

Regional and Urban Evolutions in the OECD and Europe: Pre- Crisis and Post-Crisis

Philip McCann

Lewis Dijkstra
Enrique Garcilazo

University of Groningen

* I am grateful to the European Commission Directorate-General for Regional and Urban Policy and to the OECD Department for Regional Development Policy for allowing me to use their figures and diagrams

1. Structure of Talk

- 1. Structure of Talk
- 2. Global Urban Scale and Trends
- 3. Pre-Crisis: OECD Regional Context
- 4. Pre-Crisis: The EU Regional Context
- 5. Pre-Crisis: The EU Urban Context
- 6. Post-Crisis: The EU Regional and Urban Context
- 7. Conclusions

2. Global Urban Scale and Trends

- >50% of global population live in cities (2008) accounting for 80% of global GDP (MGI data)
- 600 largest cities account for 22% of global population and 60% of global GDP
- 100 largest cities account for 38% of global GDP
- 23 mega-cities (>10m) account for 14% global GDP
- 388 out of top 600 cities which are in the rich countries account for 50% global GDP
- 190 US cities account for 20% of global GDP

2. Global Urban Scale and Trends

- Upper end of city-size distribution the scale-productivity relationship → inverted U shape
- By 2025 the share of global GDP of 100 largest cities will fall from 38% to 35%
- Composition effect - growth of second and third tier cities – China, India, Brazil, Indonesia
- Scale effect - declining growth of major cities
- Connectivity, not just scale?

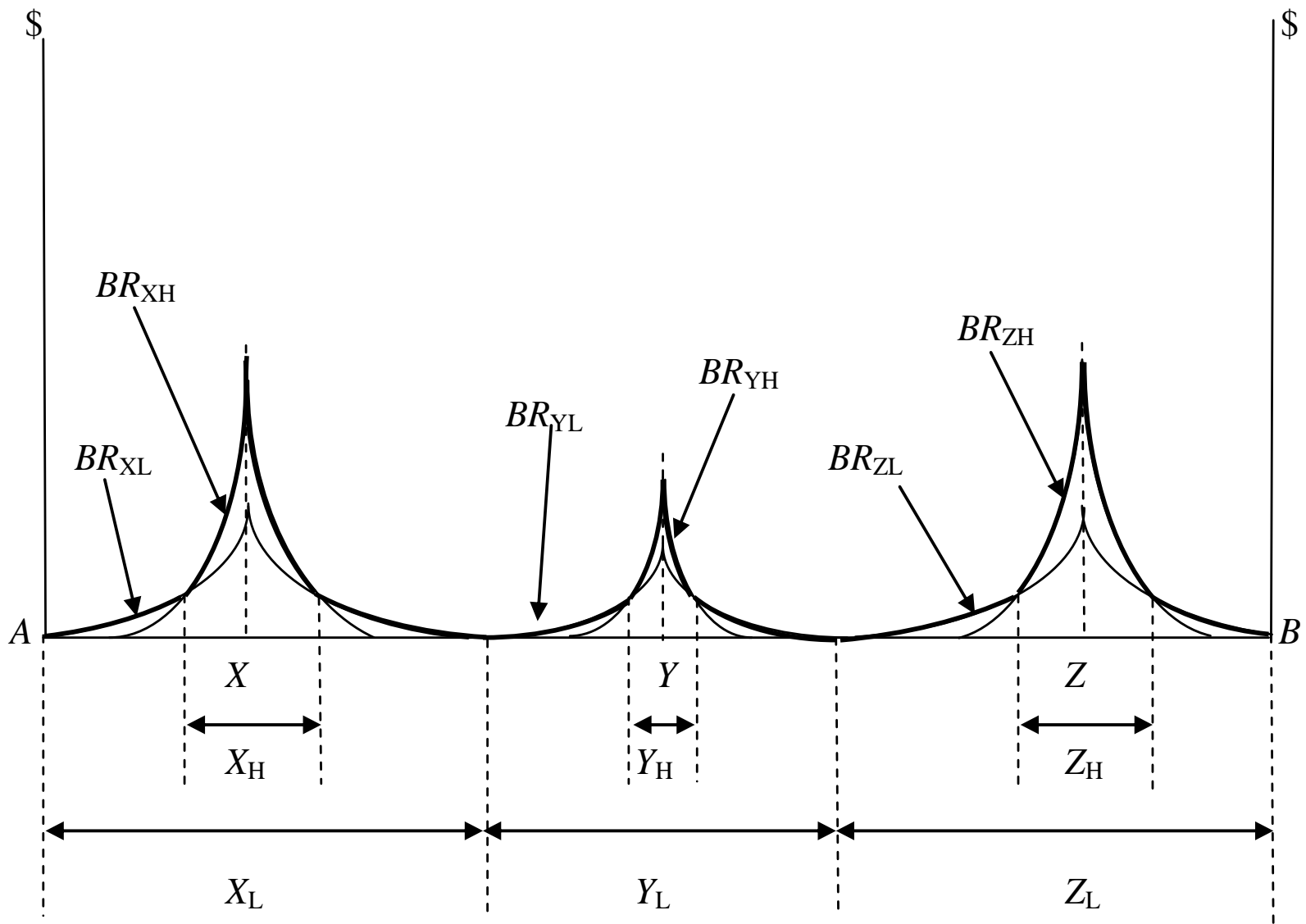


Fig. 1 A Three City One-Dimensional Economic Geography

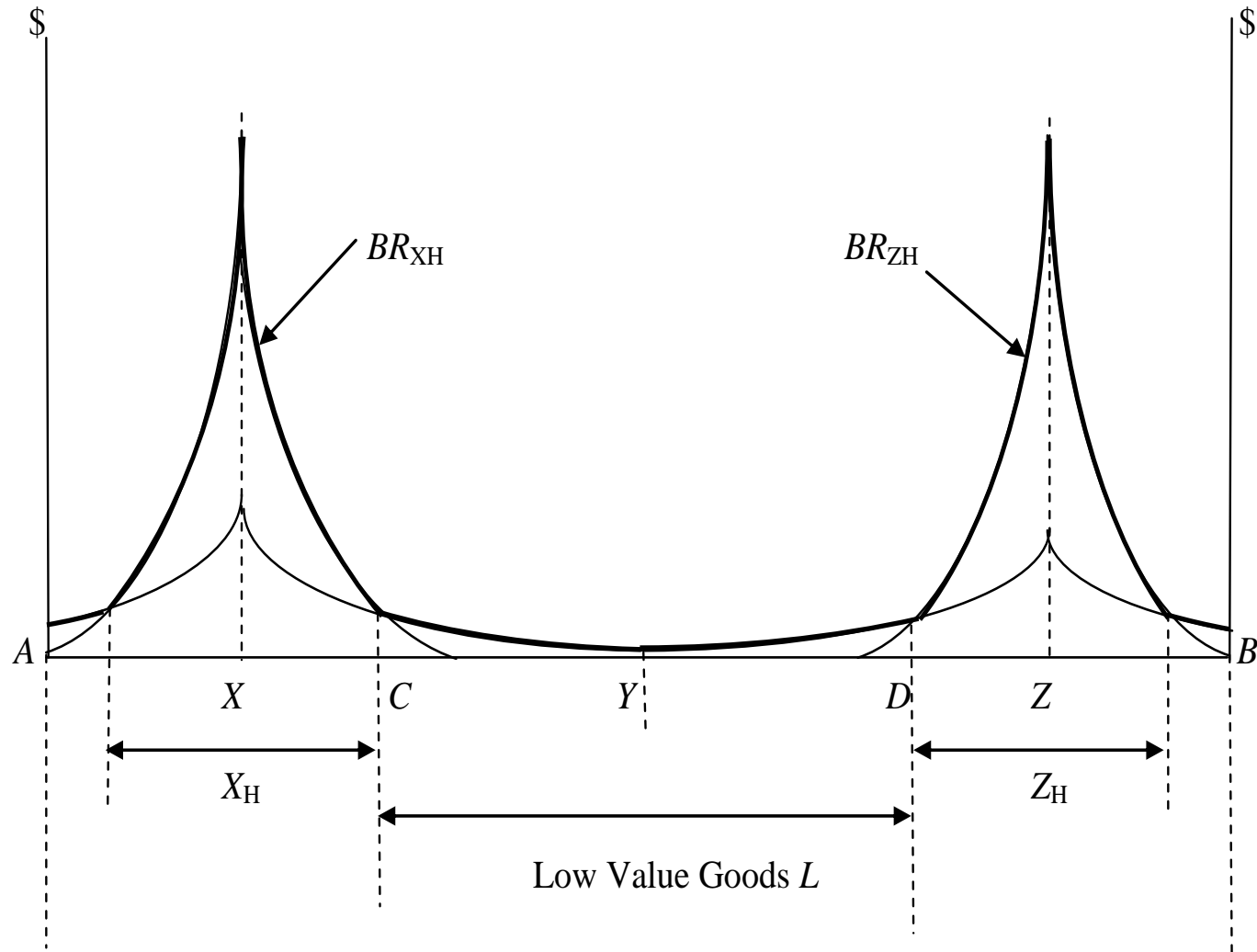
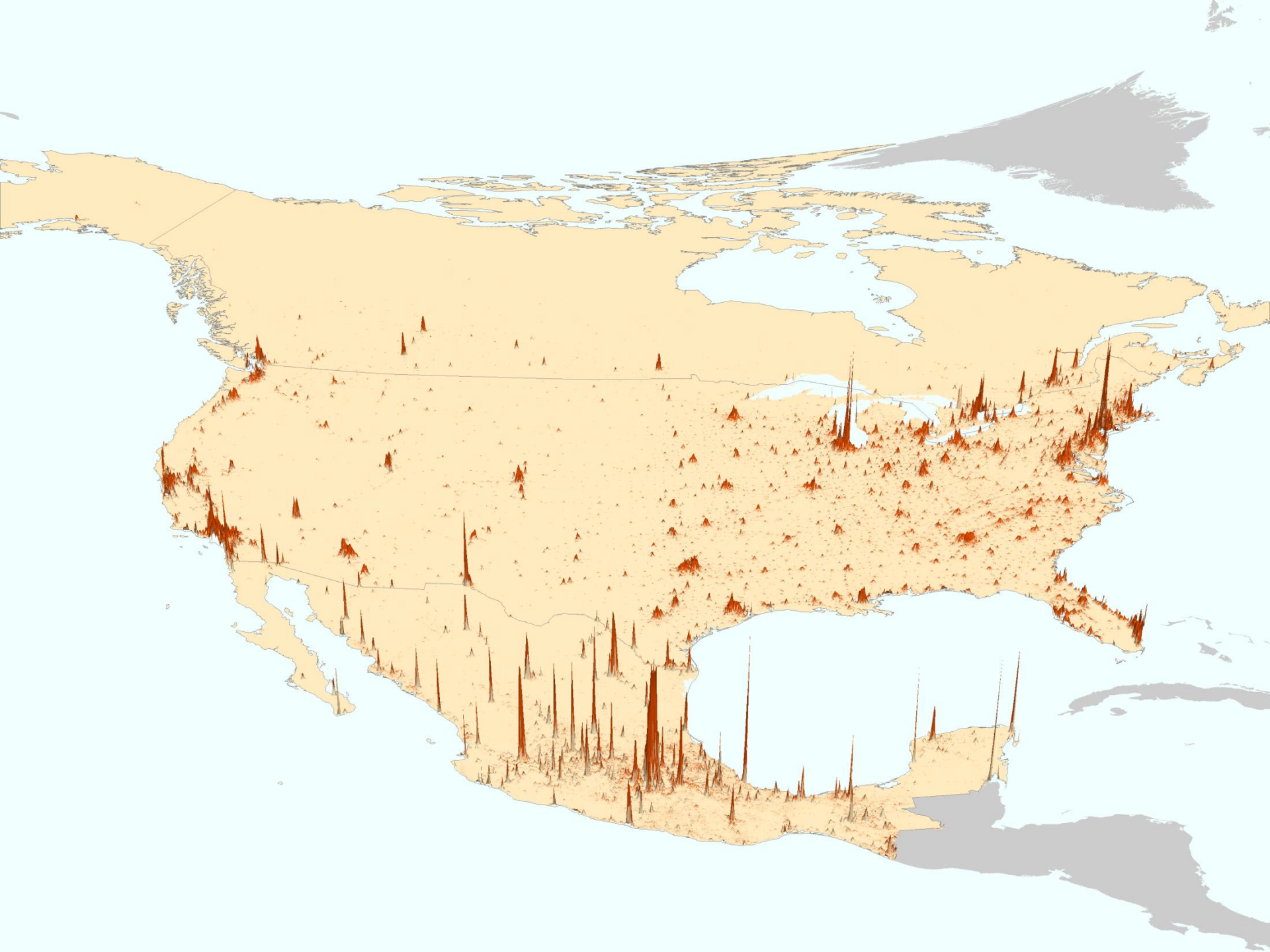
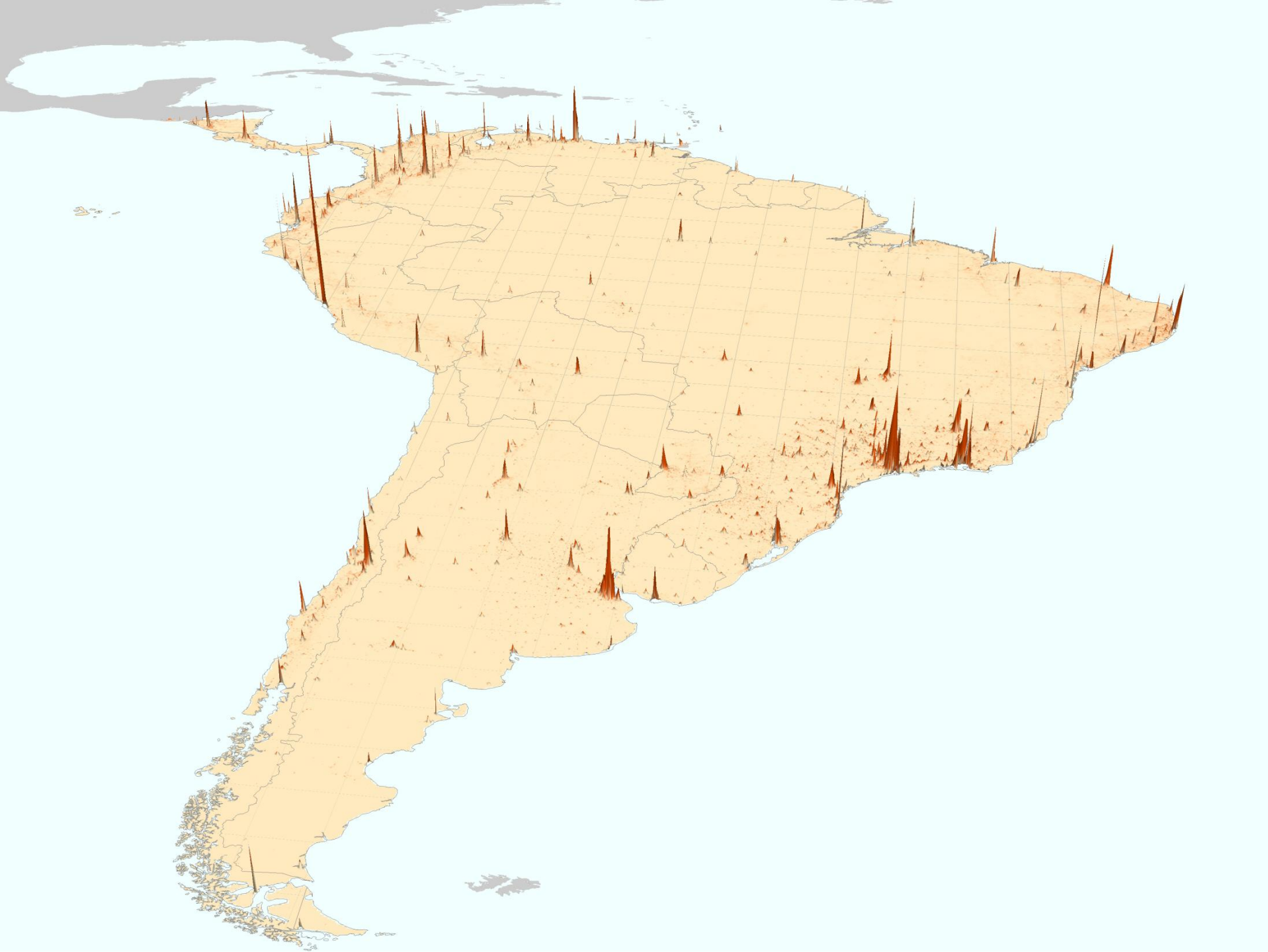
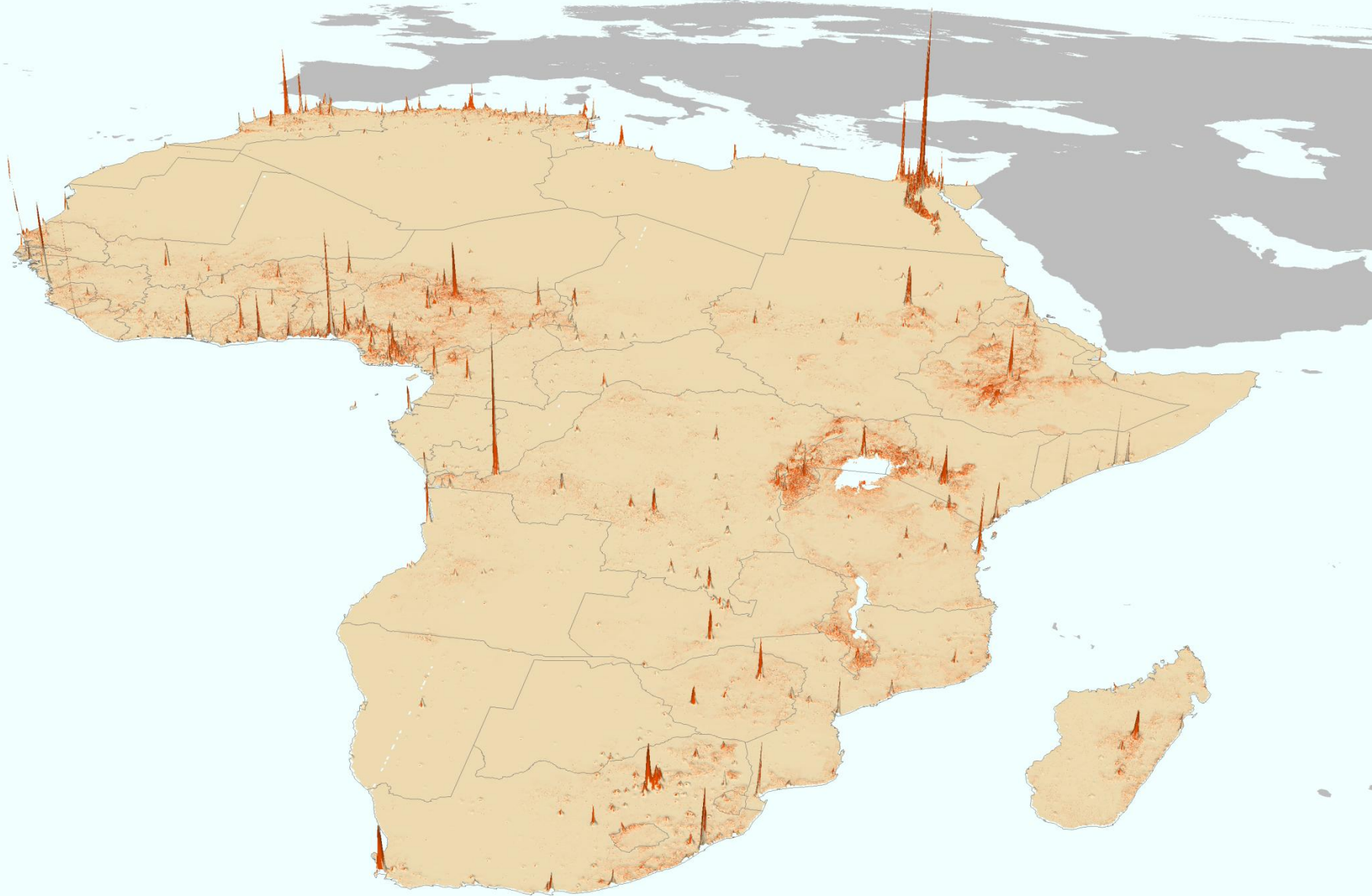
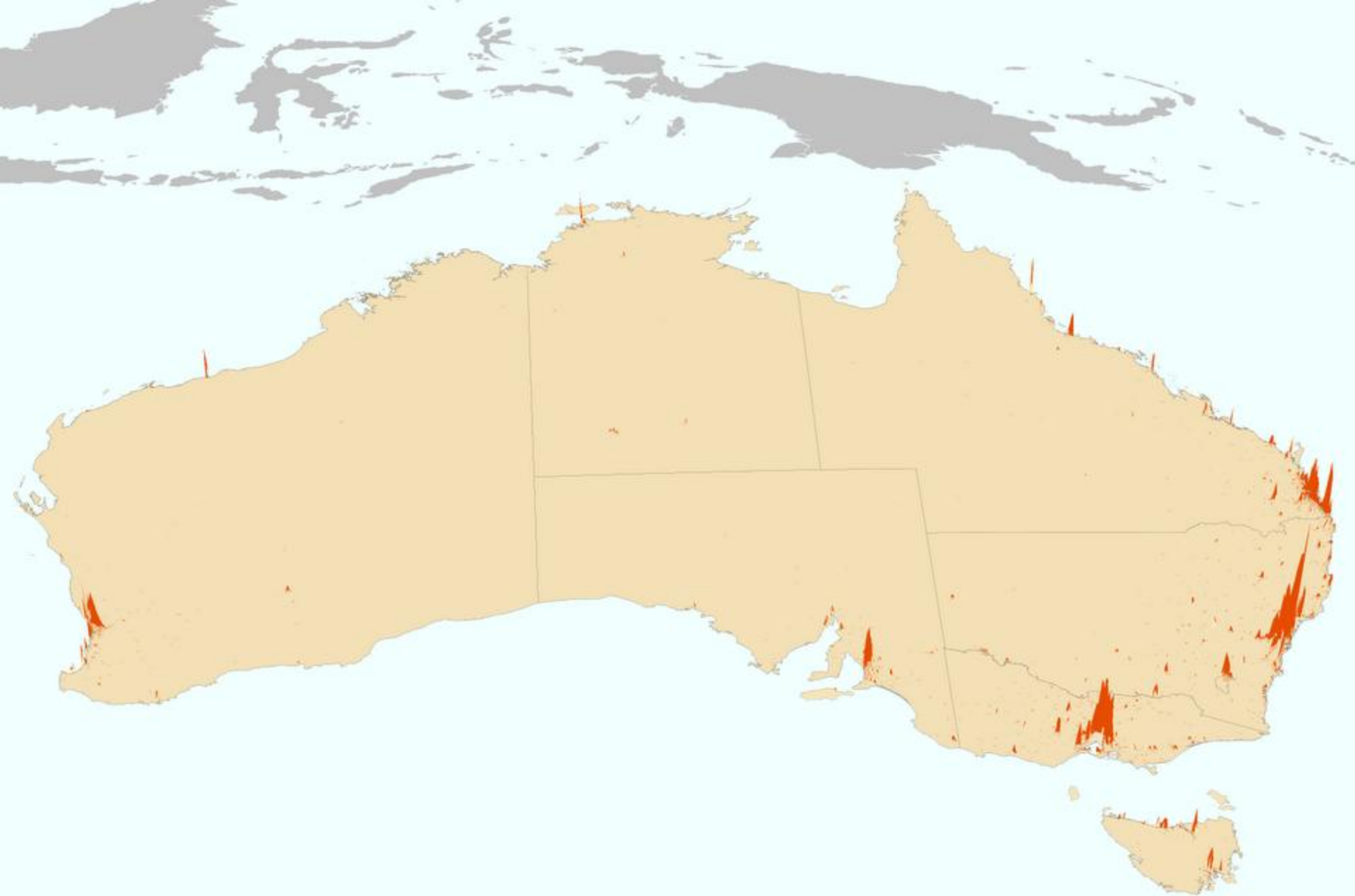


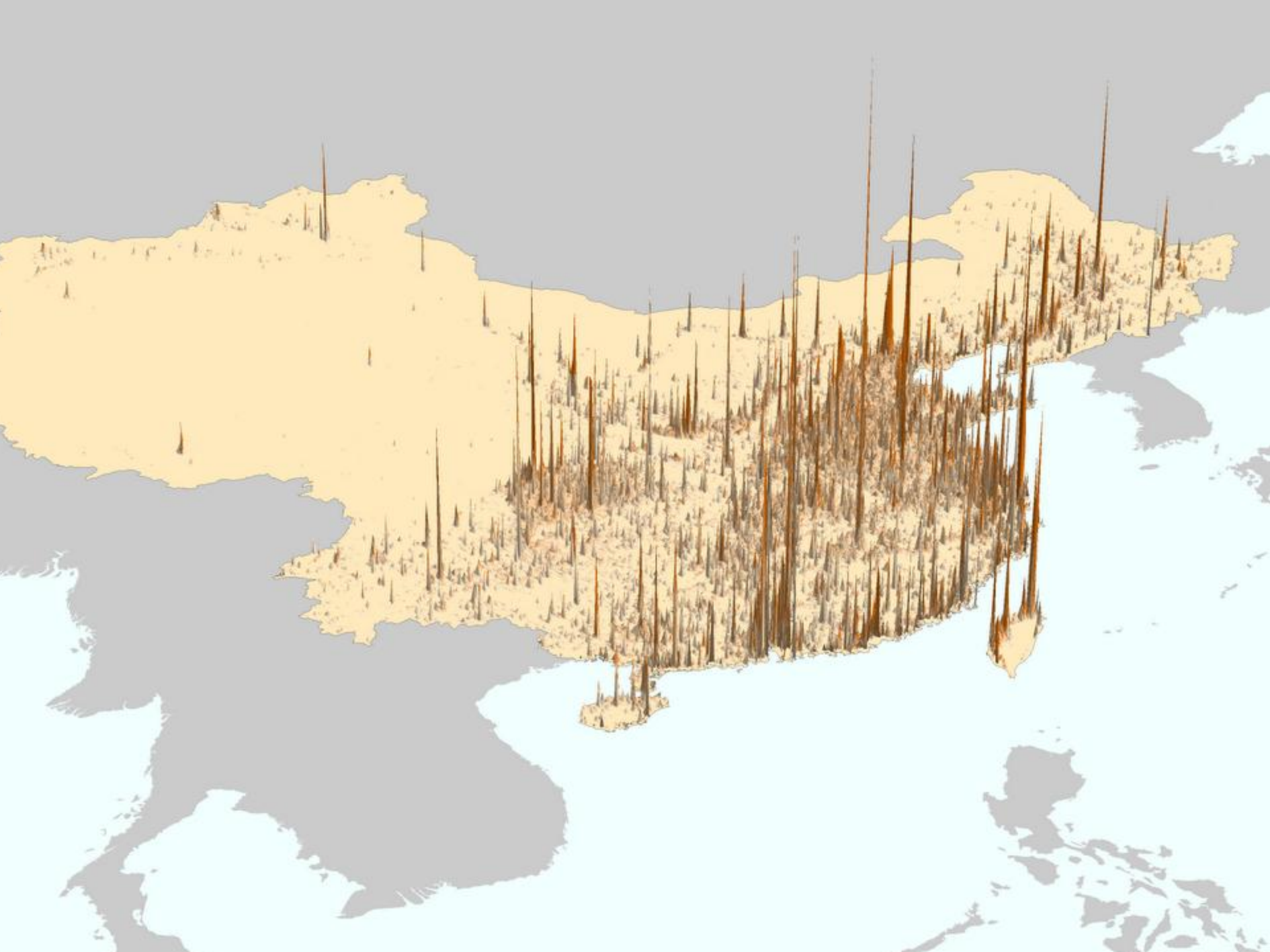
Fig. 2 Globalization, Localization and Economic Geography

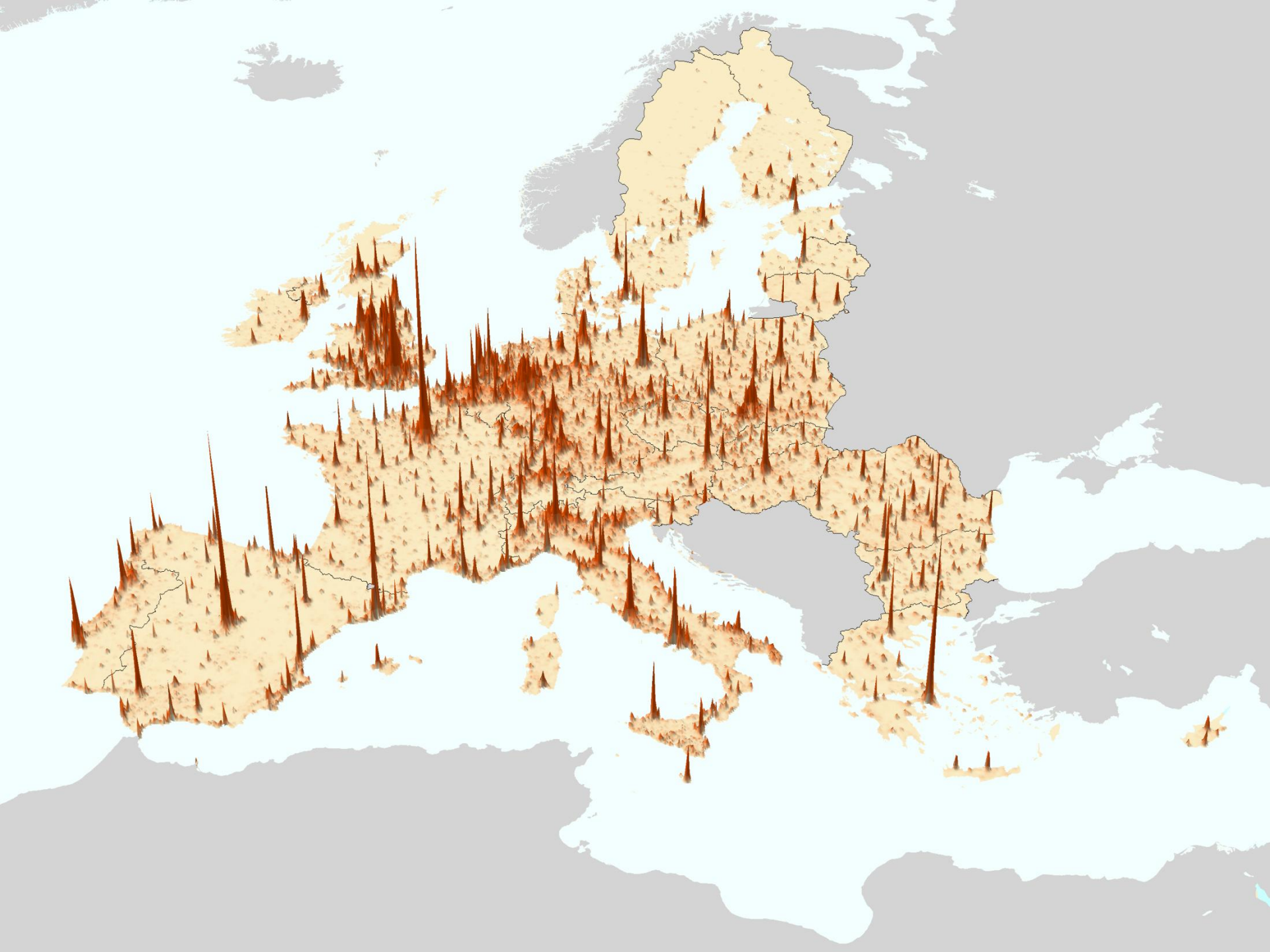








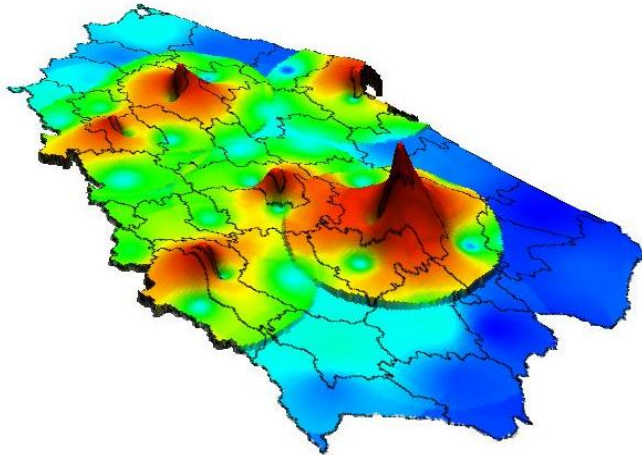




“Concentration = growth”

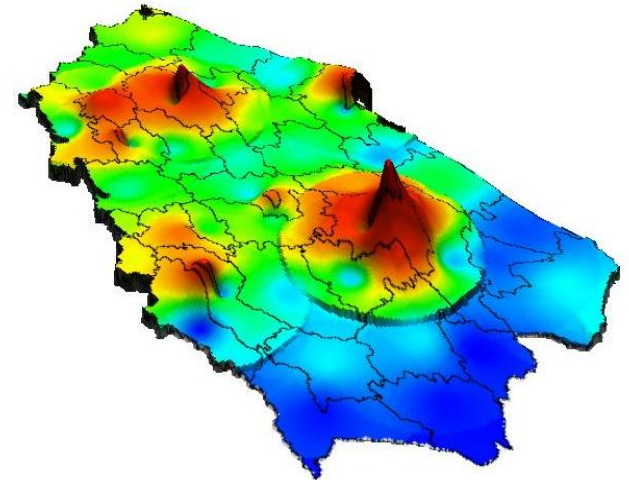
...in practice, many other paths to growth emerge...

Poland



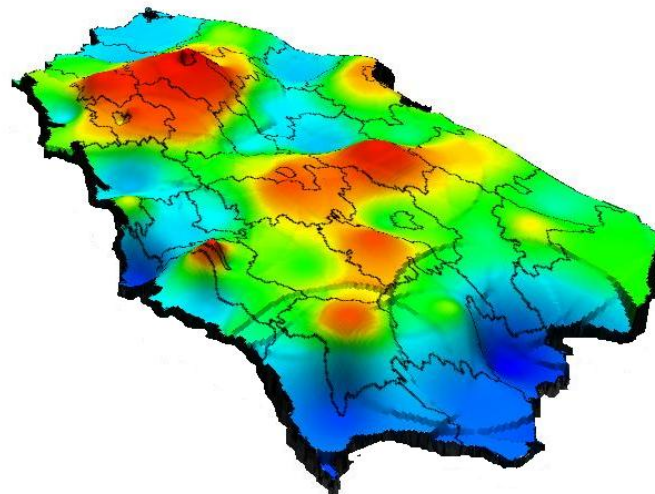
Economic Density

GDP per square kilometre



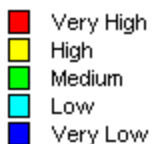
Labour Productivity

GDP per worker

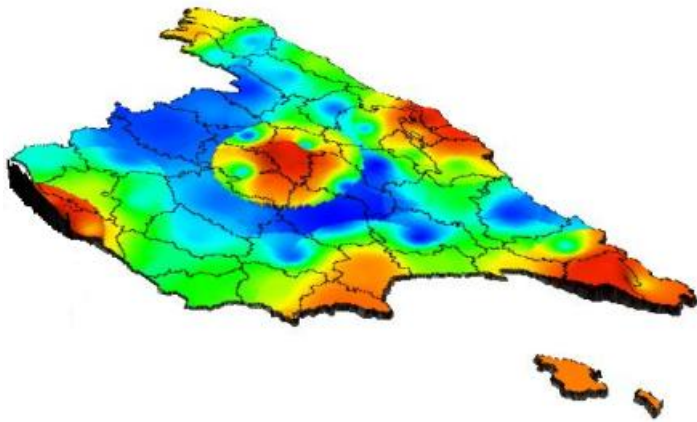


Economic Growth

Real GDP per capita growth

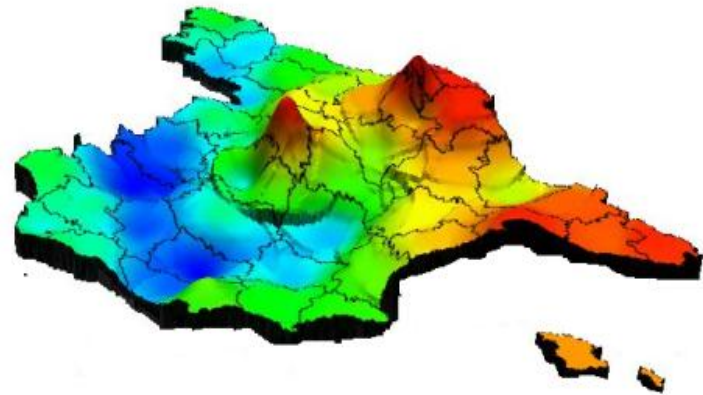


Spain



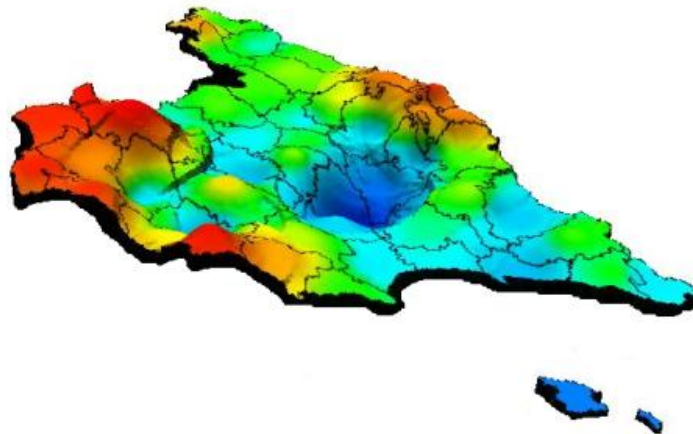
Economic Density

GDP per square kilometre



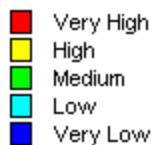
Labour Productivity

GDP per worker

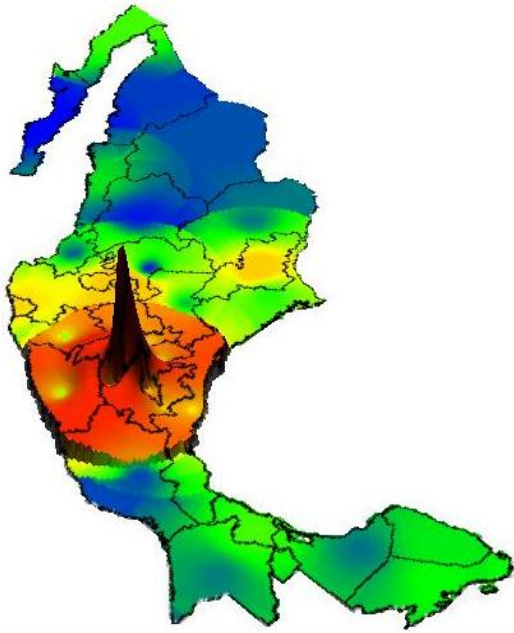


Economic Growth

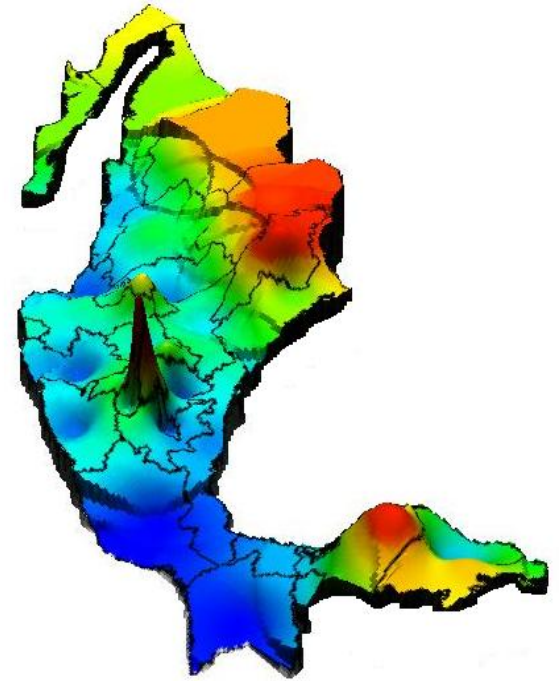
Real GDP per capita growth



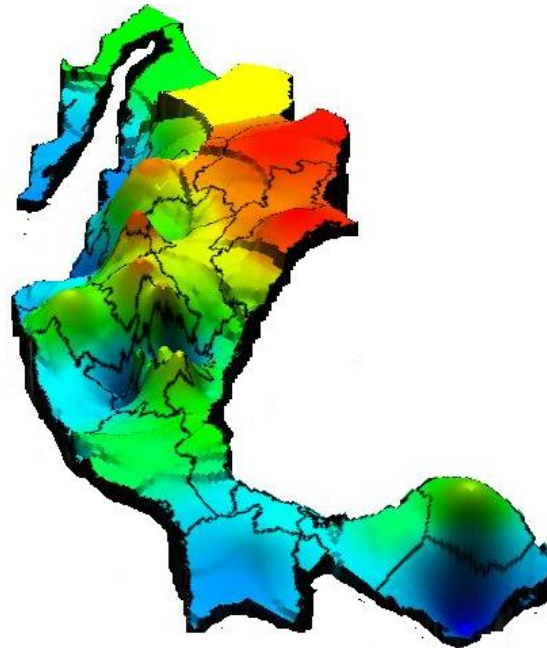
Mexico



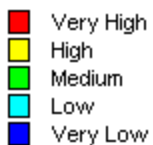
Economic Density
GDP per square kilometre



Labour Productivity
GDP per worker



Economic Growth
Real GDP per capita growth

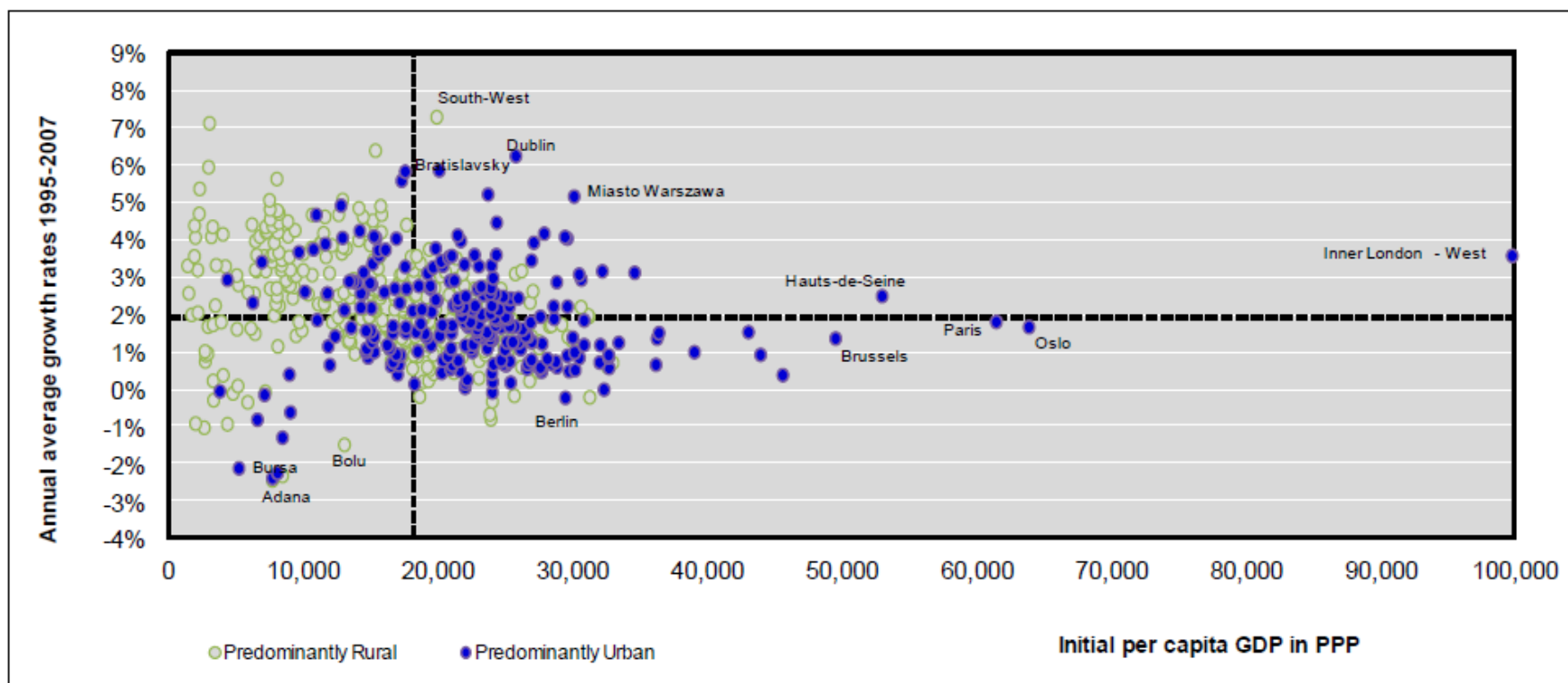


3. Pre-Crisis: OECD Regional Context

- OECD patterns of growth (urban intermediate rural etc) were very heterogeneous across countries
- Similar probabilities of above average growth – but higher dispersion higher for rural regions
- Benefits of urban concentration and agglomeration are neither linear nor infinite-limited in many OECD countries
- OECD (2009a,b, 2011, 2012) evidence that endogenous factors were critical for regional growth

No marked convergence or divergence profiles by type of region

Predominantly urban and rural regions, 1995-2007



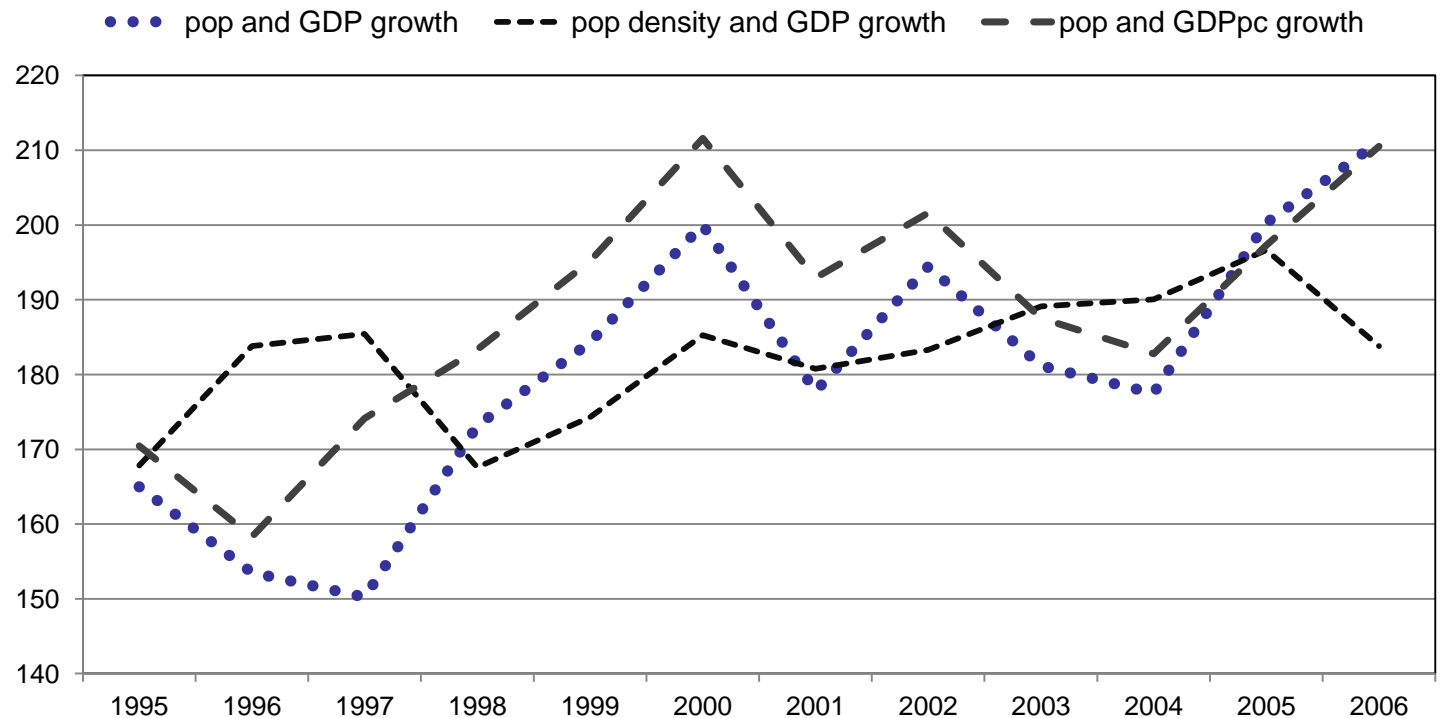
3. Pre-Crisis: OECD Regional Context

- Post-2000 Productivity *levels* were dominated by global cities
- ‘Major Hubs’ accounted for less than one-third of economic growth – and their share was *falling*
- Productivity *growth* was dominated by intermediate areas and many rural areas
- Growth role of non-core regions across OECD was increasing
- Distance-related effect in US (Partridge et al. 2011)
- Not particularly distance-related in Europe

The most dynamic OECD regions over 1995-2007..

average rank
(1== highest)

- population
- pop density



3. Pre-Crisis: OECD Regional Context

- Two-thirds of growth was driven by non-core areas → convergence processes
- Regions with less than 75% GDP per capita account for approximately 40-50% of growth
- 45-60% of growth is accounted for by regions with below national average GDP per capita
- Smaller non-core areas were growing faster across the OECD than core and larger regions
- OECD average interregional migration – 0.4% per annum and *falling* for ten years prior to the 2008 Global Financial Crisis
- Long term falls in the rates of entrepreneurship

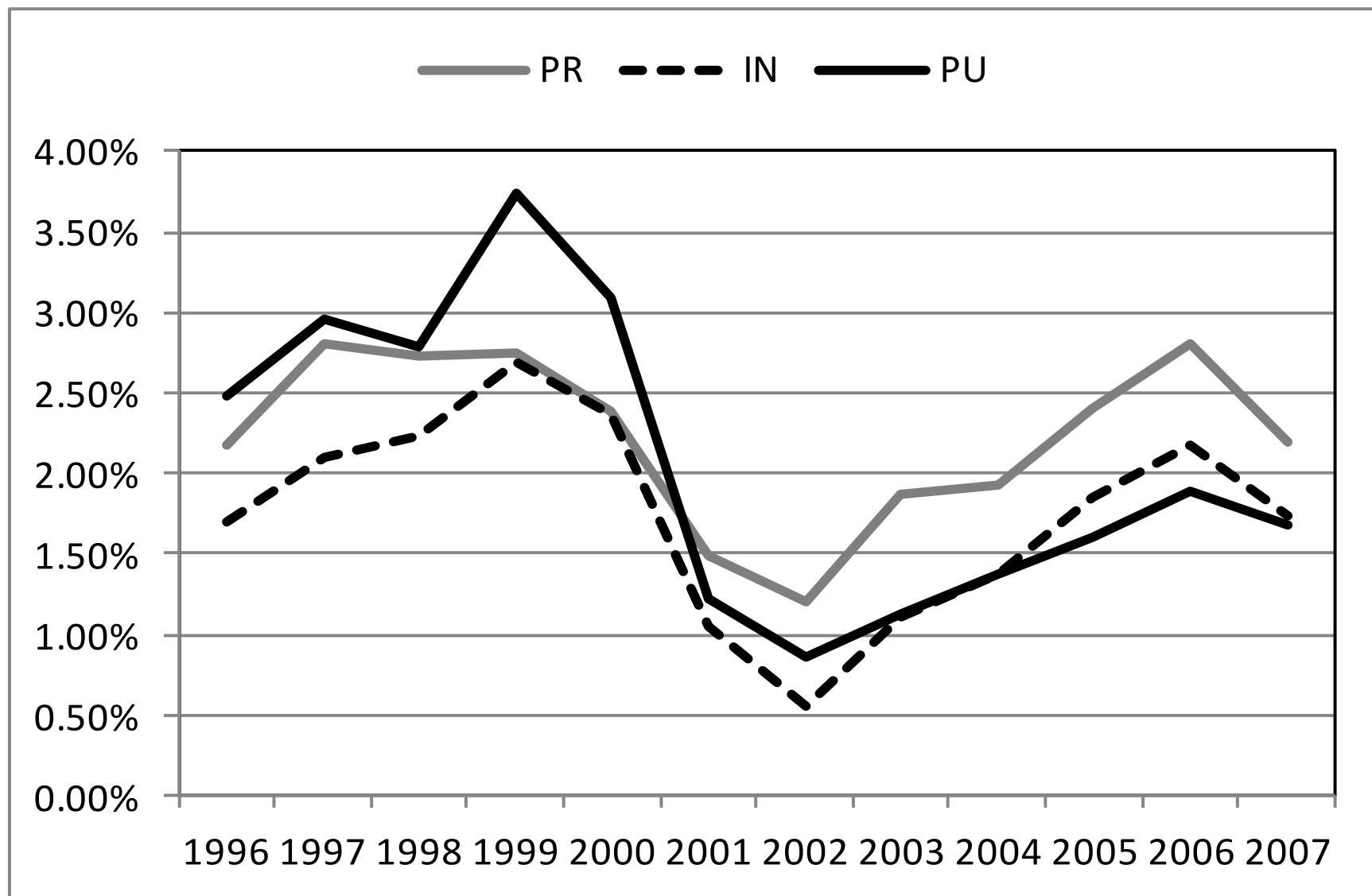
4. Pre-Crisis: The EU Regional Context

- Role of major cities was significant in UK, France, Spain, Poland, Czech Republic
- Polycentric systems in The Netherlands, Northern Italy, Germany
- Urban-urban migration in rich EU countries
- Rural-urban migration in Mediterranean and CEECs
- Regional convergence
- Overall urban share of EU GDP accounted for by metropolitan regions of >250,000 hardly changed 2000-2006

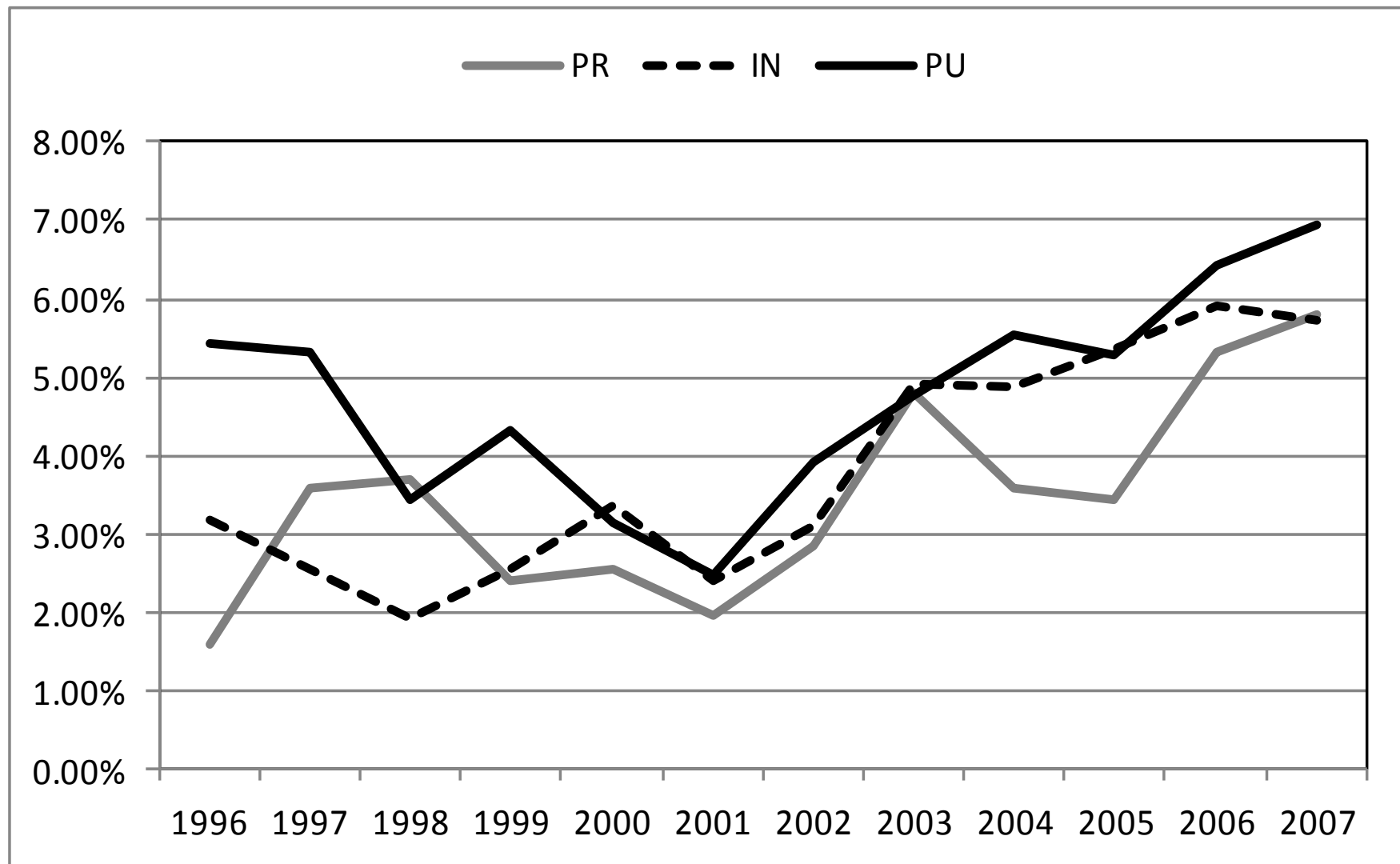
4. Pre-Crisis: The EU Regional Context

- 1990-2002 primacy of urban areas across EU: urban > intermediate > rural
- Post 2002 shift in favour of non-core locations in many EU countries in terms of population growth and productivity growth
- EU-15: intermediate areas and rural areas growing faster than urban areas
- EU-17 urban growth still dominates
- Different patterns in different countries – no simple story
- Dutch reversal Broersma and van Dijk (2008)
JEG

EU-15 2 yr MA



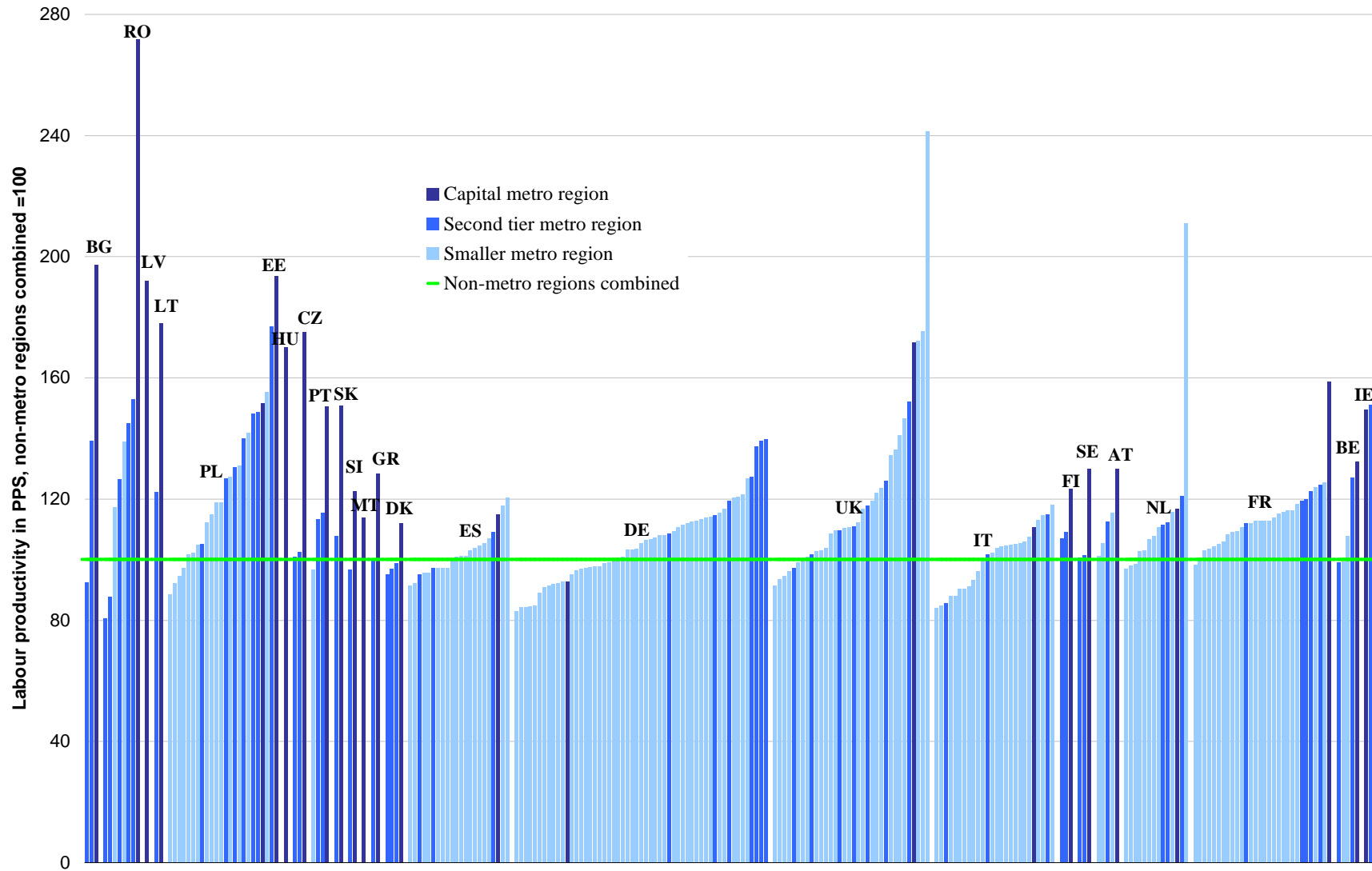
CEECs 2 yr MA



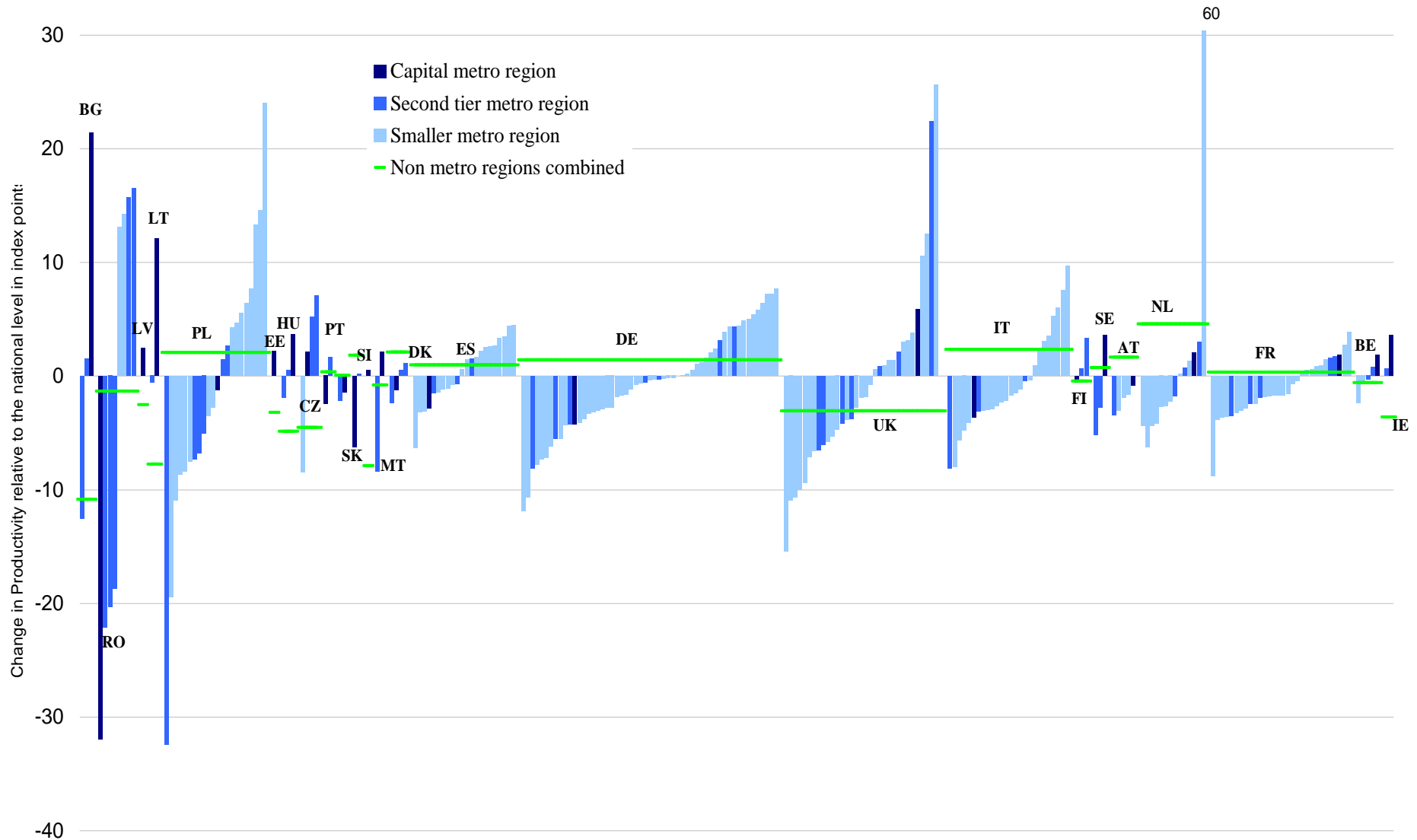
5. Pre-Crisis: The EU Urban Context

- 2000-2008 UK, France, Netherlands, Spain – population of metro regions grows at a lower rate than national population
- GDP share of primarily urban areas in EU15 remained almost constant over the decade.
- Many small and medium sized cities displayed high productivity levels and growth
- Complex polycentric EU-wide network structure *connectivity* appears to be more important than urban scale, national scale, specialisation or diversity (Bel and Fageda 2008; Ni and Kresl 2010; Taylor 2012)

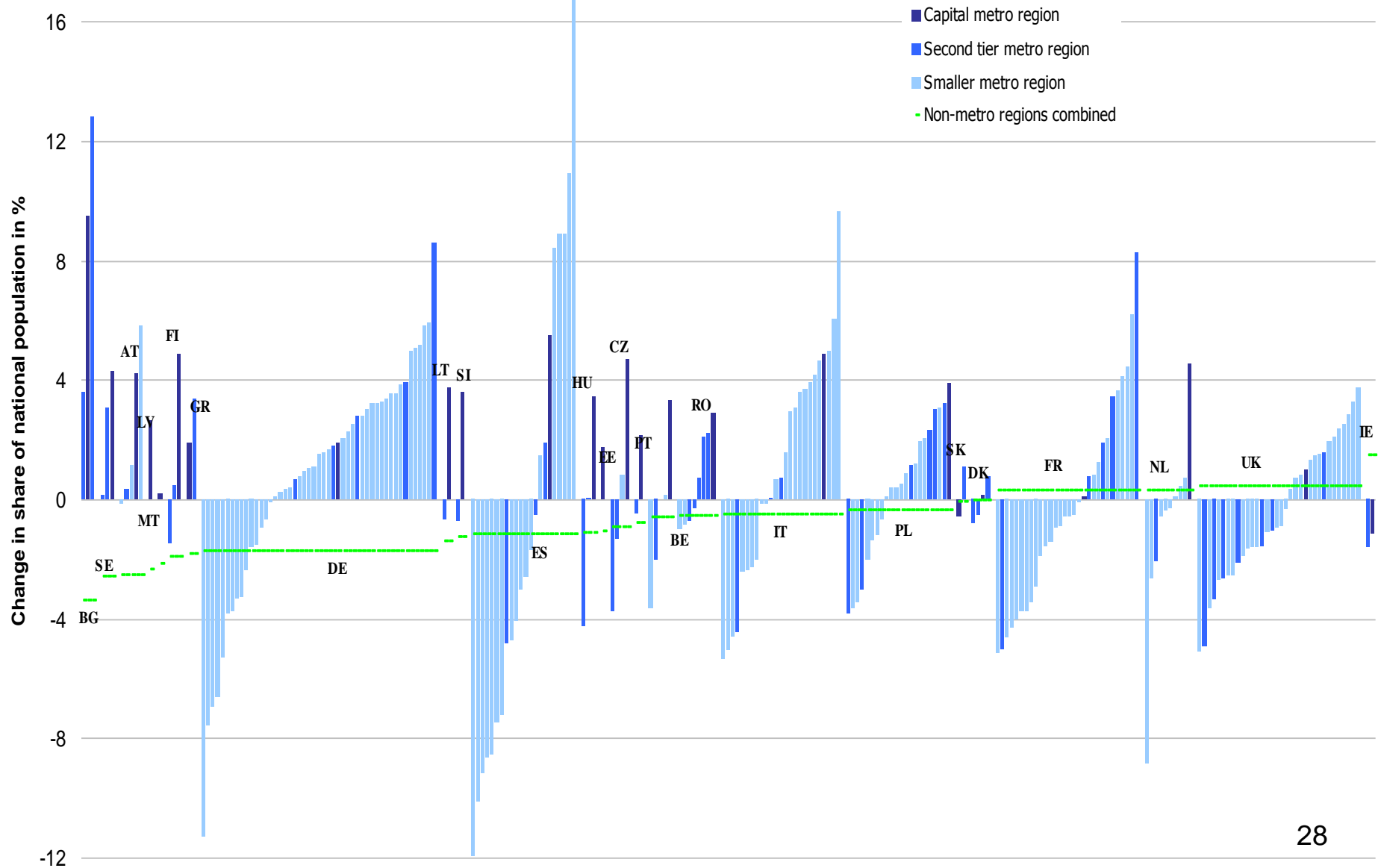
Labour productivity in PPS in metro regions compared to the rest of their country, 2008

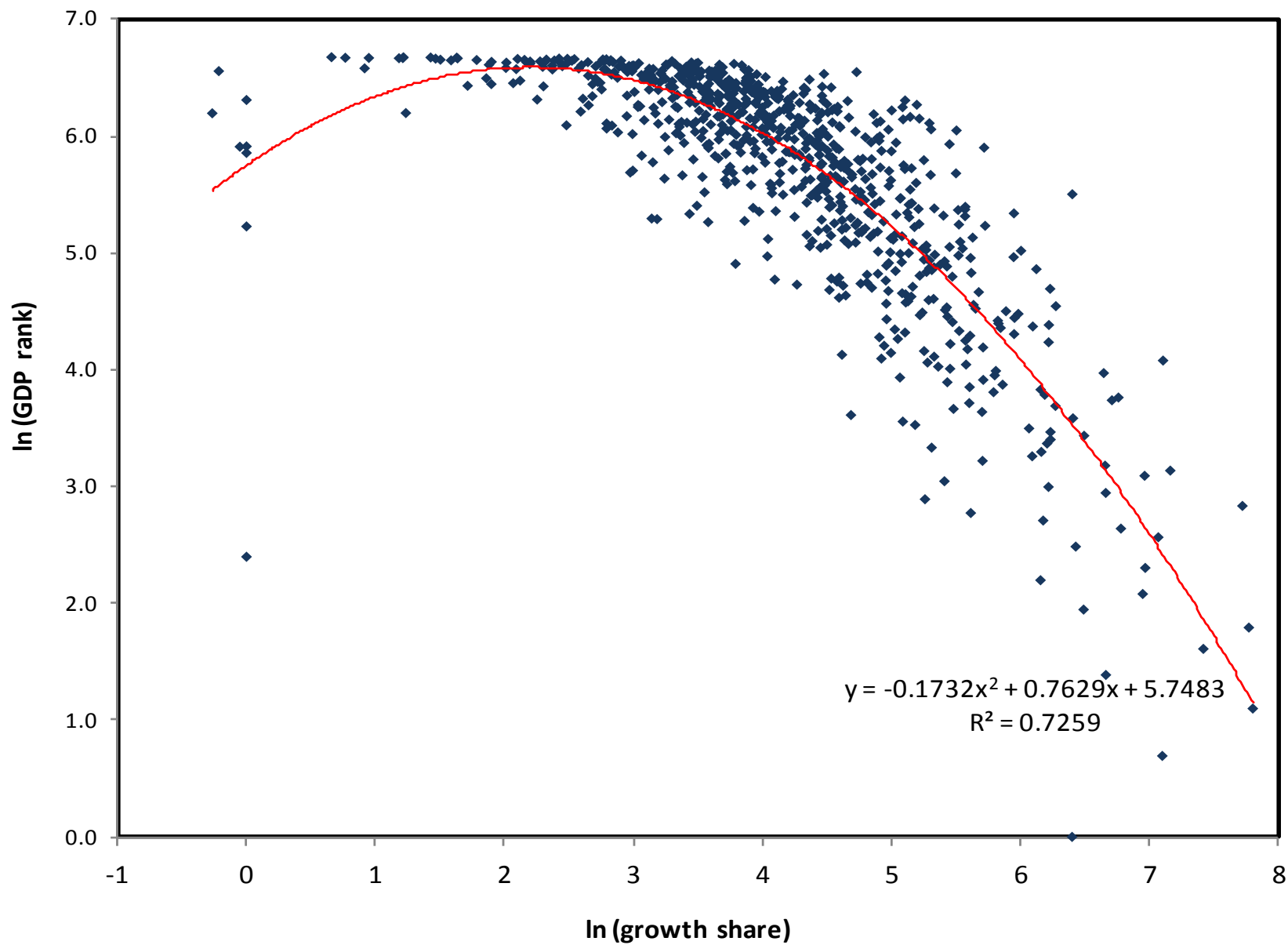


Change in labour productivity in pps, 2000-2008



Population change in metro regions, 2000-2008

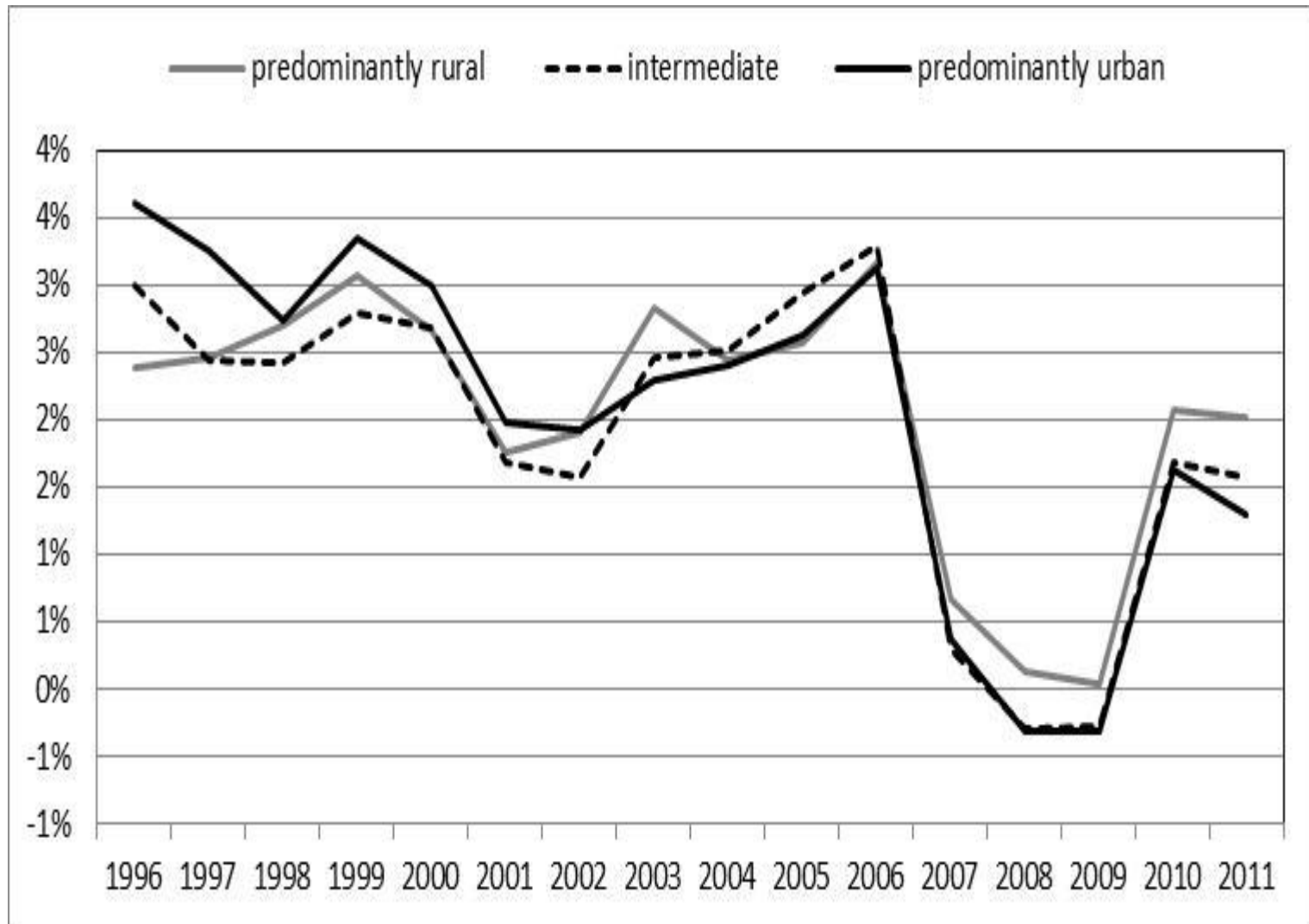




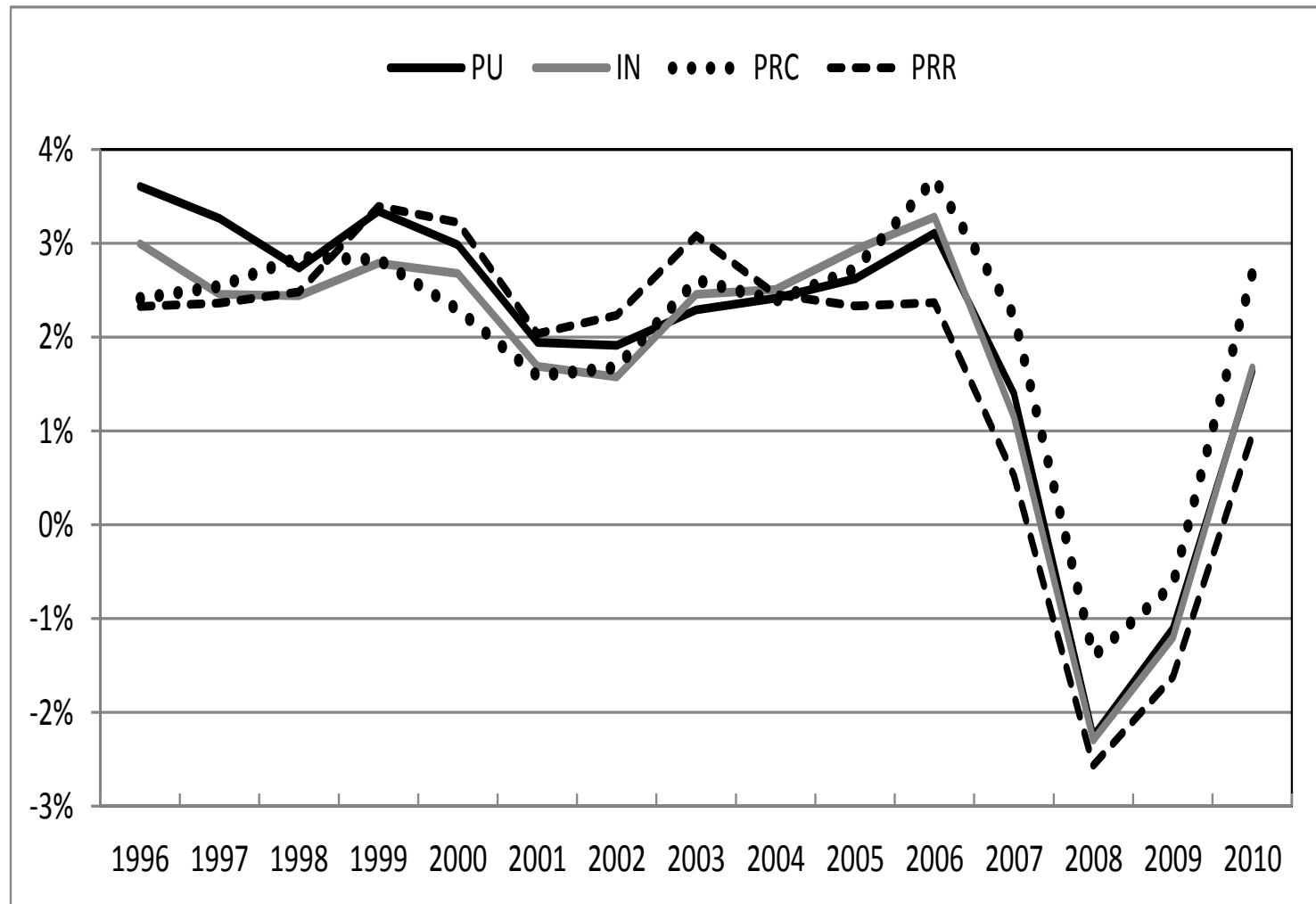
6. Post-Crisis: The EU Regional and Urban Context

- Primarily urban areas and remote rural areas are the weakest regions in Europe in the aftermath of the crisis
- Rural areas close to the cities and intermediate areas are the most robust types of European regions
- Large cities are vulnerable
- Different story to North America

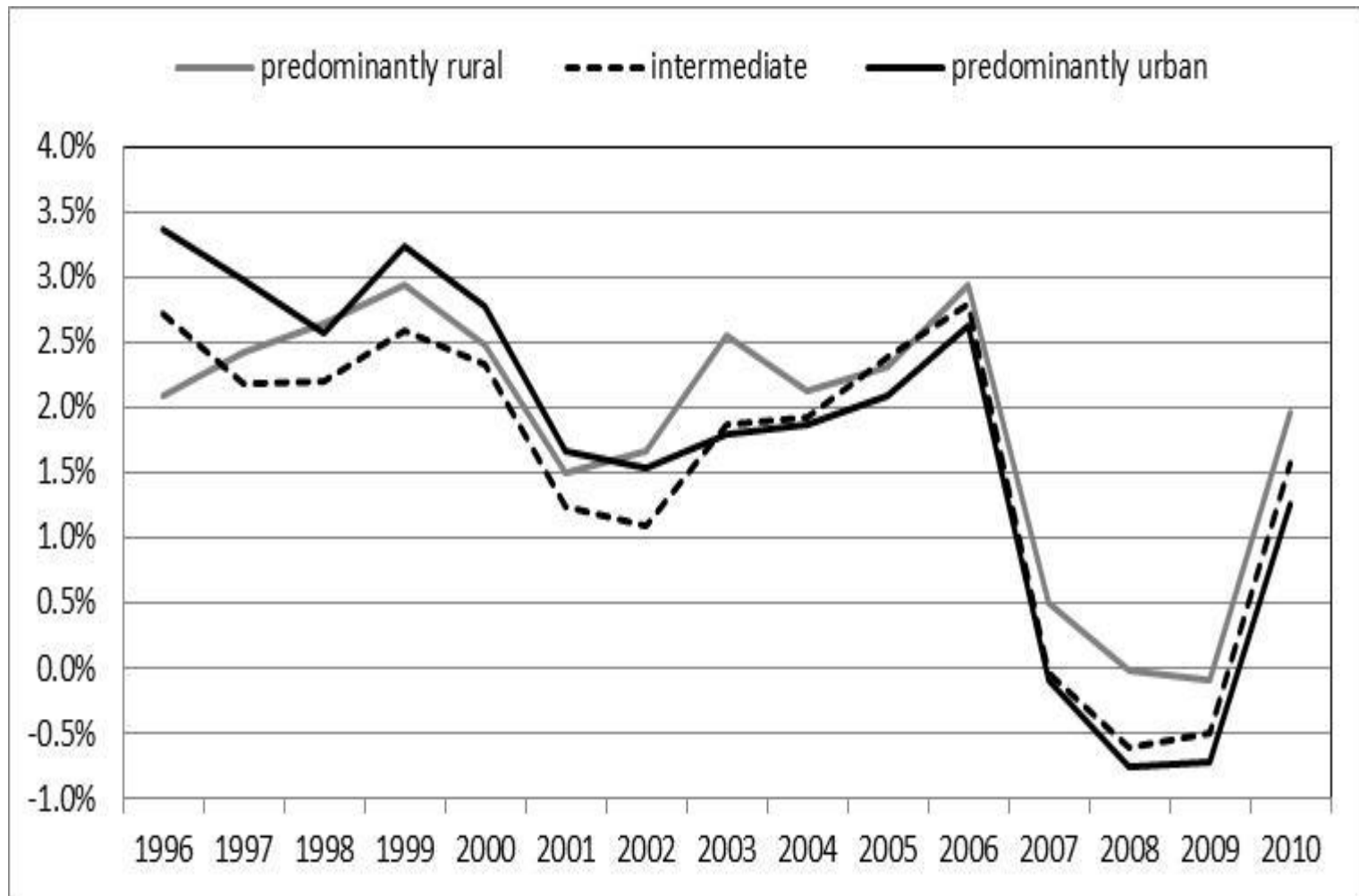
OECD Regional Typology of European Regions: Two Year Moving Average Growth Rates in GDP among TL3 regions, 1995-2011



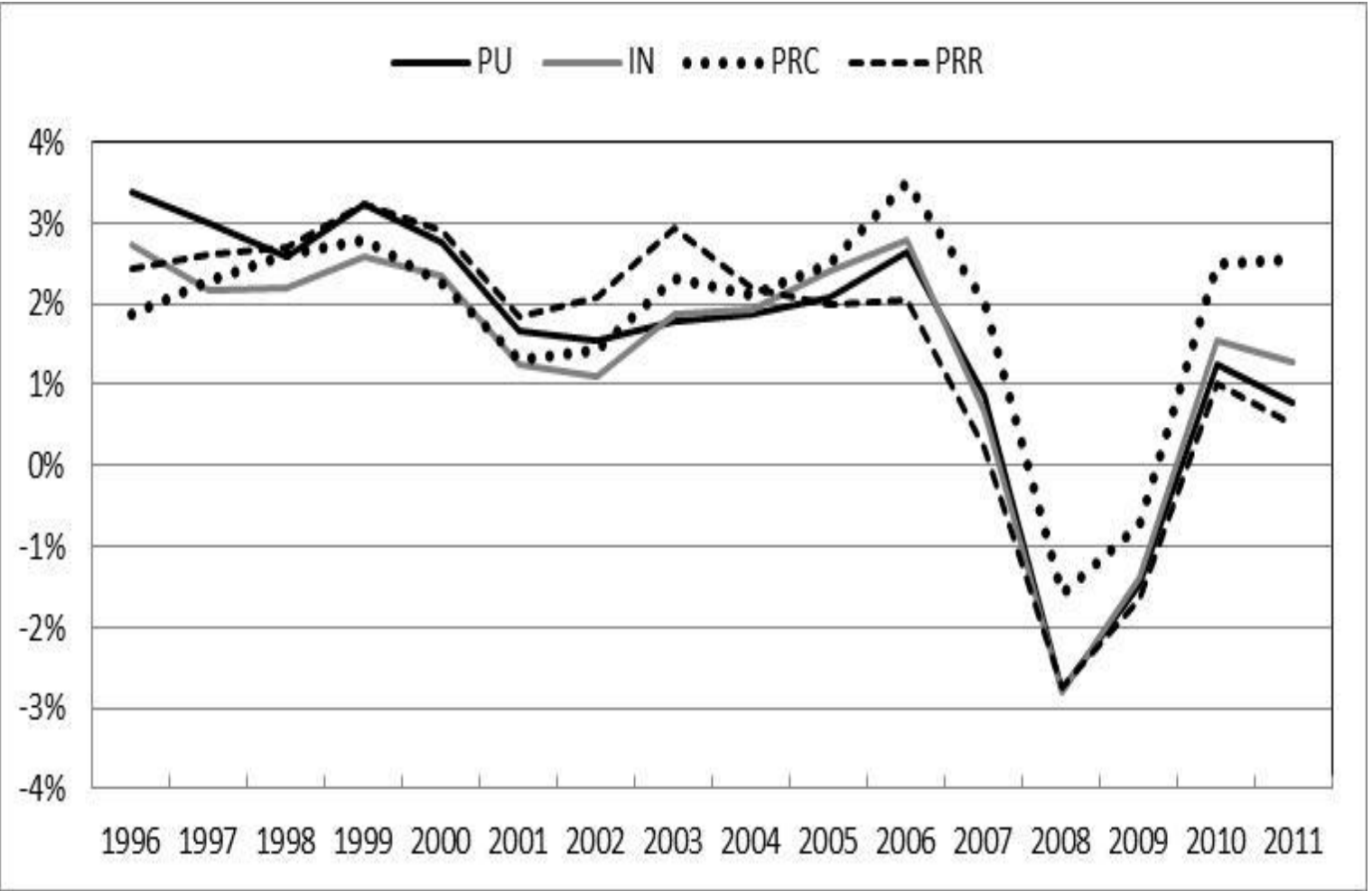
OECD Extended Regional Typology of European Regions: Two Year Moving Average Growth Rates in GDP among TL3 regions, 1995-2011



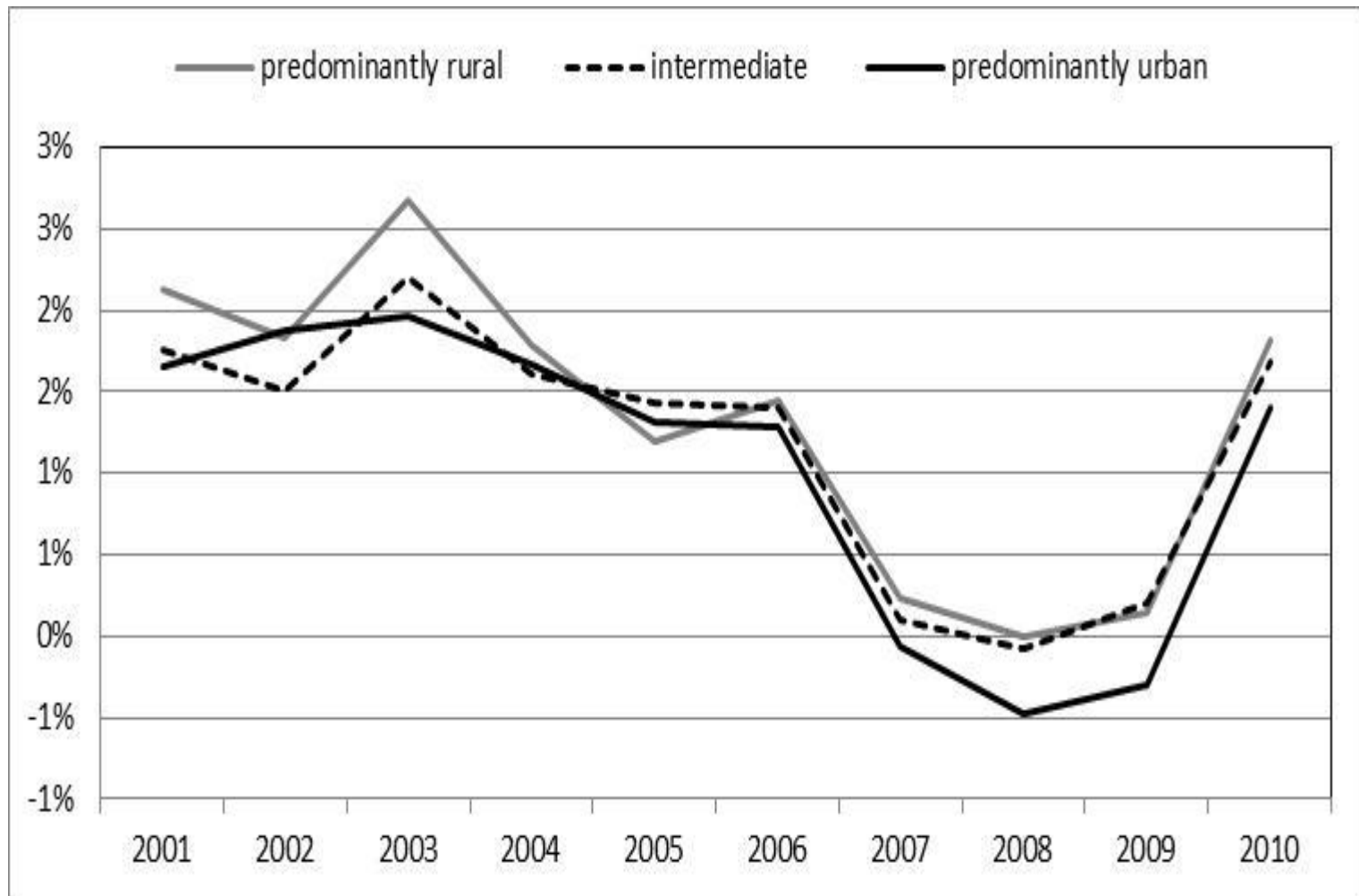
OECD Regional Typology of European Regions: Two Year Moving Average Growth Rates in GDP per Capita Among OECD TL3 regions, 1995-2011



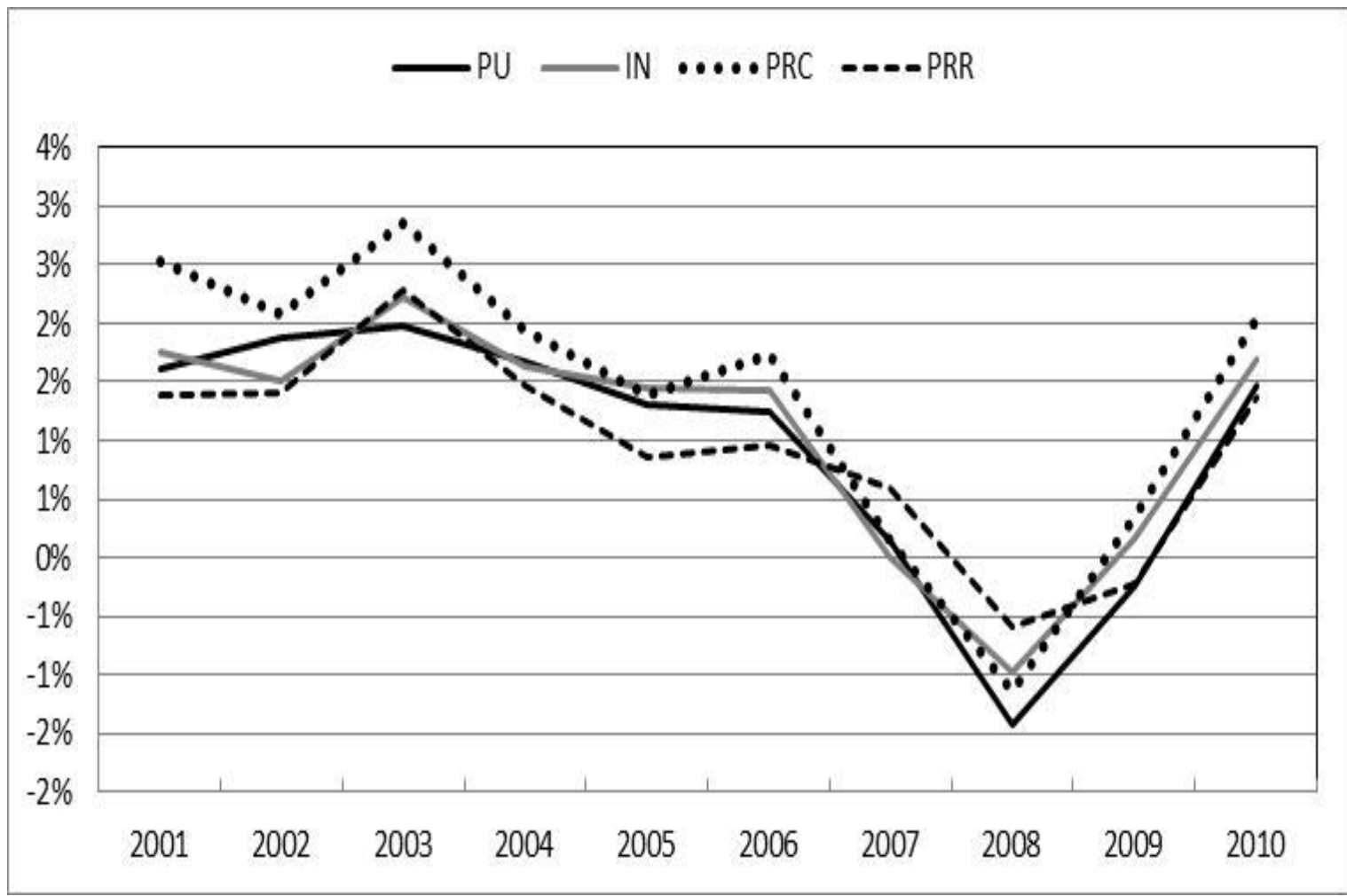
OECD Extended Regional Typology of European Regions: Two Year Moving Average Growth Rates in GDP per Capita among OECD TL3 regions, 1995-2011



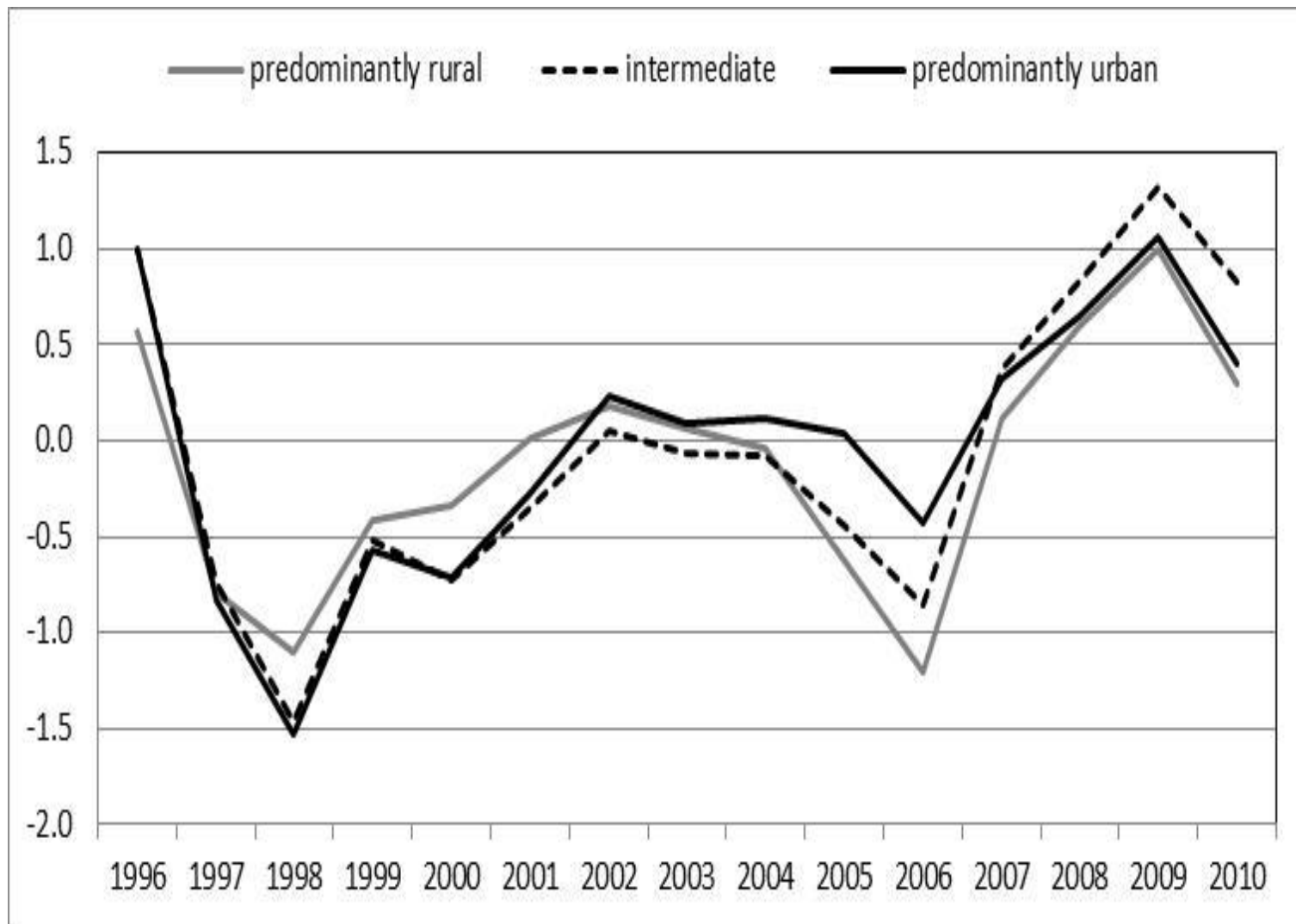
OECD Regional Typology of European Regions: Two Year Moving Average Growth Rates in GVA per Worker Among OECD TL3 regions, 2000-2010



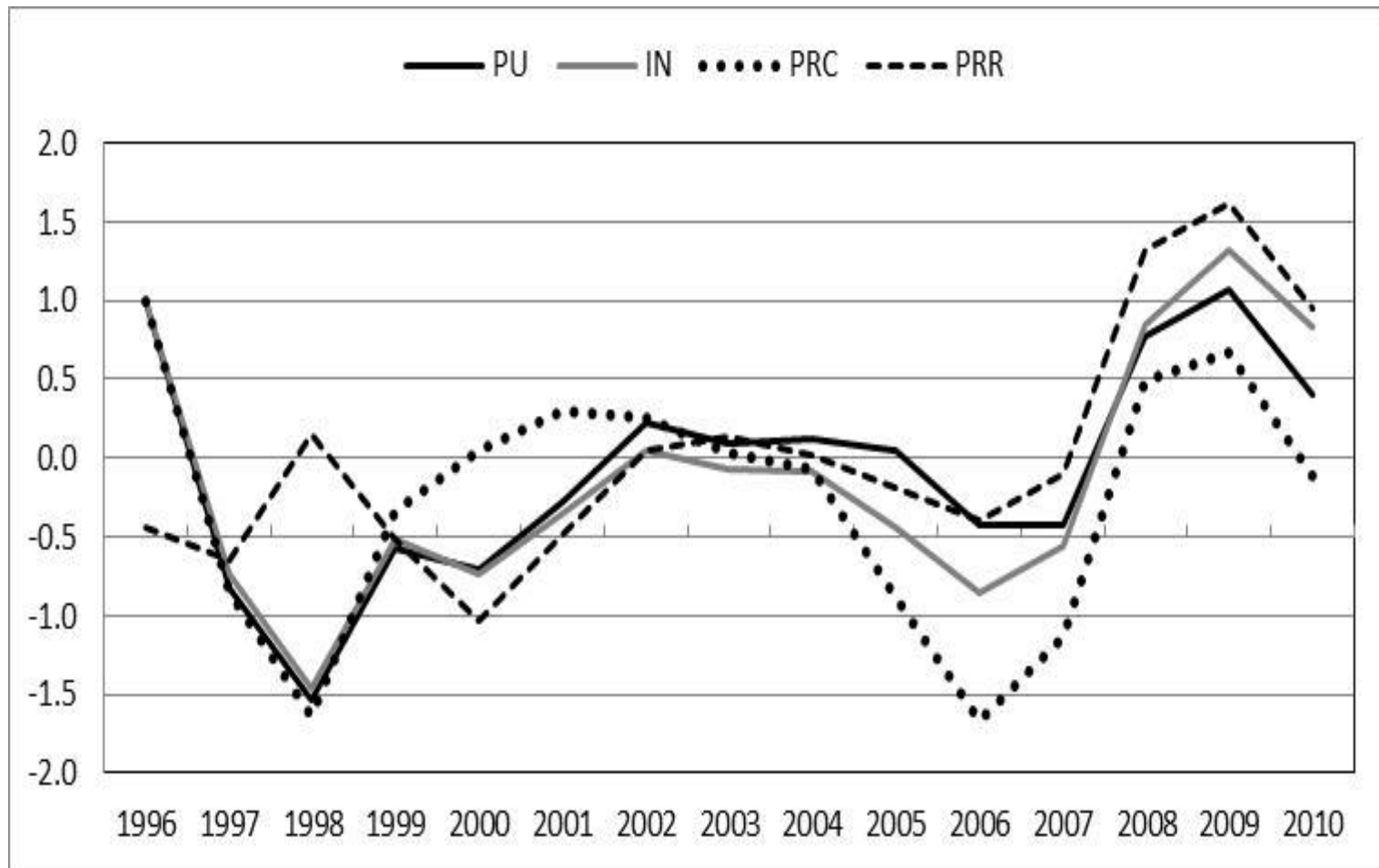
OECD Extended Regional Typology of European Regions: Two Year Moving Average Growth Rates in GVA per Worker Among OECD TL3 regions, 1995-2010



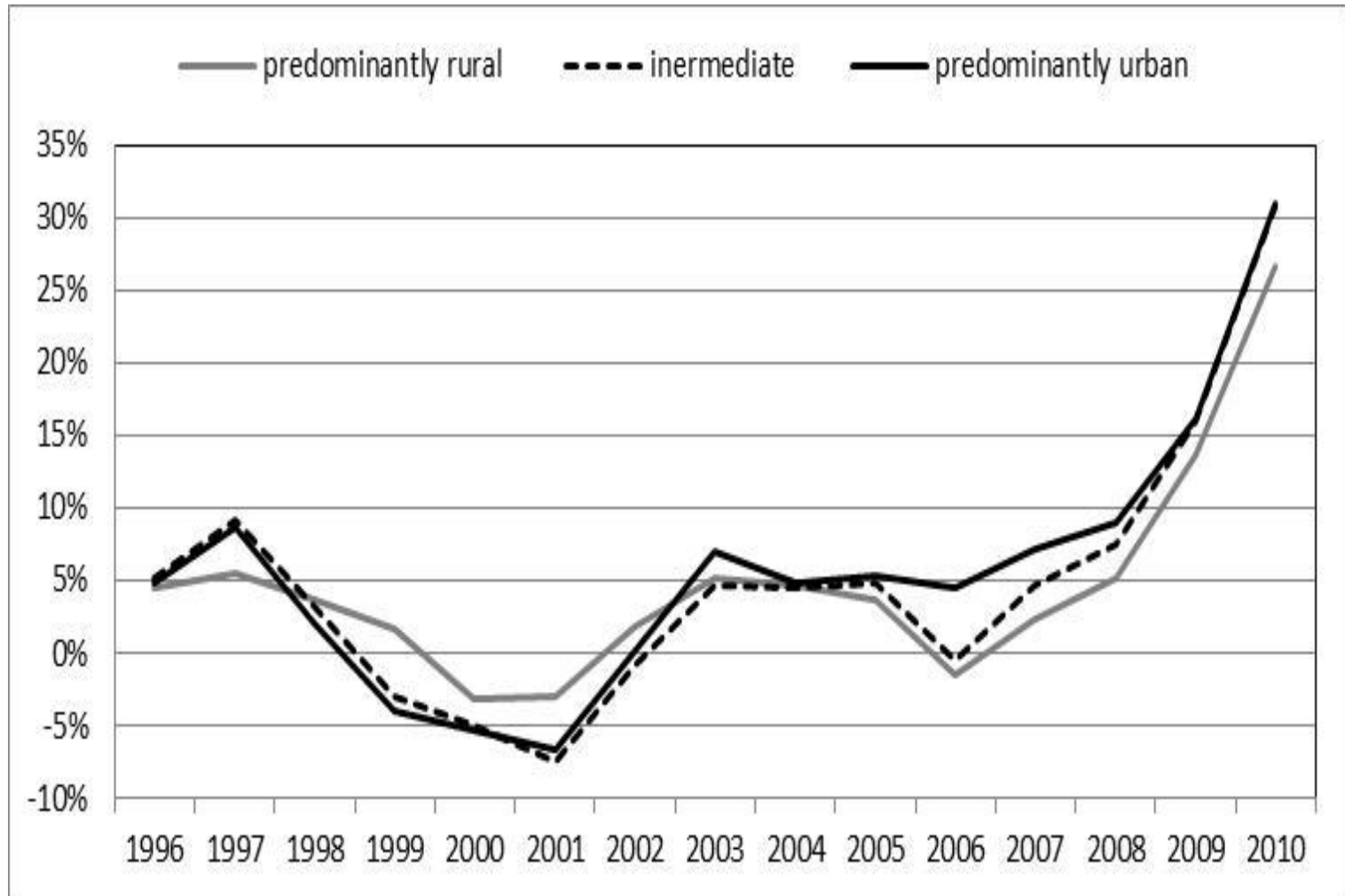
OECD Regional Typology of European Regions: Two Year Moving Average Percentage Point Change in Unemployment Rate Among OECD TL3 regions, 2000-2010



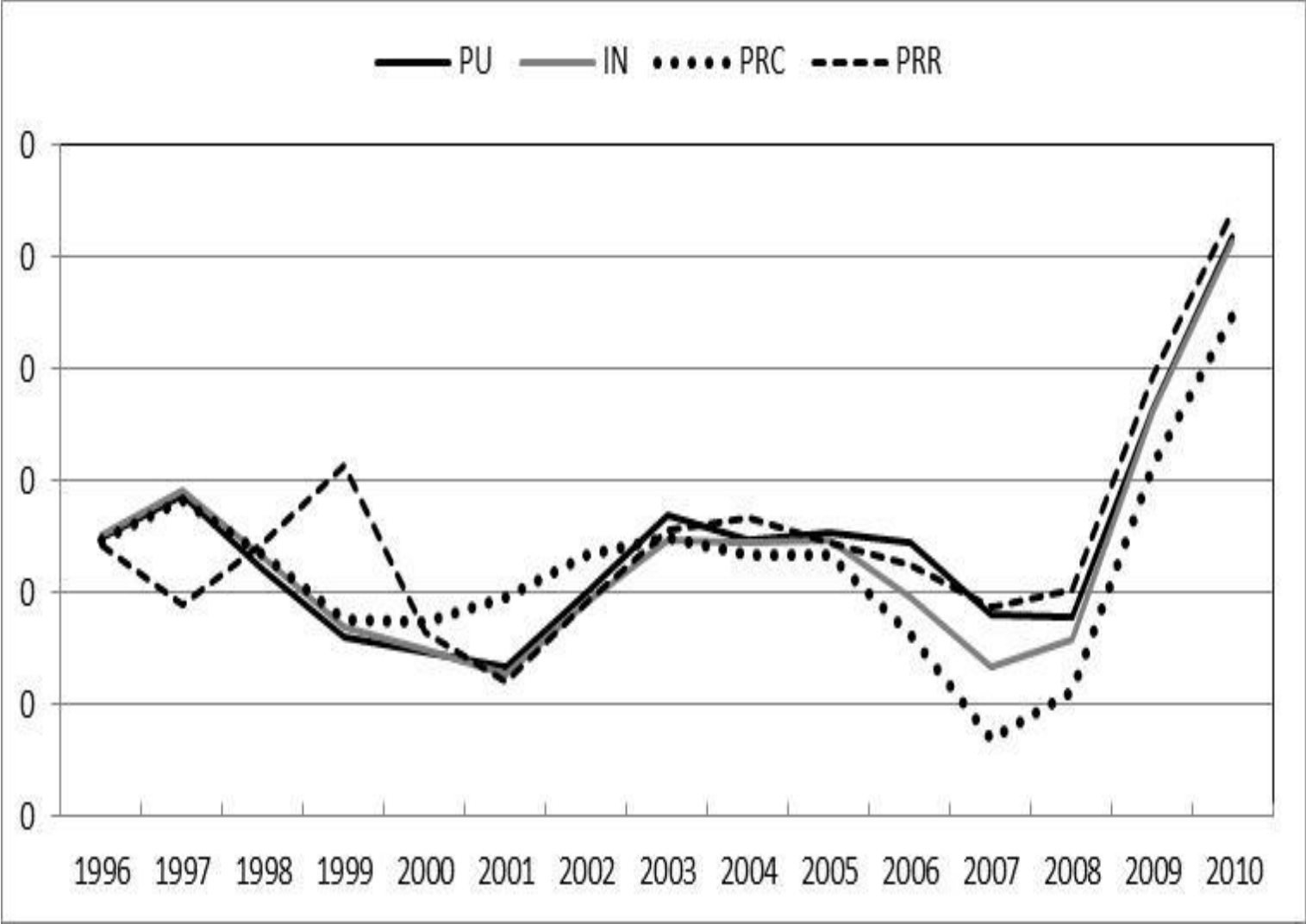
OECD Extended Regional Typology of European Regions: Two Year Moving Average Percentage Point Change in Unemployment Rate Among OECD TL3 regions, 2000-2010



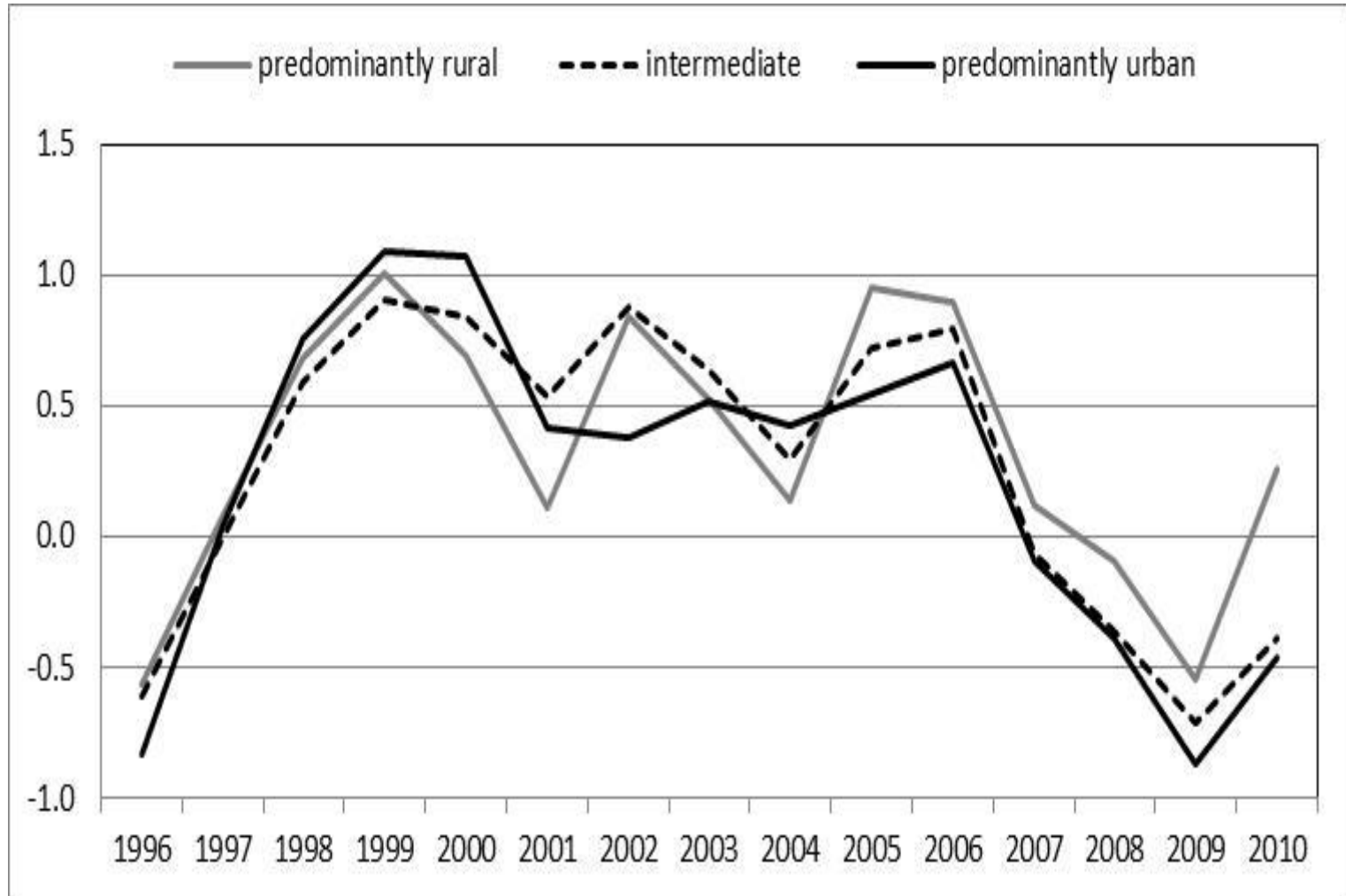
OECD Regional Typology of European Regions: Two Year Moving Average Yearly Growth Rates in Unemployment Among OECD TL3 regions, 2000-2010



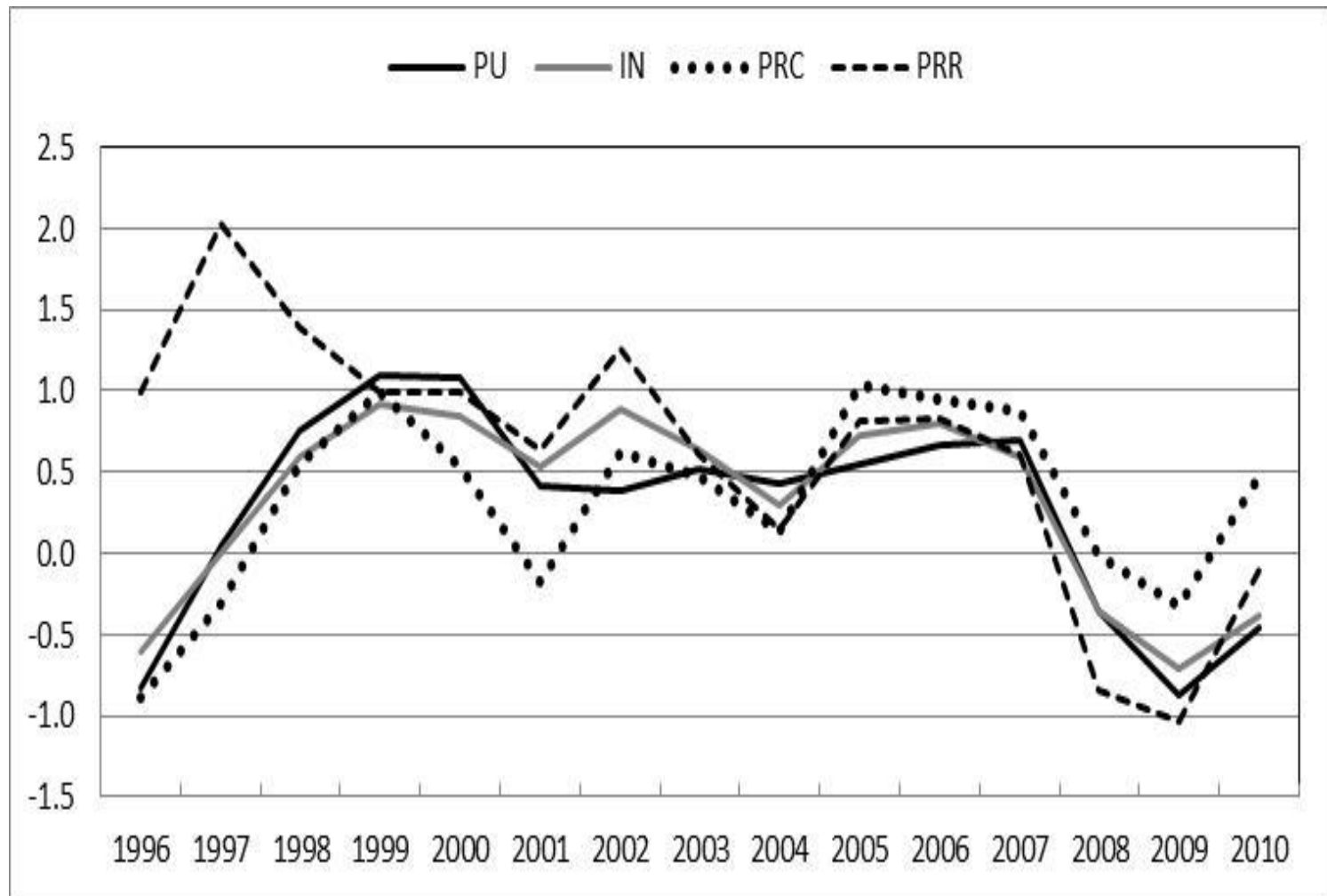
OECD Extended Regional Typology of European Regions: Two Year Moving Average Growth Rates in Unemployment Among OECD TL3 regions, 2000-2010



OECD Regional Typology of European Regions: Two Year Moving Average Percentage Point Change in Employment Rate among OECD TL3 regions, 2000-2010



OECD Extended Regional Typology of European Regions: Two Year Moving Average Percentage Point Change in Employment Rate among OECD TL3 regions, 2000-2010



Effects of the crisis in OECD TL3 European Regions (Extended OECD Regional Typology) by Period

	vulnerability to crisis			
	highest			lowest
GDP	PRR (-0.91%)	PU (-0.38%)	IN (-0.38%)	PRC (0.56%)
GDP pc	PRR (-0.98%)	PU (-0.85%)	IN (-0.71%)	PRC (0.36%)
GDP pw	PU (-0.52%)	IN (-0.21%)	PRC (-0.21%)	PRR (-0.07%)
employment	PRR (-2.20%)	PU (-1.41%)	IN (-1.05%)	PRC (-0.92%)
ER	PRR (-1.4 pp)	PU (-1.2 pp)	IN (-0.8 pp)	PRC (-0.7 pp)
unemployment	PRR (27.3%)	PU (27.2%)	IN (26.9%)	PRC (19%)
UR	PRR (1.8 pp)	IN (1.58 pp)	PU (1.57 pp)	PRC (1.1 pp)

GDP per head growth in EU metro regions 2000-2008 and 2008-2011

2000-2008				2008-2011		
Average annual real change in %	GDP per head growth =	Productivity growth +	Employment per head growth	GDP per head growth =	Productivity growth +	Employment per head growth
EU-15						
Capital metro	1.44	0.88	0.56	-0.79	0.34	-1.13
Second-tier metro	1.29	0.70	0.59	-0.76	0.15	-0.91
Smaller metro	1.20	0.67	0.53	-0.59	0.24	-0.83
Non-metro	1.15	0.75	0.40	-0.77	0.20	-0.98
Total	1.27	0.76	0.51	-0.70	0.24	-0.94
EU-13						
Capital metro	5.49	3.64	1.85	-0.26	1.04	-1.30
Second-tier metro	4.85	4.08	0.78	1.43	1.30	0.14
Smaller metro	3.66	3.56	0.09	1.38	1.17	0.21
Non-metro	4.47	4.45	0.02	0.57	1.70	-1.13
Total	4.88	4.31	0.56	0.66	1.44	-0.78

Source: Eurostat and authors' calculations

6. Post-Crisis: The EU Regional and Urban Context

- Cities exacerbate national post-crisis trends → growing countries are driven by growing cities and declining countries are weighed down by declining cities
- Urban advantages relating to employment and productivity post-crisis are oriented towards EU13 economies while EU15 face severe urban disadvantages

7. Conclusions

- Spiky world in terms of productivity – but evidence of flattening or catch up
- Reasons for the post 2000 regime change and for slower urban growth higher up the urban hierarchy?
- Anti-urban bias and planning restrictions → or shifts in the (technological and employment) spatial structure of the economy which narrow the urban advantages
- Access to services and infrastructure appears to be critical for location and migration

7. Conclusions

- Europe is very different to North America
- Across Europe cities are not driving an economic recovery → it depends on the country but there is a West-East distinction
- Real estate shock effects are dominated by cities → induced effects in the real economy
- More than one third of Europe's cities are declining in population prior to the crisis and this has been exacerbated by the crisis
- Need for a new *European* urban economics agenda?