POLITECNICO DI MILANO

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Economic development in Southern European Regions: Policies and higher education

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Economic Issues of Southern European Regions: Functions and Territorial Structure

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The need of regional upgrading

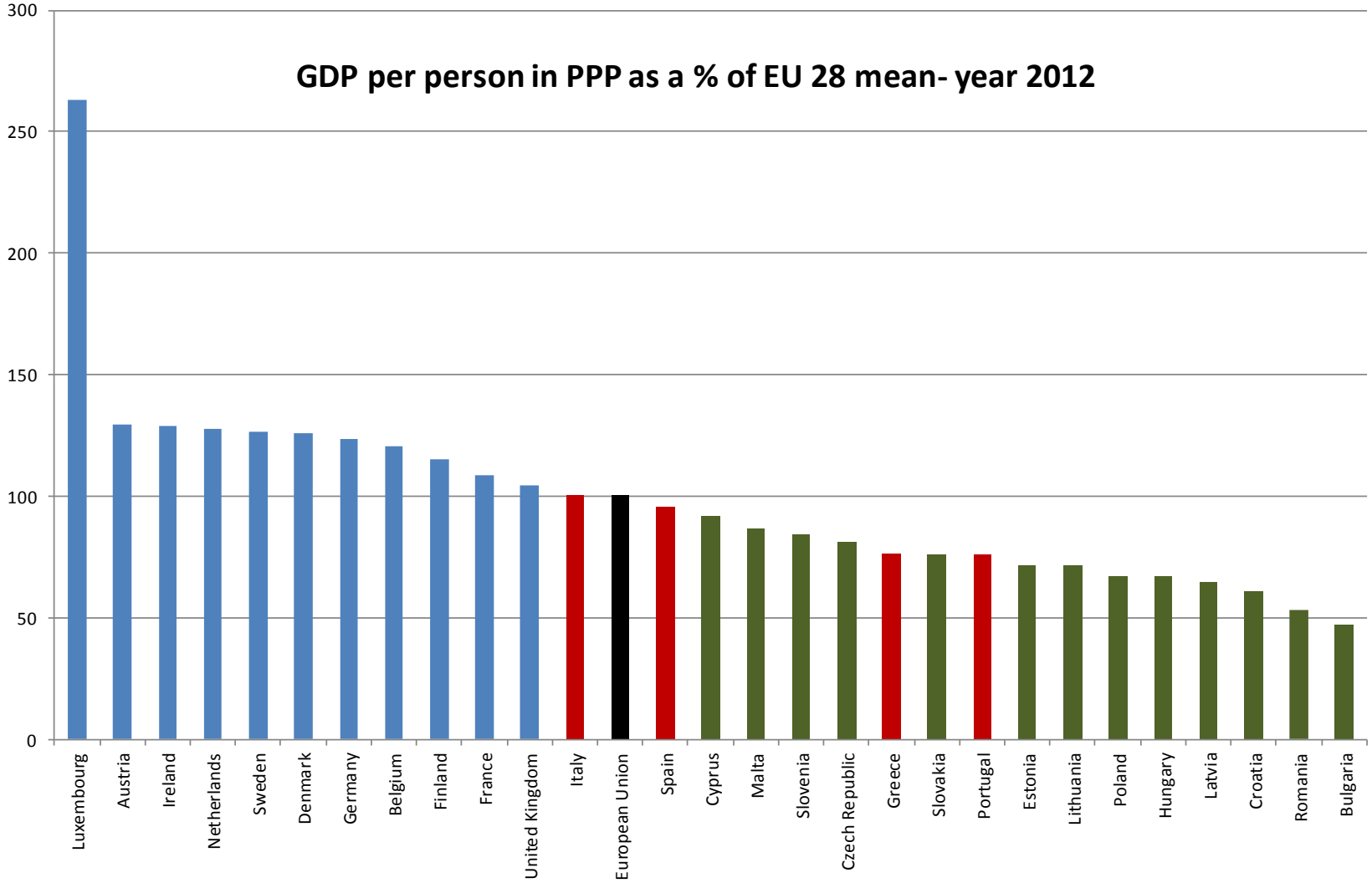
Regional upgrading concept in the global value chain approach: (Gereffi, Humprey and Sturgeon, 2005)

- Technological upgrading
- Functional upgrading

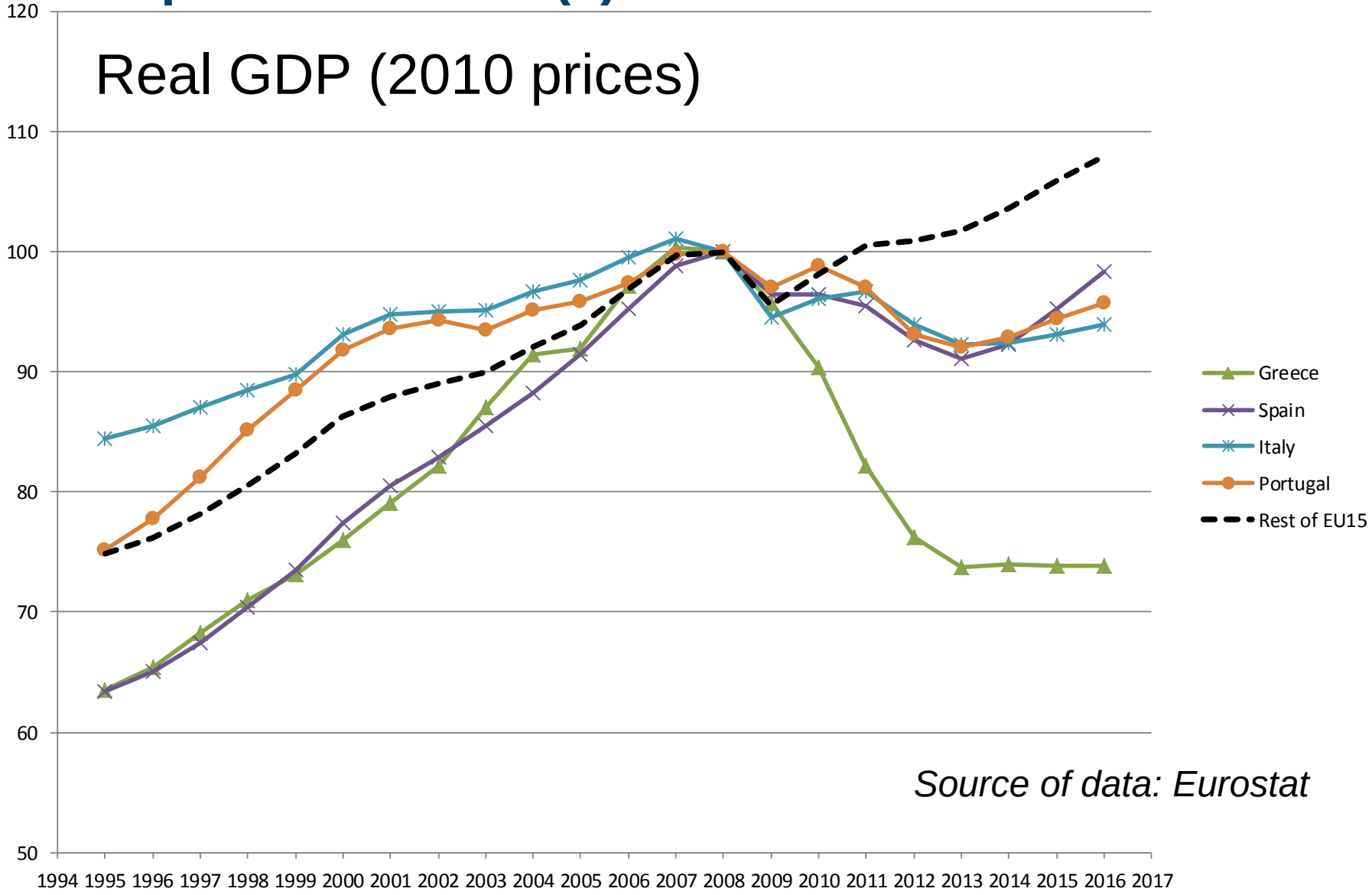
Structural upgrading considered in the literature as fundamental for the possibility of middle and high income regions and countries to thrive in the global economy.

Fast globalization processes have significantly affected European regions, affecting them with new challenges (Capello et al. 2011).

Introduction: four underperforming European countries



Introduction: four underperforming European countries (2)



Source of data: Eurostat

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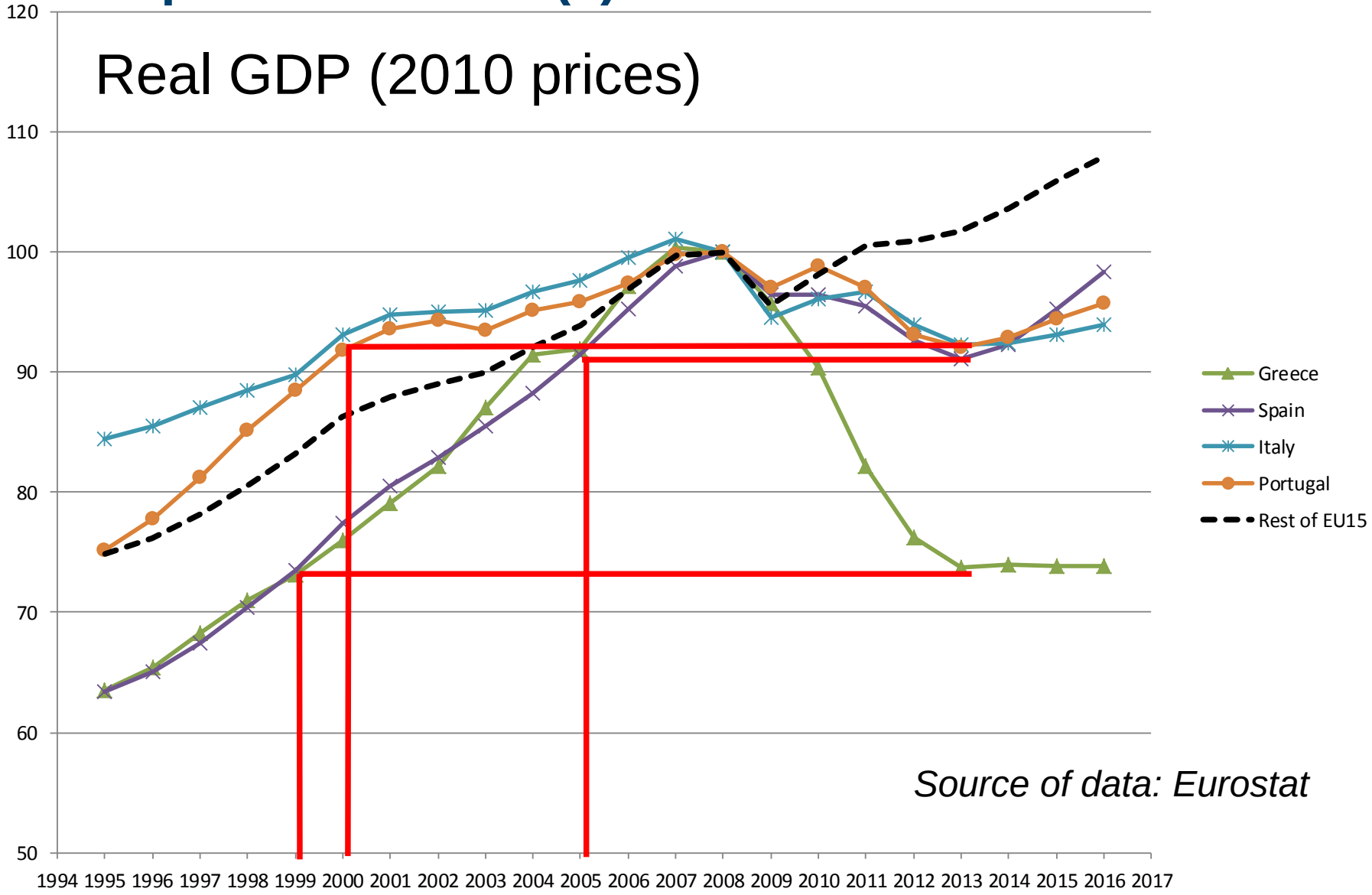
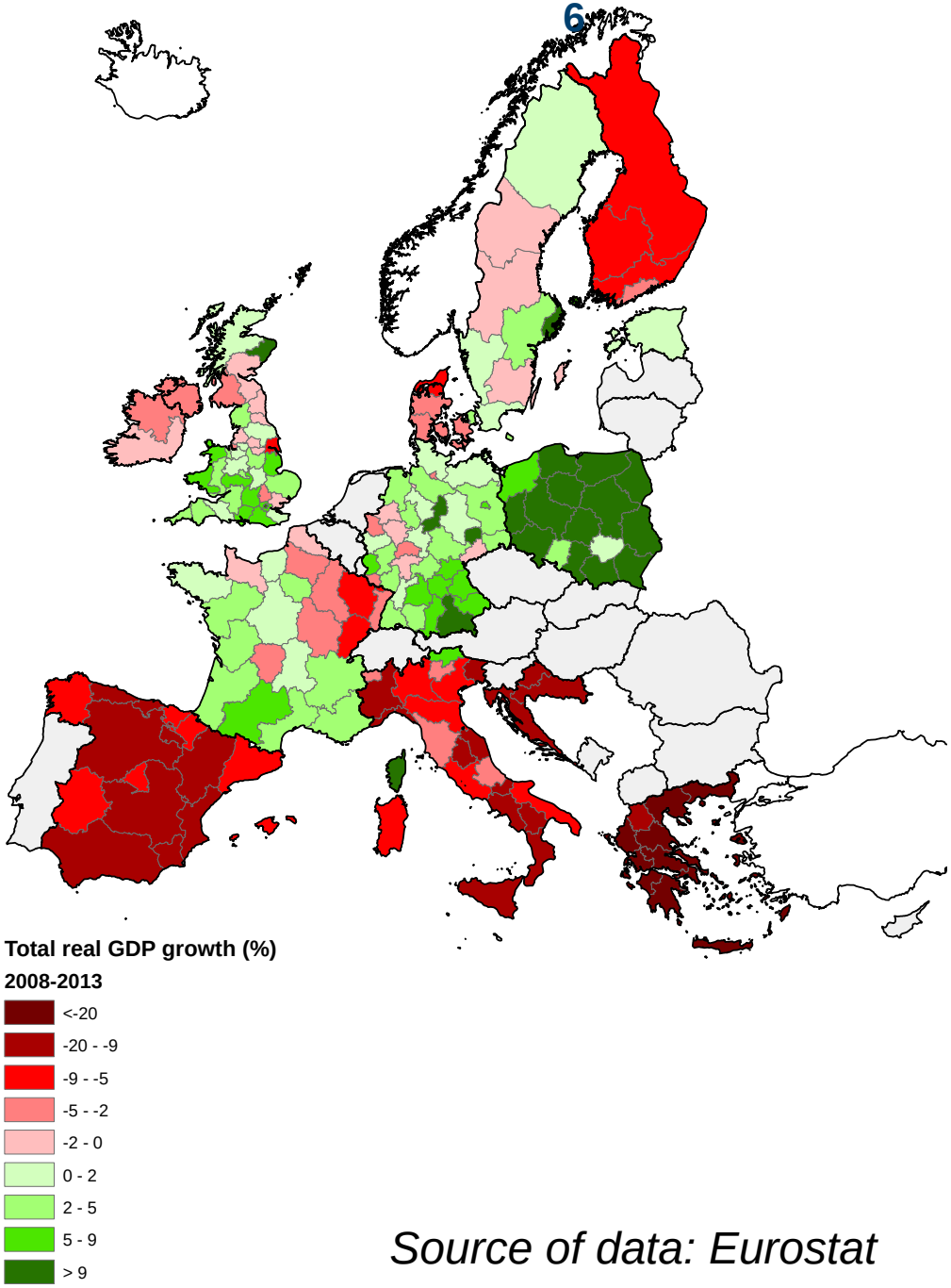


Countries are in relative decline but regional differences still exist

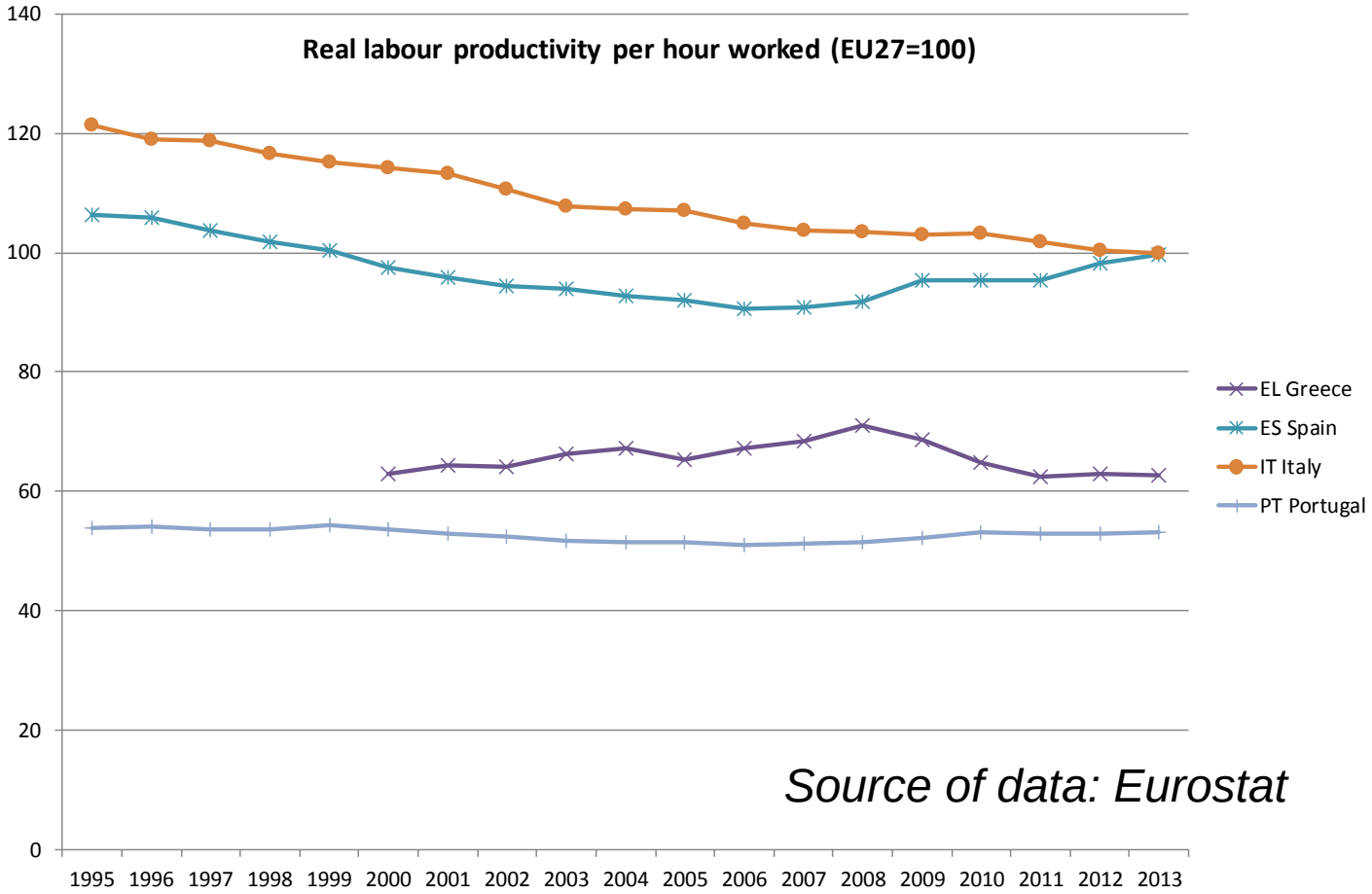


Source of data: Eurostat

Weak economies in terms of productivity

The weakness of Southern European countries and their regions has been linked to their **low levels of productivity**

This is a long-standing issue, started well before the crisis



Disentangling the effects of productivity and employment growth

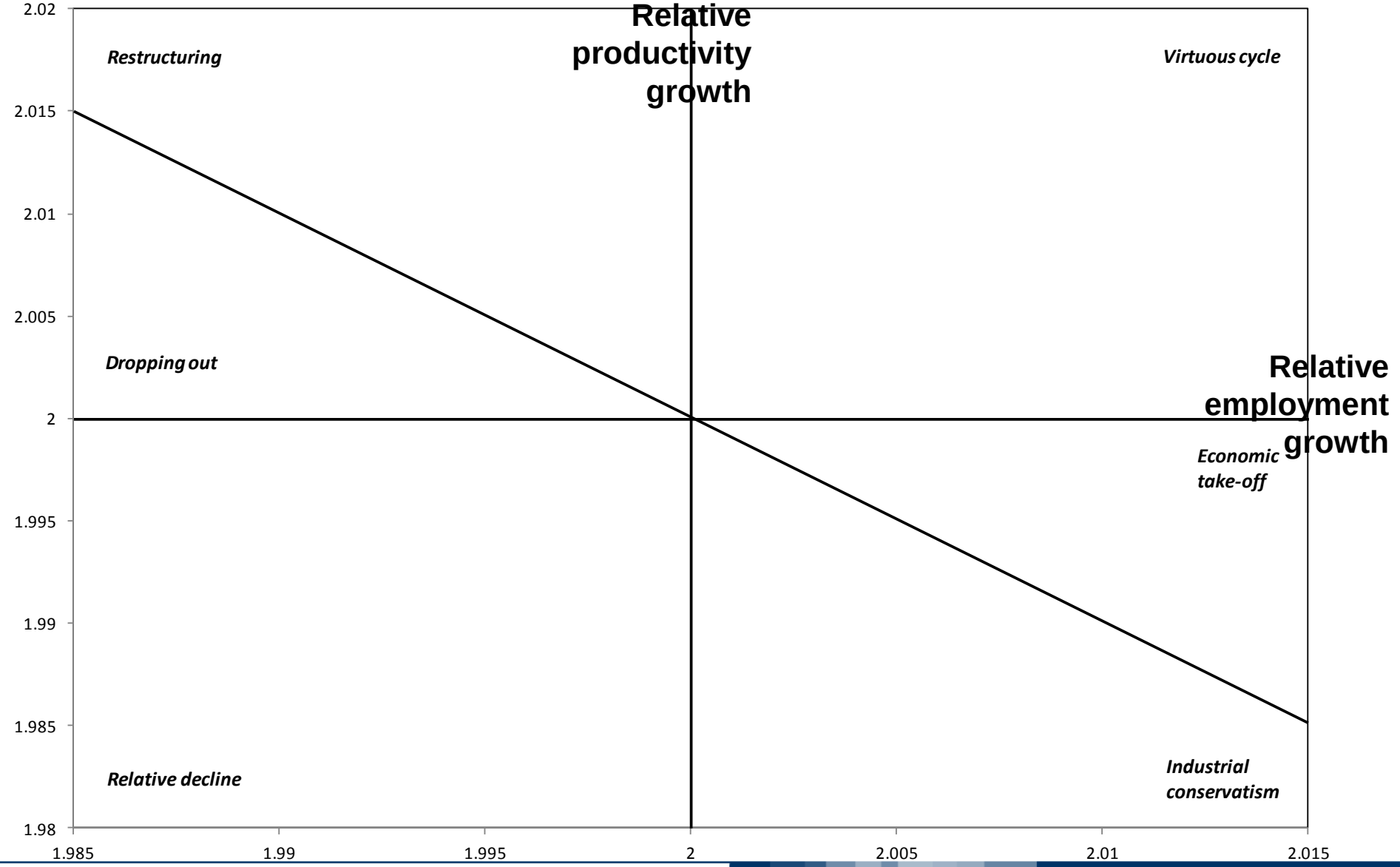
Relative decline of GVA pp

Despite good employment performance

Due to very bad productivity performance

GVA per person as a % of EU27			
	1995	2001	2006
Old North	135.3	134.5	133.5
Old South non obj1	122.9	120.3	111.5
Old South obj1	66.4	67.3	67.5
EU27*	100.0	100.0	100.0
employment rate as a % of EU27			
	1995	2001	2006
Old North	101.9	104.3	102.8
Old South non obj1	100.3	104.9	107.3
Old South obj1	81.9	84.3	87.6
EU27*	100.0	100.0	100.0
GVA per employee as a % of EU27			
	1995	2001	2006
Old North	132.8	128.9	129.9
Old South non obj1	122.6	114.7	103.9
Old South obj1	81.1	79.8	77.1
EU27*	100.0	100.0	100.0

At regional level, Southern European Regions are characterized by specific patterns



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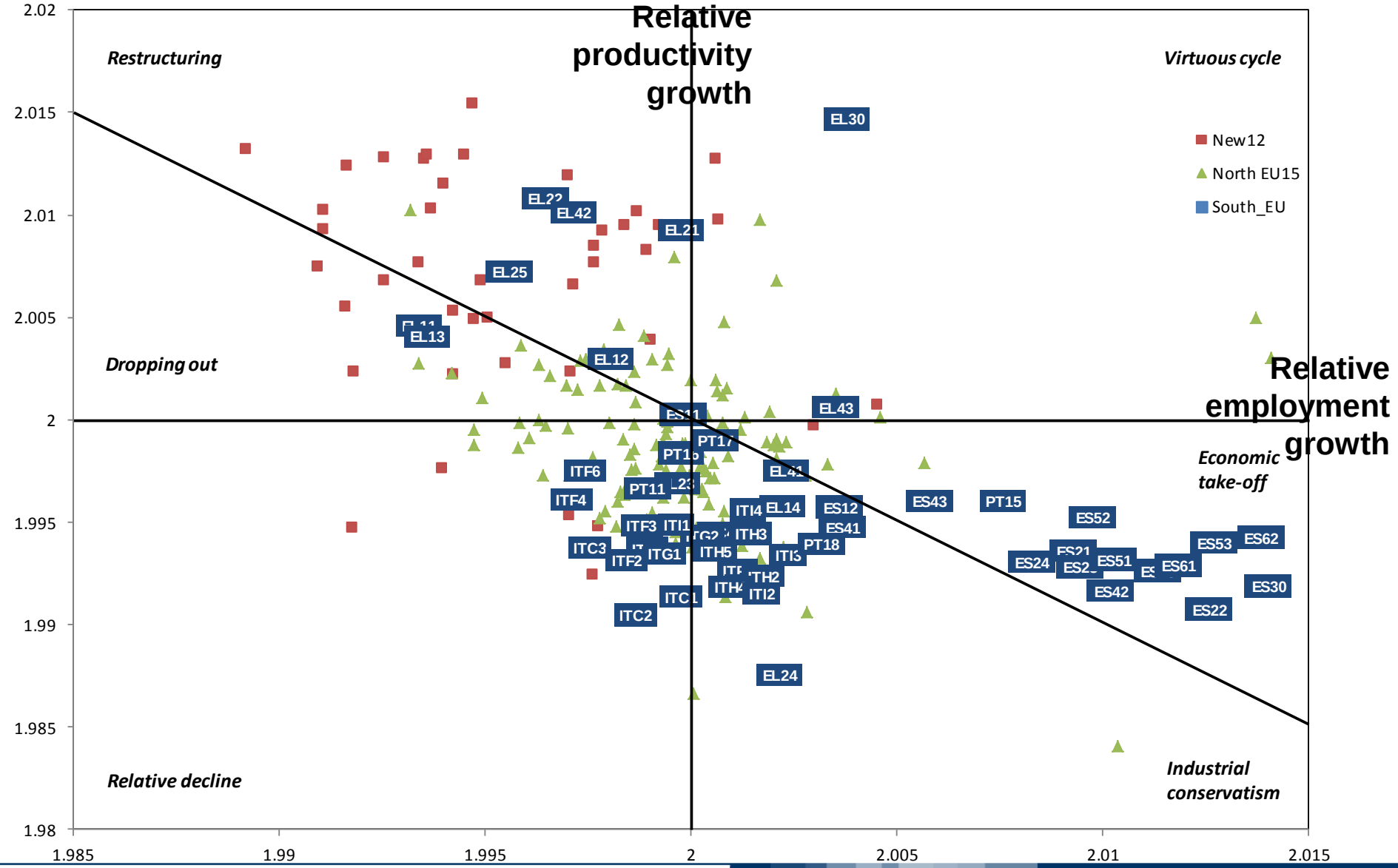


How to improve productivity

Three possible strategies for the improvement of regional productivity (Affuso et al., 2011)

1. increasing productivity through innovation
2. reconverting the regional sectoral structure
3. reconverting to higher phases of the production process

Each of them has its difficulties

Southern European Regions need to upgrade their economies

The role of regions in the increasingly fragmented global value chain networks is an important determinant of their development levels *(Coe and Yeung 2015)*.

Southern peripheral European regions squeezed between core European regions and competitors from emerging countries.

For peripheral regions of Southern European Countries, upgrading towards higher functions is no longer needed to converge towards richest regions,

but **to avoid decline**

Measuring functional upgrading

There is no single way to measure functional upgrading.

Here the approach uses the professions as coming from European Labour Force Survey (ISCO classifications).

Professions (ISCO codes) linked with high-value functions:

- 11 Legislators and senior officials
- 12 Corporate managers
- 13 Managers of small enterprises
- 21 Physical, mathematical and engineering science professionals
- 231 College, university and higher education teaching professionals
- 241 Business professionals
- 245 Writers and creative or performing artists

High-value added in Southern European Regions are less diffused

ISCO denominations	Legislators and senior officials	Corporate managers	Managers of small enterprises	Physical, mathematical and engineering science professionals	College, university and higher education teaching professionals	Business professionals	Writers and creative or performing artists
ISCO codes	11	12	13	21	231	241	245
Old North	0.51	5.77	3.31	3.37	0.52	1.40	0.63
Old South non obj1	**0.69**	**2.50**	**3.58**	**1.65**	**0.39**	**0.66**	**0.61**
Old South obj1	**0.46**	**1.44**	**7.47**	**1.27**	**0.34**	**0.60**	**0.27**
New 12	0.47	3.32	2.98	1.94	0.36	1.59	0.41
EU mean	**0.51**	**4.42**	**3.86**	**2.66**	**0.45**	**1.25**	**0.54**
sig	***	***	***	***	***	***	***
F	25.1625	188.5864	75.5542	39.1205	32.5722	64.3482	49.9712

Source of data: Eurostat

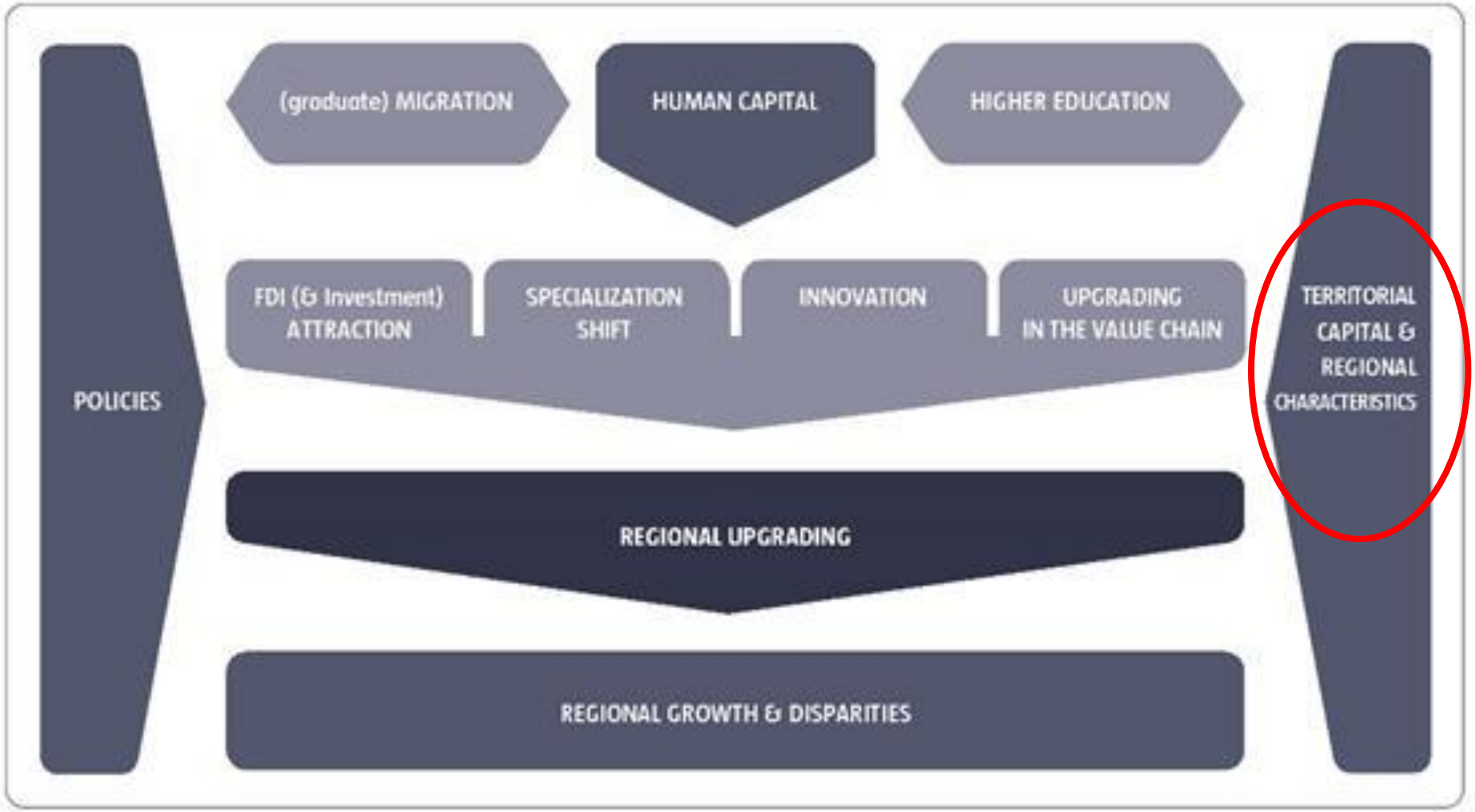
Functions affect regional growth

Panel regressions of regional growth in southern European Regions, Nuts2 level, years 1996-2010 (3-years averages), time and country dummies included

Dependent variable: Regional real GDP growth	(1)	(2)	(3)	(4)	(5)	(6)
Income per capita	-345.5***	-344.8***		-365.2***	-606.3***	-593.8***
	(99.22)	(94.28)		(117.1)	(119.6)	(122.9)
High value functions		61.55***	61.87**	47.65**	48.43**	
		(20.23)	(23.35)	(20.10)	(19.81)	
Human resources in science and technology (core definition)				0.248*	0.339**	0.332**
				(0.148)	(0.153)	(0.165)
Education					0.108*	0.0971
					(0.0609)	(0.0620)
Constant	9.134***	8.025***	1.224***	5.716***	6.188**	7.295**
	(1.911)	(1.773)	(0.413)	(2.072)	(2.733)	(2.760)
Time and country dummies	significant	significant	significant	significant	significant	significant
Observations	290	290	290	277	199	199
R-squared	0.682	0.691	0.664	0.700	0.810	0.805
Number of groups	58	58	58	58	58	58

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

The upgrading process and its catalysts



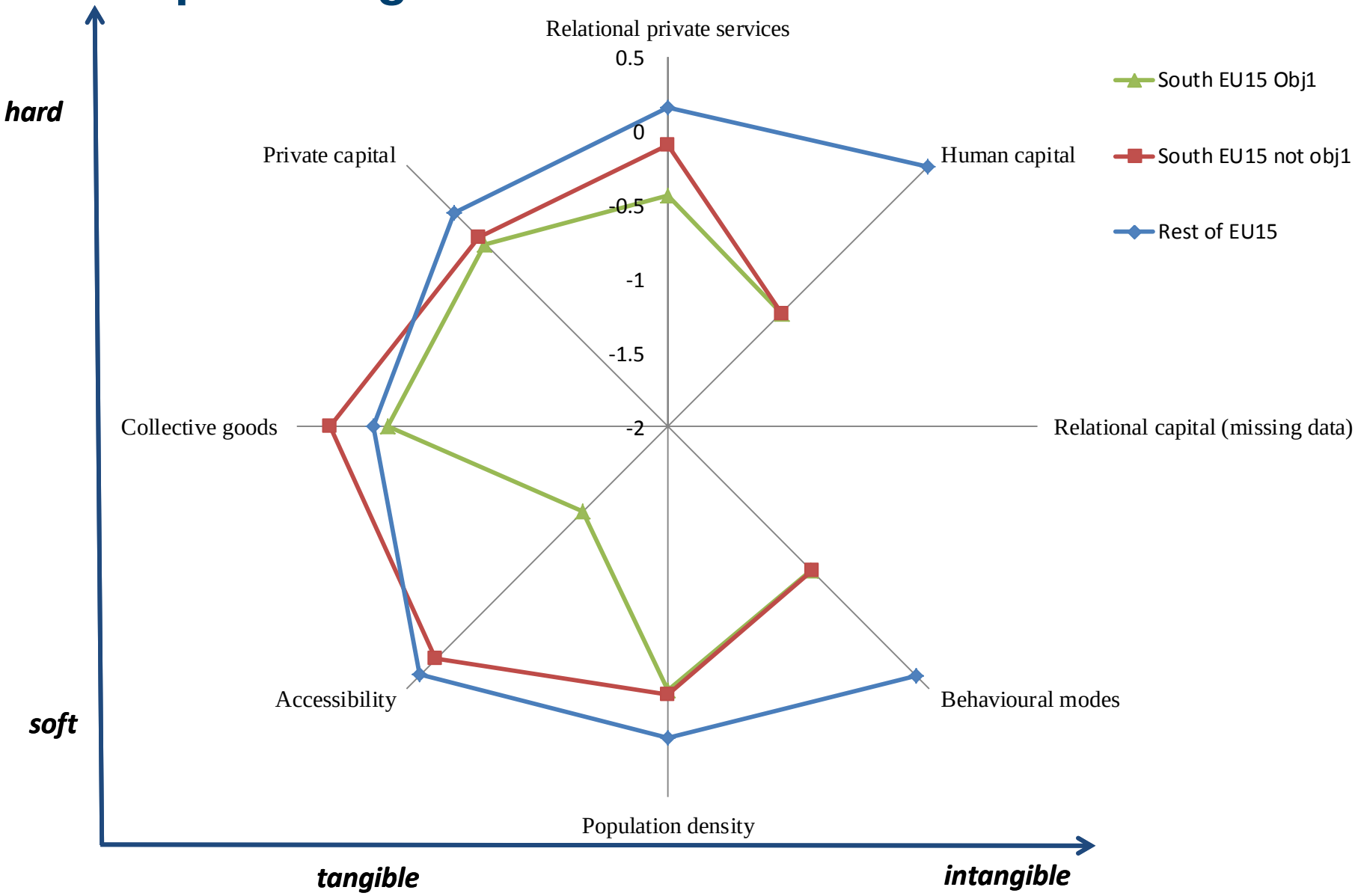
Source: Fonseca and Fratesi (2017)

What regional characteristics? A definition of territorial capital

Rivalry				
(high) →	*Private goods*	***c*** Private fixed capital stock Pecuniary externalities Toll goods	***i*** Relational private services operating on: - External linkages for firms - Transfer of R&D results	***f*** Human capital Pecuniary externalities
	Club goods, impure public goods	***b*** Proprietary networks Collective goods: -landscape - cultural heritage	***h*** Cooperation networks Governance on land and cultural resources	***e*** Relational capital
(low)	*Public goods*	***a*** Resources: - Natural - Cultural (punctual) Social overhead capital: infrastructure	***g*** Agglomeration and district economies Agencies for R&D transcoding Receptivity enhancing tools Connectivity	***d*** Social capital: - institutions - behavioural modes, values trust, reputation
		Tangible goods (hard)	*Mixed goods (hard + soft)*	*Intangible goods*
		Materiality **(high)** → **(low)**		

Source: Camagni (2009)

Territorial capital in Southern European Regions



Conclusions

Macroeconomic issues are very relevant for Southern European Regions, and sometimes a burden (e.g. real effective exchange rates, public finances, etc.)

Yet, regional supply-side aspects are also very important, and long standing.

Among them the inability to grow in productivity as the rest of advanced countries

Well before the crisis, economic growth in southern European regions was led by employment growth (with scarce productivity increases)

Conclusions (2)

A weak economic structure is more vulnerable to external competition, and Southern European Regions are weak because they are specialized in **low-value added functions** and did not upgrade them

Among Southern European regions, those with relatively higher functions have outperformed the others.

The economic structure of regions is a catalyst of upgrading processes

But in terms of territorial capital, Southern European Regions are less endowed in almost all assets
(and this is worth especially for the poorest ones)

Implications for policies

Ongoing research is showing that territorial capital also acts as catalyst of policy effectiveness:

- regional growth benefits more from policies when there are complementary territorial capital assets in place;
- regional policies which invest in complementary territorial capital assets are more effective than policies concentrating on assets already present (where there are decreasing returns)
  --> The system of territorial capital has to be balanced

Can we relinquish structural policies in Southern European Regions?

- No, even if they pay off only in the long run
- and attention has to be paid to complementary assets

Thank you for your attention