Income and consumption expenditure by households groups in National accounts

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National accounts (NA) are the ideal context to reconcile micro and macro data sources in a coherent framework. In this paper we aim at estimating some significant items of national accounting (in particular available income and final consumption) by households groups using micro survey data and NA figures simultaneously.

The results would be really useful for the building of both the Social Accounting Matrix (SAM) and the households sectors accounts as set out in SNA. The process would also highlight the conceptual differences between macro and micro economic statistics, resulting in improved knowledge of the "true" values of economic aggregates and in a better understanding of households economic behaviour. As a matter of fact both approaches (macro and micro) try to measure the same phenomena but figures are often considerably different.

We take NA macro data as the top to be disaggregated by groups of households according to patterns coming from micro data sources on income and consumption expenditure. The crucial question is how to reconcile macro and micro data.

NA statistics themselves are the result of the integration of several data sources. Particularly the Italian National Accounts office uses (a variant of) the methodology by Stone, Champernowne and Meade to merge the estimates in a coherent framework. The method allows to move from an initial set of estimates based on independent methods and data sources to a final set of estimates, balanced according to the supply and use table accounting constraints. Unfortunately, for the time being, microeconomic statistics on households income are not included in the database underlying the balancing process, i.e. households income micro statistics *do not* enter the estimation process of the Italian NA. Therefore, the use of micro income statistics (essential for the estimate of NA variables by households group) must be tested.

In the first part of the paper we chiefly take into account the Istat survey on Income (Eusilc) and The Bank of Italy survey on Income and Wealth (SHIW). We compare concepts and figures on income and expenditure in order to point out the main differences with respect to NA values.

Another relevant issue is how to match micro data coming from income surveys on one hand and consumption surveys on the other. This is the object of the second part of the paper.

Two main problems encourage the matching:

- The simultaneous use of independent data sources may lead to inconsistencies in the indicators to be used for distributing NA income and consumption expenditure by households group. This is particularly true when households are grouped by characters not directly collected by both data sources, especially if they are monetary. The problem would not emerge if we could use one single data source for estimating all the indicators
- As it is well known surveys on income do not collect detailed information on consumption expenditure, while surveys on consumption usually include only few generic questions on income. The exclusive use of the SHB (Survey on Households Budgets, Istat survey about households expenditures) would not allow to group households according to income related characters like the household's main source of income. On the other hand, the exclusive use of SHIW (or Eusilc) would preclude the analysis of consumption of households groups by

categories of products or by function of consumption (which is an essential piece of information for the building of the SAM).

In a previous work we tried to extract the best information from each survey merging the SHB and the SHIW micro data sets through a *statistical matching*. Records from SHIW were considered incomplete records with missing values in correspondence of questions relating consumption. Data on consumption were "donated" by the SHB records selected by the matching process. We obtained encouraging results. In this paper we repeat the statistical matching for some recent years. We also take into account the Eusilc survey as an alternative input from the income side. The purpose is twofold: the validation of the method and the estimate of the indicators for disaggregating NA income and consumption expenditure by types of households groups. In particular we consider economic and social characteristics as the quantile of the income, the main source of income, the education level of the head of the household or the "age" of the family.