

The Territorial Dimension of Poverty and Social Exclusion in Europe (TiPSE)

**Social Situation Monitor
Seminar on regional well-being indicators**

19 October 2016, Brussels

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Social, Economic and Geographical Sciences (SEGS) Group

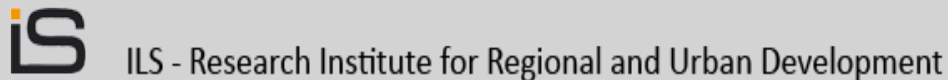


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ESPON TiPSE

The **T**erritorial **D**imension of **P**overty and **S**ocial **E**xclusion in Europe
2012-2014



EU2020 strategy AROPE target

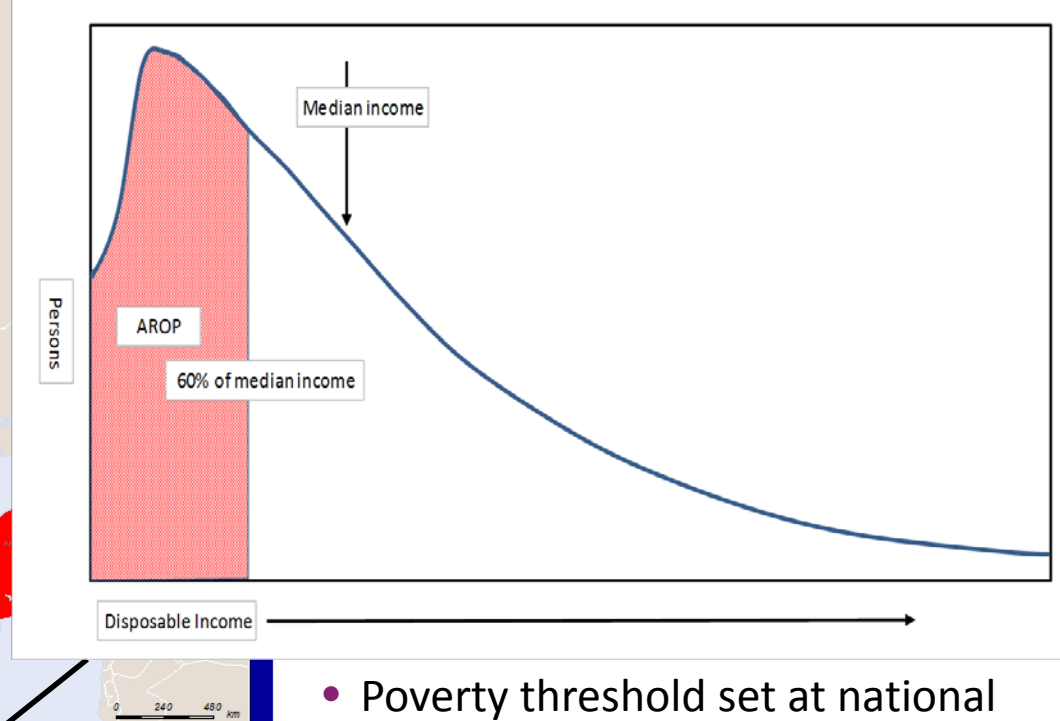
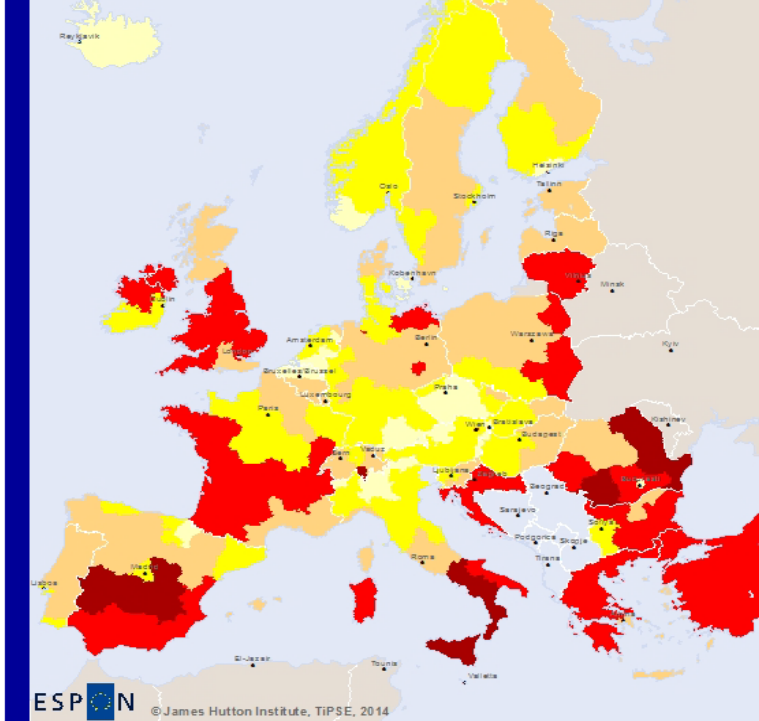
... lifting at least 20 million people out of the risk of poverty and social exclusion by 2020

- The number of persons **at risk of poverty**, i.e. the number of persons in households whose disposable income is less than 60% of the national median.
- The number of persons not able to afford four of out of nine items indicative of **material deprivation**.
- The number of persons living in households where adults (together) work less than 20% of a full time year (**low work intensity**).



Monitoring at the level of Member States, but EUROSTAT publishes regional data for the indicators based on the EU-SILC. The spatial coverage varies from country to country, some at NUTS 2, some at NUTS 1, some at NUTS 0.

At Risk of Poverty Rates (Eurostat) 2013



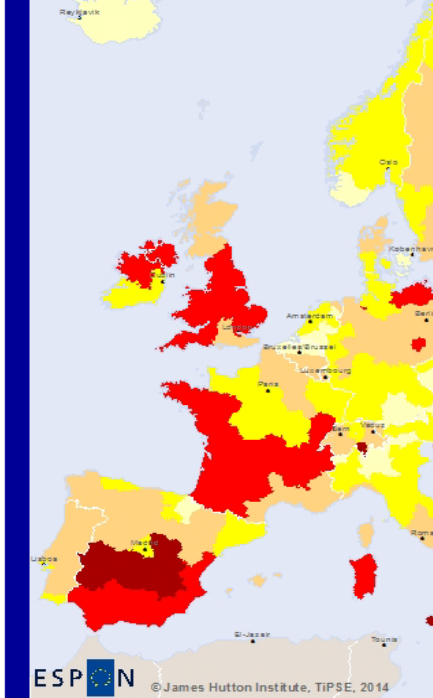
Percentage population in households with <60% of the national median equivalised disposable income.

- 2.7 - 9.9 **Source:** Eurostat Regio database Table ilc_li41 (Downloaded 10/10/2014)
- 10.0 - 14.9 **Year:** 2013, except; BE, CH, EL, HR, IE, LU, (2012), DE, EL, NL, (2006), PT (2005).
- 15.0 - 19.9
- 20.0 - 29.9 **Region Level:** NUTS 0 - EE, CY, HR, IS, LT, LU, LV, MT, TR. NUTS 1 - BE, EL, HU, PL.
- 30.0 - 42.3 NUTS 2 - AT, BG, CZ, DK, DE, IE, ES, fi, FR, IT, NL, PT, RO, SE, SI, SK, NO, CH, UK

- Poverty threshold set at national level and thus differs across countries: not comparable across countries

- ARoP rate is a relative measure and varies with changes in overall income, so households with constant income over time may be above or below at-risk-of-poverty simply due to changes in relative income distribution

At Risk of Poverty Rates (Eurostat) 2013

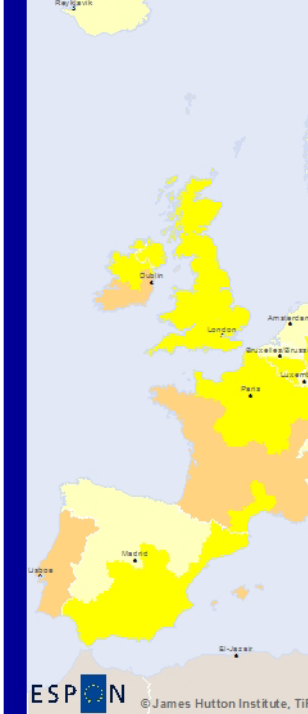


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Percentage population in households with <60% of the national median equivalised disposable income

- 2.7 - 9.9 **Source:** Eurostat Regional Development Indicators (2013)
- 10.0 - 14.9 **Year:** 2013, except; BE, PT (2005).
- 15.0 - 19.9
- 20.0 - 29.9 **Region Level:** NUTS 0 - BE, EL, HU, NUTS 1 - BE, EL, HU, NUTS 2 - AT, BG, CZ, I
- 30.0 - 42.3

Severe Material Deprivation (Eurostat) 2013

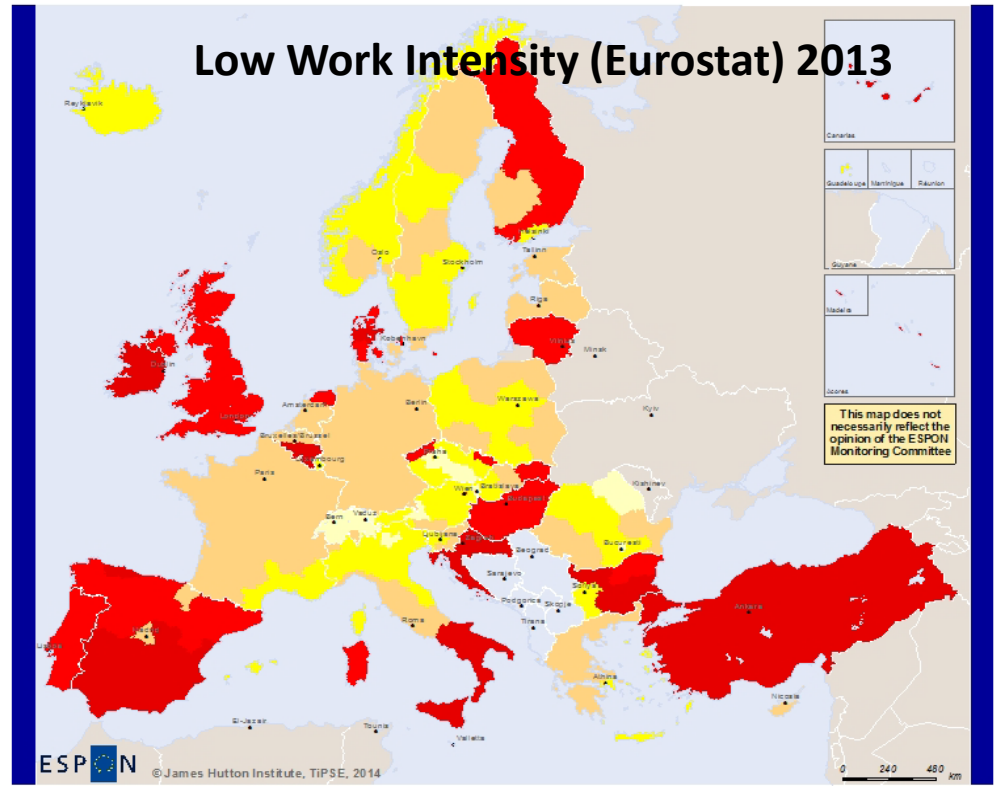


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Per cent of population to afford four of the severe material deprivation indicators

- 0.2 - 4.9 **Source:** Eurostat Regional Development Indicators (2013)
- 5.0 - 9.9 **Year:** 2013, except; BE, PT (2005).
- 10.0 - 19.9 **Region Level:** NUTS 0 - BE, EL, HU, NUTS 1 - BE, EL, HU, NUTS 2 - AT, BG, CZ, I
- 20.0 - 29.9
- 30.0 - 67.5

Low Work Intensity (Eurostat) 2013



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Per Cent of population in households where adults work less than 20% of a full time year

- 2.5 - 4.9 **Source:** Eurostat Regio database Table ilc_lvh121 (Downloaded 10/10/2014)
- 5.0 - 7.4 **Year:** 2013, except; BE, CH, EL, HR, IE, LU, (2012), TR (2006).
- 7.5 - 9.9 **Region Level:** NUTS 0 - EE, CY, LV, FR, HR, IS, LT, LU, LV, MT, PT, TR, UK NUTS 1 - BE, EL, HU, NL, PL NUTS 2 - AT, BG, CH, CZ, DK, ES, FI, IE, IT, NO, RO, SE, SI, SK
- 10.0 - 14.9
- 15.0 - 27.1

This map does not necessarily reflect the opinion of the ESPON Monitoring Committee

Regional level: NUTS 0-2
Source: Eurostat, year 2014
Origin of data: Regio (Schmidt), year (mostly) 2012
© EuroGeographics Association for administrative boundaries



ESPON TiPSE

The **T**erritorial **D**imension of **P**overty and **S**ocial **E**xclusion in **E**urope

Overall aim: “to generate a regional database ... and associated maps of poverty and social exclusion indicators.”

Objectives:

- Establish macro and micro-scale patterns of poverty and social exclusion (PSE).
- Observe associations between PSE and socio-economic indicators, suggest possible causal links and processes.
-



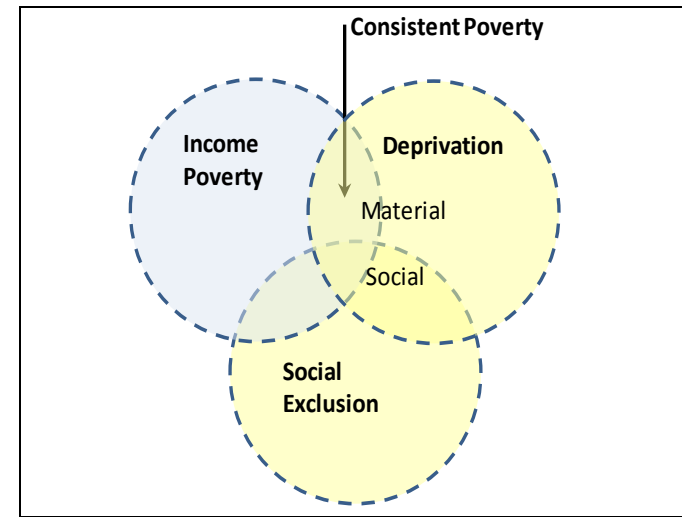
Poverty and social exclusion

“In the TIPSE project we take the view,... that poverty and social exclusion are **closely related, but nevertheless** are **distinct** phenomena. Within a policy context, at least, **poverty is usually** considered **a relatively narrow income-based concept**, which is amenable to quantification and definition according to specific benchmarks.... **Social exclusion**, on the other hand, **is** a **multi-dimensional** characteristic, defined according to context, and often assessed in more qualitative ways. ...social exclusion is often a process rather than simply a state at a point in time: it refers to both processes and consequent situations... **Poverty and social exclusion are not necessarily associated or co-located, since social exclusion is not always a function of low income.**”







Measuring & mapping regional poverty

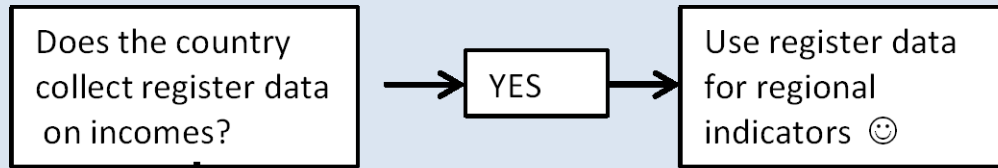
- TiPSE considered existing definitions and indicators of poverty and social exclusion, but the key focus was on the *spatial scale*.



- Poverty is a spatially heterogeneous phenomenon, thus poverty rates can vary widely over space.
- Regional and local policies need a better understanding of patterns of poverty at an appropriate scale: national vs. regional vs. small-area scale.

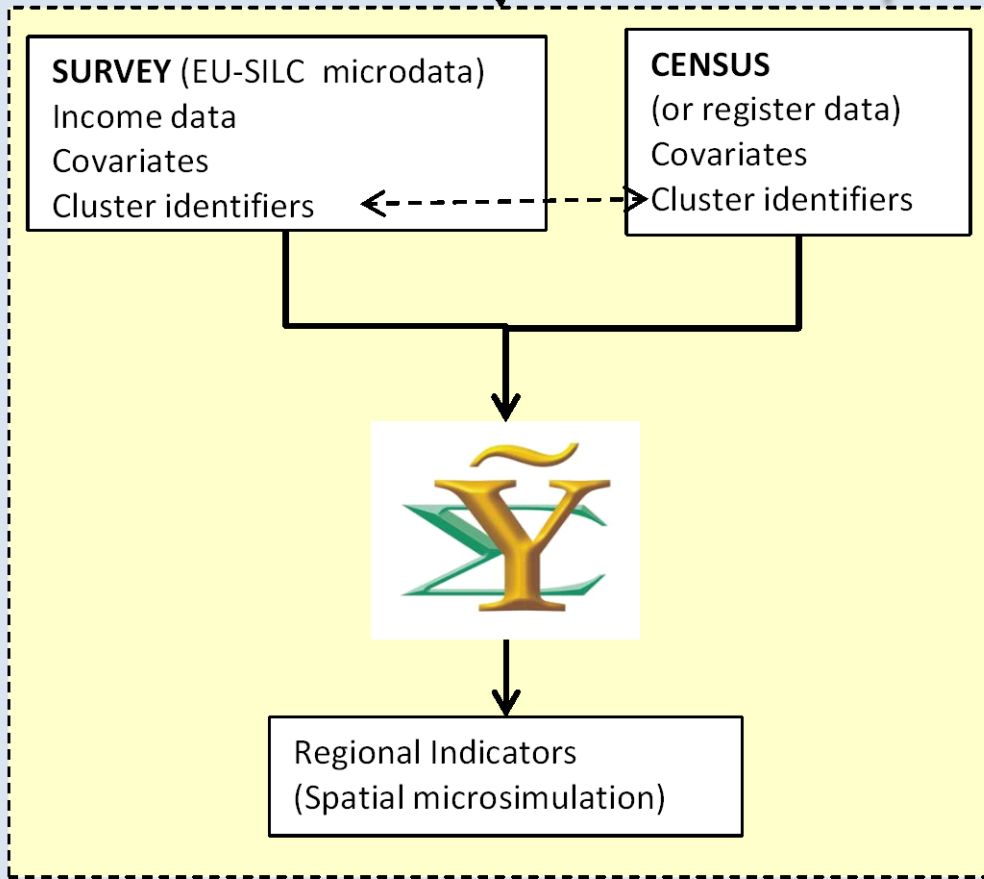
The challenge!

- Measure and map at-risk-of-poverty rates at NUTS 3 level, and smaller where possible, for all ESPON space countries.
- Differences in data sources and availability – needed a pragmatic methodology fit-for-purpose:
 1. Check availability of ARoP rates for NUTS 3 or smaller regions for each country (e.g. National Statistics Institute, World Bank); 
 2. For countries with register-based systems data for ARoP rates were directly obtained from NSI, in some cases data had to be adjusted from municipal level to NUTS 3 level using population weights. 
 3. Where data for ARoP rates were not available, implement empirical methodologies to estimate rates for NUTS 3 and smaller regions:
 - (1) World Bank (WB) poverty mapping methodology (WBPM) - failing that: 
 - (2) NUTS 2 level area-based models (ABM), or 
 - (3) Simple direct apportionment (APPT).

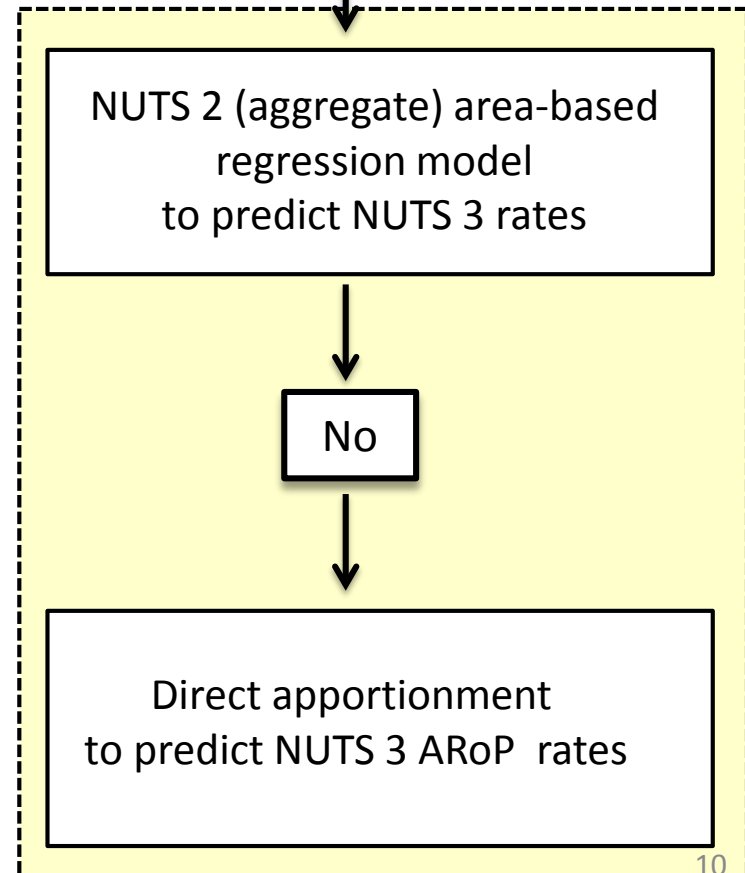


No

Implement PovMaP



No



Country	Method	Region	Source
Albania	WBPM	NUTS 3	World Bank
Austria	WBPM/APPT	NUTS 3/NUTS 3	TiPSE
Belgium	APPT	NUTS 3	TiPSE
Belgium	WBPM	-	World Bank
Bulgaria	WBPM	-	World Bank
Croatia	WBPM	NUTS 3	World Bank
Cyprus	EUSILC	NUTS 3	TiPSE (from NSI)
Czech Republic	WBPM	-	World Bank
Denmark	REG	NUTS 3	TiPSE (from NSI)
Estonia	WBPM	-	World Bank
Finland	REG	NUTS 3	TiPSE
France	NSI	NUTS 3*	TiPSE (from NSI)
FYROM	WBPM	-	World Bank
Germany	ABM	NUTS 3	TiPSE
Greece	WBPM	NUTS 3	TiPSE
Hungary	WBPM	-	World Bank
Iceland	EUSILC	NUTS 2	TiPSE (from NSI)
Ireland	EUSILC	NUTS 3	TiPSE (from NSI)
Italy	ABM	NUTS 3	TiPSE
Kosovo	WBPM	-	World Bank
Latvia	WBPM	-	World Bank
Lithuania	WBPM	-	World Bank
Luxembourg	EUSILC	NUTS 3	TiPSE (from NSI)
Malta	EUSILC	NUTS 2	TiPSE (from NSI)
Montenegro	WBPM	-	World Bank
Netherlands	REG	NUTS 3	TiPSE (from NSI)
Norway	REG	NUTS 3	TiPSE
Poland	WBPM	-	World Bank
Portugal	APPT	NUTS 3	TiPSE
Romania	WBPM	-	World Bank
Serbia	WBPM	-	World Bank
Slovakia	WBPM	-	World Bank
Slovenia	WBPM	-	World Bank
Spain	APPT	NUTS 3	TiPSE
Sweden	REG	NUTS 3	TiPSE (from NSI)
Switzerland	APPT	NUTS 3	TiPSE
Turkey	ABM	NUTS 3	TiPSE
United Kingdom	WBPM	NUTS 3 / LAU1	TiPSE
England and Wales	NSI	NUTS 3	TiPSE (from NSI)
Scotland	NSI	NUTS 3	TiPSE (from NSI)
Northern Ireland	NSI	NUTS 3	TiPSE (from NSI)

- Countries with register-based systems: Denmark, Finland, Netherlands, Norway and Sweden.
- WBPM used by TiPSE for Austria, Greece, and UK.
- ABM used by TiPSE for Germany, Italy, and Turkey.
- APPT used by TiPSE for Belgium, Portugal, Spain and Switzerland.

ARoP – At Risk of Poverty Rates (TiPSE - NUTS 3)

Sources:

BE, DE, EL, ES, IT, AT, PT, TR, CH -
ESPON **TiPSE project**.

DK, SE, FI, NO, IE, NL, FR, UK, HR -
National Statistical Institutes

LV, HU, RO, SI, SK - **World Bank**.

BG, CZ, EE, CY, LT, LU, MT, PL, LI -
Eurostat Regio Database (NUTS 0-2)

ARoP – At Risk of Poverty Rates (Eurostat)

Source: Eurostat Regio database
Table ilc_li41

Year: 2012, except; BE (2011), DE, EL, NL, (2010), FR, UK, (2009) TR, (2006), PT (2005).

Region Level:

NUTS 0 - EE, CY, LV, LT, LU, MT, IS, HR, TR

NUTS 1 - BE, EL, HU, PL, UK

NUTS 2 - BG, CZ, DK, DE, IE, ES, FR, IT, NL, AT, PT, RO, SI, SK, NO, CH

ARoP – At Risk of Poverty Rates (TiPSE - NUTS 3)

Sources:

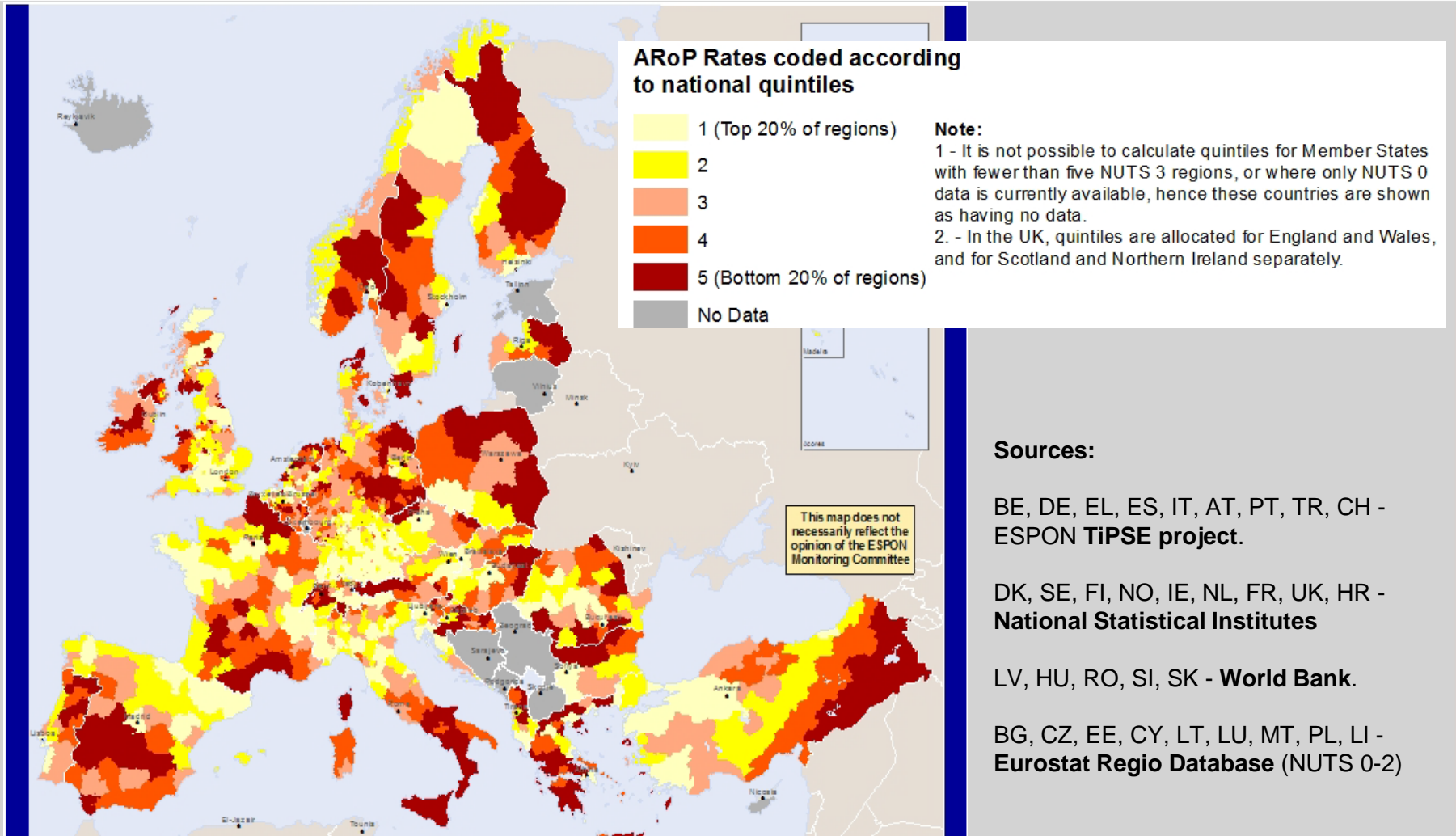
BE, DE, EL, ES, IT, AT, PT, TR, CH -
ESPON **TiPSE** project.

DK, SE, FI, NO, IE, NL, FR, UK, HR -
National Statistical Institutes

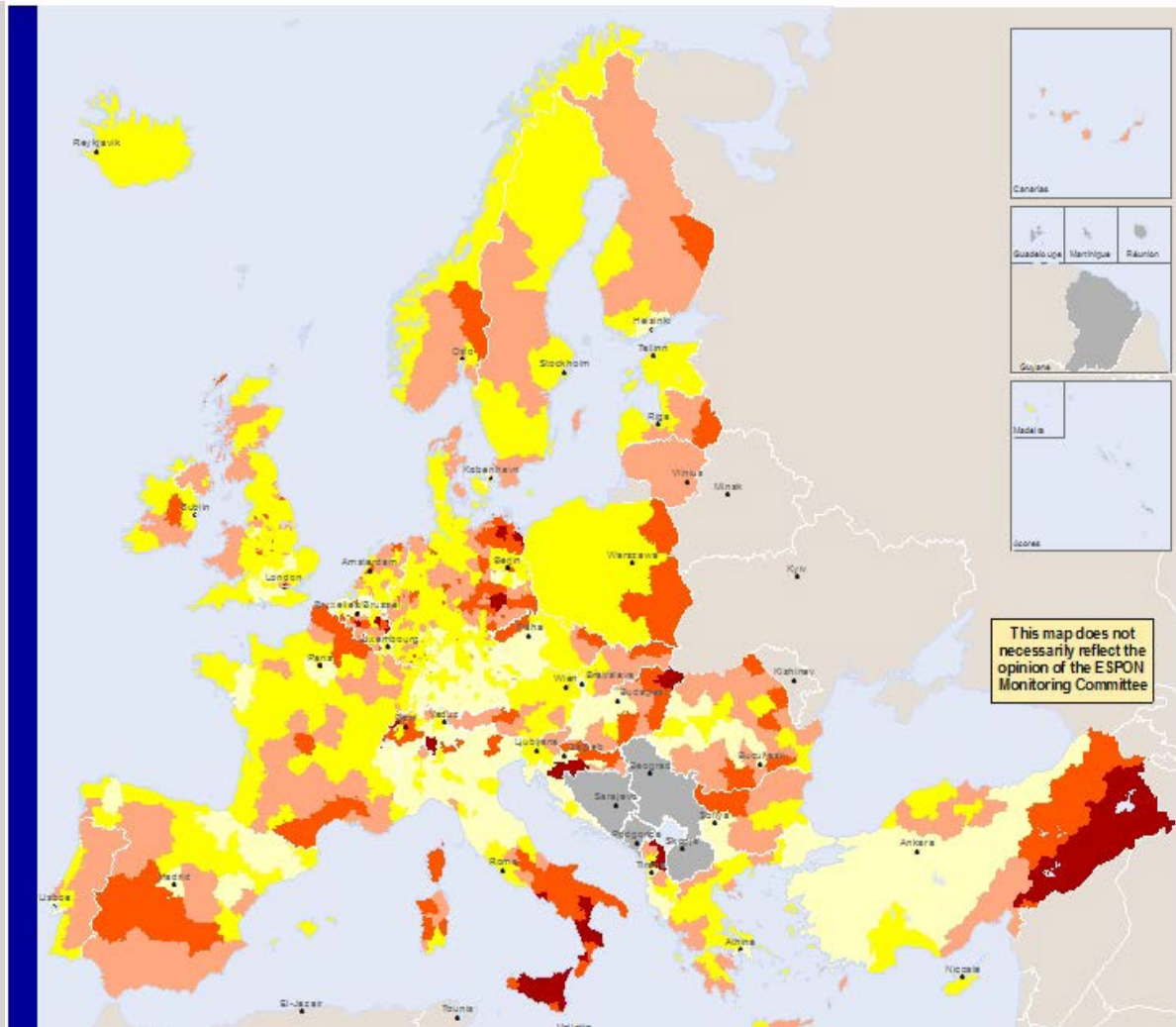
LV, HU, RO, SI, SK - **World Bank**.

BG, CZ, EE, CY, LT, LU, MT, PL, LI -
Eurostat Regio Database (NUTS 0-2)

ARoP – At Risk of Poverty Rates expressed as National Quintiles (TiPSE - NUTS 3)



ARoP – At Risk of Poverty Rates expressed as National Indices (TiPSE - NUTS 3)



Sources:

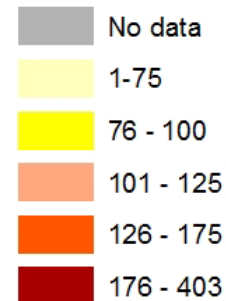
BE, DE, EL, ES, IT, AT, PT, TR, CH - ESPON TiPSE project.

DK, SE, FI, NO, IE, NL, FR, UK, HR - National Statistical Institutes

LV, HU, RO, SI, SK - World Bank.

BG, CZ, EE, CY, LT, LU, MT, PL, LI - Eurostat Regio Database (NUTS 0-2)

**ARoP Rate
Percent of national mean**



National Average =100



Investment for jobs and growth

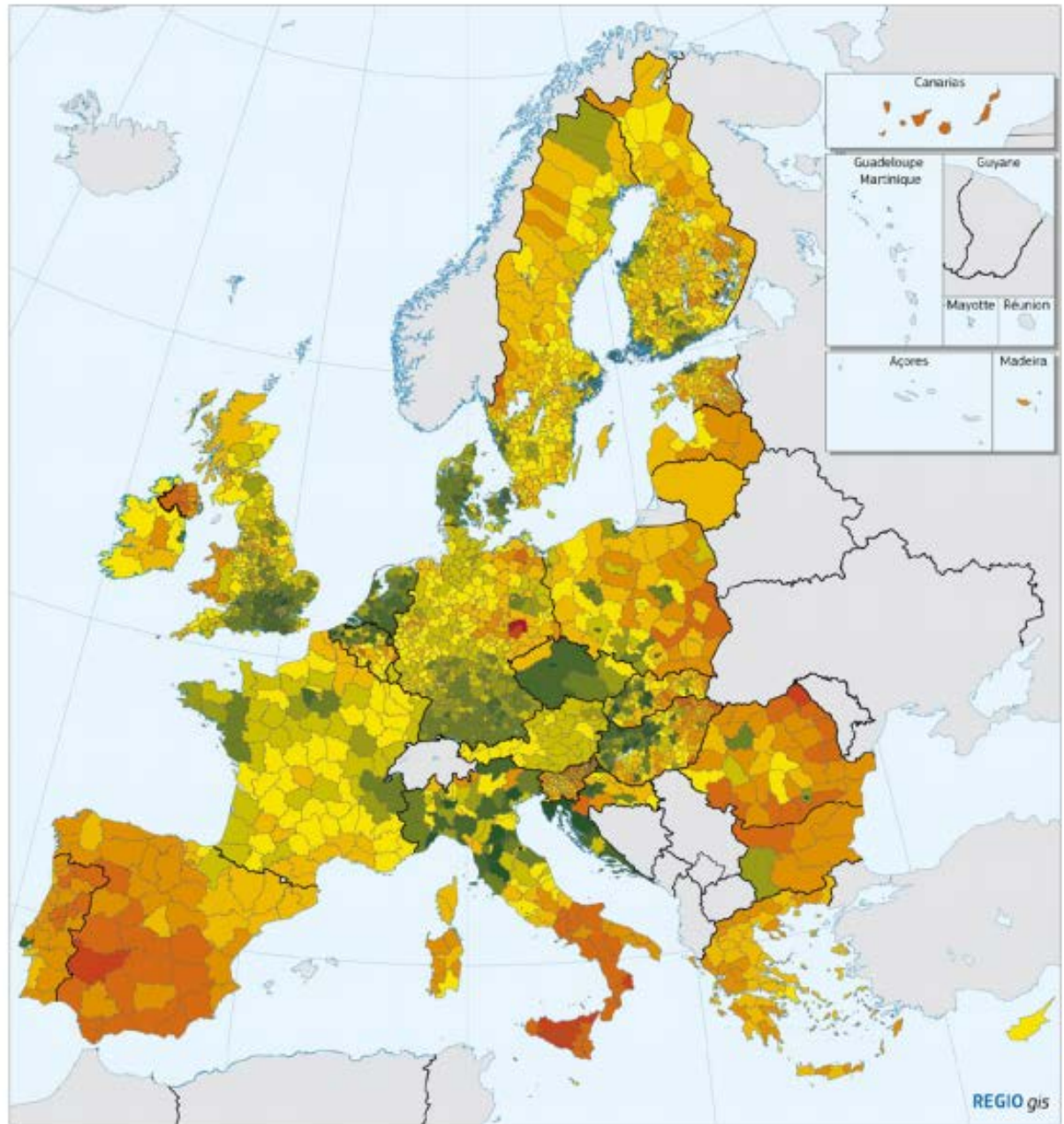
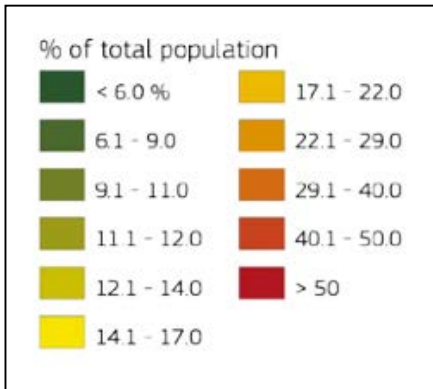
Promoting development and good governance in EU regions and cities



Sixth report on economic, social and territorial cohesion

Regional and Urban Policy

July 2014

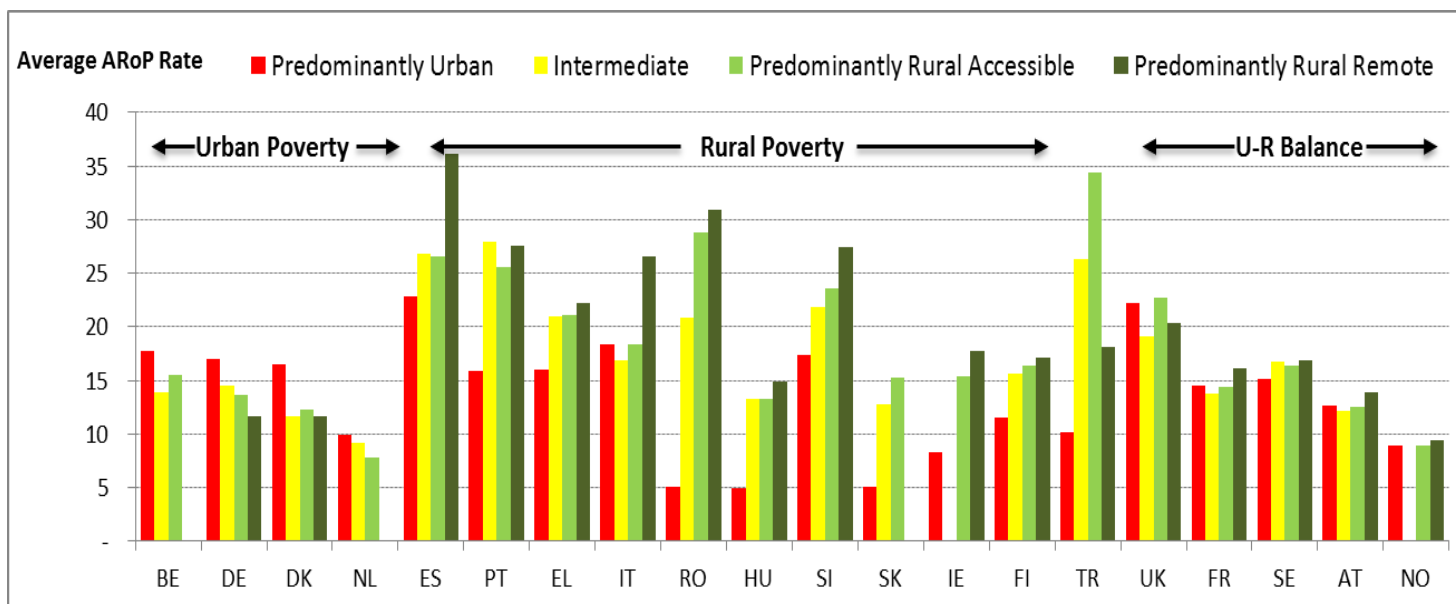


Map 2.15 At-risk-of-poverty-rate, 2010-2011

REGIO gis

The geography of income poverty (1)

- Exploring the spatial variation of ARoP rates at NUTS 3 level using ESPON regional typologies (urban-rural, metropolitan regions, border regions, etc.).



- Income poverty rates are
 - higher in urban areas in 4 countries (the centre).
 - higher in rural/intermediate areas in 11 countries (Med. and East).
 - no clear U-R difference in 5 countries (mostly NW).

The geography of income poverty (2)

- At a macro-scale the highest AROp rates of poverty tend to be in the Mediterranean countries and Turkey, the lowest in the Northern and Western countries.
- The relationship between capital cities, and secondary cities, and AROp rates is complex. Broadly speaking large cities in the North and West of Europe often contain areas with high rates of income poverty, whilst in the South and East cities tend to have relatively lower rates.
- Accessible rural areas, especially those close to larger cities and capitals, tend to have relatively low rates of income poverty.
- Remote rural regions often exhibit relatively high AROp rates.

Association between NUTS 3 ARoP rates and other socio-economic factors

- Statistical relationships between NUTS 3 ARoP rates and other 32 socio-economic factors (e.g. agglomeration, productivity, labour market, sectoral structure and human capital)
- Some key results:
 - Unemployment (total, youth, long-term) closely associated with ARoP throughout Europe.
 - Profiles of relationships in EU15 and EU12 are slightly different:
 - EU15 – labour market characteristics, elementary occupations; weak relationship between GDP pc and ARoP rates (i.e. intra-regional distributional effects more important than inter-regional variation in overall performance)
 - EU12 – accessibility, primary sector, education and skills, productivity; strong negative correlation between GDP pc and ARoP rates (i.e. regional performance more likely to drive poverty rates)

What about social exclusion?



DOMAIN	Dimension	Examples/ Descriptions
EARNING A LIVING	(a) Income	Disposable income Employed Unemployed
	(b) Employment	Inactive Long term unemployed Jobless households
ACCESS TO SERVICES	(a) Health	Access to primary health Healthy life expectancy
	(b) Education	Access to different kinds of school, college, cultural facility Attainment (ISCED levels)
	(c) Housing	Tenure status Density Amenities Post Office
	(d) Transport and Communication	Broadband Public transport Car availability
SOCIAL ENVIRONMENT	(a) Age	Dependency rates
	(b) Ethnic composition	Proportion from minorities
	(c) Migrants	Migrants as share of population
	(d) Crime and safety	Crime rates
POLITICAL PARTICIPATION	(a) Citizenship	Voters Civic engagement

Conclusions

- Short term improvements:
 - Include NUTS 2 identifiers in the EU-SILC for all countries; Align the EU-SILC covariates with variables in Eurostat Census Hub.
 - But regression modelling (e.g. SAE) using EU-SILC and Census data only a short term fix.
- Need a longer term solution:
 - EU-wide register data - Eurostat “Register Hub”? Would allow (1) longitudinal analysis of income poverty, (2) greater spatial detail, and (3) measuring the impact of policy interventions more effectively.
- Income is only one aspect of poverty, living costs also vary substantially across space, housing cost adjustment is not enough (urban bias).
- Consideration as to whether ARoP rates should also be expressed with respect to EU-wide poverty line (given issues above).



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Thank you

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