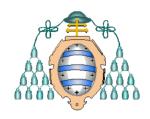
Università degli Studi di Siena

EU Politics

Widening regional disparities in Europe and the role of EU regional policies

March 2017
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Europe at night



The Iberian Peninsula, and Italy, at night





Sources: ISS/NASA via The Guardian, Dec. 2011, "Satellite eye on Earth"; and www.spaceref.com.

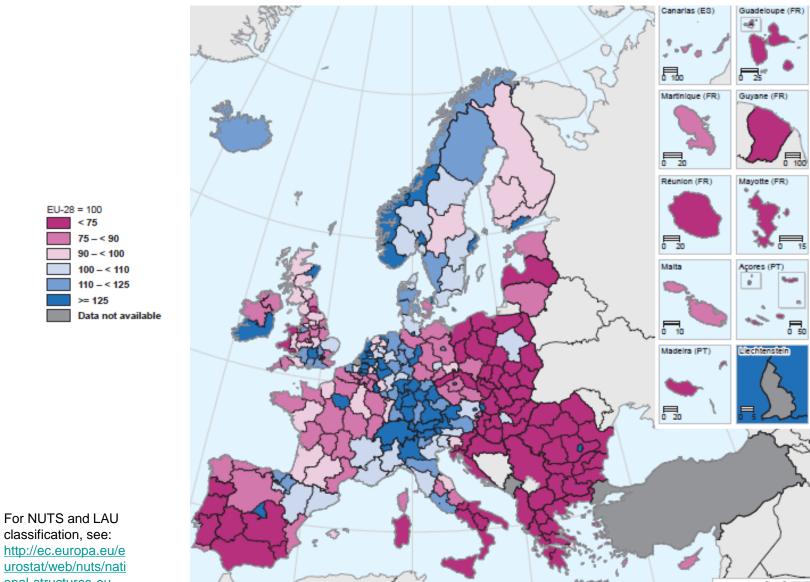
Regional disparities: questions

- 1. Are there regional disparities in Europe? If so, why?
- 2. To what extent are regional disparities a problem?
- 3. What is the expected impact of European integration on these disparities?
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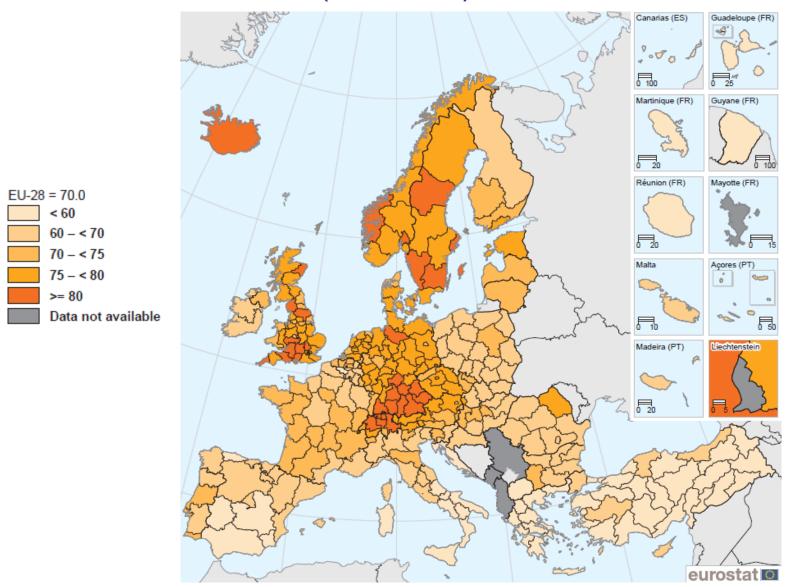
GDP per inhabitant in EU regions (NUTS 2), 2014



classification, see: http://ec.europa.eu/e urostat/web/nuts/nati onal-structures-eu

Source: Eurostat, Regional Statistical Yearbook, 2016

Employment rate (20-64 years old) in EU regions (NUTS 2), 2015



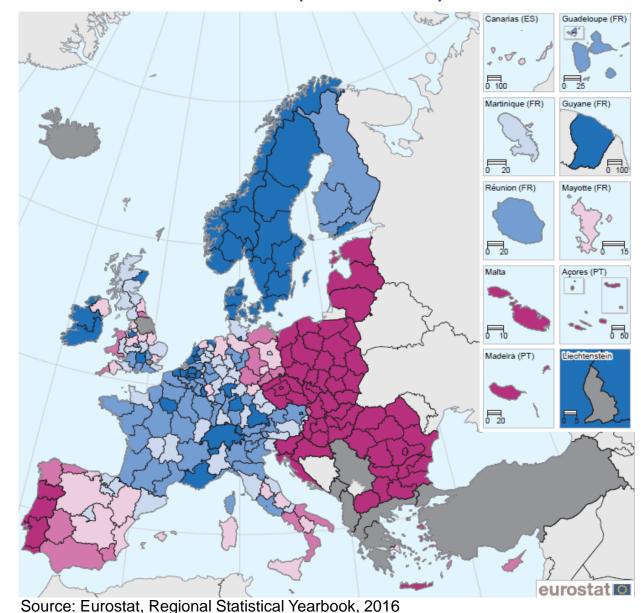
Source: Eurostat, Regional Statistical Yearbook, 2016

GVA per person employed in EU regions in relation with EU-28 ave.(NUTS 2), 2014

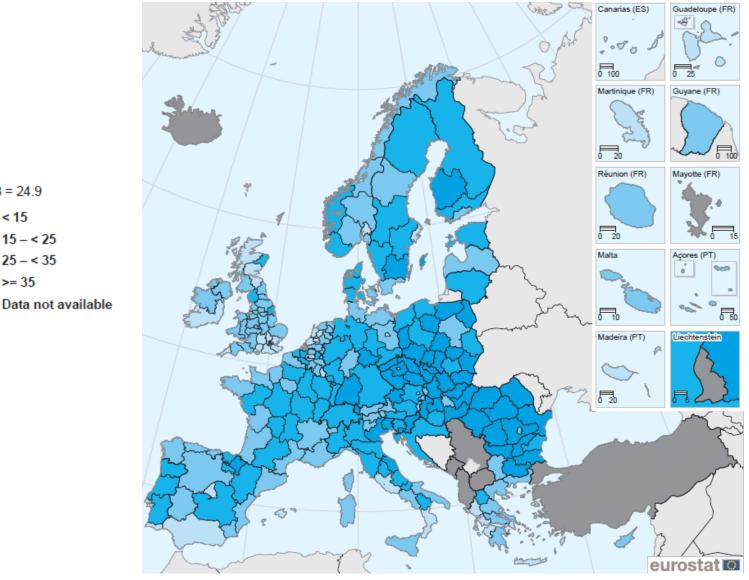
EU-28 = 100

75 – < 90 90 – < 100 100 – < 110 110 – < 125 >= 125

Data not available



Employment share of the industrial economy in EU regions (NUTS 2), 2013



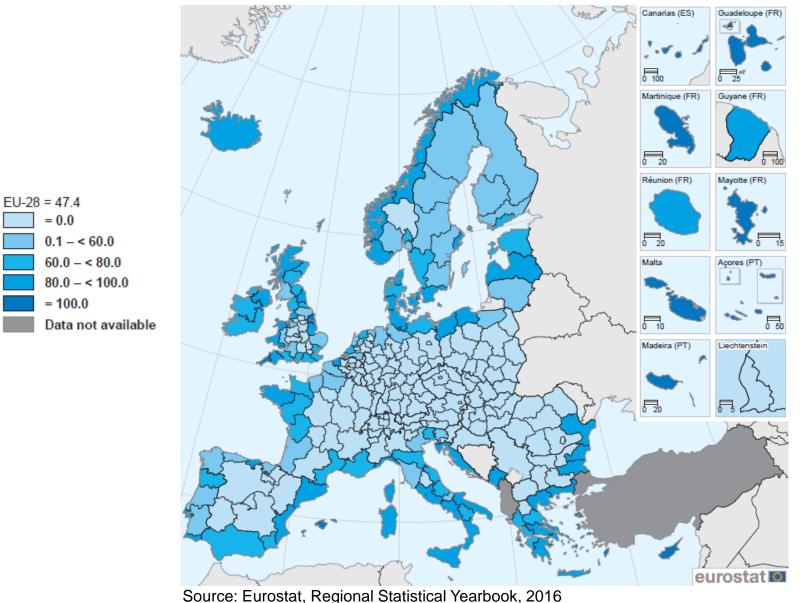
Source: Eurostat, Regional Statistical Yearbook, 2016

EU-28 = 24.9

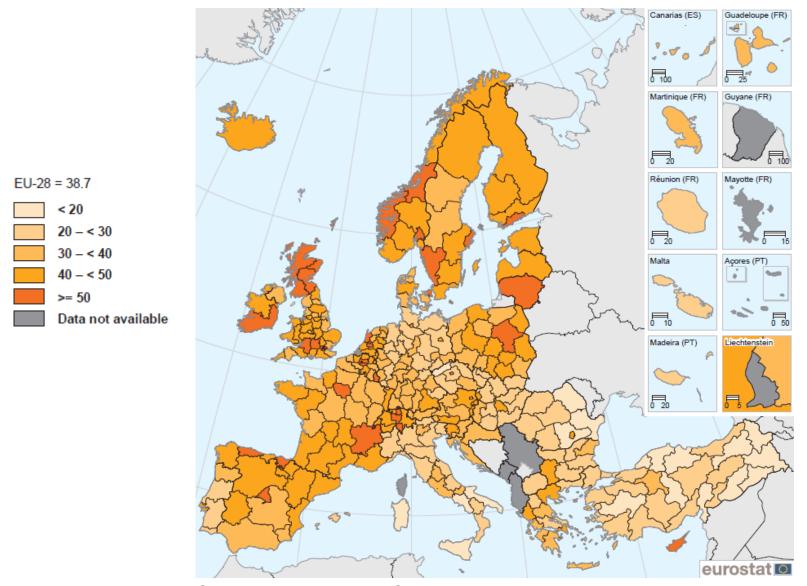
< 15

15 - < 2525 - < 35>= 35

Coastal tourism: nights in local hotels (%) in EU regions (NUTS 2), 2014

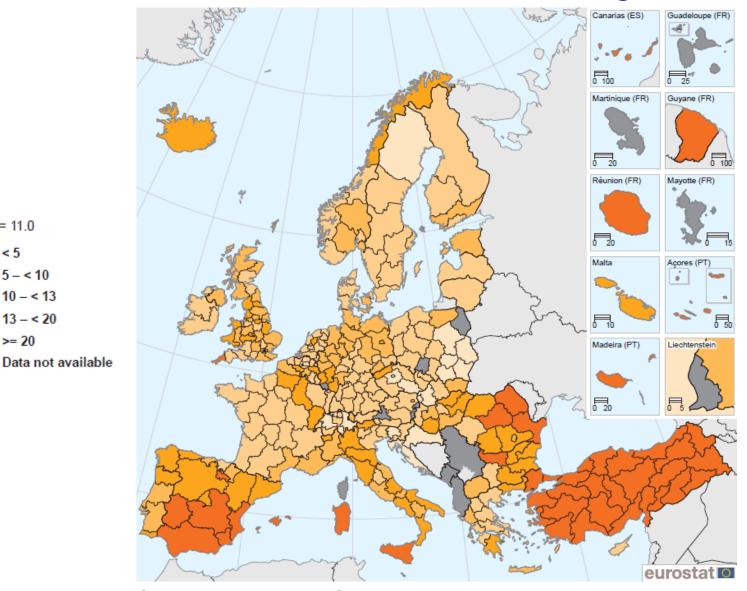


Share of the population aged 30-35 with tertiary education in EU regions (NUTS 2), 2015



Source: Eurostat, Regional Statistical Yearbook, 2016

Share of young people (18-24) who were early leavers from education or training, 2015



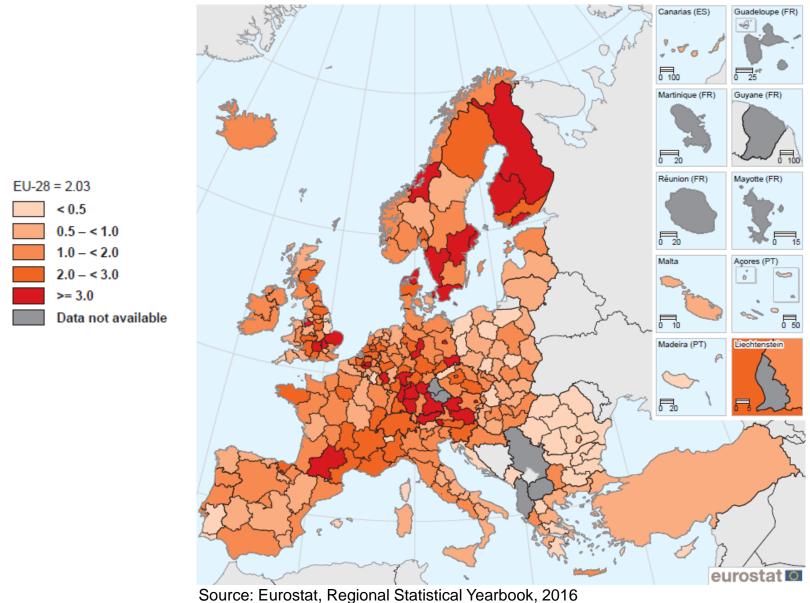
Source: Eurostat, Regional Statistical Yearbook, 2016

EU-28 = 11.0

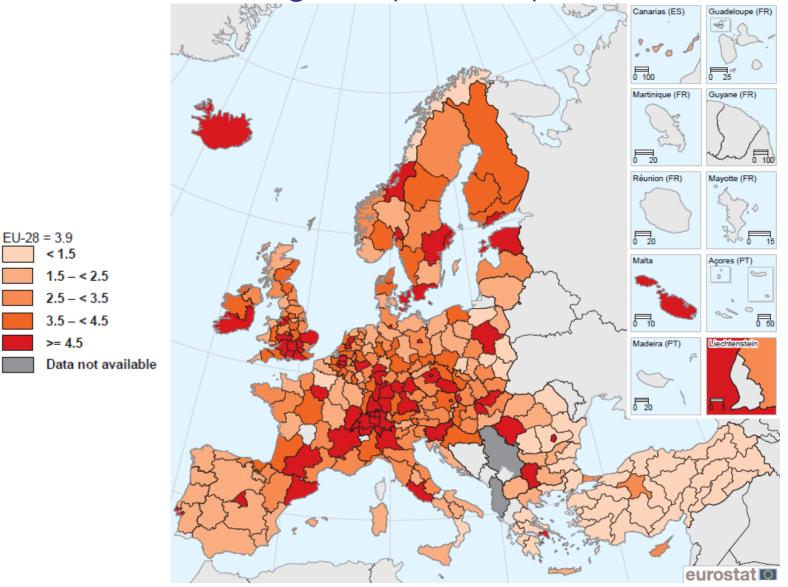
< 5

5 - < 1010 - < 1313 - < 20>= 20

R&D intensity: expenditure as a proportion of regional GDP in EU regions (NUTS 2), 2013



Share of employment in high-tech sectors in EU regions (NUTS 2), 2014



Source: Eurostat, Regional Statistical Yearbook, 2016

Regional disparities: questions

1. Are there regional disparities in Europe? If so, why?

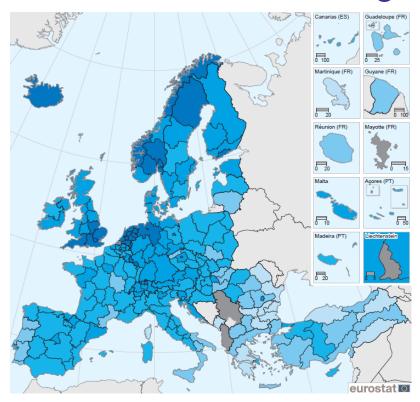
Yes, there are significant regional differences in Europe. So far, the reasons are:

- The proportion of people who work greatly differs
- Productivity of those who work varies between regions, which is due, among other reasons, to:
 - Regional specialization patterns and employment differences: e.g. industry, tourism
 - Technological disparities: advanced vs. stagnant activities, firms and regions
 - Differences in education of the labour force

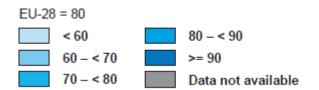
Regional disparities: questions

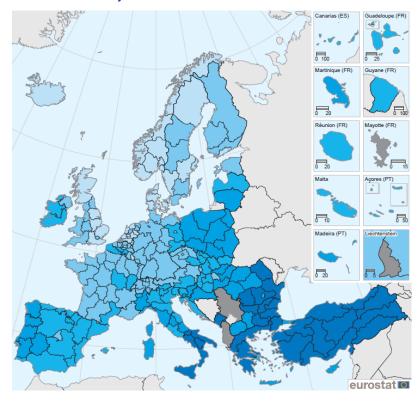
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Broadband connections and internet use in EU regions (NUTS 2)

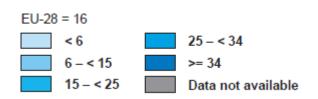


Proportion of households with broadband connection (2015)





Proportion of people who never use the internet (2015)



Geographical income disparities

Underlying causes of national and regional disparities

- The **spark of economic growth** appears in different places at different times
- Geography matters: natural advantages
- **History** matters: development, institutions, policies and politics
- **Economic dynamics** operate, and two main forces have been defined in the literature:
 - Concentration or centripetal forces
 - <u>Dispersion or centrifugal forces</u>

Geographical income disparities

- Regional economic dynamics are equivalent to those operating in Simon Kuznets' analysis of personal income distribution, the (famous) "inverted U curve", representing unequal changes and compensatory changes.
- -Albert O. Hirchman also wrote extraordinary pages interregional transmission of economic growth

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European integration and the case for centrifugal forces (dispersion)

- **Trade**: regions would benefit from trade, since it allows regional production factors to operate
- **Labour mobility**: migration flows would compensate initial wage differences among regions
- Capital mobility: capital accumulation in the growing region would allow investments in other regions, where capital would be more productive

European integration and the causes for centripetal forces (agglomeration) (1)

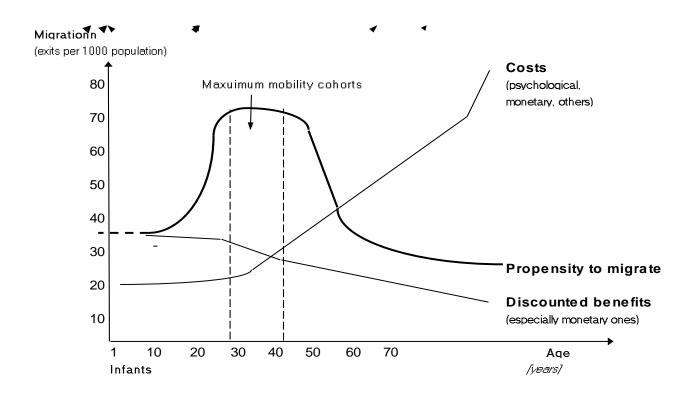
- Recent theories question that centrifugal forces operate easily, suggesting instead that economic dynamics lead to concentration:
 - **New growth theories**: capital is not necessarily more profitable where it is more scarce. Human capital, R&D are key companions of traditional capital, reducing risk
 - Technology diffussion theories: "codified knowledge" is easily transmitted, but "tacit knowledge" is not so. Firms will prefer to locate in areas where there is an agglomeration of innovation.

Barriers to mobility in Europe: language differences



Source: www.eurominority.org

Barriers to mobility in Europe: migration biases



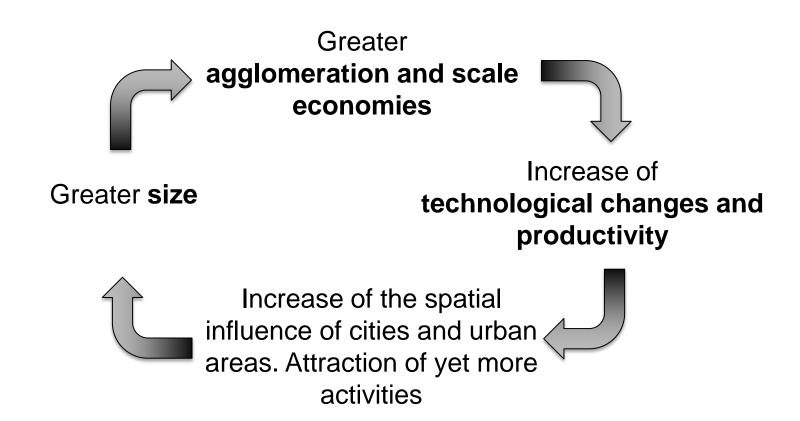
Source: Mario Polèse y Fernando Rubiera (2009). *Economía* urbana y *regional*. *Introducción a la geografía económica*, Civitas.

European integration and the case for centripetal forces (agglomeration) (2)

- Krugman's "New Economic Geography"
 - Scale economies and market size are key factors for firms' location
 - Transport costs, and technology also matter
 - "Virtuous circles" (circular causality) may occur due to the above, when market size increases, as in the European integration process

Agglomeration economies

Cumulative relations affected by size, productivity and technological development:



European integration, and the determinants of centripetal and centrifugal forces

- Lowering transport costs may lead industry to cluster geographically, but also to disperse

Mapa 1.—La gran dorsal europea



Source: Lecciones de Economía Española, 12ª ed.

May regional disparities exist permanently?

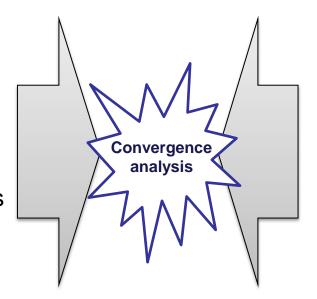
Neoclassical approach

No regional disparities in the long run

Dispersion / centrifugal forces operate: diminishing returns, migration, capital outflows

Works in the long term

Spatial scale is not important



Other approaches

Endogenous factors and cumulative processes matter

Economies of scale

Economies of agglomeration

New Economic Geography

Divergent dynamics, coreperiphery

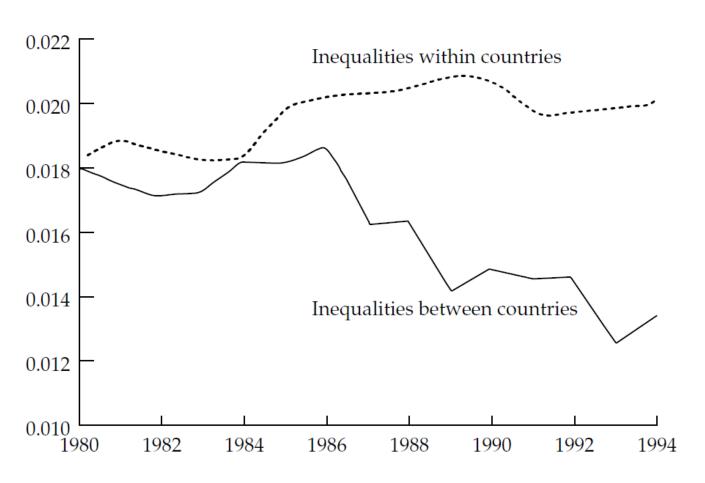
Spatial scale matters

Key issue from an economic policy viewpoint: policy decisions strongly affected by convergence

Regional disparities: questions

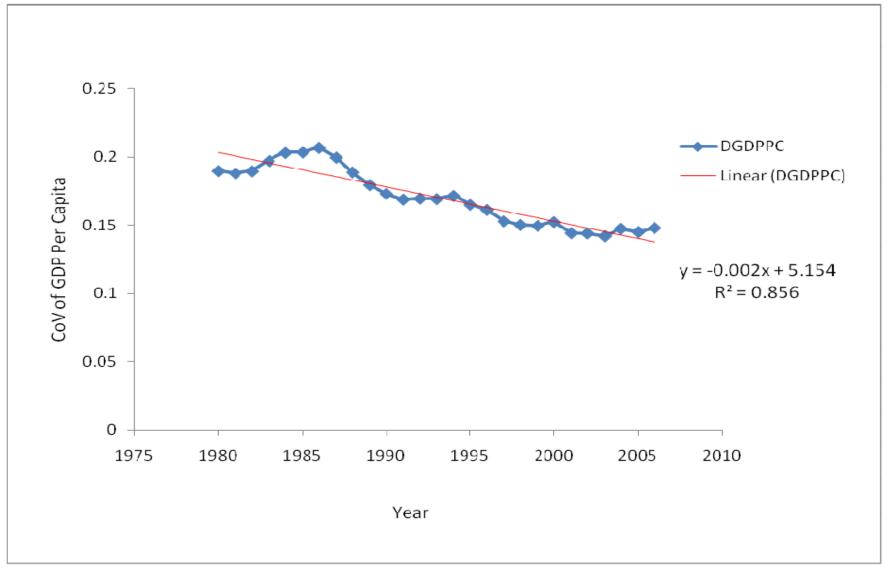
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Decomposition of Theil index of income inequality across European regions, 1980-1994



Source: Esteban (1999)

Figure – 1: Dispersion of GDP per capita over EU(15) member states excluding Luxembourg



Data Source: WITS

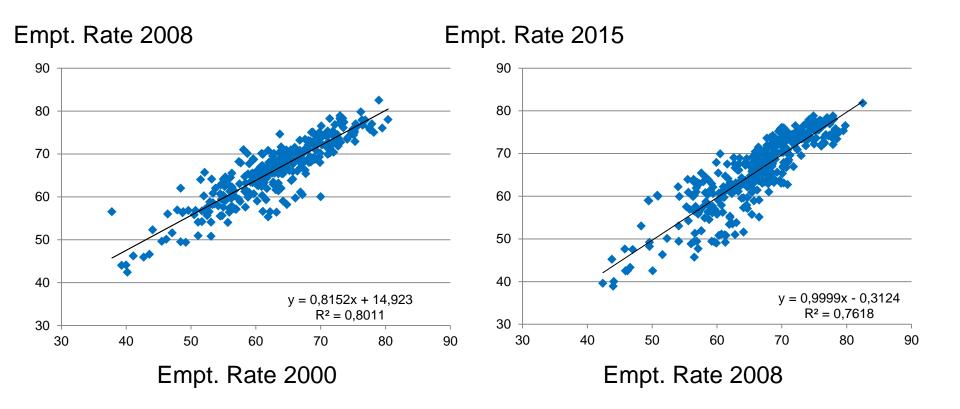
Measure: Coefficient of Variation

Statistic: GDP Per Capita Time Period: 1980 – 2006

Countries: EU(15) excluding Luxembourg

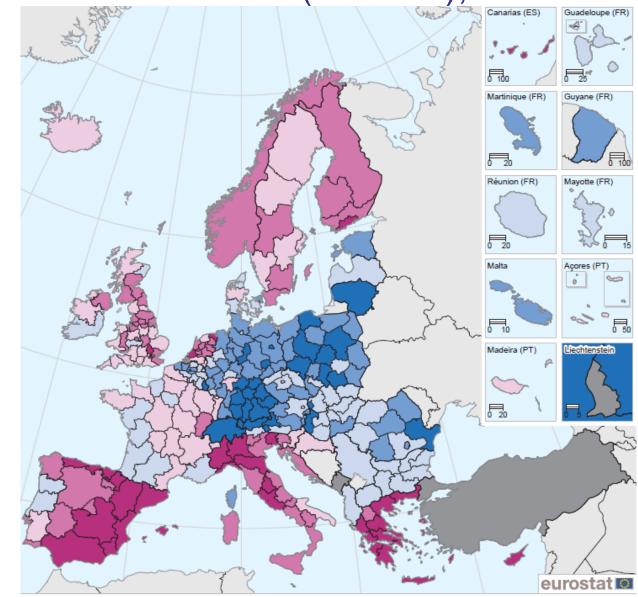
Source: Ghosh and Faber, 2010

Employment rates (15-64 yrs.) by NUTS-II European regions, 2000-2015



Source: elaborated with Eurostat data

Variations in GDP per inhabitant in EU regions in relation to EU-28 ave. (NUTS 2), 2008-2014



Source: Eurostat, Regional Statistical Yearbook, 2016

EU-28 = 0

< -10 -10 - < -5 -5 - < 0 0 - < 5 5 - < 10 >= 10

Data not available

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European regional "politics and policies"

- Article 3 of the TEU requires the EU to:
 - 'Work for the sustainable development of Europe based on balanced economic growth;
 - Promote economic, social and territorial cohesion and solidarity among Member States;
- Regional policy was already in the Treaty of Rome preamble
- Four main instruments operate historically in European Regional Policy:
 - The European Social Fund (ESF)
 - The European Regional Development Fund (ERDF)
 - The Cohesion Fund
 - The European Investment Bank

The European Social Fund

- The ESF was created in 1960 to improve employment conditions, and to help bearing the costs that integration meant for unemployment and displacement of workers.
- The ESF is a traditional instrument that helps funding training schemes, youth policies, programmes addressed to LTU, and other Active Labour Market Policies





The European Regional Development Fund

- The European Regional Development Fund (ERDF) was created in 1975 to help funding different projects in disadvantaged areas, like:
 - modernizing and restructuring production;
 - infrastructure projects;
 - education and professional training;
 - environment;
 - health services;
 - culture and
 - the reduction in disparities between regions



The Cohesion Fund

- The Cohesion Fund was introduced in 1993 to help prepare for EMU.
 - The criterion for eligibility is that the <u>country</u> has a GDP per capita less than 90 per cent of the Community average.
 - The countries receiving assistance through the Cohesion Fund (the new member states, Greece and Portugal) are obliged to adopt economic policies conducive to convergence. In return, they receive financial assistance for projects in favour of the environment and transport infrastructure.



The European Investment Bank

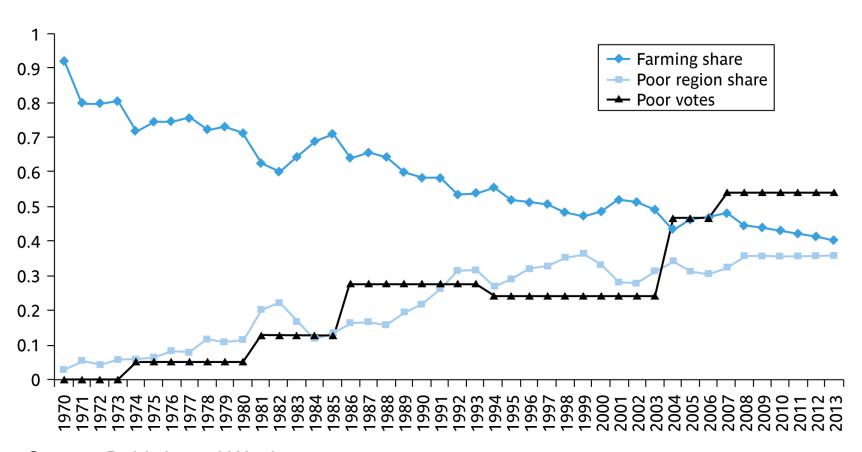
- The European Investment Bank (EIB) helps to finance projects in the member states, and in certain third countries.
 - The EIB raises funds on financial markets using its name as a guarantee and provides subsidised loans to finance projects carried out by public authorities and private firms.
 - The EIB is outside the EU budget.



European regional "politics and policies"

- A political analysis: major EU funding for less-favored regions was introduced only when the first 'poor' member, Ireland, joined in 1973: the European Regional Development Fund (ERDF) was set up to redistribute money to the poorest regions, but its budget was minor.
- The situation changed in the 1980s when Greece, Spain and Portugal joined: these nations were substantially poorer and did not benefit from CAP funding. The voting power of Greece, Spain, Portugal produced a major realignment of EU spending priorities.

Distribution of the EU budgetary expenditures, 1965–2013; CAP vs. Structural Funds



Source: Baldwin and Wyplosz

Traditional guiding principles of European regional policy

Four main **structural spending rules**:

- Concentration geographically (concentrazione)
- Programming (programmazione) ("Nat. St. Prog. Ref. Frameworks", "Operating Progs.")
- Coordination of different levels of government, industry and labour unions (partenariato)
- Cohesion funds must be additional to national and regional budgets (addizionalità)

Plus other criteria:

- Consistency and complementarity with treaties and community policies
- Monitoring and evaluation of spending

Do Spanish and Italian regional policies work this way?

New key points in European regional policy

The 2013 reform brought about significant changes for the programming period 2014-2020:

- Small reduction of budgetary provisions to 351 billion (34% of the budget, down from the previous 36%)
- Framing regional policy in the wider "Europe 2020" strategy
- Further simplification of policy objectives and instruments, following a trend introduced in the previous two periods
- Support of the so-called territorial capital, i.e. assets that represent the development potential of a region
- Encouragement of the so-called smart growth, i.e. integral actions to sponsor smart cities (urban development)
- All in all, spending about one third of funds to R&D, digital agenda, support to SME, and low-carbon-economy across the board

EU regional policy today

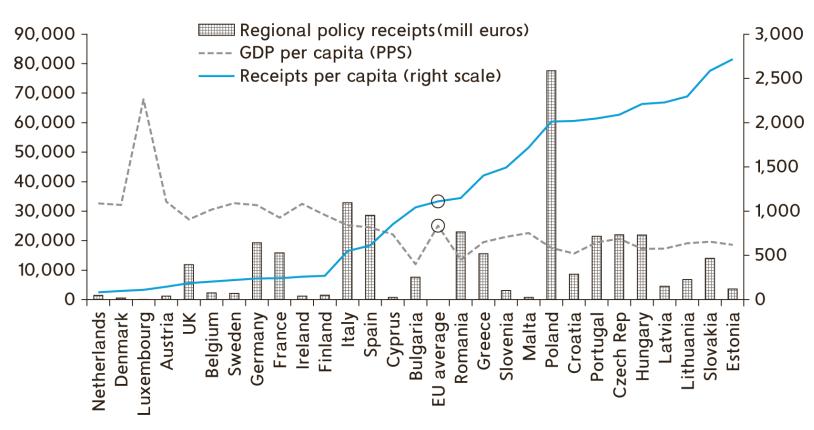
Framed within the driving "Europe's 2020" Strategy for smart, sustainable and inclusive growth: between 2014-2020, the EU invests €351 billion in Europe's regions

Table 10.2 Thematic objectives in the Europe 2020 strategy

Smart growth				
1	Strengthening research, technological development and innovation			
2	Enhancing access to, and use and quality of, information and communication technologies			
3	Enhancing the competitiveness of small and medium-sized enterprises (SMEs)			
Sustainable growth				
4	Supporting the shift towards a low-carbon economy in all sectors			
5	Promoting climate change adaptation, risk prevention and management			
6	Preserving and protecting the environment, and promoting resource efficiency			
7	Promoting sustainable transport and removing bottlenecks in key network infrastructures			
Inclusive growth				
8	Promoting employment and supporting labour mobility			
9	Promoting social inclusion, combating poverty and countering discrimination			
10	Investing in education, skills and lifelong learning			
11	Enhancing institutional capacity of public authorities and stakeholders, and promoting efficient public administration			

EU regional policy today

EU allocation of cohesion spending by nation, 2014 - 2020:



Source: Multiannual Financial Framework and Eurostat for population and income data

L'evoluzione degli obiettivi dei Fondi strutturali tra il 1989 e il 2020

Source: Senior Nello (2016)

Riquadro 15.2 L'evoluzione degli obiettivi dei Fondi strutturali tra il 1989 e il 2020

Riquadro 15.2 L'evoluzione degli obiettivi dei Fondi strutturali tra il 1989 e il 2020						
1989-93	1994-99	2000-06	2007-13	2014-2020		
Obiettivo 1: le zone meno sviluppate della Comunità, che sono definite come quelle il cui PIL pro capite è inferiore al 75% della media UE nei tre anni precedenti.	Obiettivo 1: le zone meno sviluppate della Comunità, che sono definite come quelle il cui PIL pro capite è inferiore al 75% della media UE nei tre anni prece- denti.	Obiettivo 1: le zone meno sviluppate dell'UE, che sono definite come quelle il cui PIL pro capite è inferiore al 75% della media UE.	Obiettivo 1: le regioni di convergenza, o le zone meno sviluppate dell'UE, che sono definite come quelle il cui PIL pro capite è inferiore al 75% della media UE.	Regioni meno svi- luppate: PIL < 75% della media UE-28.		
Obiettivo 2: le regioni colpite dal declino delle industrie tradizionali.	Obiettivo 2: la riconversione delle regioni gravemente colpite dal declino industriale.	Obiettivo 2: la riconversione economica e sociale delle regioni che stavano affrontando difficoltà naturali, comprese le zone rurali in declino e quelle dipendenti dalla pesca.	Obiettivo 2: la creazione di competitività e occupazione.	Regioni in transizione: PIL dal 75% al 90% della media UE(28).		
Obiettivo 3: la lotta contro la disoccu- pazione di lunga du- rata.	Obiettivo 3: lottare contro la disoccupazione di lunga durata (oltre 12 mesi) e facilitare l'integrazione nel mondo del lavoro per i giovani (sotto i 25 anni di età), per le donne e le persone a rischio di esclusione dal mercato del lavoro.	Obiettivo 3: miglio- rare il capitale uma- no promuovendo l'occupazione, l'i- struzione e la forma- zione professionale.	Obiettivo 3: la cooperazione territoria- le a livello europeo.	Regioni più sviluppate: PIL > 90% della media UE(28).		
Obiettivo 4: inserimento dei giovani nella vita professionale.	Obiettivo 4: agevo- lare l'adattamento dei lavoratori ai mu- tamenti industriali e all'evoluzione dei si- stemi di produzione.					
Obiettivo 5a: favorire l'adeguamento strutturale dell'agricoltura e della pesca. Obiettivo 5b: aiuti alle aree rurali.	Obiettivo 5a: favorire l'adeguamento strutturale dell'agricoltura e della pesca. Obiettivo 5b: aiuti alle aree rurali.	Lo sviluppo rurale diventa il secondo pilastro della PAC.	8			
	Obiettivo 6: regioni del nord della Fin- landia e della Svezia a bassa densità di popolazione.					

EU regional policy today: evaluation of growth effects

Table 4.2 Main results and conclusions from the econometric studies.

Author(s)	Main results of the study	Conclusions for EU Cohesion Policy
Crescenzi and Giua (2015)	Positive impact of Objective 1 interventions in Italy, Spain and UK; negative in Germany.	The results support the role of Cohesion Policy and suggest a stronger 'place- based' dimension.
De Dominicis (2014)	Inequality has a positive impact on GDP growth in less developed regions; no significant impact in the other regions.	The concentration of Structural Funds in a limited number of regions may enhance growth in the early stages of developments.
Fratesi and Perucca (2014)	Cohesion Policy not very effective per se, but more effective in regions more endowed with territorial capital.	Investing Cohesion Policy funds in regions more endowed with territorial capital is more effective.
Maynou <i>et al</i> . (2014)	Significant positive effect of SCF on GDP growth at country level; no significant effects on convergence.	No direct conclusions for Cohesion Policy.
Pellegrini et al. (2013)	Positive effect of Objective 1 interventions on regional growth, but modest impact on convergence.	The growth effects of Cohesion Policy are rather modest.

Source: Bachtler et al (2017)

EU regional policy today: evaluation of growth effects (2)

Author(s)	Main results of the study	Conclusions for EU Cohesion Policy
Rodríguez-Pose and Garcilazo (2013)	High impact of government quality on growth in poorer regions; smaller impact of Cohesion Policy funds.	Cohesion Policy transfers should be accompanied by improving local institutions.
Rodríguez-Pose and Novak (2013)	Positive impact of 2000–6 SF on regional growth, but no impact in 1994–9.	The effectiveness of Cohesion Policy has improved.
Tomova et al. (2013)	Cohesion Policy funds contributed to improving socio-economic development; higher impact when combined with sound economic policies.	Making Cohesion Policy funds conditional on sound economic policies is likely to improve their effectiveness.
Becker et al. (2012b)	Growth effects of Cohesion Policy transfers decrease with increasing transfer intensity.	A part of transfers should be reallocated to regions receiving less funds.
Becker et al. (2012a)	'Objective 1 treatment' has significantly higher growth impact in regions with good human capital and government quality.	Objective 1 transfers should be focused in regions with the best human capital and government quality.
Le Gallo <i>et al.</i> (2011)	Positive impact in some regions, negative in some others. Important spatial spillover effects.	No direct conclusions for Cohesion Policy.
Becker et al. (2010)	Positive effect of 'Objective 1 treatment' on GDP growth.	No direct conclusions for Cohesion Policy.

EU regional policy today: evaluation of growth effects (3)

Author(s)	Main results of the study	Conclusions for EU Cohesion Policy
Mohl and Hagen (2010)	Positive but small impact of Cohesion Policy funds in Objective 1; no clear results for Objective 1+2+3.	Objective 1 transfers are effective in promoting growth, but transfers to Objective 2 and 3 regions are not.
Dall'Erba and Le Gallo (2008)	Insignificant SF effect on regional GDP growth.	SF may be insufficient to counterbalance the agglomeration process.
Esposti and Bussoletti (2008)	Limited but positive impact of Objective 1 funds on growth; negative impact in some regions.	No direct conclusions for Cohesion Policy.
LeSage and Fischer (2008)	Spatial dependences are important for regional growth.	No direct conclusions for Cohesion Policy.
Ramajo et al. (2008)	Strong regional convergence, especially in Cohesion countries.	Regional policy has good effects in Cohesion countries.
Puigcerver- Peñalver (2007)	SF had significant impact on growth rates; higher in 1989–93, lower in 1994–9.	SF will not reduce gaps between regions quickly.
Ederveen et al. (2006)	Negative impact of SF on growth; positive only in countries with good institutions.	SF should be directed towards institution-building.
Barrios and Strobl (2005)	Inequalities rising up to a certain level of development, then decreasing.	SF would provide greater welfare if more concentrated in richer regions.
Rodríguez-Pose and Fratesi (2004)	No significant relationship between SF and regional growth; investment in human capital brings the best effects.	SF should support a more locally tailored combination of investment priorities, avoiding a focus on infrastructure.
Midelfart-Knarvik and Overman (2002)	SF affect industrial location by attracting R&D-intensive industries.	SF should help regions to specialise according to their competitive advantage.
Boldrin and Canova (2001)	No convergence in per capita GDP; small convergence in labour productivity.	SF is effective neither for growth nor for convergence.

European regional "politics and policies": ending points

- What was once interpreted as a weakening force for European nation-states, is not so clear after "regional policy" became "cohesion policy" in the 1990s.
- Almost 30 years later, coordination and additionality principles have not been fully achieved. Many analysis suggest greater concentration would improve growth results.
- Impact evaluation: (insufficient ?) progress
- The current period relatively simplifies EU regional policy
- Regional funds still reach almost all countries. This seems coherent with:
 - The development objective (vis-a-vis redistribution)
 - The persistent internal inequality within member states
- But there might be an inflexion point regarding funding: over it, cohesion funds lead to rising regional differences within countries.

References & further reading

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