EUROSTAT EU-SILC

Meeting of Providers of OECD Income Distribution Data

2.2 Comparability of OECD with other international and national estimates on income inequality and poverty

1. EU-SILC - Overview

- Statistics on Income and Living Conditions
- **Annual data:** cross-sectional and longitudinal (4-year rotating panel), EU27 + CH + IS + NO + HR + TR + tests in FYROM, Serbia, Montenegro

  - Information on both households and individuals (micro level)
    - Income and tax
    - Material deprivation
    - Housing conditions
    - Employment, Childcare
    - Health, Education
1. EU-SILC - Overview

- Reference population
  All private households and their current members

- Sample size
  Minimum sample size corresponding to a precision criteria for the key indicator (precision of at-risk-of-poverty rate of 1%)

- Ex-ante output harmonization
  - Definition of target concepts/variables to be measured
  - Standardized output (format and content)
  - National implementation (subsidiarity)

- Legal basis: Regulations - EC Regulation 1177/2003
  - Obligation of Member States to deliver data and specifications
  - Quality reports (national and EU)
  + Harmonised guidelines to be followed (monitored by Eurostat)

- National flexibility in the implementation
  - Source: national survey and/or registers (DK, NL, SI, FI, SE, IS, NO) or (more and more) mixed
  - Fieldwork: one-shot (# length) or continuous survey
  - Income reference period: fixed or moving 12-months
2. EU-SILC - Validating & Processing

- **Micro validation**
  - File structure; Format & Syntax
  - Routing of variables; Diagnostics on missing values
  - Logic

- **Macro Validation**
  - Outliers detection
  - Summary Statistics
  - Longitudinal weights
  - Time series: frequencies & quartiles changes to Y-1
  - Comparison with external sources for weighting

*Member States to send comments on errors & warnings with first transmission* (Validation and indicator calculation programs made available to Member States)

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2. EU-SILC - Validating & Processing

- Politically agreed indicators – calculated immediately after validation; application shared with MS
- Time series (4 years) and revision checks (T-1)
- Additional datasets – updated every middle of month

*Eurostat to send indicators computed to Member States for final validation* (Validation and indicator calculation programs made available to Member States)
3. Comparability

- Any difference in sources may affect cross-country comparability
  - Administrative vs. survey sources
  - Coverage, etc.
  - Key role of quality reports and metadata (ESMS)

- Indeed this is still more difficult among international sources
  - EU-SILC is not always the source on income used at national / OECD level in / for EU countries
  - Methodologies refer to international standards (Canberra Group handbook) but different rules in the implementation might interfere

3. Comparability

- Equivalence scale
  - Eurostat uses "Modified OECD equivalence scale", weights:
    - 1 for the 1st adult (≥ 14 years)
    - 0.5 for other adults
    - 0.3 for children <14
  - Comparing with OECD (√):
    - 1 adult: ESTAT = 1  OECD = 1
    - 1 adult 1 child: ESTAT = 1.3  OECD = 1.41
    - 1 adult 2 children: ESTAT = 1.6  OECD = 1.73
    - 2 adults: ESTAT = 1.5  OECD = 1.41
    - 2 adults 2 children: ESTAT = 2.1  OECD = 2
    - 3 adults 3 children: ESTAT = 2.9  OECD = 2.45
3. Comparability

- Some EU-SILC rules concerning various meeting's agenda items
  - Missing values and imputation:
    - No missing values are accepted for income variables
    - Corresponding imputation rules are defined nationally
    - For non-income variables, calculations are done based on non-missing values
  - Negative incomes are accepted (self-employed)
  - There is no top-coding by Eurostat of its micro data (however some Member States do it before sending data to Eurostat)

- EU-SILC developments related to various meeting's agenda items
  - Imputed rent:
    - Data are collected
    - But the cross-country comparability is too low to include it in Eurostat income figures
  - Social Transfers In Kind:
    - On-going project, priority to education and health
    - Issues on hook variables, sources and equivalence scales
  - Precision (variance):
    - Calculation on main indicators using linearisation methods
    - Implemented; to be disseminated soon
4. EU-SILC - Some links

- EU-SILC on Eurostat web site:
  http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/introduction

- EU-SILC in Eurostat Statistics Explained:

- EU-SILC quality reports (national and EU):
  https://circabc.europa.eu/faces/isp/extension/wai/navigation/container.jsp
  Then: -> "EU-SILC" -> "Library" -> "05. Quality assessment"
  And also (EU only):
  http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/quality/eu_quality_reports

Thank you for your attention

didier.dupre@ec.europa.eu

Eurostat F/4
EU-SILC