

2018 Net-SILC3 International Conference

Comparative EU Statistics on Income and Living Conditions

Session 1: Methods and income measurement (abstracts of all session papers)

Chair: Didier Dupré (European Commission, Eurostat, Luxembourg)

Discussant: Andrea Brandolini (Bank of Italy)

- Tijana Čomić (Institute of Economic Sciences, Serbia): *Production for own consumption: Net-SILC3 main findings and recommendations on the validity and comparability of EU-SILC variables & Impact on the income distribution and on key EU income-based indicators*
- Veli-Matti Törmälehto (Statistics Finland): *Reconciliation of EU-SILC data with national accounts*
- Alessio Fusco (LISER, Luxembourg), Giovanni Gallo (University of Modena and Reggio Emilia, Italy) and Philippe Van Kerm (LISER and University of Luxembourg): *Rotation group bias in the estimation of EU social indicators*

- Tijana Čomić (Institute of Economic Sciences, Serbia): *Production for own consumption: Net-SILC3 main findings and recommendations on the validity and comparability of EU-SILC variables & Impact on the income distribution and on key EU income-based indicators*

In this paper, we estimate the effects of inclusion of the value of goods produced for own consumption as a component of household disposable income on the main social indicators that have been agreed at EU level. The analysis considers both the total population and relevant subpopulations. Although not being a part of the total household disposable income concept used for the computation of EU social indicators, the data on value of goods produced for own consumption are being collected by most of the countries. However, there is no standard methodology for own consumption data collection in EU-SILC which causes comparability issues of data among countries. Therefore, the paper describes the national practices (in EU and non-EU countries) on how own consumption data are collected from households/persons and how own consumption is valued/monetised, with the aim to suggest the most efficient approach that might be accepted by all countries.

- Veli-Matti Törmälehto (Statistics Finland): *Reconciliation of EU-SILC data with national accounts*

The coherence of household survey data with national accounts has been studied extensively in recent years, following the “Beyond GDP” initiatives. This paper compares income aggregates in EU-SILC and national accounts, adjusts for the main conceptual differences, and discusses factors that could influence the observed discrepancies. Following a proposal by Atkinson, Guio and Marlier (2017), sensitivity of key social indicators to the micro/macro-discrepancies is then examined by adjusting the micro data totals to match the reconciled macro aggregates. Three adjustment methods are tested (simple proportional scaling, calibration to margins, Pareto imputation), and their impact on the measures of income inequality and at risk of poverty compared. In line with other studies, the micro/macro gaps are found to vary significantly across countries, and are more substantial in property and self-employment income compared to wages and salaries and transfers received. The observed gaps are likely to be mostly due to measurement errors and conceptual differences. Adjusting the micro data with the gaps results in significant increases in inequality and median income levels, but more subdued changes in at risk of poverty rates. The results are sensitive to the adjustment methods as well as proper assessment of the micro/macro gaps. Caution is warranted if distributional indicators are computed from macro-adjusted micro data.

- Alessio Fusco (LISER, Luxembourg), Giovanni Gallo (University of Modena and Reggio Emilia, Italy) and Philippe Van Kerm (LISER and University of Luxembourg): *Rotation group bias in the estimation of EU social indicators*

The European Union Statistics on Income and Living Condition (EU-SILC) instrument relies on a 4-wave rotating panel design. A new population sample is drawn every year and selected respondents are interviewed annually for up to four years. A complete EU-SILC cross-section dataset therefore contains data from samples drawn independently in four different years. This paper applies influence function regressions methods to examine to what extent the rotating panel design of EU-SILC influences the estimates of social indicators such as income poverty rates or income inequality measures, in other words whether a “rotation group bias” is observed. Our analysis of the 2014 EU-SILC cross-sectional data highlights that estimates of income inequality and poverty rates for newer rotation groups are often higher than for older ones. “Fresh” rotation groups exert an influence that is significantly different from other rotation groups in 7 of the 28 countries examined. These impacts remain significant even when accounting for different socio-demographic characteristics of households and main characteristics of the sampling. Not all countries are affected by the bias however. We cannot isolate the source of the bias, but we raise attention to an issue that may affect the reliability of important social indicator estimates.