



**SMALL AREA METHODS
FOR MONITORING OF POVERTY
AND LIVING CONDITIONS IN EU**



**Jean
Monnet
Chair**
European Commission

PISA, 8-10 MAY 2018

**WORKSHOP “SMALL AREA METHODS AND LIVING CONDITIONS
INDICATORS IN EUROPEAN POVERTY STUDIES IN THE ERA OF
DATA DELUGE AND BIG DATA”**

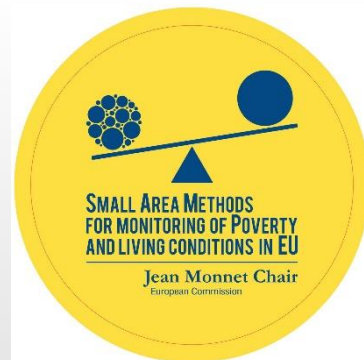
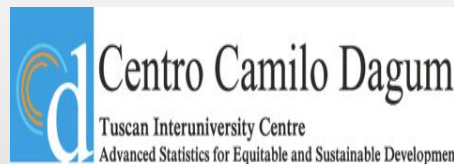
FINAL EVENT OF THE JEAN MONNET CHAIR SAMPLEU



SDGs Agenda 2030

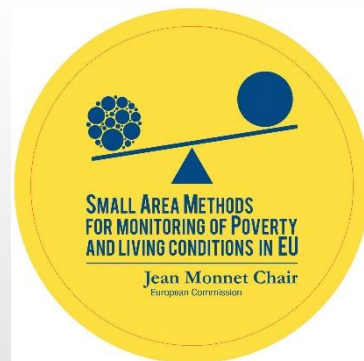
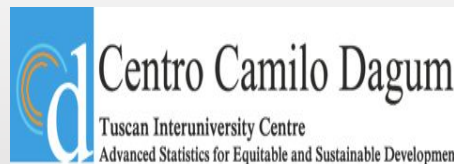
The importance of estimating **poverty indicators** and the number of poor **at sub-national** and **local level** is nowadays worldwide recognized

However, there are still ***open problems*** to compute adequate sub-national poverty indicators (relative monetary poverty)



Policy relevance

- Poverty monitoring: global/national /local trends
- Analysis: poverty risks, poverty profiles
- Subnational economic differences
- Social policy design: benefits, eligibility
- Poverty impact assessment: effects



Question: **Local**?

Answer 1 - Citizens, Policy makers, subject matter experts:

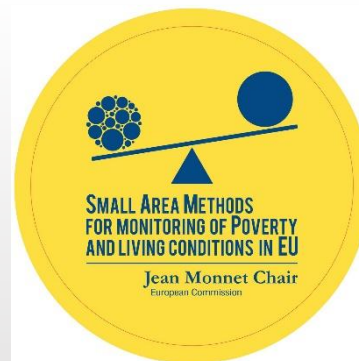
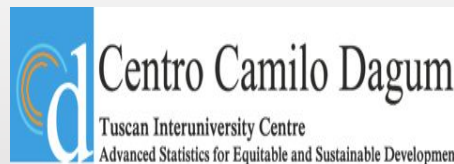
The **places** where people live

The areas of interest for local **government**

Answer 2 – Statisticians:

Areas for which direct estimates of poverty are “statistically significant”

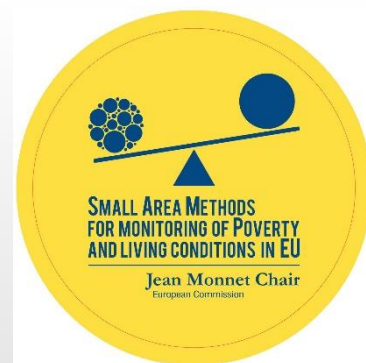
Smaller areas for which the **sample size** is not enough to obtain accurate estimates of poverty



Areas (domains of study) for which direct estimation of poverty from survey data is statistically significant....

Statistical issues

- ❖ Poverty indicator(s) for policy use
- ❖ Choice (and estimation) of poverty lines: pros and cons
- ❖ National versus subnational lines (..it reduces the number of relative poor)
- ❖ Which price adjustments (see Laureti)?
- ✓ Would poor-specific PPPs be more reliable?



Areas (domains) for which the sample size is not enough, in order to obtain accurate estimates of poverty

Statistical issues

- ❖ Poverty indicator(s) for policy use
- ❖ Choice (and estimation) of poverty lines: pros and cons
- ❖ National versus subnational lines (they are estimated)
- ❖ Which price adjustments (see Laureti)?

+

- ❖ **Model-based estimates**
- ❖ International guidelines?



❖ Model-based estimates

The use of Small Area Estimation (SAE) methods or other methods when sample size is not enough, in order to obtain accurate estimates of the indicators at local level and/or of the whole local distribution of income/ consumption expenditure

Internal and external validation of the SAE model

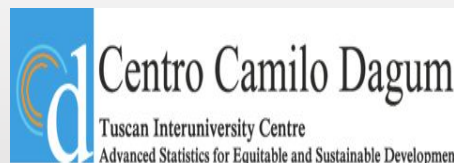
Univariate, multivariate SAE models,

Unit level, area level models

Models for different hierarchical levels

Linkage and data integration

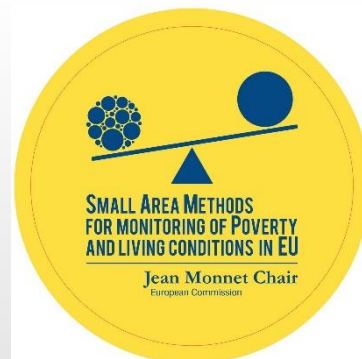
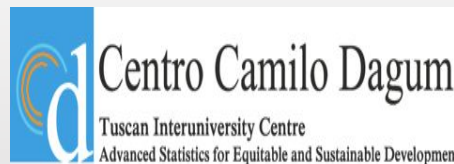
Small areas and Big data



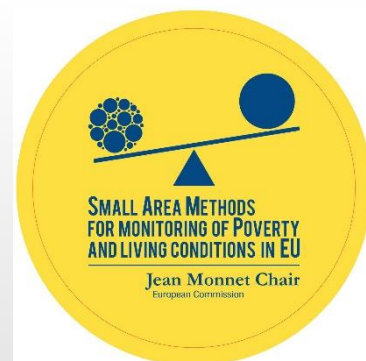
Key Questions

- ✓ Are relative/absolute (regional) lines more relevant?
- ✓ Relative poverty indicators or absolute poverty indicators?
- ✓ How to factor in products' quality, consumers' choices
- ✓ Comparisons over time?
- ✓ Model-based estimates and policy use: black box?

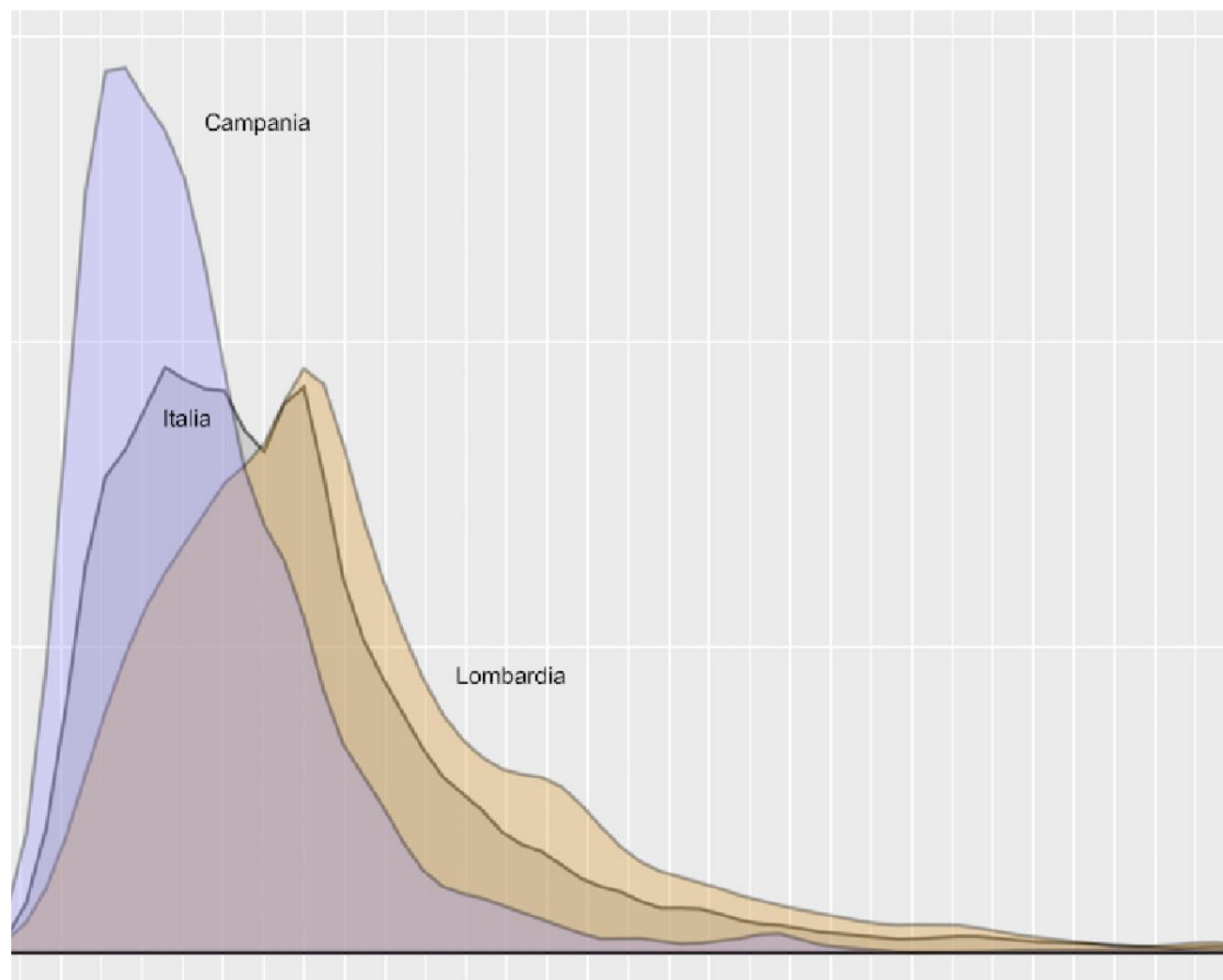
These issues are relevant because their solution sometimes strongly affects both the estimated values of the poverty indicators and of the number of the poor



Thank you!



Estimates of the expenditures distribution – 2012



Household HCR for Italian regions computed with National Poverty Line and Regional Poverty Lines – 2012

