

How Can NA Data Account for Differences among Household Groups? Integration of Micro and Macro Data on Labour Income for Households' Accounts

Davide Di Laurea
Istat - Italian National Institute of Statistics
dilaurea@istat.it

Francesca Tartamella
Istat & Eurostat

Disposable income is a key quantitative indicator for measuring households well-being. The National Accounts describe the economic behaviour of a representative household, aside from their heterogeneity. Moreover some imputed flows and classifications have been specifically thought for the analysis of the whole economic system and its interaction, but they may be less meaningful when analysing the household sector alone (for example Fisim correction). On the other hand, micro data sources provide information on the distribution of income, consumption and wealth among individuals and households. But they may fail in covering comprehensively all households' earnings, savings and expenses. In any case they do not allow for analysing households vis a vis the other economic sectors.

Over the years micro and macro concepts and approaches developed separately, often leading to divergent results even when coping with ex-post fully harmonized population domains and income definitions. Deriving distributional information for sub-populations from micro data to be applied to NA totals may be misleading, due to heterogeneous magnitudes of discrepancies across different strata of the population for any source of income. Differences can be quite relevant, especially for income from property and self-employment. It is therefore important to detect all elements causing differences and to adjust micro and macro data conveniently, in order to derive correct distributional analyses.

In the first part of this paper we decompose and reassemble NA components of disposable income in order to find a configuration whose entries, while preserving NA definitions, are closer to the income concepts of the Canberra group. In this way their differences can be considered a reliable measure of the under-coverage from micro data. The second part describes an innovative approach to deal with this gap. In particular, we concentrate on labour income, showing how administrative archives can be used to integrate household survey data. This integration allows for building a sound and coherent micro database which proves to be a powerful instrument to fill the gap with macro data on labour income.

Micro data are from an household income survey – namely It-Silc- and the Italian Social Security archives, containing records on employees and self-employed. The latter, combined with the Labour Force Survey, already constituted the base of Italian National Accounts estimates on labour input and labour compensation. The record linkage among survey and administrative data allows for detecting and appropriately correcting inconsistencies at the micro level. They may come from diverging occupational or employment status, at the individual level as well as at the job one. It also enables to identify non-registered workers together with their labour income. Once working characteristics are appropriately reconciled this integrated archive also provides a valid support for minimizing discrepancies between amounts in the data from different sources. A new labour income distribution is then obtained, also by imputing non-reported and/or under-reported income components. An assessment on how much the gap with NA is reduced is also presented.

The analysis of the impact on poverty and inequality indicators, respectively for work and total household income, concludes the paper.