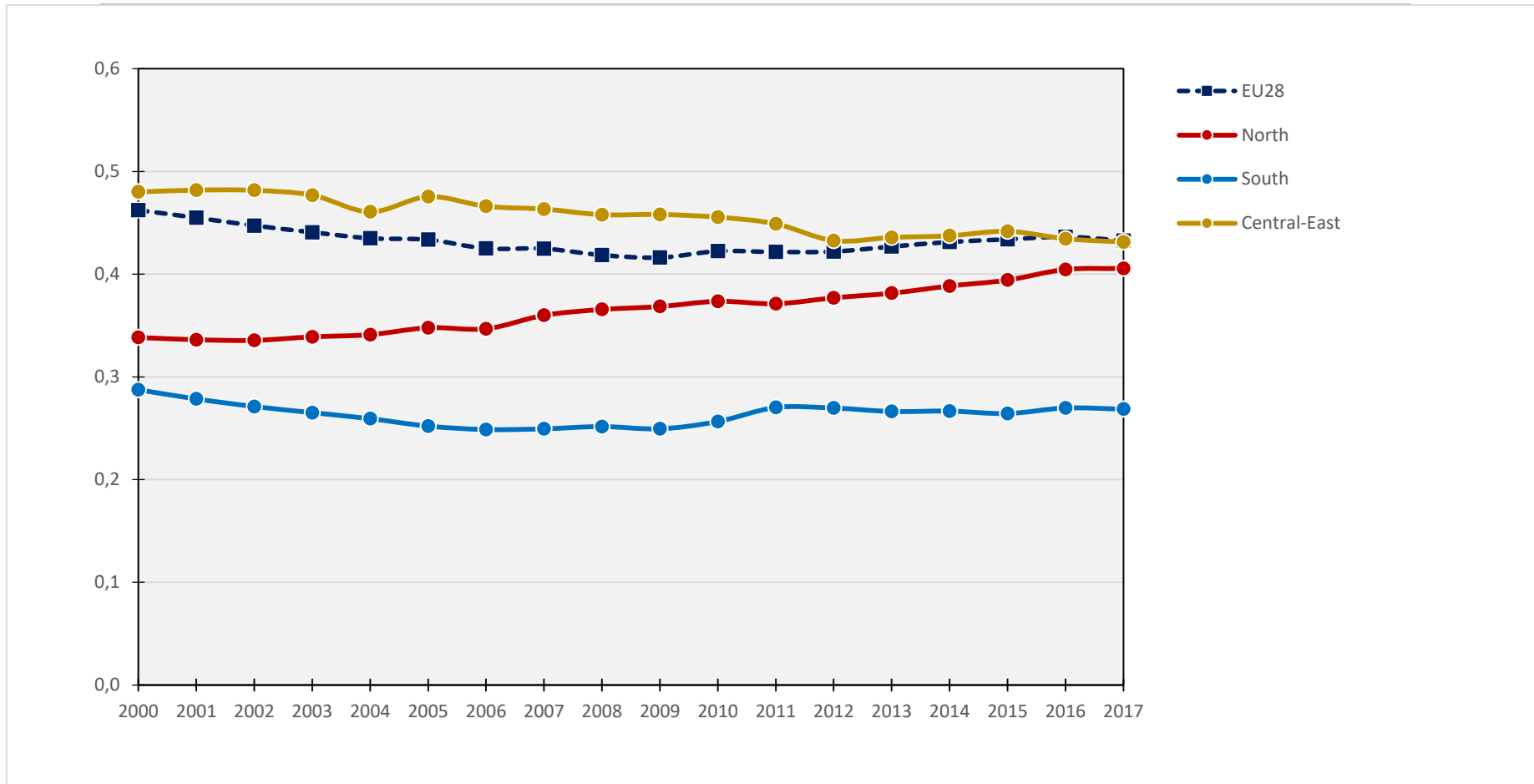
# Coefficient of Variation (CV) for the GDP per inhabitant in PPS Groups, NUTS 2 regions, 2000-2017



Source: Eurostat ([nama\\_10r\\_2gdp](#))

# Coefficient of Variation (CV) for the GDP per inhabitant in PPS, weighted by population

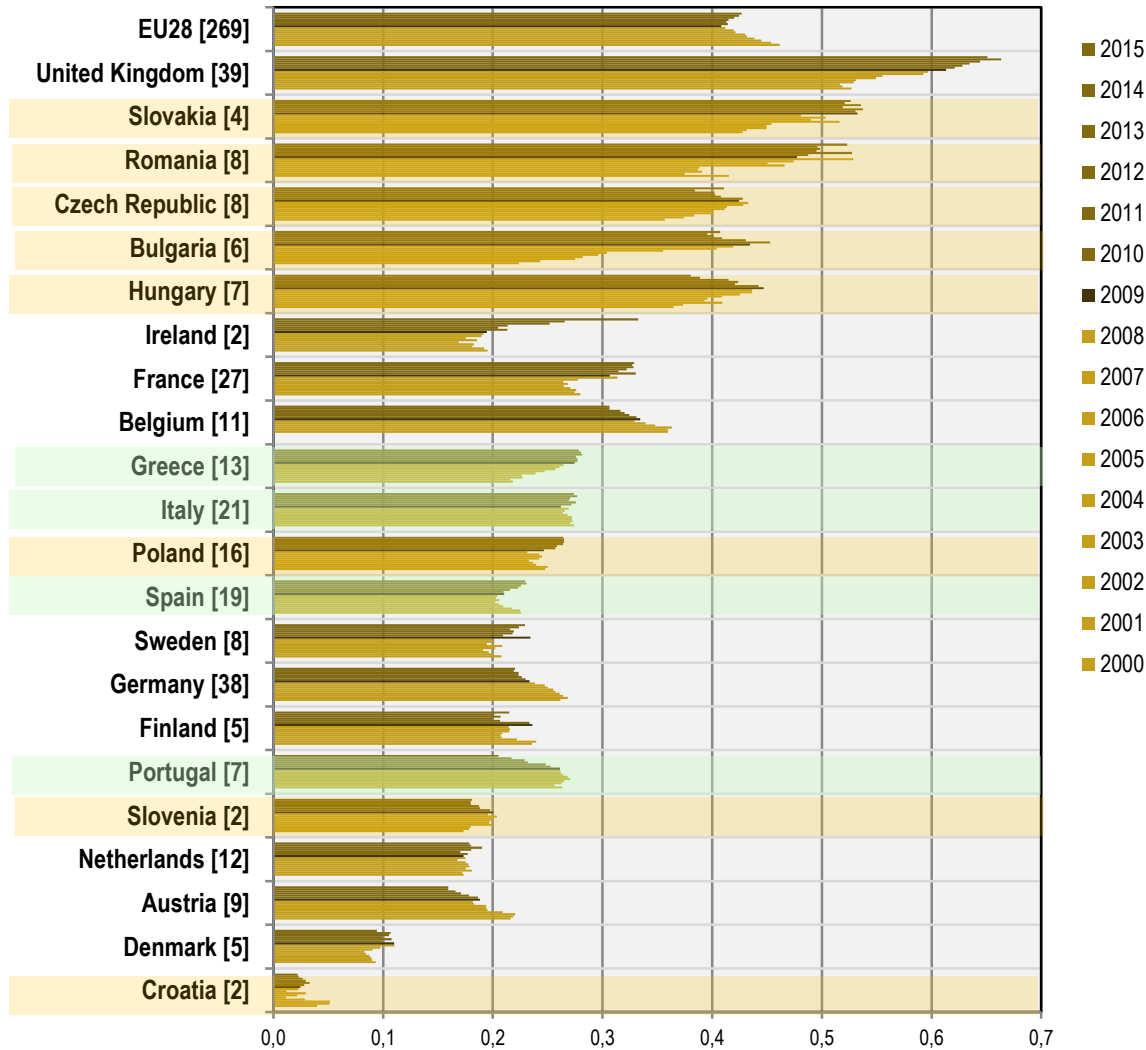
## Groups, NUTS 2 regions, 2000-2017



Source: Eurostat ([nama\\_10r\\_2gdp](#))

# Coefficient of Variation (CV) for the GDP per inhabitant in PPS, weighted by population

EU member states, NUTS 2 regions, 2000-2015



Source: Eurostat ([nama\\_10r\\_2gdp](#))

# Taking a step further by analyzing the influence of Metropolitan areas

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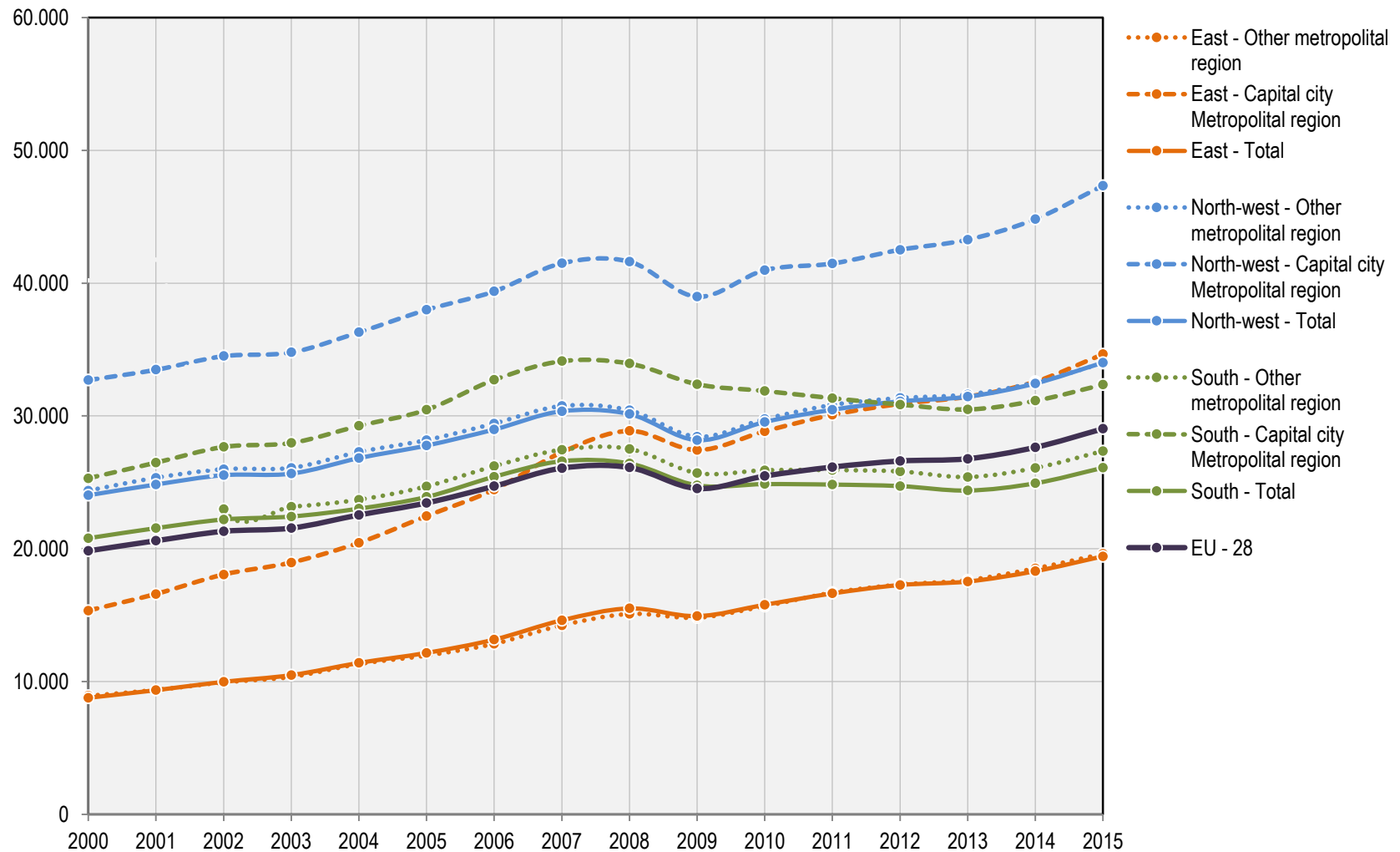
We then proceed by tracing the development path by group of regions taking into consideration the Metropolitan level. This analysis provides some additional insights to the development map of the EU.

- Metropolitan regions enjoy higher level of economic development for the EU and the three groups of EU countries.
- Furthermore, in Northern EU countries the distance between metropolitan regions and the rest of the country is increasing. The same applies to the Central and East EU countries.
- Metropolitan regions enjoy higher level of economic development than the rest of the country in the EU south. However, they keep relatively stable distance across time.
- Capital city regions and metropolitan regions contribute to more than 60% on average to the GDP in the EU countries.

Summing up, it could be stated that new geographies of development have been emerged within different groups of countries. In the Northern and Eastern EU countries inequalities between metropolitan regions and the rest of the country is increasing. Metropolises are the drivers of new type of regional inequality in wealth and prosperity. This trend is also progressing rapidly especially to the East EU countries.

# Gross domestic product (GDP) per inhabitant in PPS

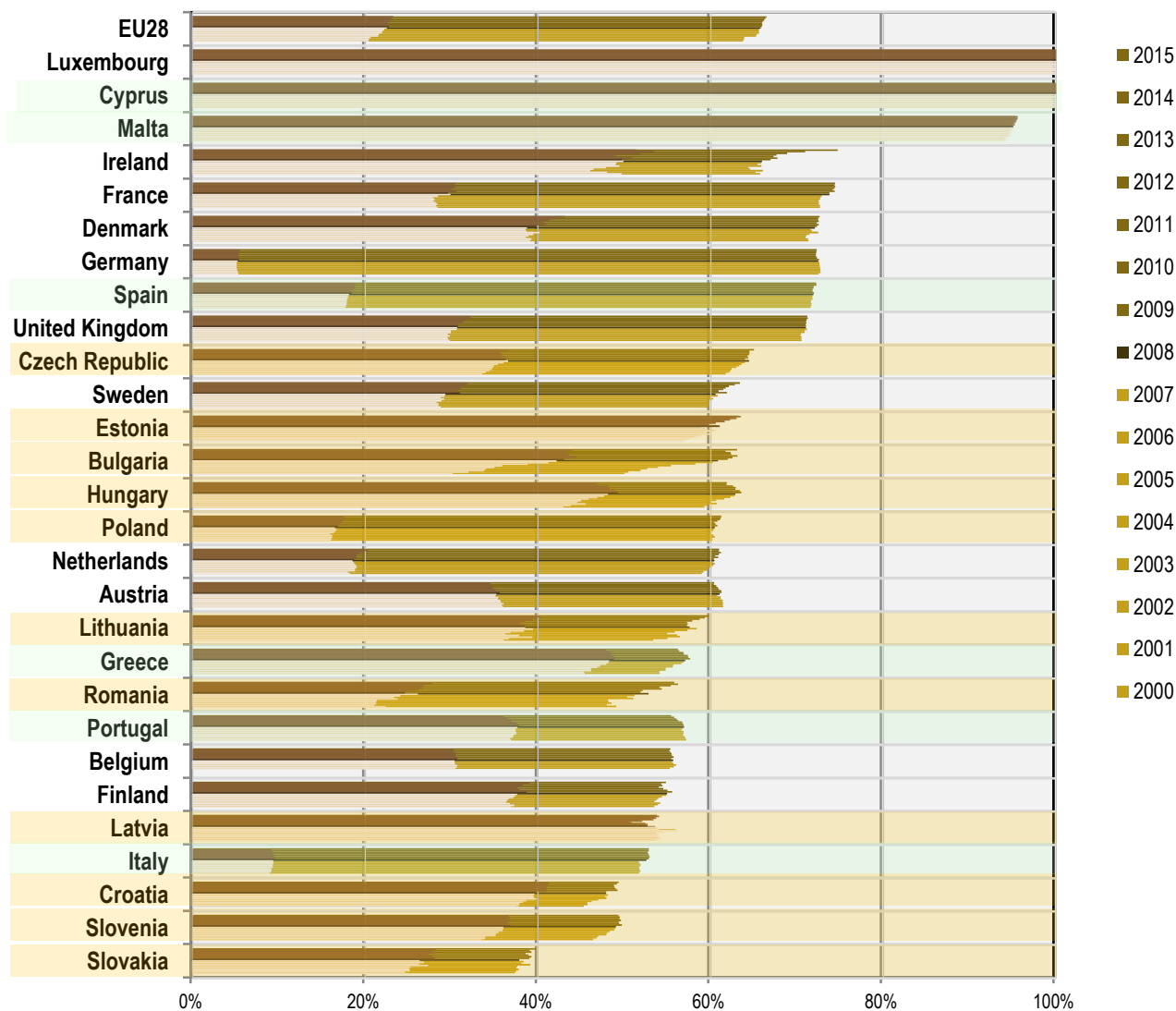
## Groups/typologies, 2000-2015



Source: Eurostat ([nama\\_10r\\_2gdp](#)) and ([met\\_10r\\_3gdp](#))

# Share of metropolitan regions in gross domestic product (GDP) in PPS

EU member states 2000-2015, (%) , Capital City region | Other Metropolitan Regions



Source: Eurostat ([met\\_10r\\_3gdp](#))



## Case study:

### *The evolution of regional development in the CEE countries*

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This part of the presentation has made an attempt to present the level and the evolution of regional development in the CEE countries of the EU during the period 2000-2016, focusing on the role of metropolitan regions. The analysis has provided some interesting results.

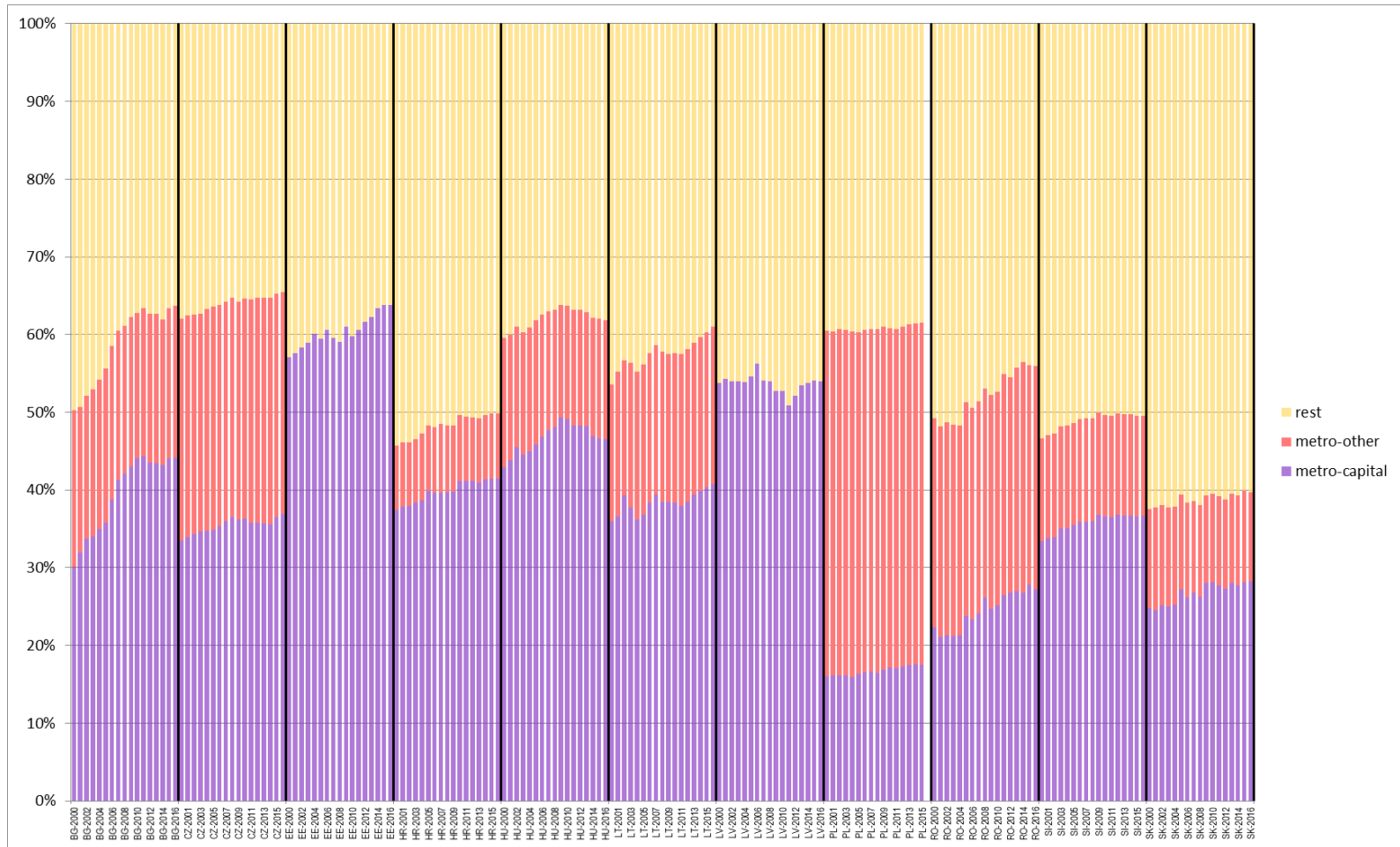
- 1) the CEE countries are lagging behind in terms of economic development compared with the EU average, however, there is important trend towards convergence.
- 2) metropolitan regions seem to be the outliers in the level of economic development since they enjoy levels of economic development well above the EU average.

These trends reflect the changing landscape of regional inequality in the development map of the European Union. These changes call for the differentiation of regional policies. The CEE countries require well-tailored policies in order to achieved balanced development between regions, urban areas and the other regions in each country.

Summing up it could be stated that this new form of inequality requires different methods of analysis and adjustments to policy.

# Shares (%) of Metro regions in national GDP

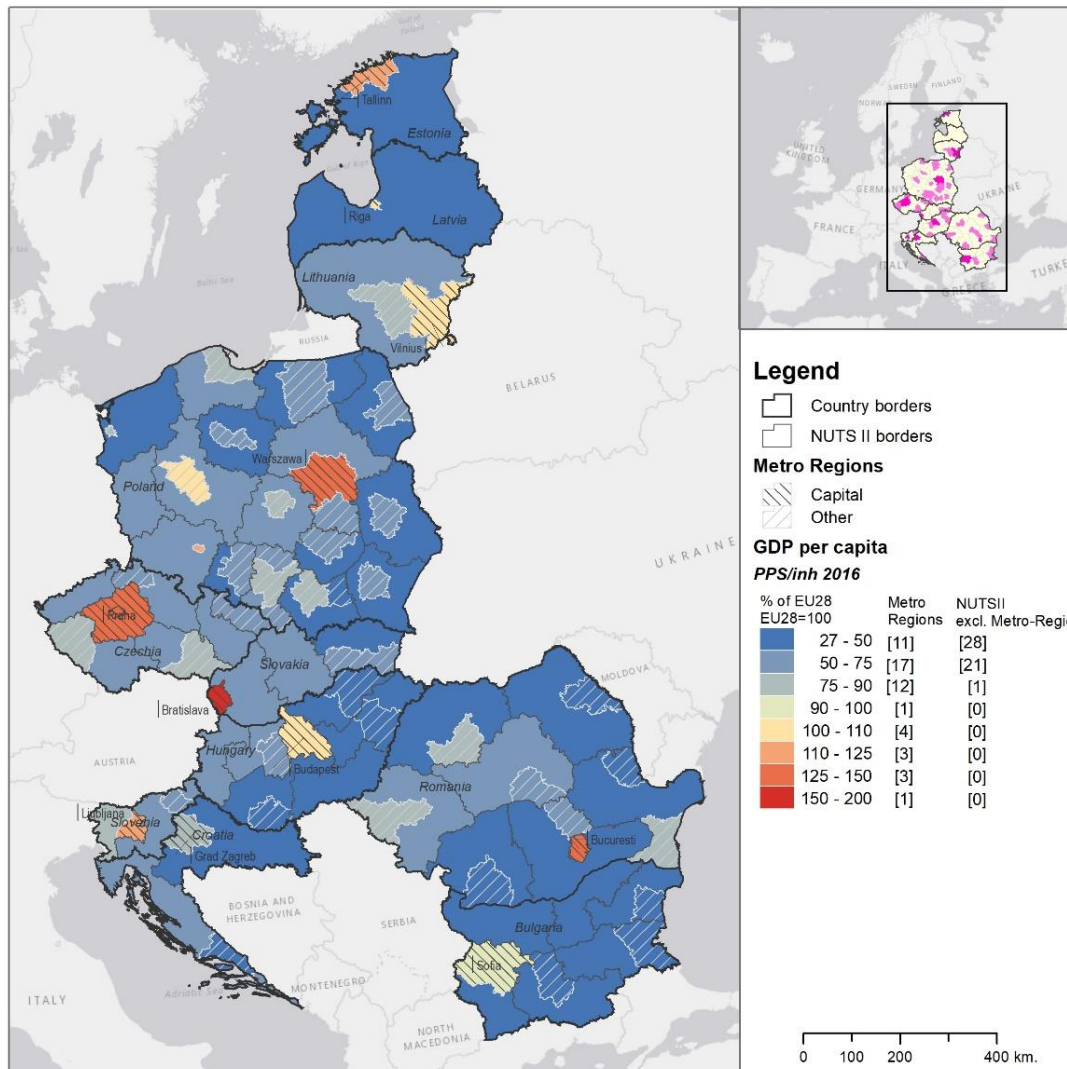
## CEE EU member states, 2016



Source: Eurostat ([nama 10r 2gdp](#)) and ([met 10r 3gdp](#))

# GDP per capita at regional and metropolitan level

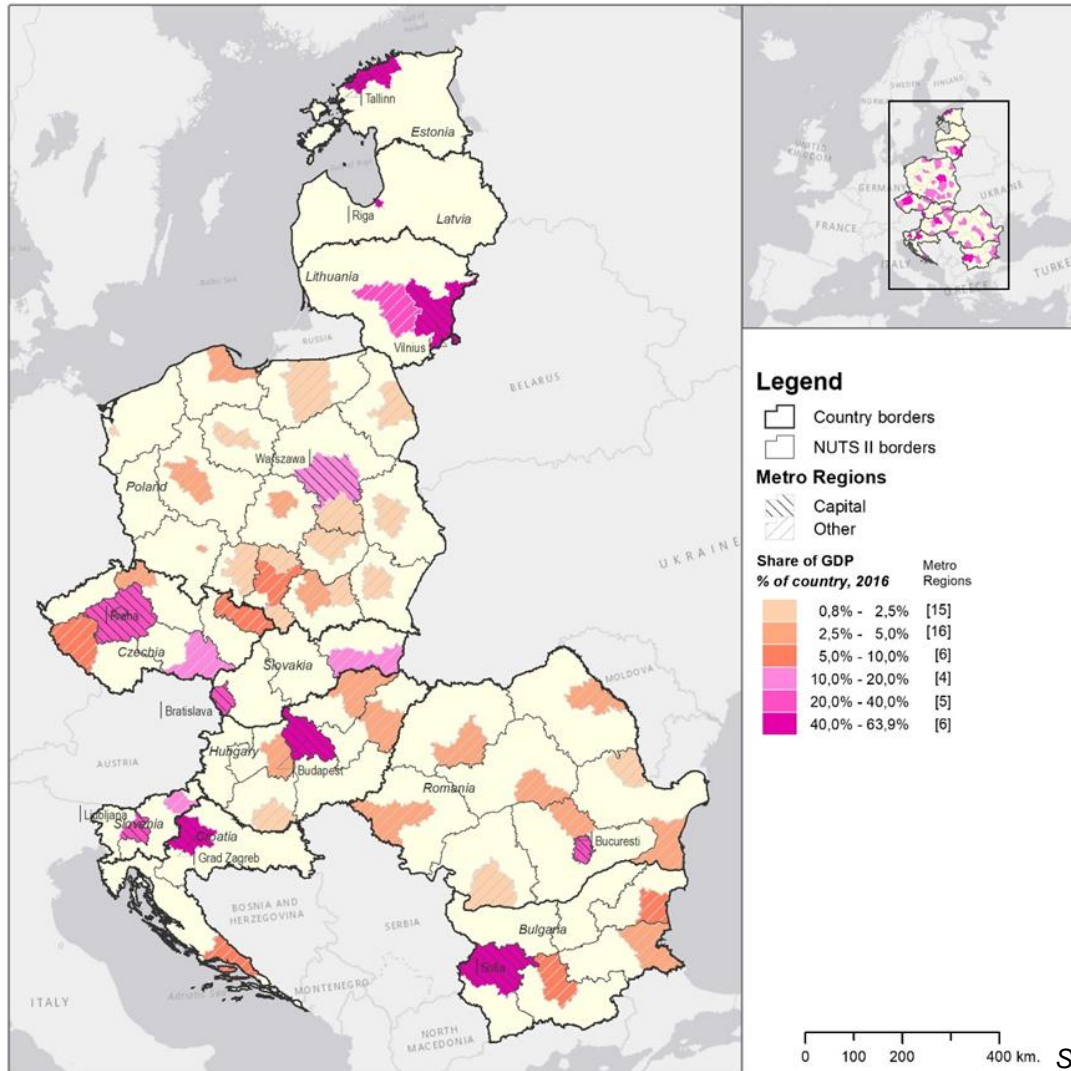
## CEE EU member states, NUTS 2 regions, 2016



Source: Eurostat ([nama 10r 2gdp](#)) and ([met 10r 3gdp](#))

# GDP at Metro-Regions as share (%) of national GDP

## CE EU member states, NUTS 2 regions, 2016



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### III. Geographical aspects of sectoral specialization, manufacturing activity and trade balance within the EU

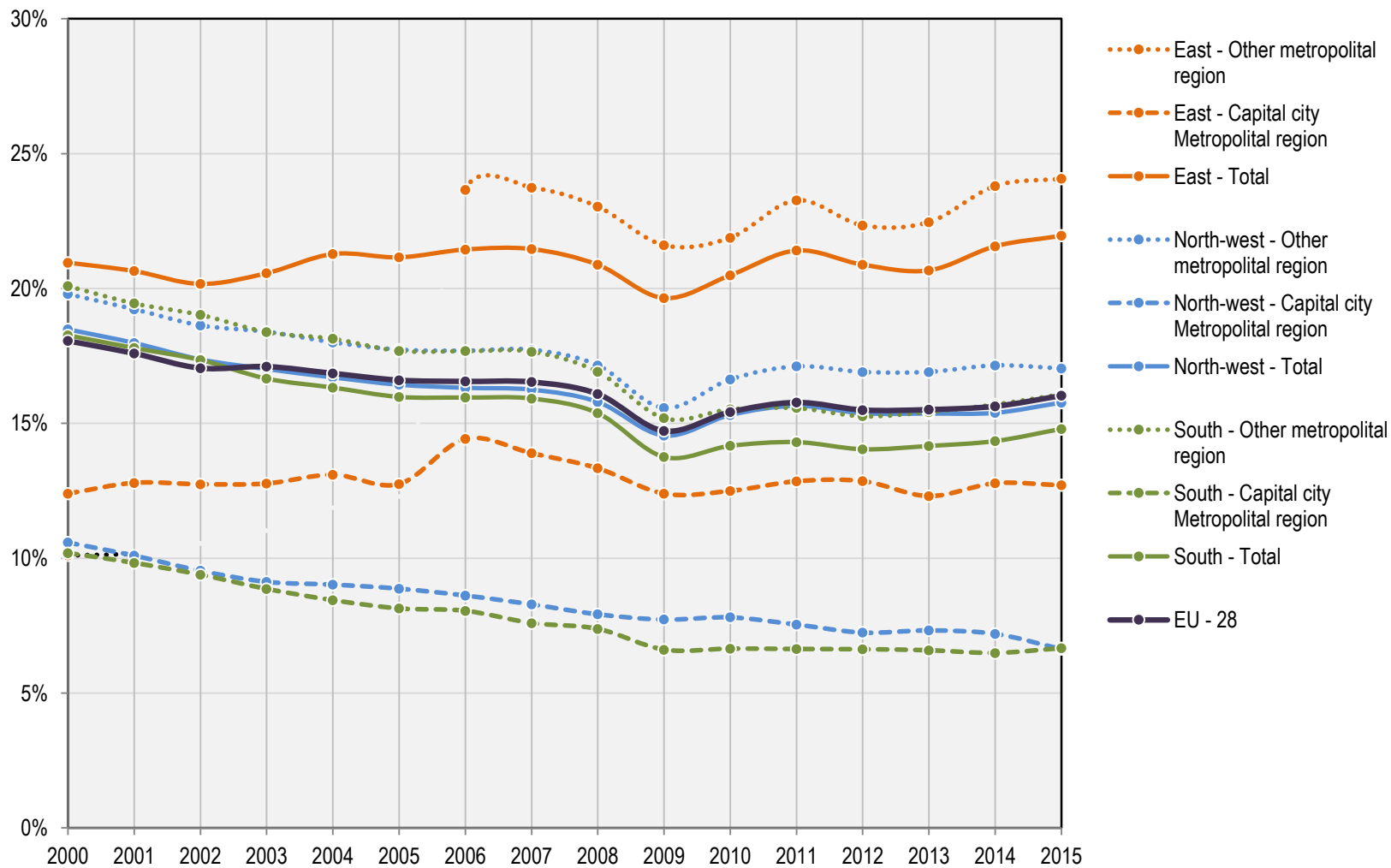
## Geographical aspects of manufacturing and trade in the EU-28 context

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- Industry decreased steadily until 2010, a reversal trend has been observed during the last decade
- East EU countries show higher levels of Manufacturing activity outside the Metropolitan areas
- Trade balance reflects the productivity gaps between the North, South and East EU countries
- There are some important differences regarding the trade patterns within EU and the rest of the World
- Sectoral specialization has impacted on trade

# Gross value added (GVA) in Manufacturing sector as % of the total GVA

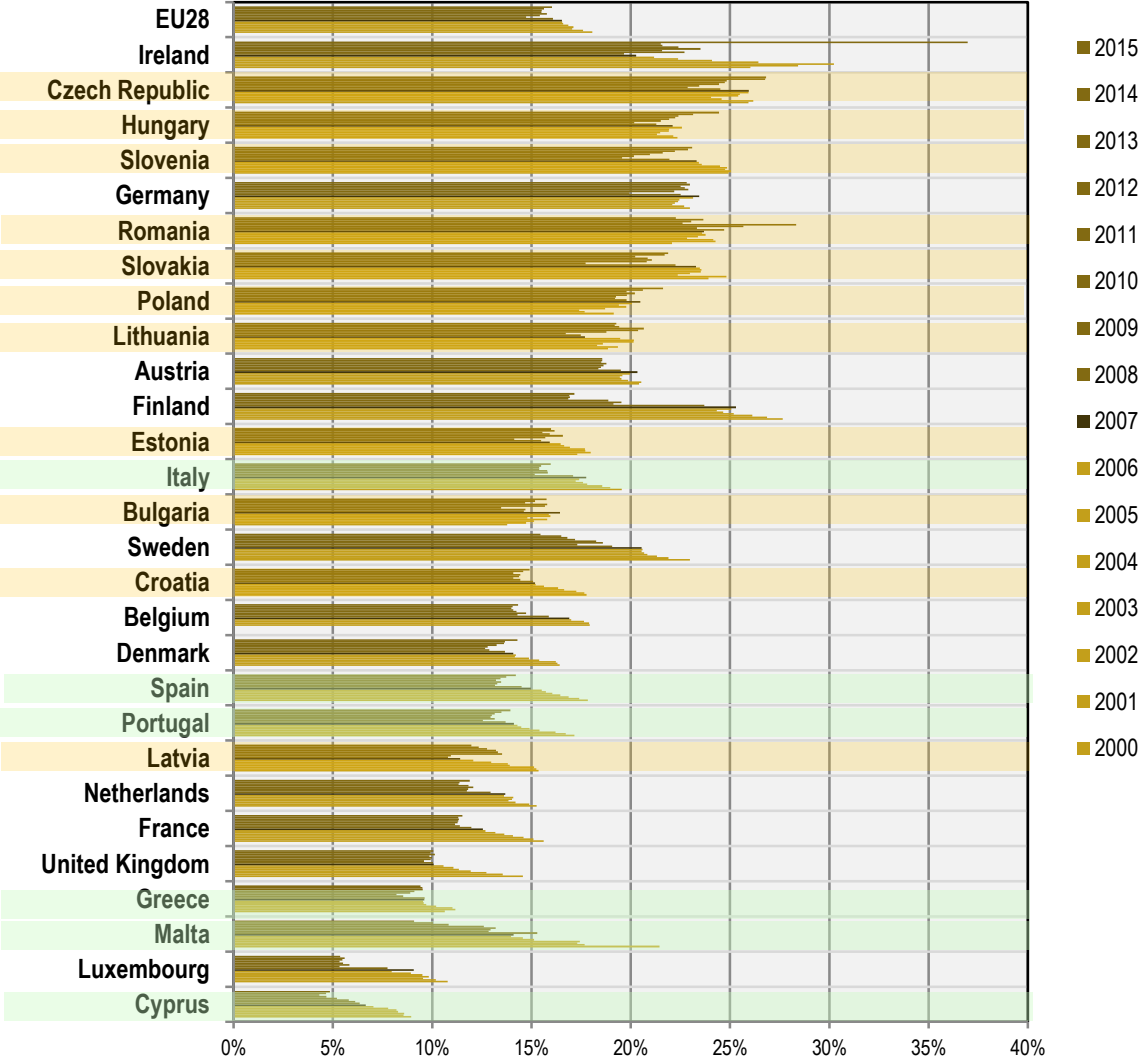
## Groups/typologies, 2000-2015



Source: Eurostat ([nama 10r 2gdp](#)) and ([met 10r 3gdp](#))

# Gross value added (GVA) in Manufacturing sector as % of the total GVA

## EU members states, 2000-2015

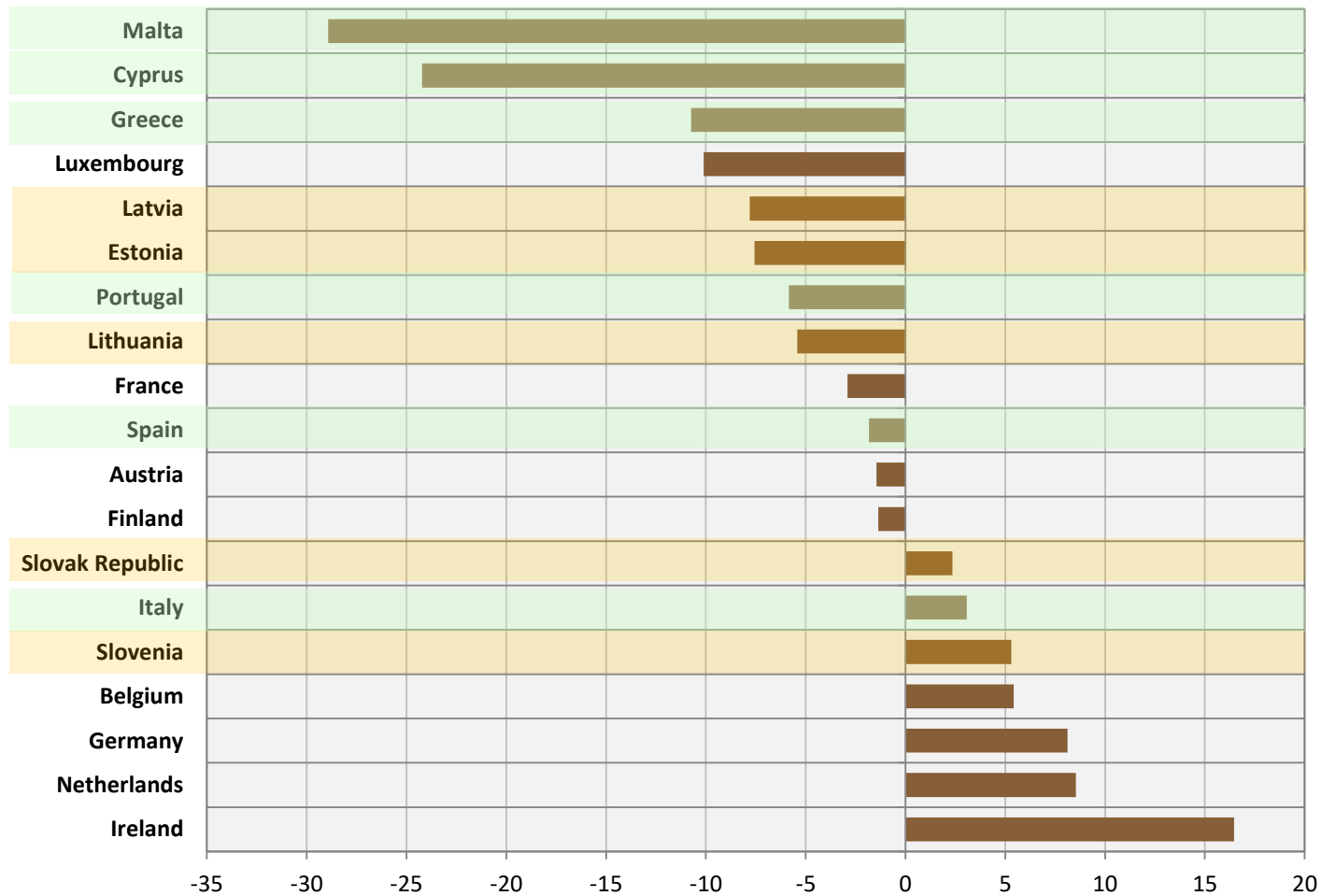


Source: Eurostat ([nama\\_10r\\_3gva](#))



# Merchandise trade balance (% of GDP) in the Eurozone

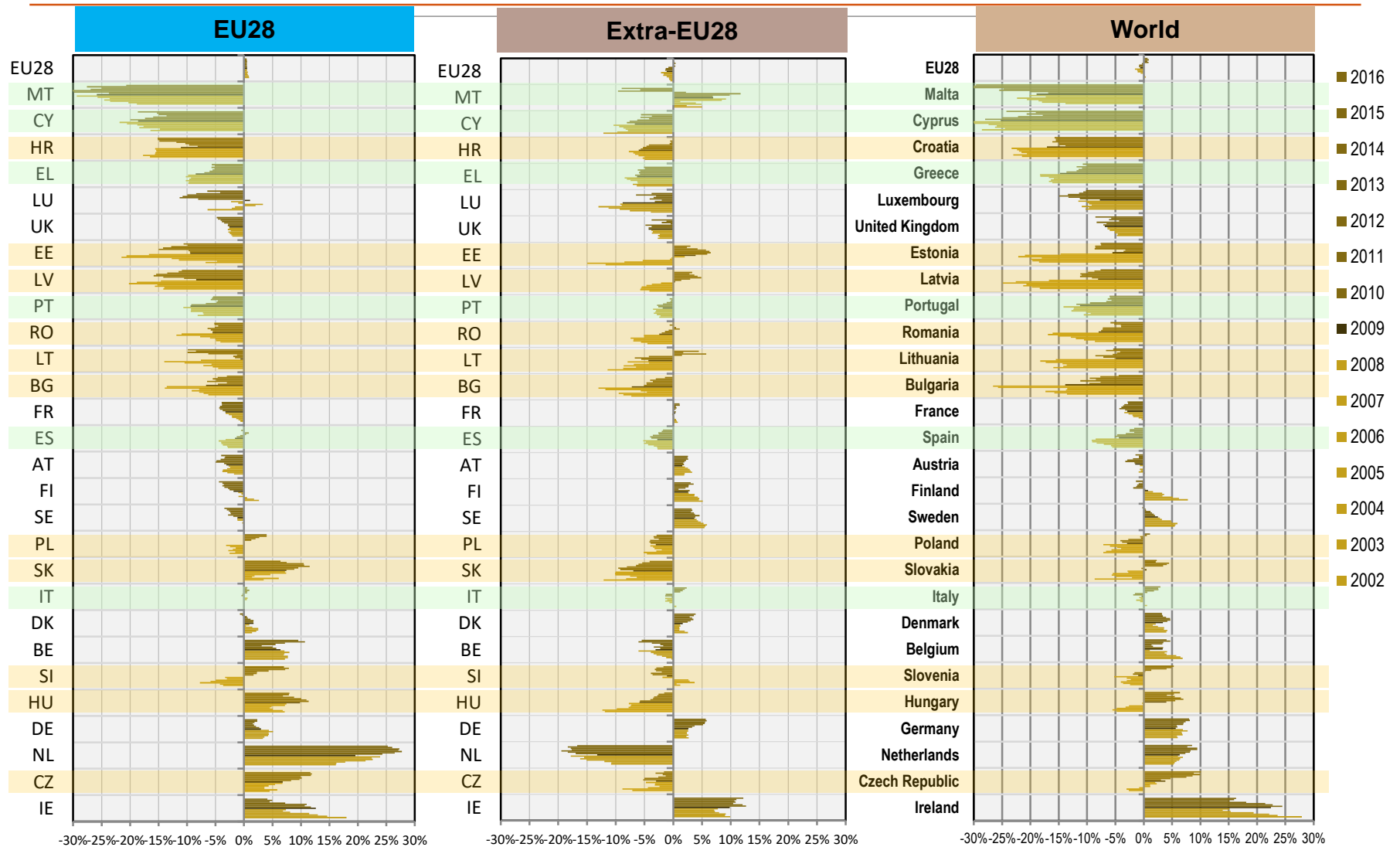
## EU members states, 2015



(Source, IMF, authors elaborations)

# Trade Balance (+/-) as % percentage of gross domestic product (GDP)

EU member states, 2002-2016



Source: Eurostat ([teiet210](https://teiet210))

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## IV. EU Budget, cohesion policy and redistribution

# Cohesion policy and redistribution

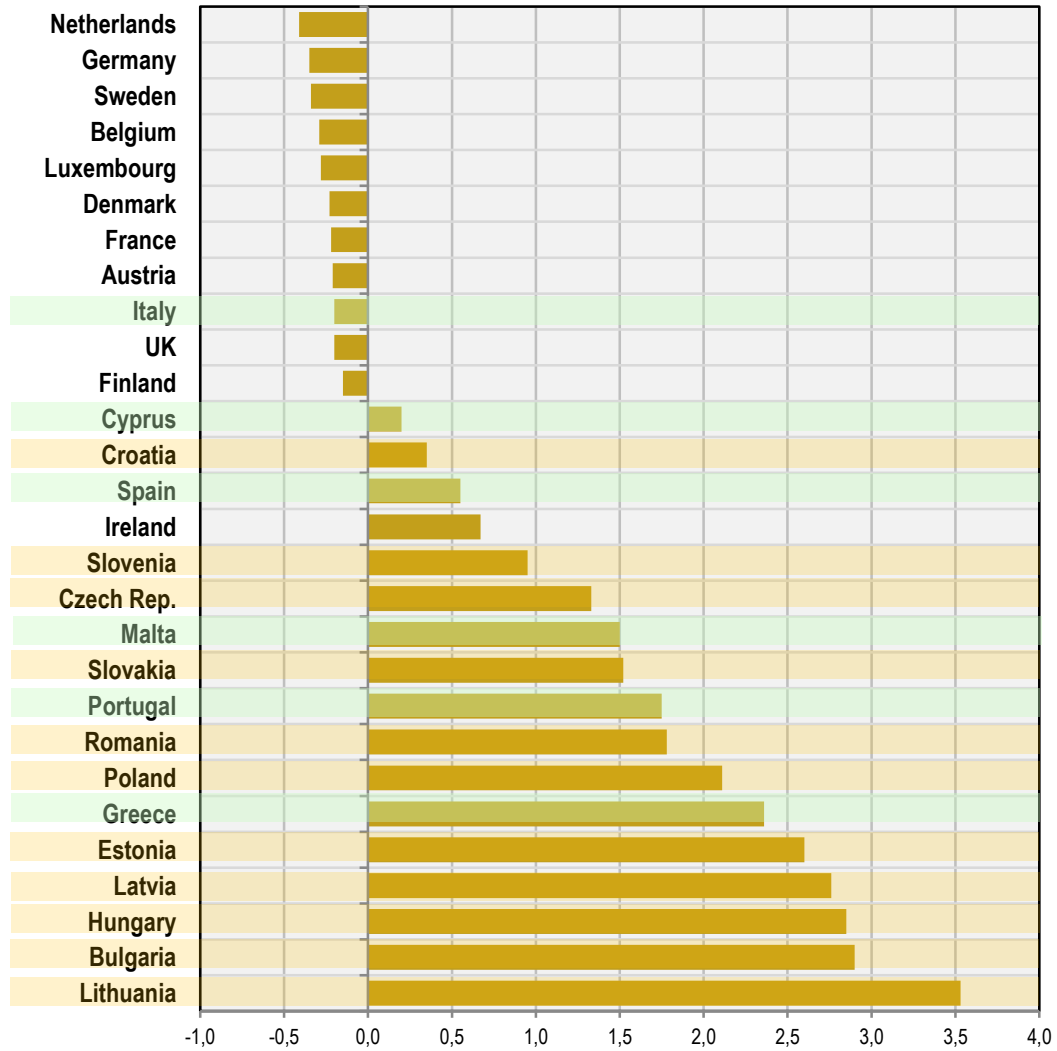
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## Financing EU Budget

- Net contributors in the EU Budget are the more developed countries in the EU North
- Ret recipients are the less well off regions and countries in the EU lagging behind regions and territories
- The cost of financing the EU Budget is relatively small for the net contributors
- The gains of the recipient countries are very high
- Trade is favoring the more competitive and more well off countries in the EU
- The cost of redistribution can be counterbalanced by the gains through trade
- While net contribution in the EU Budget reflects the financial cost for European integration, the surplus trade balance reflects the economic gains from the European integration. This creates benefits for all and constitutes the dynamic balance between losses and gains in the process of European integration.

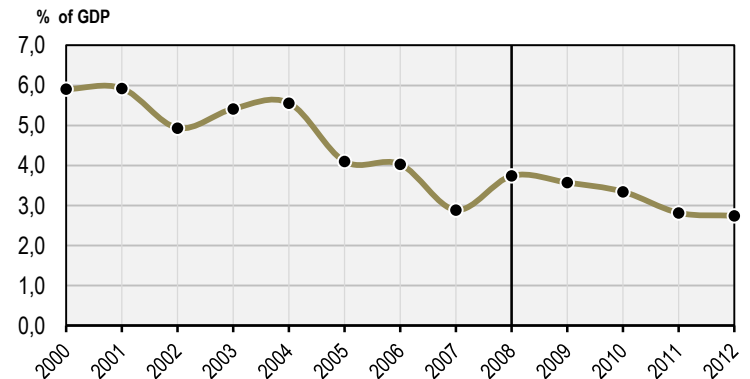
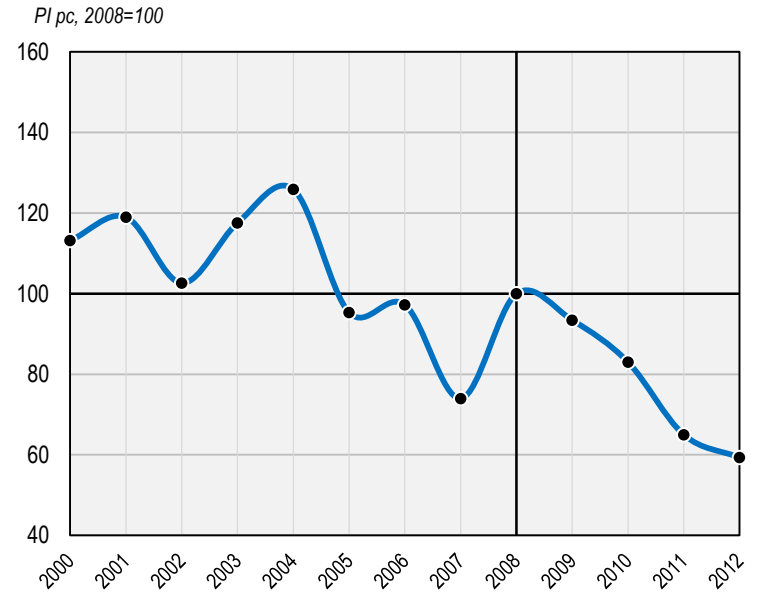
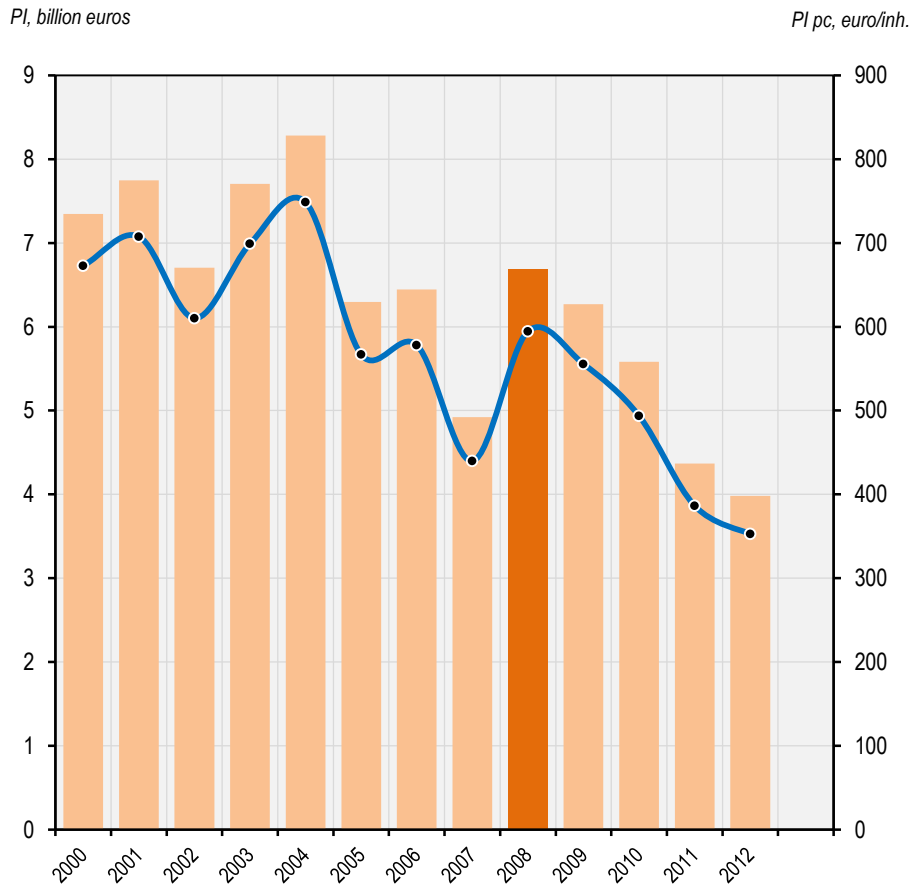
# Net contributions as % percentage of GNI 2000-2015

EU member states



Source: <https://www.cbs.nl/en-gb/news/>

# Example of Evolution of public investment spending in Greece 2000-2012



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## V. Conclusions and policy proposals

# Conclusions: a synopsis (1)

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- After the economic crisis a new development map in the EU has been emerged.
- Inequalities between North and South have been increased.
  - A new dualism in the level of economic development between North and South has been emerged.
- Central East EU countries are converging to the EU average.
  - However, this achievement has been accomplished/achieved with the cost of increasing internal inequalities especially between metropolitan areas and the rest regions of these counties.



# Conclusions: a synopsis (2)

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- High gaps between the metropolitan regions and the rest of the regions has been observed in many Northern countries.
  - France and the UK constitute representative examples of this trend.
- The most prosperous regions of the EU have been reduced to a much narrower development corridor from Sweden to Northern Italy.

# Discussion and policy considerations (1)

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- Different types of regions require different sets of policies.
- Specific attention is required for Metropolitan areas.
- Trade patterns show high intensity of flows within EU.
- Financing cohesion policy should take into consideration budgetary costs vis-a-vis gains from trade and higher integration.
- Golden Rule for balanced budget should be re-examined in favour of fiscal space for public investment.

# Discussion and policy considerations (2)

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- Support investments in human capital, green projects, digital solutions and improvements in the quality of government.
- Implementation of development policies to promote employment and reducing inequality.
- More active involvement of development banks, support/utilize European Invest Bank projects
- New programming period should promote more targeted policies with a good balance between place specific and people specific priorities.
- The new programming period should target on higher consolidation and implementation of development policies, with more fiscal space for public investment. The consensus over a new development plan for Europe could be an option for stabilization and higher integration

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Thank you for your attention!

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