

Quantitative Economics for the Evaluation of the European Policy

Dipartimento di Economia e Management

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Plan of the Course

Module 1: Quantitative methods for economics

- Introduction to non-parametric techniques (Prof. Davide Fiaschi)
- Introduction to bootstrap (Prof. Davide Fiaschi)
- Introduction to panel (Dr. Angela Parenti)
- Introduction to spatial econometrics (Dr. Angela Parenti)

Module 2: European Regional policy and economic convergence

- Causes and effects of regional imbalance: economic theory and empirical evidence (Prof. Davide Fiaschi)
- Regional policies: theoretical models (Prof. Davide Fiaschi and Dr. Angela Parenti)
- Historical development of European Regional Policy (Dr. Angela Parenti)
- Econometric models for convergence (Prof. Davide Fiaschi and Dr. Angela Parenti)

Plan of the Course

Module 3: Evaluation of economic policy

- Statistical, non-experimental methods for policy evaluation: the problem of causality, the counterfactual approach (Dr. Irene Brunetti)
- The estimate of the counterfactual (Dr. Irene Brunetti)
- The impact of estimating counterfactual (Dr. Irene Brunetti)

Module 4: TBA

- TBA

Resources and Materials for the Course

- Some books' chapters and papers
- Some handouts on R (<https://www.r-project.org/>)
- Website of the course: <http://qe4policy.ec.unipi.it/>
- Web resources for the EU Regional Policy:
http://ec.europa.eu/regional_policy/en/,
<http://cohesiondata.ec.europa.eu/>

Methods of evaluation

Two homeworks for each couple of students (randomly formed)

- First homework: at the end of the course (Modules 1 and 2)
- Second homework: at the end of the course (Module 3)

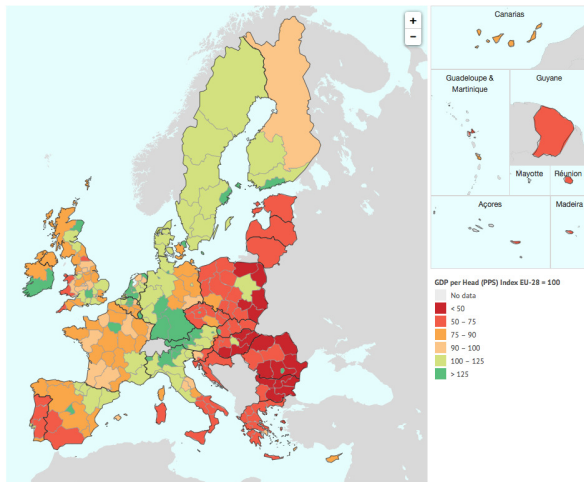
Main Questions of the Course

- How is the inequality across European regions and how is evolving?
- Which type of inequality we are interested in? (income, health, happiness, unemployment, productivity, concentration of economic activities, etc.)
- Is there a theoretical model able to explain such types of inequality?
- Which are the main goals of European Regional Policy?
- How are they effectively pursued?
- Macro and micro issues of European Regions.

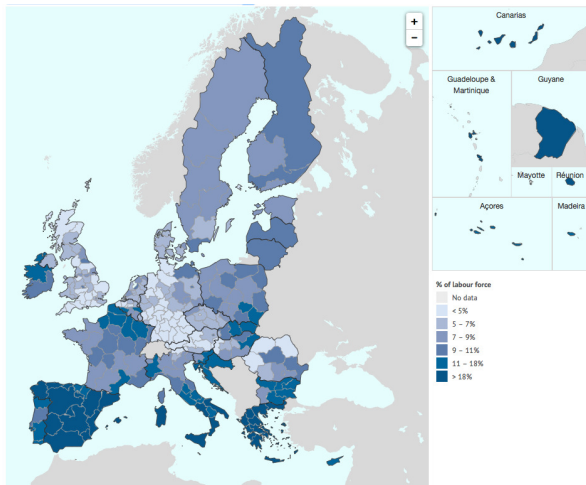
Why NUTS2 Regions?



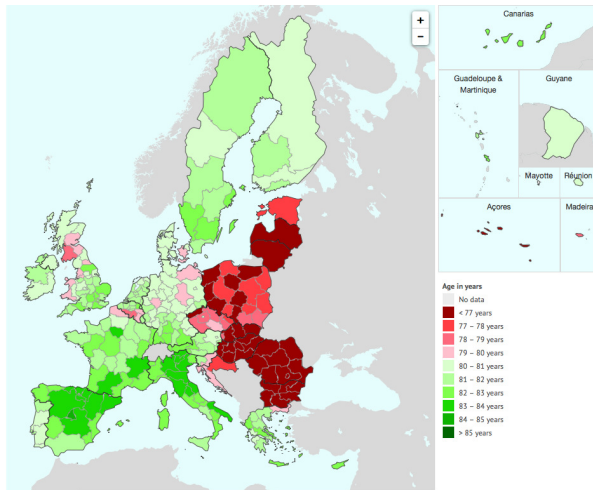
Regional GDP per Head, 2013(PPS)



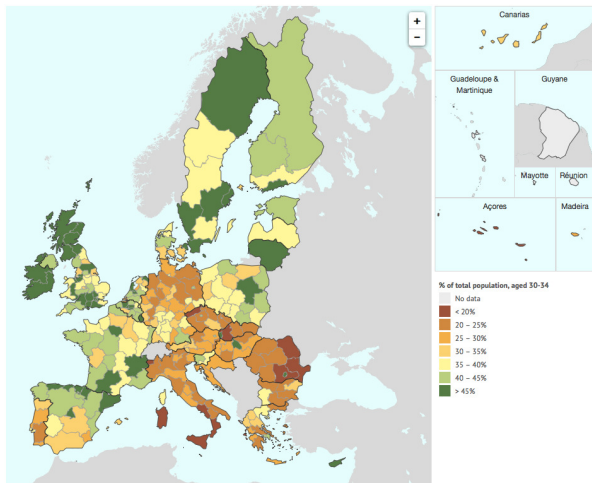
Regional Unemployment Rate, (2014)



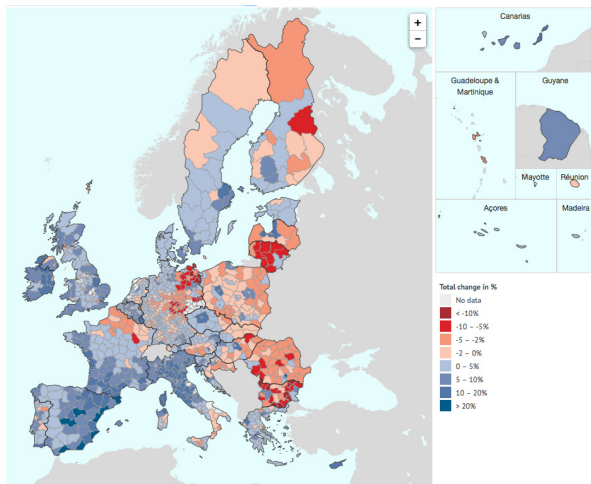
Regional Life Expectancy, (2013)



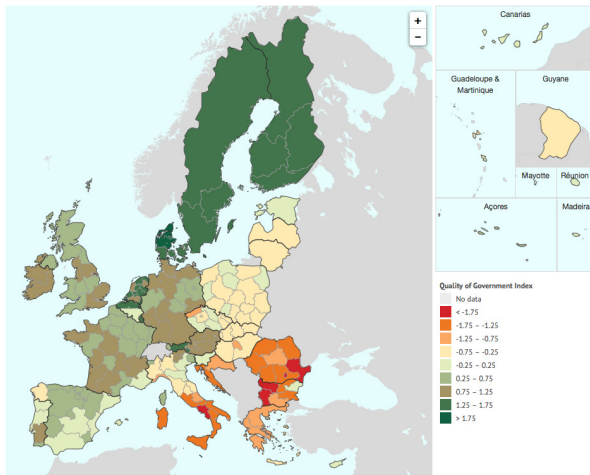
Regional Population with Tertiary Education (2012-2014)



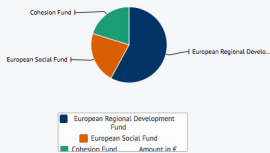
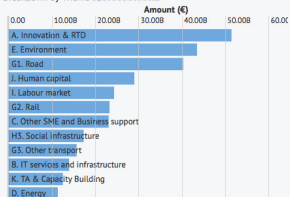
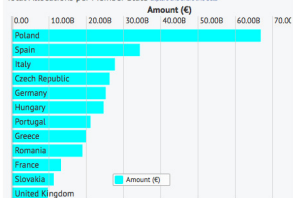
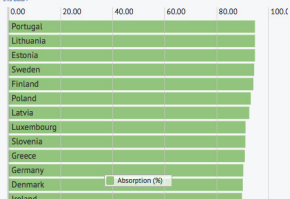
Regional Net Migration (2001-2011)



Regional Quality of Government Index (2013)



EU Regional Policy 2007-2013

Breakdown by Fund [Explore and Share this Data >](#)Breakdown by Theme [Explore and Share this Data >](#)Total Allocations per Member State [Explore and Share this Data >](#)Percentage of Available Funds Paid Out by the Commission [Explore and Share this Data >](#)

EU Regional Policy 2007-2013

