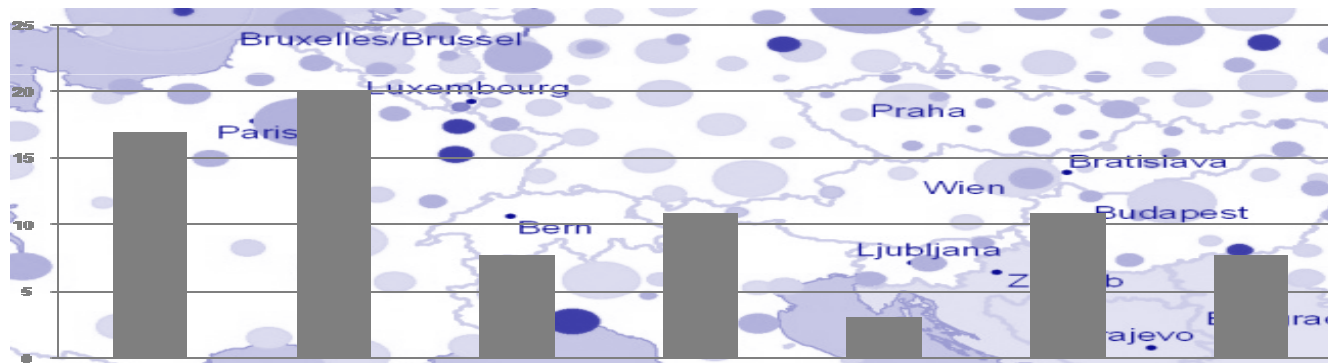


Shrinking Cities in Europe - Problems of Data and Methodes



CIRES Training School 2011 – Mapping Urban Shrinkage

Manuel Wolff

Institute of Geography

Dresden University of Technology

Introduction – What is a Shrinking City?

The combined effects of deindustrialisation, suburbanisation, post-Soviet re-composition and demographic factors have produced a hitherto unknown model for decline.

(Oswalt, 2006)

Introduction – What is a Shrinking City?

The term shrinking city usually describes a densely populated urban area that has on the one hand faced a **population loss** in large parts and is on the other hand undergoing **economic transformation** with some symptoms of a **structural crisis**.

(Shrinking Cities International Research Network)

A Shrinking City can be defined as a city that has experienced **population loss, employment decline** and **social problems** as symptoms of a **structural crisis**.

(Martinez-Fernandez et al., forthcoming)

Outline

- **URBAN AUDIT**
Spatial reference - Indicators – Availability
- **National Statistics**
Spatial reference – Indicators – Availability
- **Conclusion and final remarks**

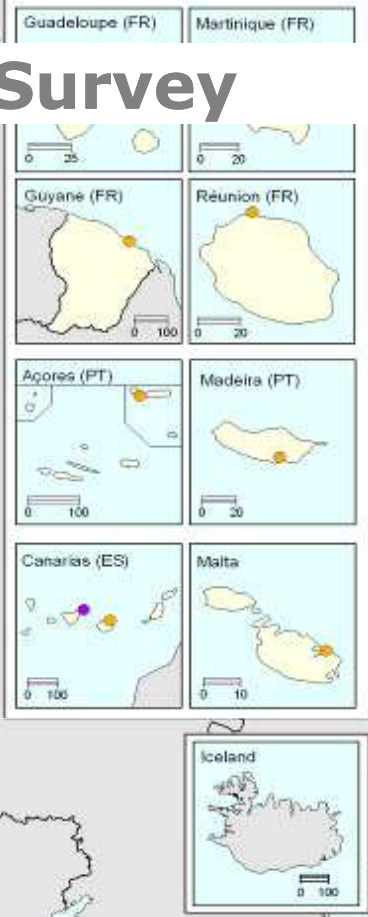
Cities participating in the Urban Audit data collection

- Cities participating in the Urban Audit since 2003/2004
- Cities participating in the Urban Audit since 2005
- Cities participating in the Urban Audit since 2006/2007

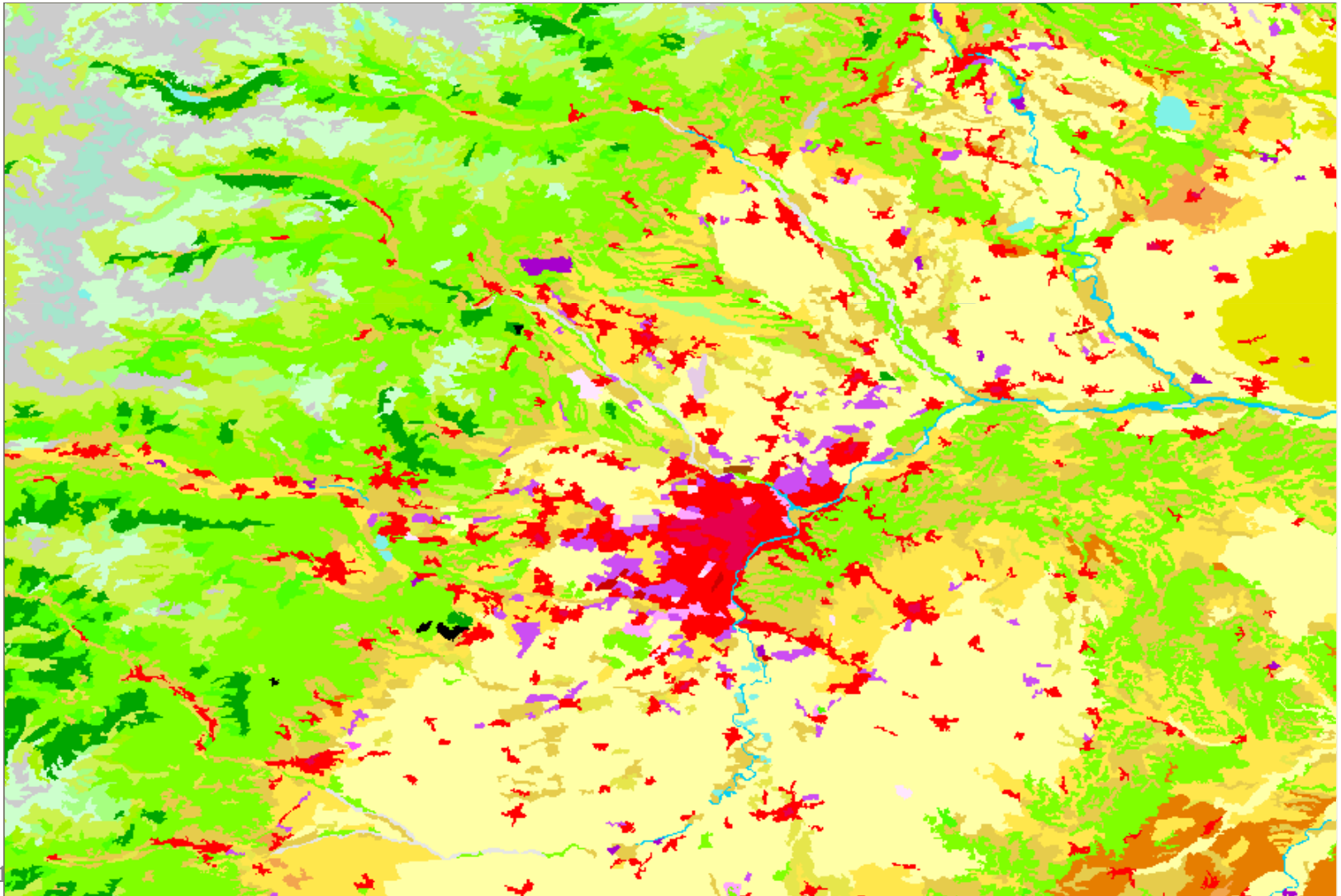
Source: Urban Audit
© EuroGeographics Association, for the administrative boundaries
Cartography: Eurostat - GISCO, 04/2007

0 600km

URBAN AUDIT – Survey



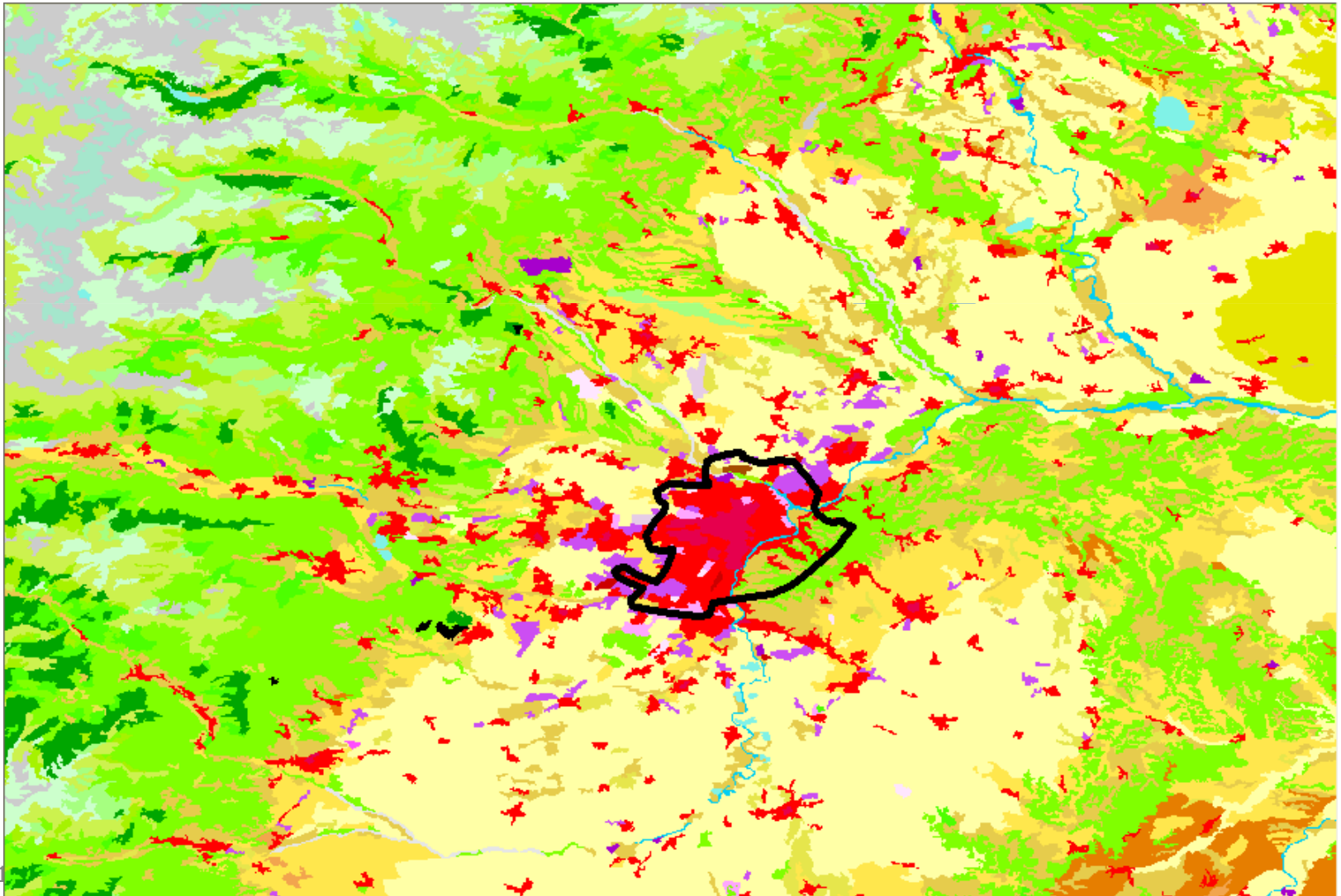
URBAN AUDIT – Spatial Reference



EUROSTAT
Dortmund, 1

URBAN AUDIT – Spatial Reference

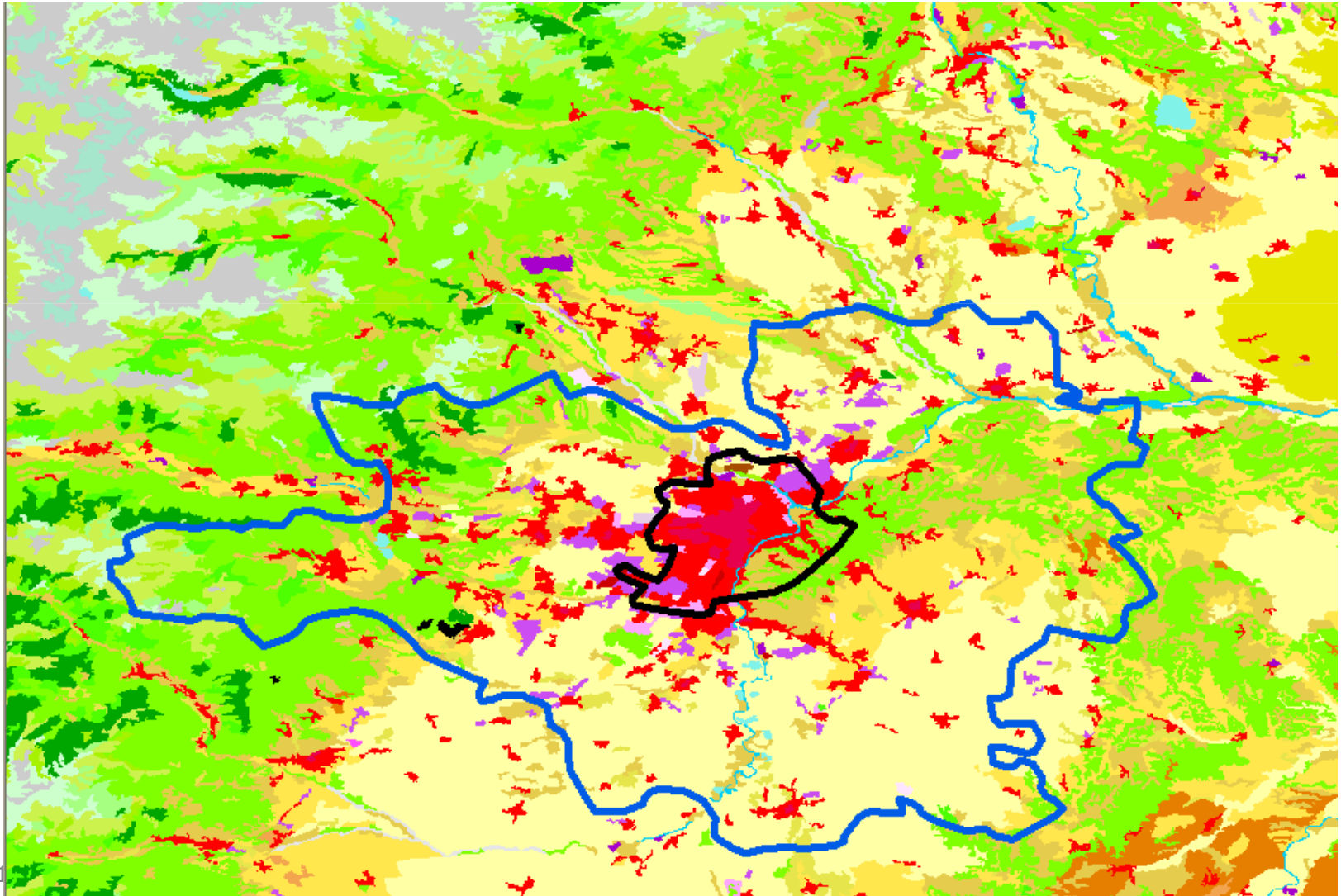
Core City



EUROSTAT
Dortmund, 1

URBAN AUDIT – Spatial Reference

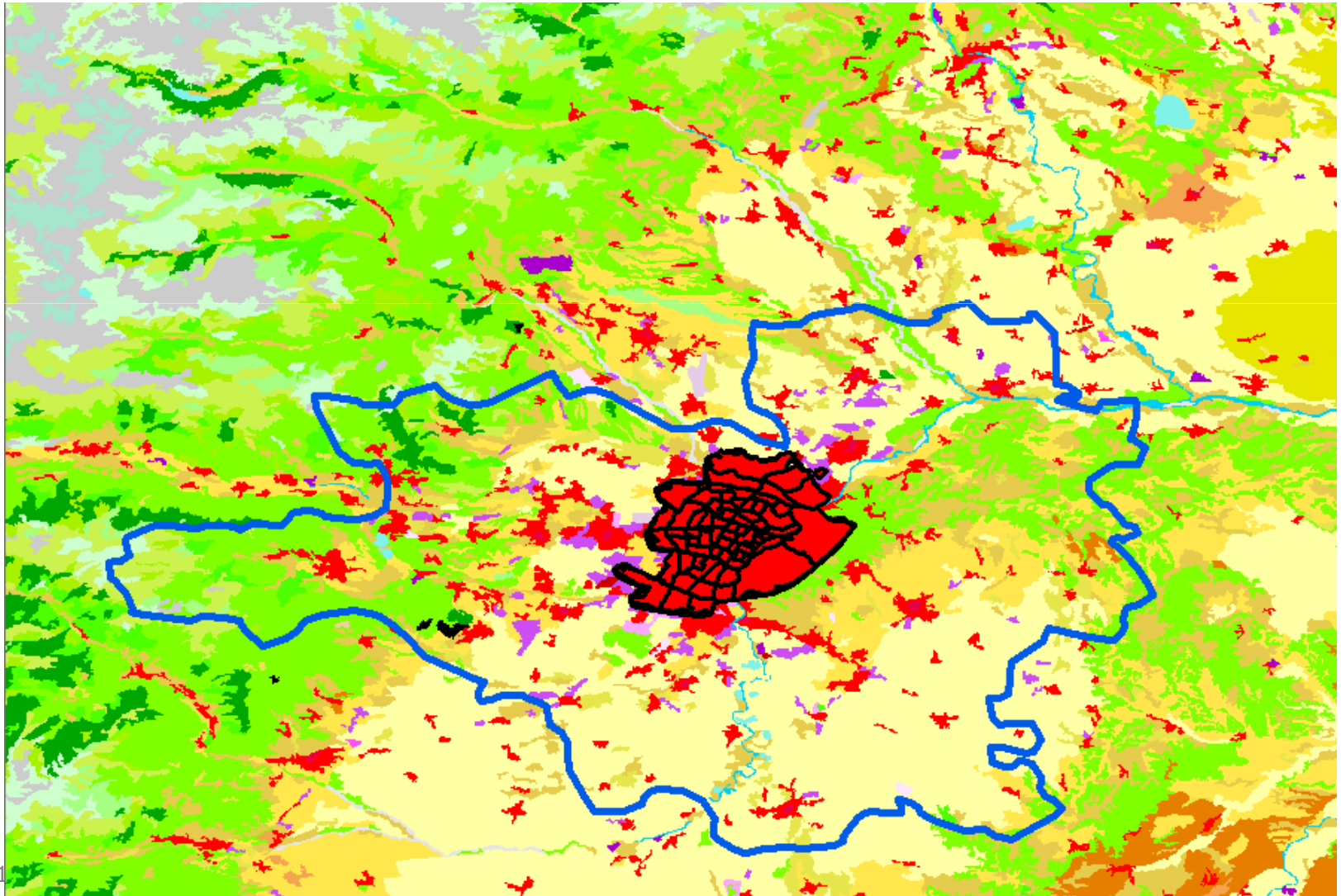
LUZ



EUROSTAT
Dortmund, 1

URBAN AUDIT – Spatial Reference

SCD

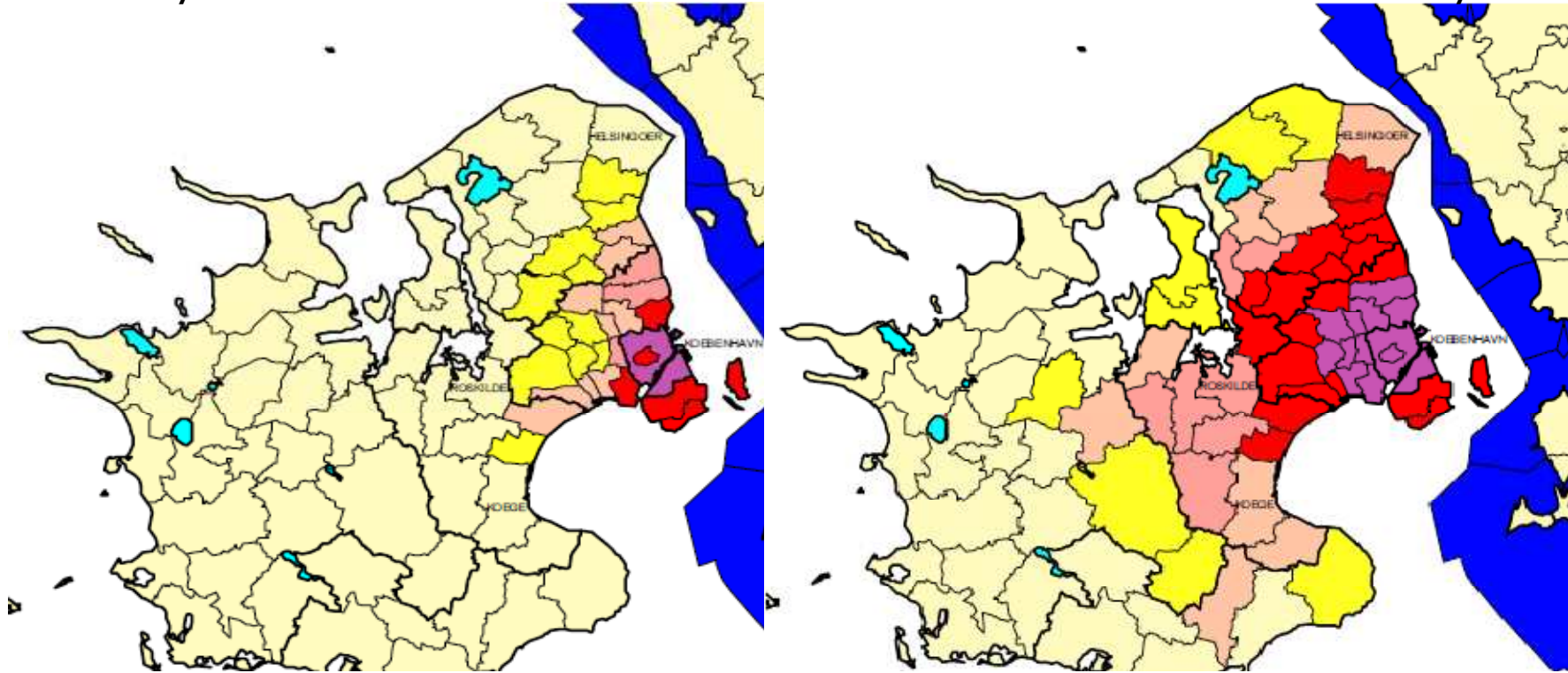


EUROSTAT
Dortmund, 1

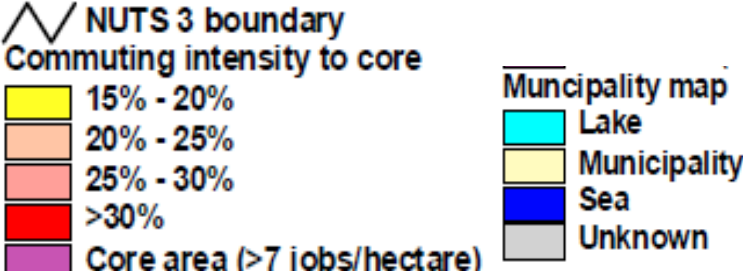
URBAN AUDIT – Spatial Reference

Primarily determination of LUZ

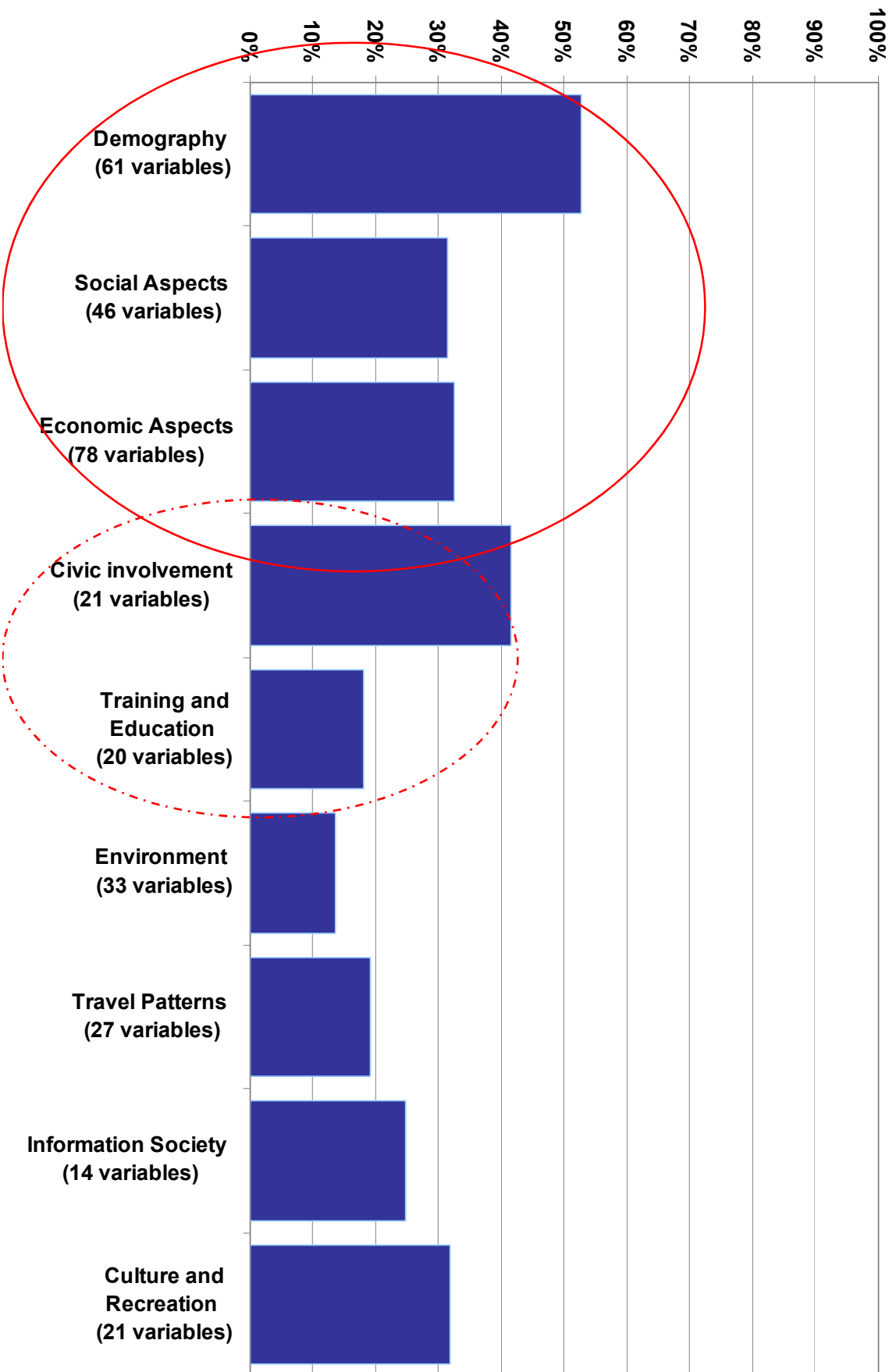
Recalculation of LUZ after survey 2004



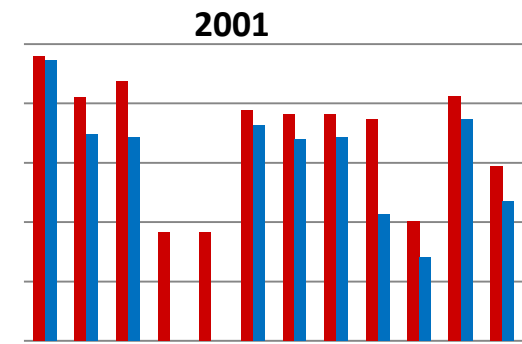
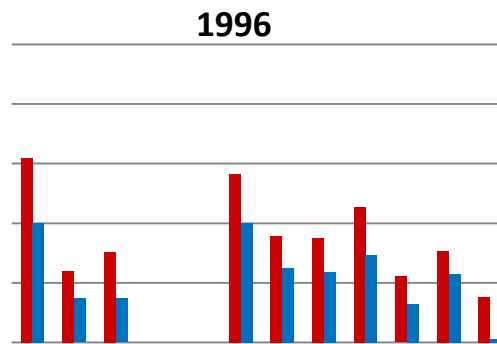
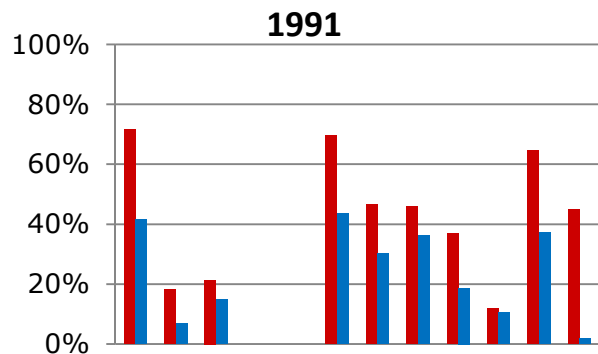
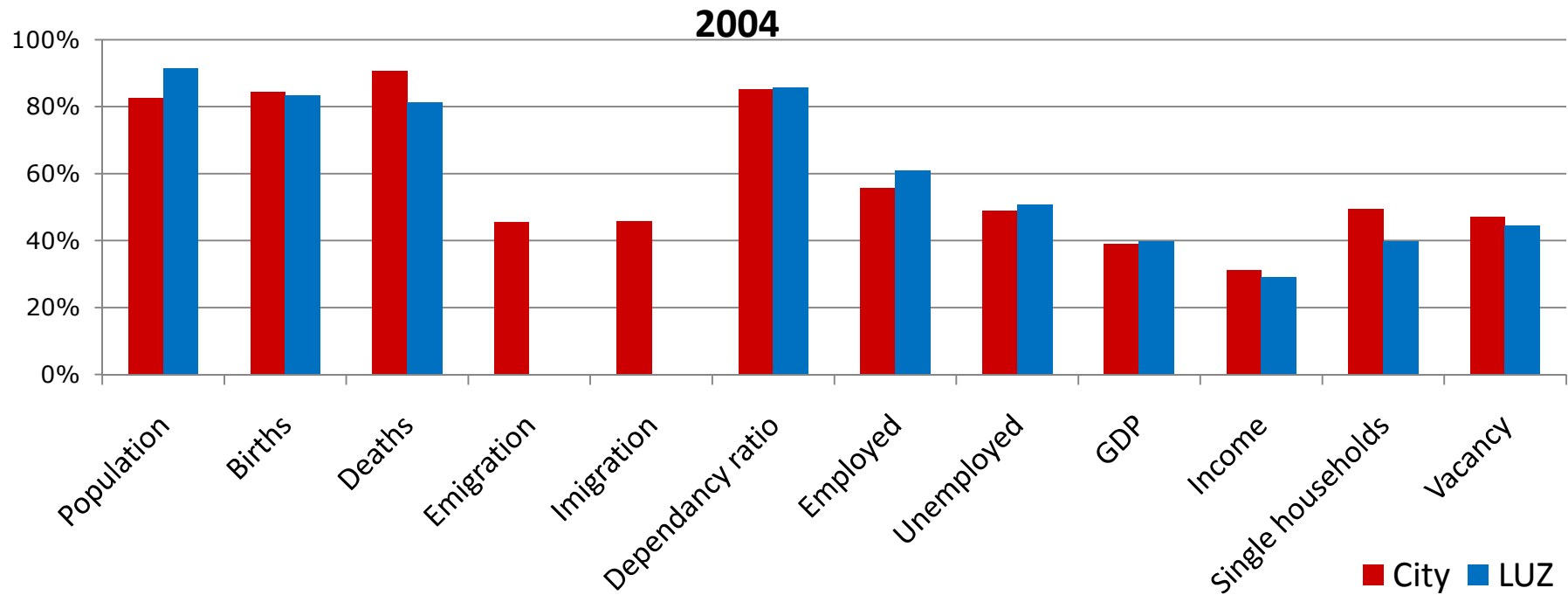
Carlquist (2006)



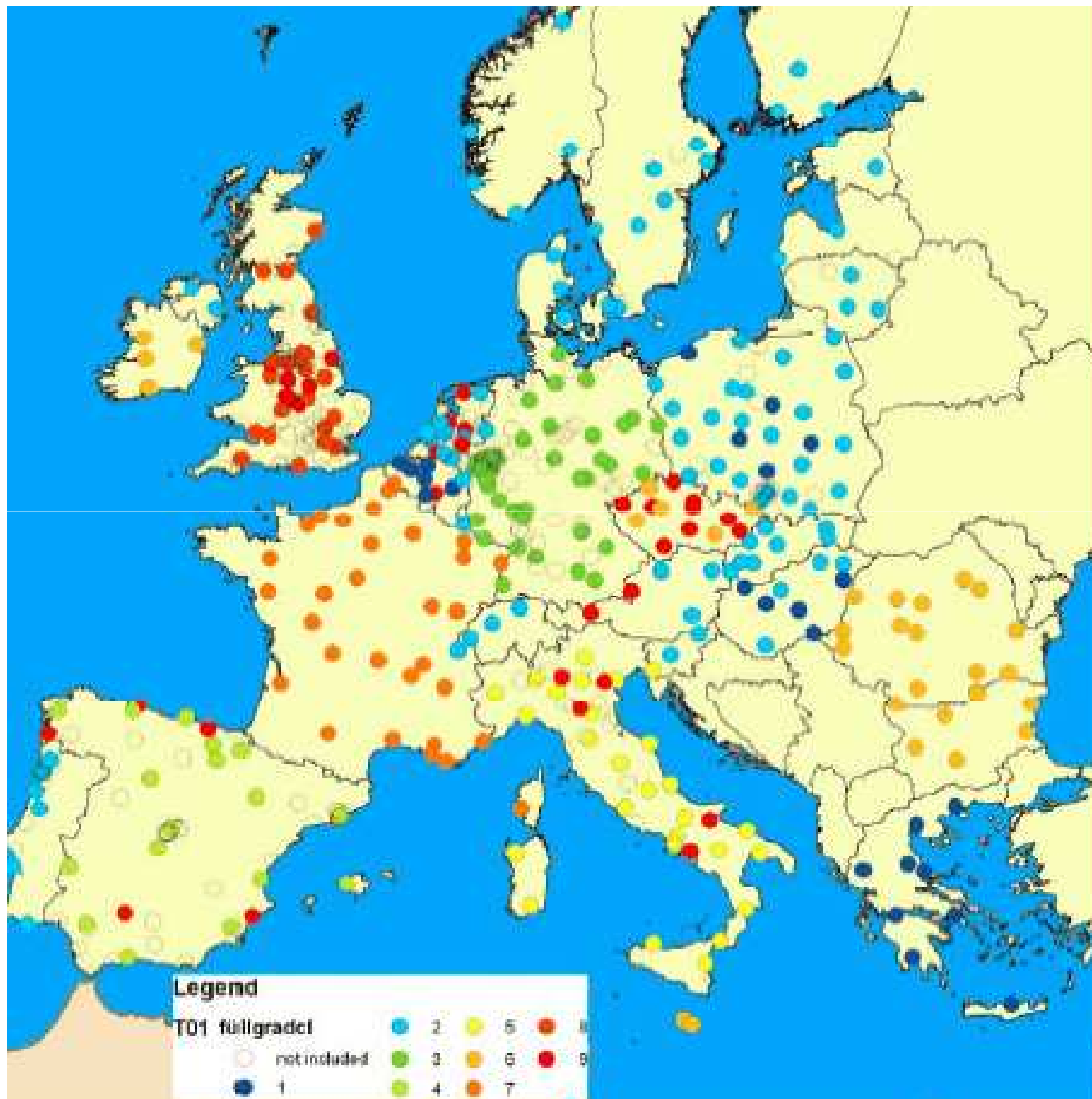
URBAN AUDIT - Data Gaps (2004)



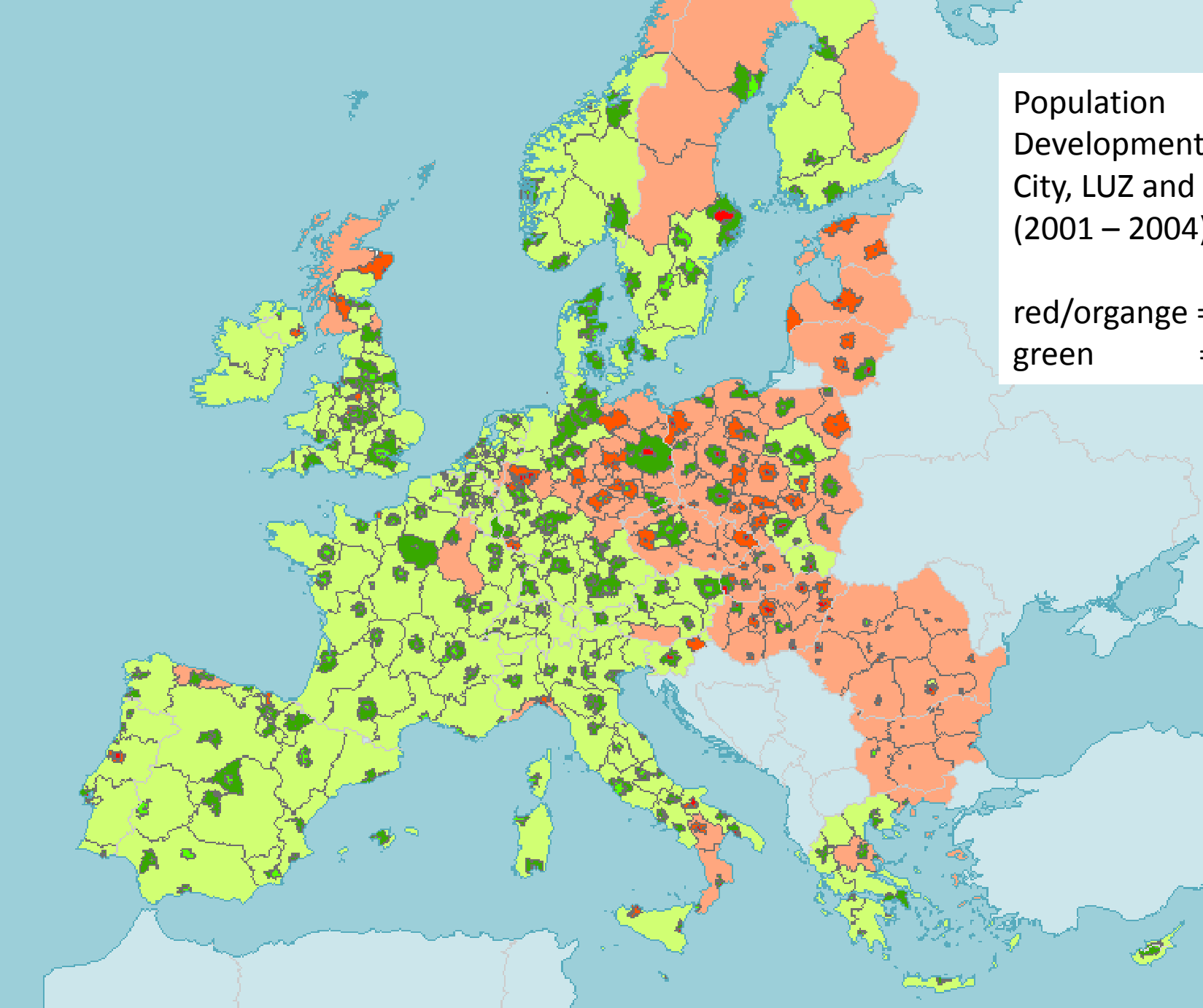
URBAN AUDIT – Available Data (1991, 1996, 2001, 2004)



URBAN AUDIT – Data Delivery Patterns 2001

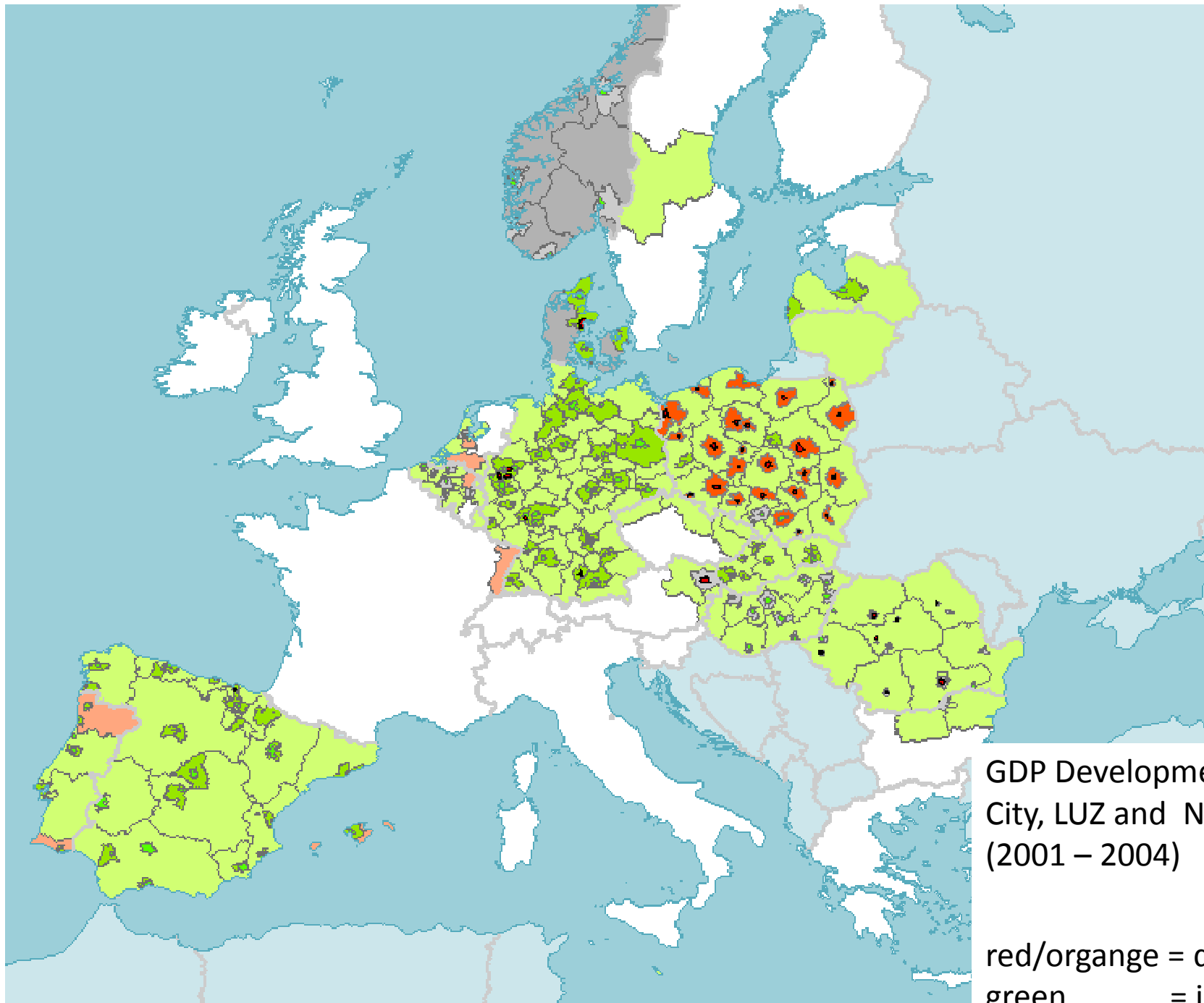


Rheinisch-Westfälisches
Institut für
Wirtschaftsforschung (2009)



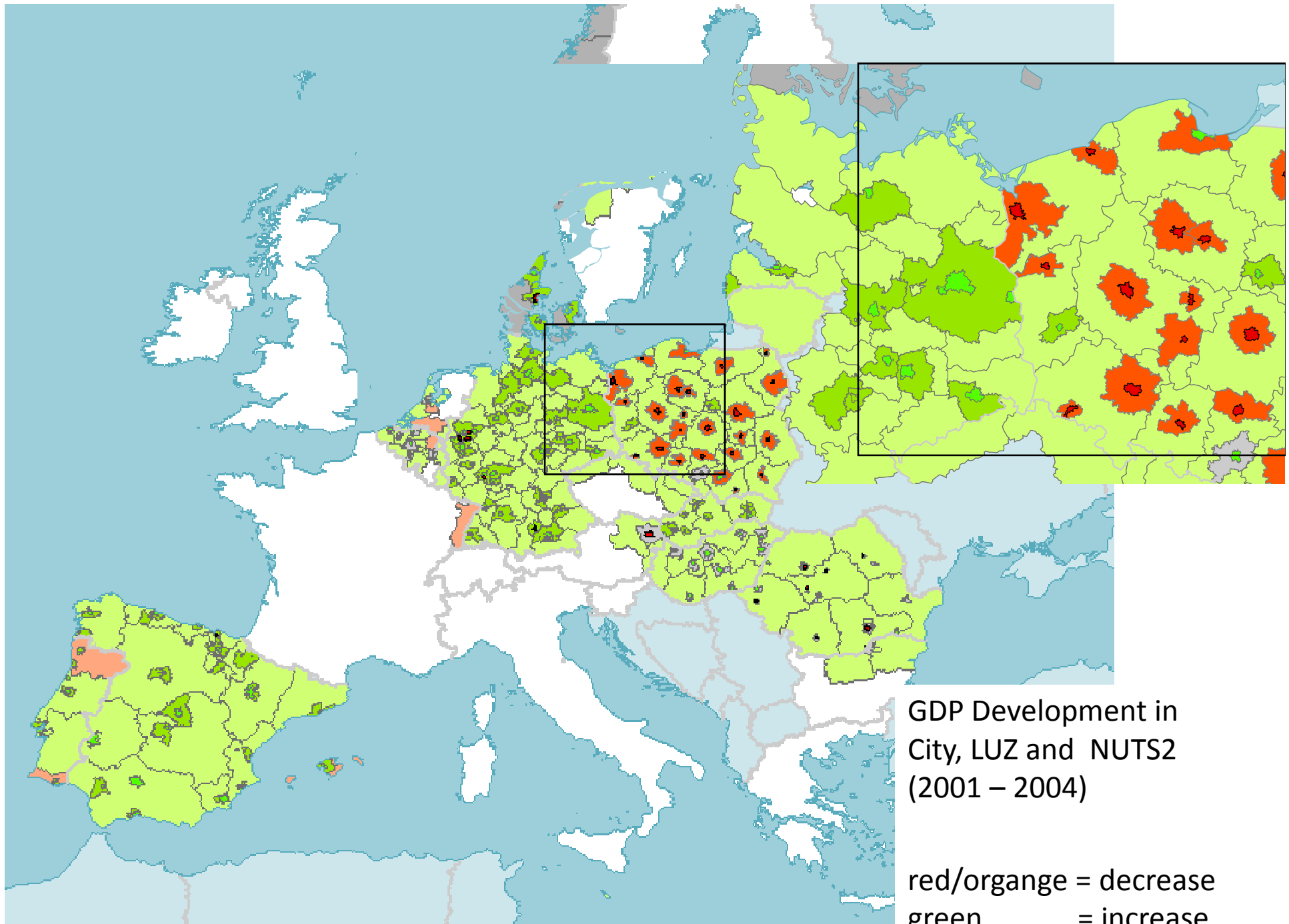
Population
Development in
City, LUZ and NUTS2
(2001 – 2004)

red/organge = decrease
green = increase



GDP Development in
City, LUZ and NUTS2
(2001 – 2004)

red/organge = decrease
green = increase



URBAN AUDIT: Summary

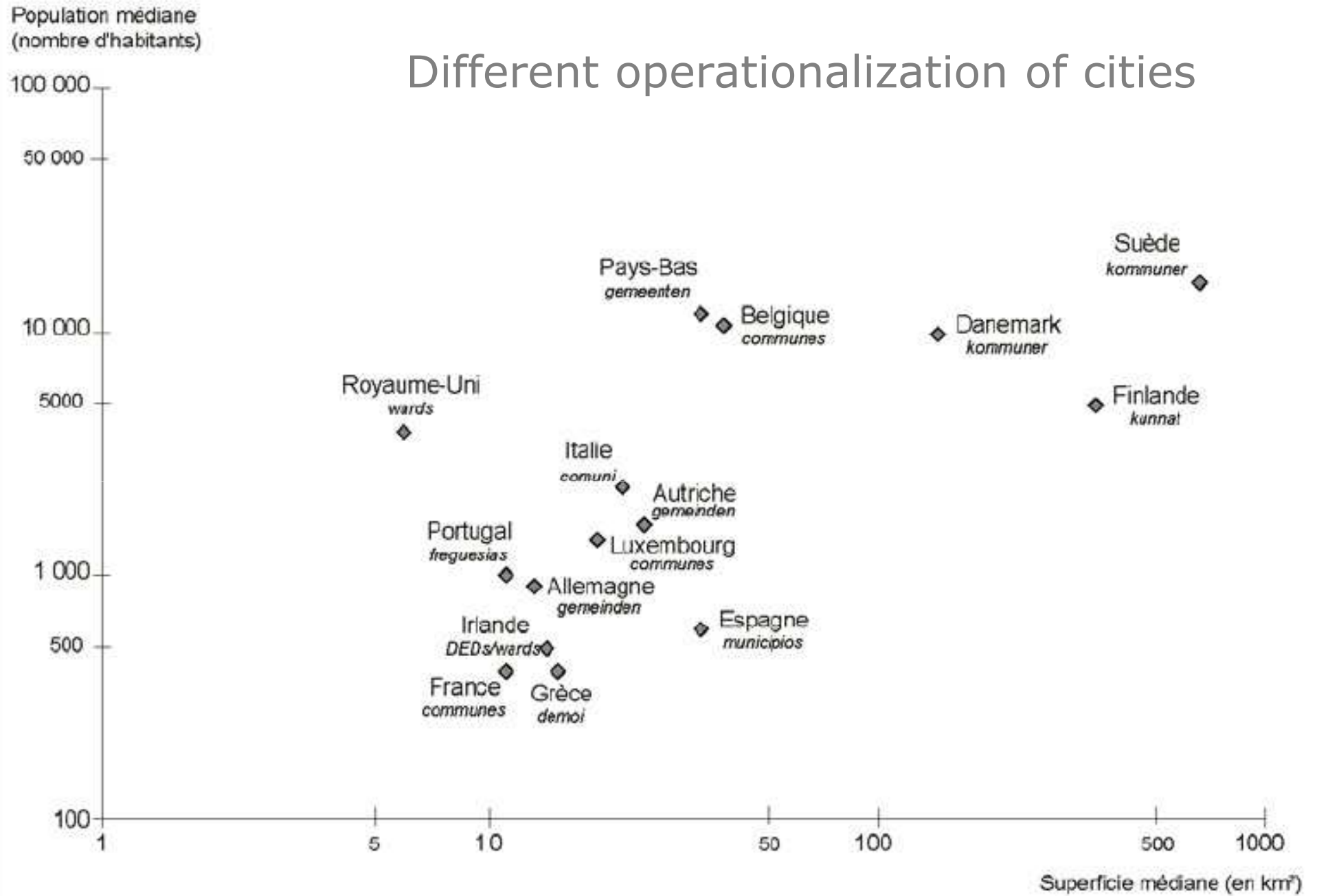
Advantages	Disadvantages
- Central Database for European Cities	- Longitude analysis is difficult
- Availability of 2 spatial units	- Data gaps
- Variety of indicators	- Lack of metadata

National Statistics	
?	?

National Statistics

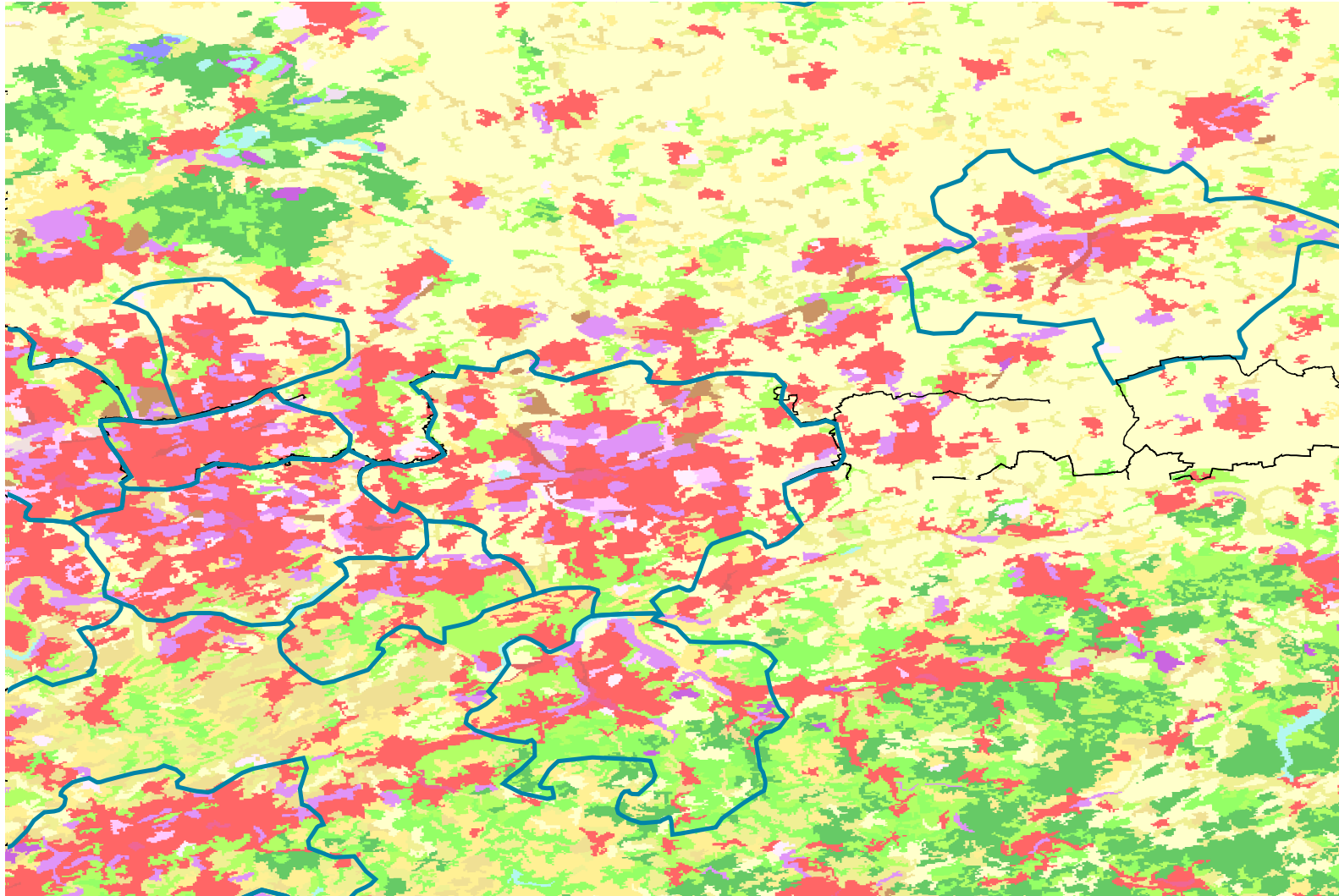
- Spatial reference
- Time reference
- Data availability and survey methods

Different operationalization of cities



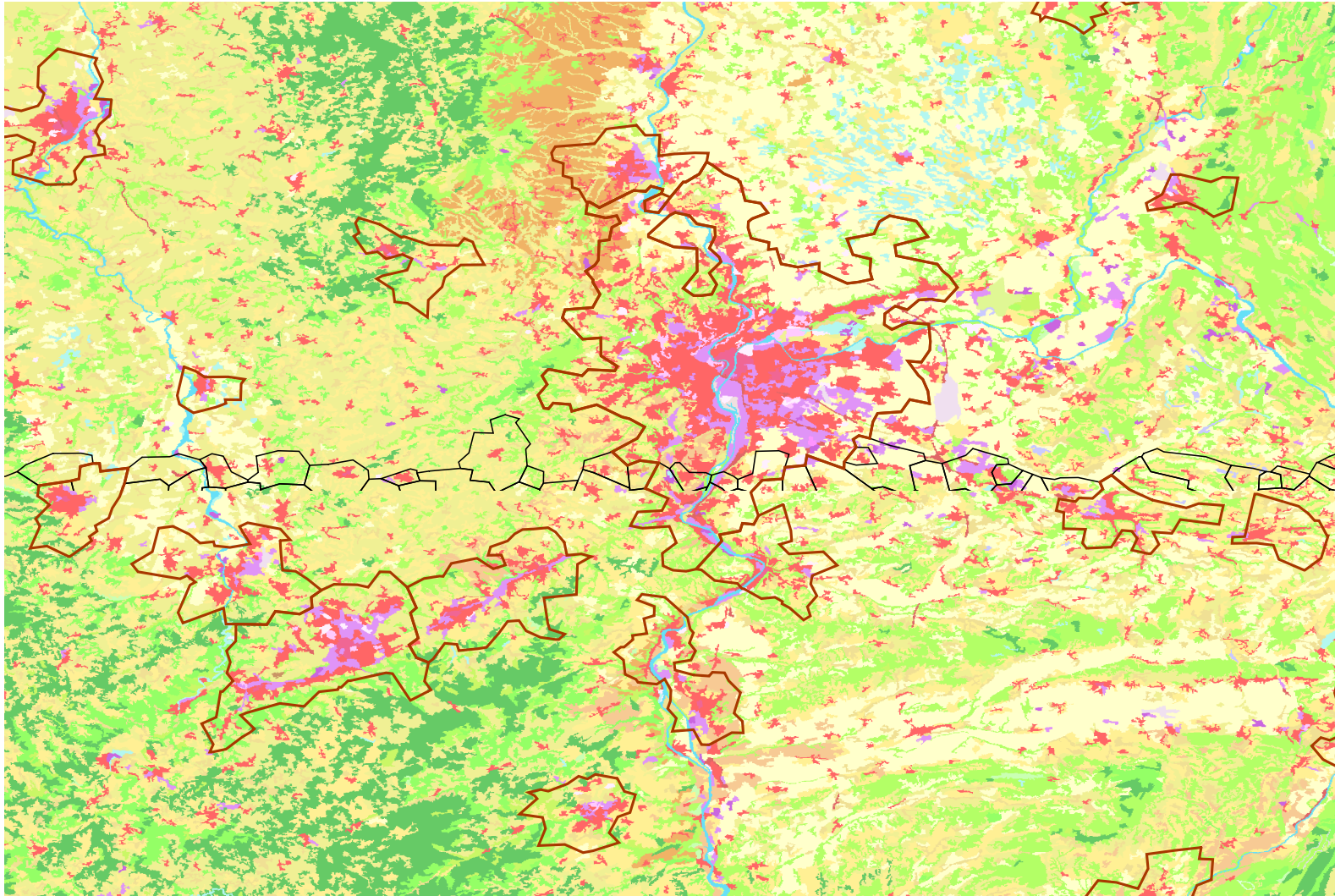
In: Guerois (2003), Source: Eurostat 1991, Le Gléau, Pumain, Saint-Julien (1996)

Different operationalization of cities



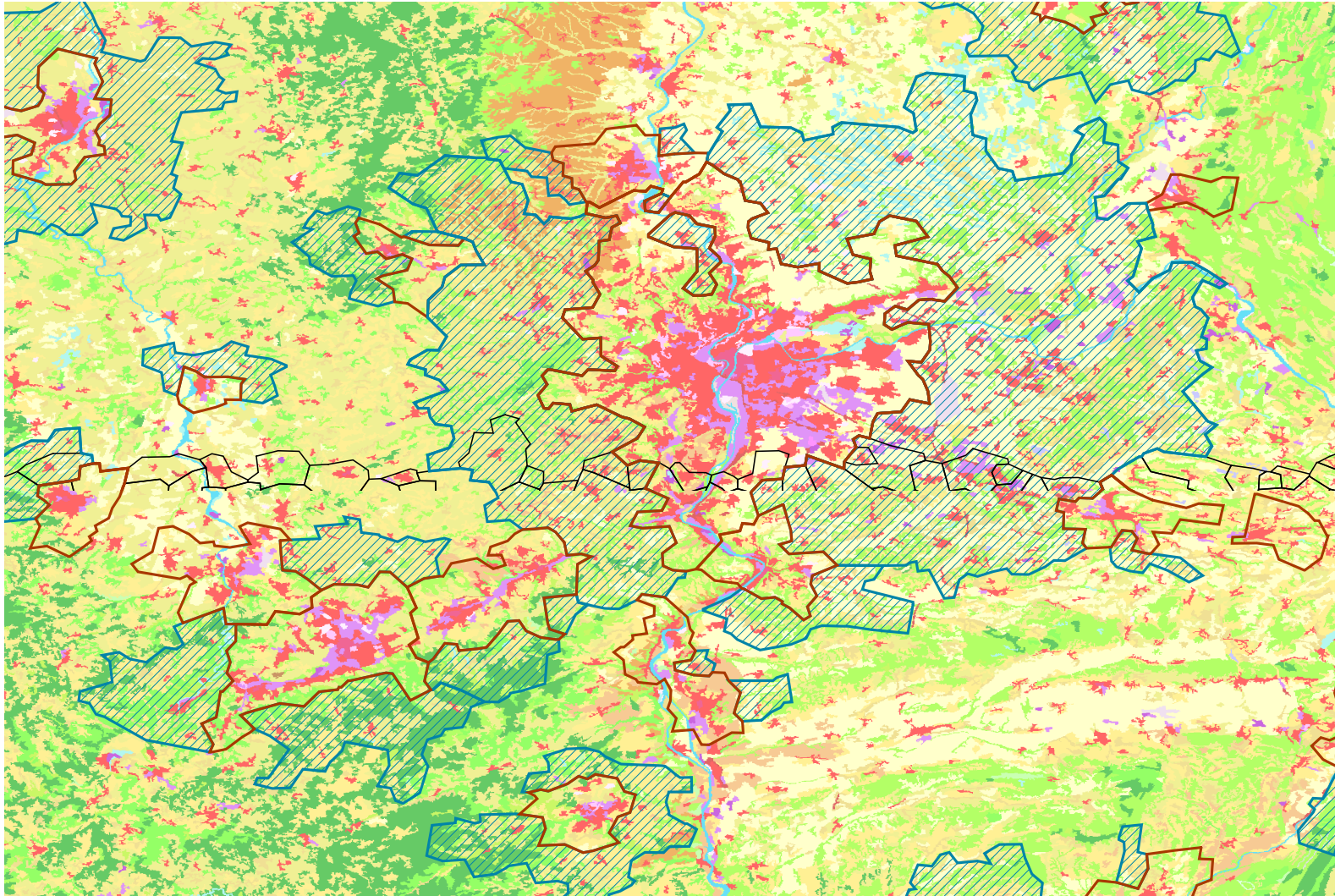
Administrative city definition

Different operationalization of cities



Functional city definition

Different operationalization of cities



Functional city definition

Availability of Data

	A	CZ	ESP	FI	HU	PL	PT	SE	SK	TR	CH	FR	SL
1. DEMOGRAPHIE													
1.1 Bevölkerung													
1.1.1 Gesamt				k.A.					k.A.		k.A.		
1.1.2 Altersgruppen				k.A.					k.A.		k.A.		
1.1.3 Qualifikation				k.A.					k.A.		k.A.		
1.2 Natürliche Bevölkerungsentwicklung													
1.2.1 Sterbefälle													
1.2.2 Geburten				k.A.					k.A.	k.A.	k.A.		
1.2.3 Fertilität				k.A.			k.A.		k.A.		k.A.		
1.2.4 Durchschnittsalter				k.A.					k.A.	k.A.	k.A.		
1.3 Räumliche Bevölkerungsentwicklung													
1.3.1 Migration				k.A.					k.A.		k.A.		
1.3.2 Altersgruppen				k.A.	k.A.				k.A.		k.A.		
1.3.3 Qualifikation				k.A.	k.A.				k.A.		k.A.		
2. ARBEITSMARKT													
2.1 Erwerbstätige													
2.1.1 Gesamt				k.A.	k.A.				k.A.		k.A.		
2.1.2 Altersgruppen				k.A.	k.A.		k.A.		k.A.		k.A.		
2.1.3 Qualifikation				k.A.	k.A.				k.A.		k.A.		
2.1.4 Wirtschaftssektor									k.A.		k.A.		
2.2 Erwerbslosigkeit													
2.2.1 Gesamt									k.A.		k.A.		
2.2.2 Altersgruppen				k.A.			k.A.		k.A.		k.A.		
2.2.3 Qualifikation				k.A.			k.A.		k.A.		k.A.		
2.2.4 Wirtschaftssektor				k.A.			k.A.		k.A.	k.A.	k.A.		
2.3 Arbeitsplätze													
2.3.1 Gesamt				k.A.			k.A.		k.A.		k.A.		
2.3.2 Wirtschaftssektor				k.A.	k.A.		k.A.		k.A.	k.A.	k.A.		
3. WIRTSCHAFT													
3.1 Bruttoinlandsprodukt													
3.1.1 Gesamt													
3.1.2 Wirtschaftssektor									k.A.		k.A.		
3.2 Anzahl Unternehmen													
3.2.1 Gesamt													
3.2.2 Wirtschaftssektor				k.A.	k.A.		k.A.		k.A.	k.A.	k.A.		
4. SOZIAL													
4.1 Haushalte													
4.1.1 Gesamt				k.A.					k.A.	k.A.	k.A.		
4.1.2 Struktur				k.A.	k.A.				k.A.	k.A.	k.A.		
4.2 Einkommen													
4.2.1 Einkommen pro Person / Haushalt				k.A.			n.a.						
4.2.2 Kaufkraft pro Person / Haushalt				k.A.					k.A.	k.A.	k.A.		
4.2.3 Sozialhilfeempfänger													
4.2.4 Relative Armut									k.A.	k.A.	k.A.		
4.3 Wohnungsmarkt													
4.3.1 Immobilienwerte / -preise				k.A.					k.A.	k.A.	k.A.		
4.3.2 Leerstand				k.A.					k.A.	k.A.	k.A.		

Demography

Labor market

Economy

Social aspects

National Statistics - Summary

- different operationalization of ‚cities‘ with different thresholds
- heterogeneous time-reference of existing data
- different standards, methods, and variables
- in some countries poor availability of socio-economic data

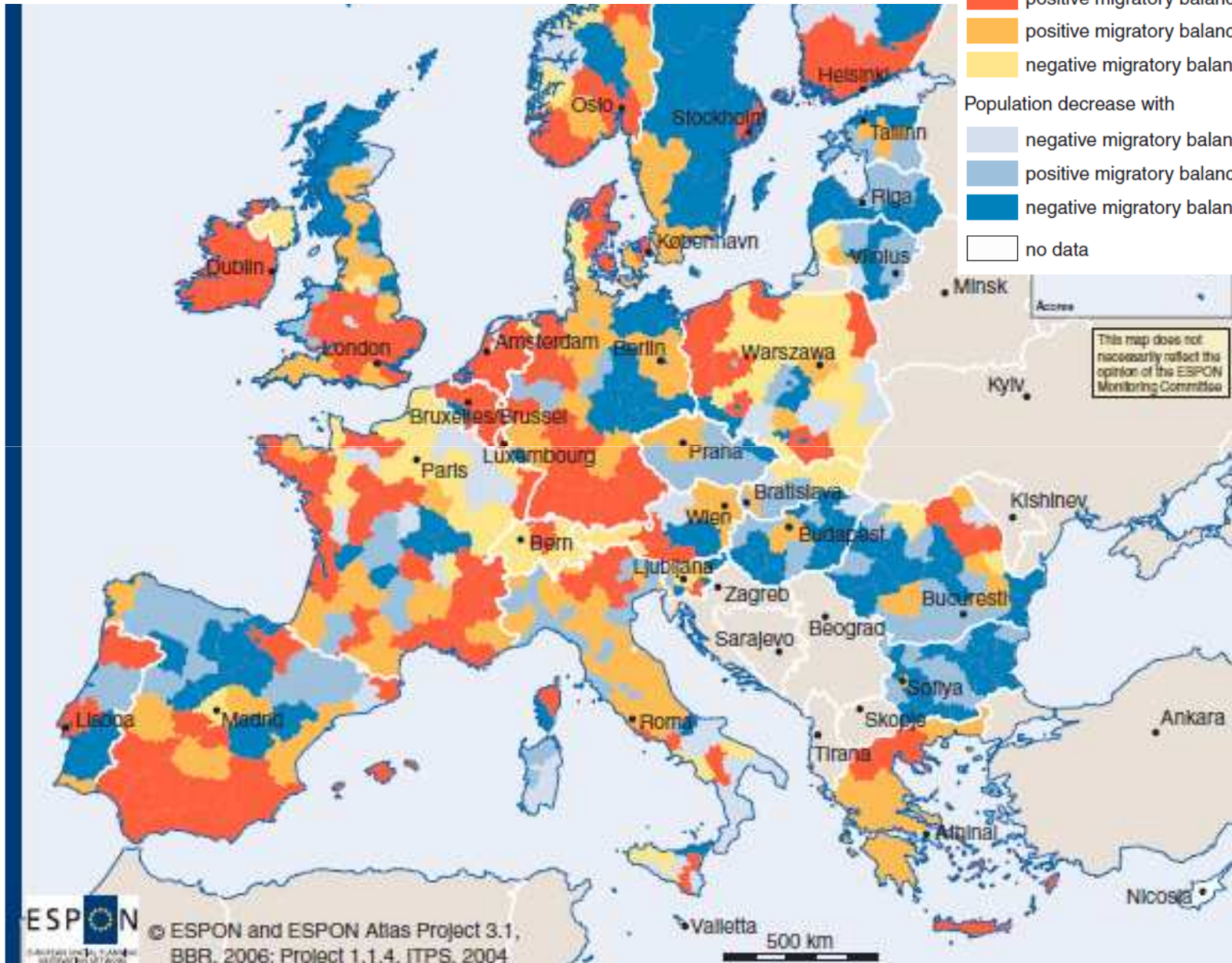
How to combine indicators?

Population increase with

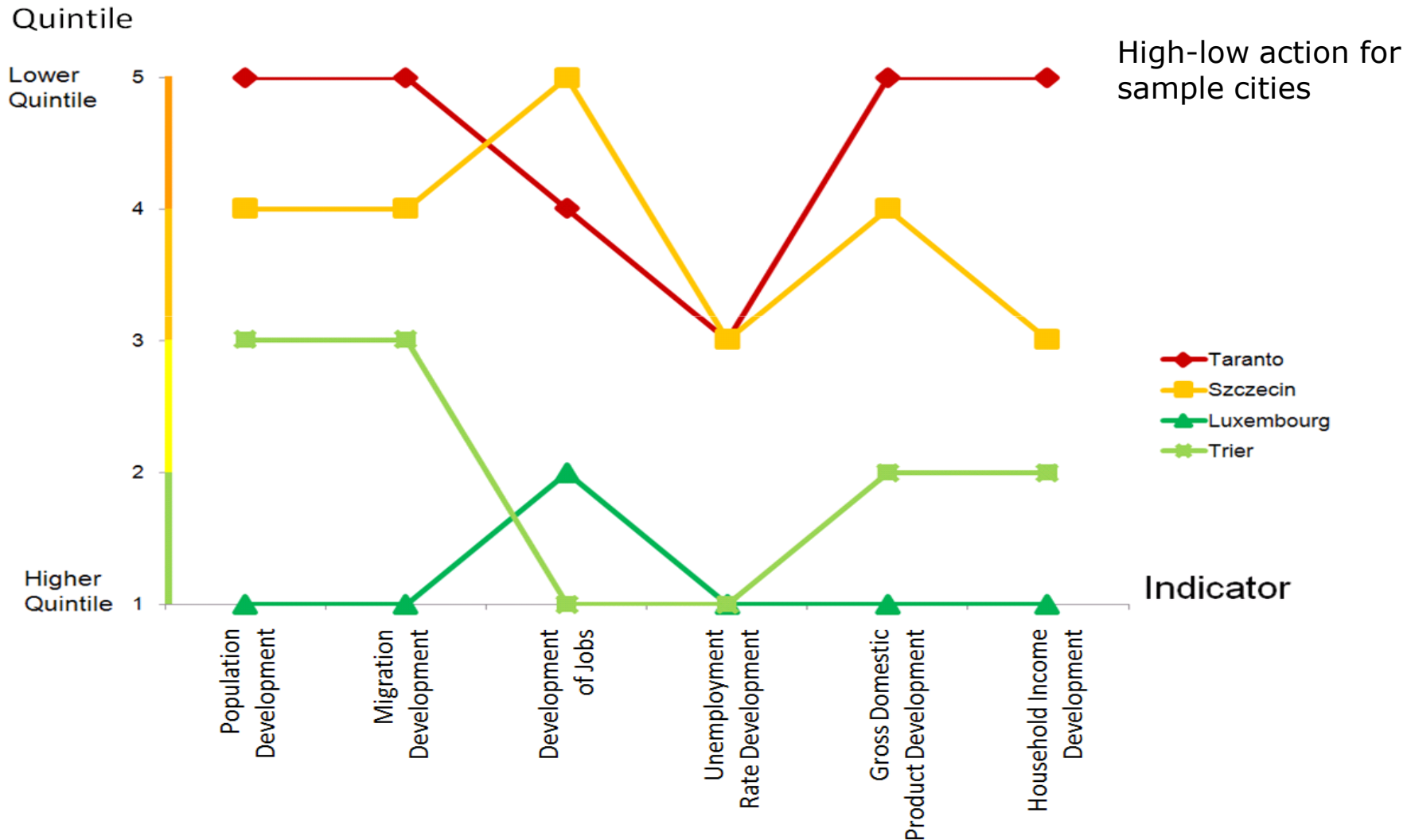
- positive migratory balance and positive natural balance
- positive migratory balance and negative natural balance
- negative migratory balance and positive natural balance

Population decrease with

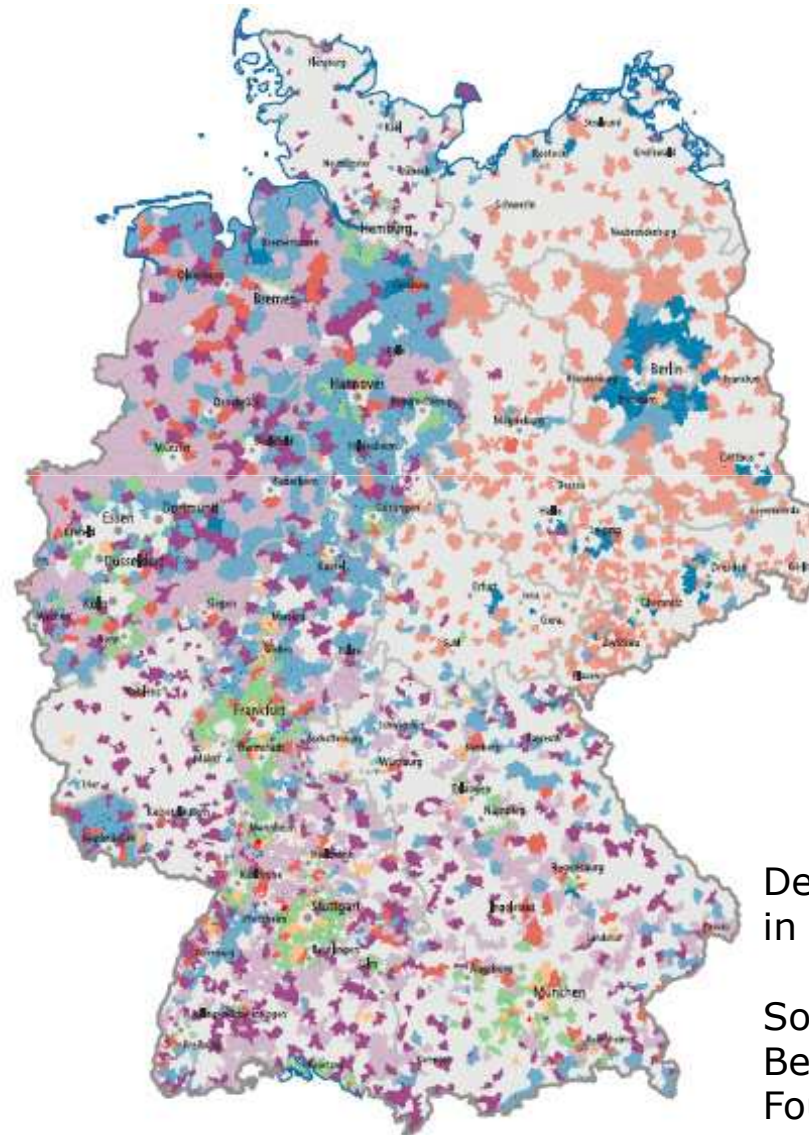
- negative migratory balance and positive natural balance
- positive migratory balance and negative natural balance
- negative migratory balance and negative natural balance
- no data



Combination of indicators?



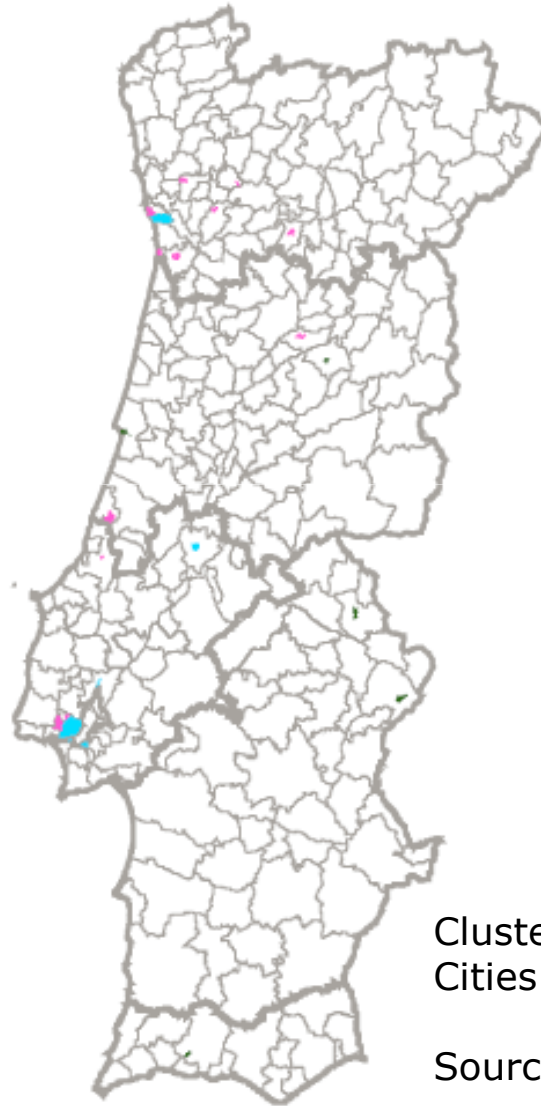
Combination of indicators?



Demographic types in Germany

Source:
Bertelsmann
Foundation (2006).

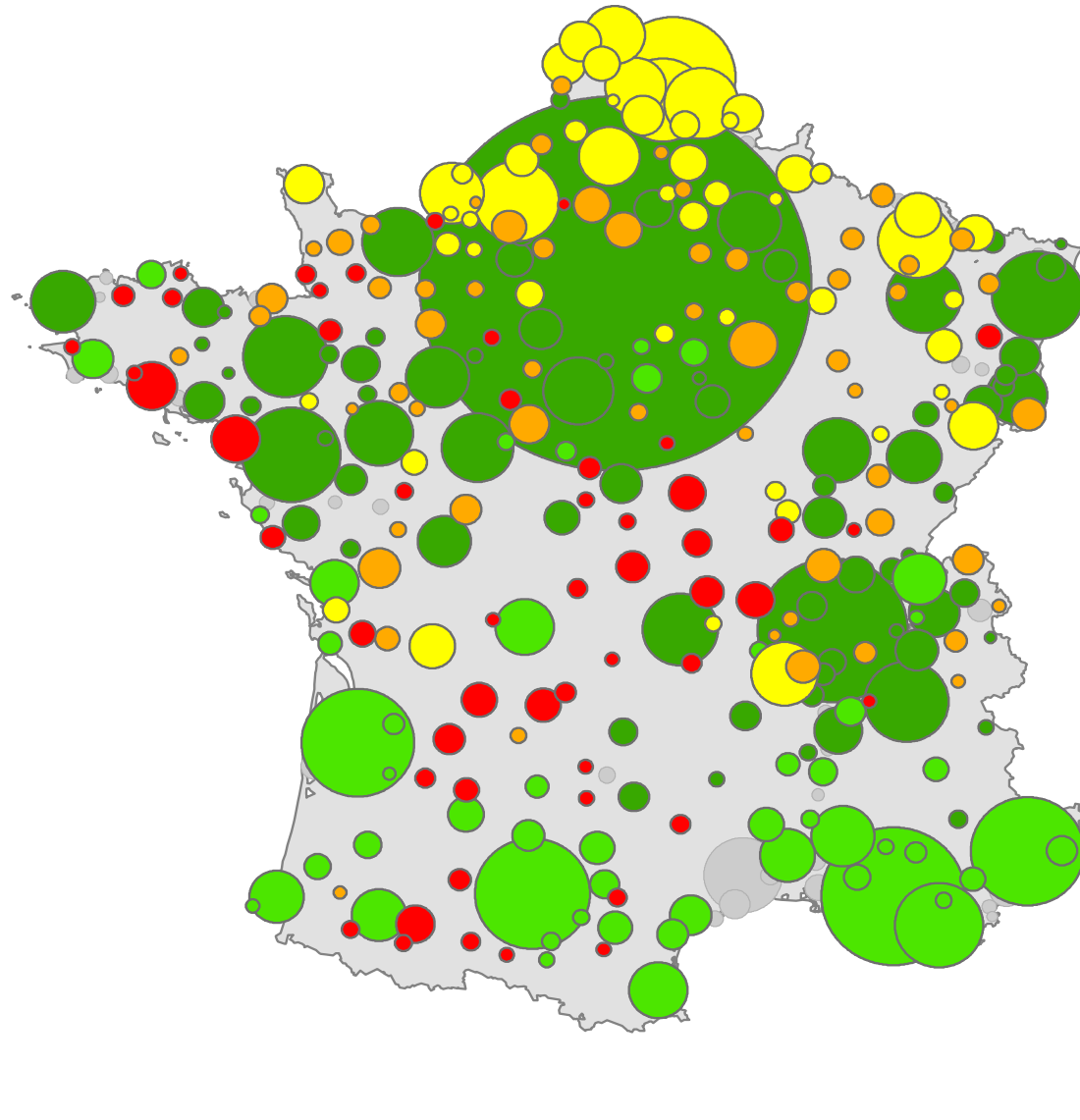
Combination of indicators?



Cluster of Shrinking
Cities in Portugal

Source: Sousa (2010).

Combination of indicators?



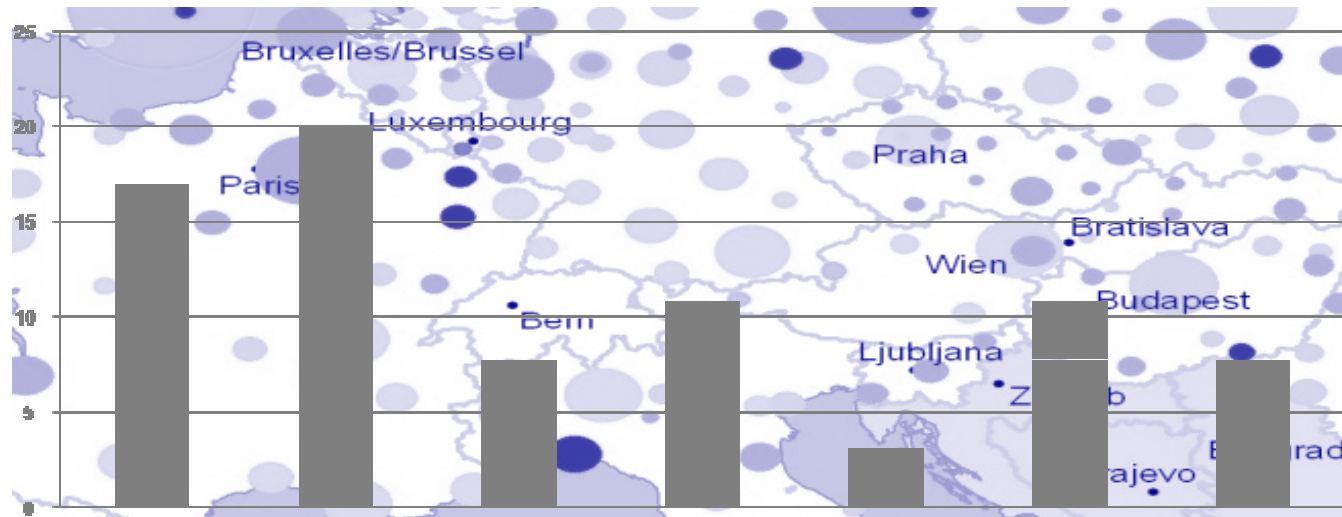
Cluster of Urban
Patterns in France

Source: Wolff (2010).



Combination of indicators?





Thank you very much for your attention