ABSTRACT
Household surveys are typical sources of data on income. For one thing, they improve upon alternative sources, such as social security or tax records, on many respects: they do not suffer from censoring of low-income earners (e.g. due to tax thresholds); the income concept is not restricted to the base relevant for tax or social contribution payments but could be the most comprehensive one (e.g. including also in-kind receipts); administrative sources are usually poor in terms of individual's characteristics and the unit is the individual, with no possibility of matching with information on other members of the household. On the other hand, household surveys are affected by non-sampling errors. As participation is usually not compulsory, a bias due to selection into participation is often at work. Moreover, response error may arise because of underreporting, recording errors, difficulties in the understanding of questions, and so on.

The objective of this paper is to study, and to correct for, response error in personal income collected through survey data. Response error is defined as the difference between the objective truth relating respondent's income and her report about that income. The consequences of response error are twofold. The first is bias, which affects the size and the sign of the discrepancy between actual and reported amount earned. The second is variability or reliability, which refers to the distribution of errors around their average values. In this paper we focus on the issue of the potential bias due to response error.

The motivation behind this paper is twofold. The first objective is to provide an adjusted database to be used for ex-ante policy evaluation in microsimulation models. How tax-benefit policies affect the distribution of income is a central question in economic and policy analysis. For the policy maker, it is crucial to know whether actual reforms have achieved initial policy objectives and how topical reforms may potentially affect income distribution in the future. For those simulations, the availability of micro-data which provide an accurate representation of the household economic situation is crucial. The second objective is to derive misreporting indicators at the individual level. This enables us to have a better understanding of the distribution of response errors. Knowing whether such errors are concentrated in few respondents or not, and what are their main drivers, can help data producers to improve the accuracy of their data.

The data-set we rely upon is the Bank of Italy's Survey of Household Income and Wealth (SHIW, thereafter), which is run biennially and is representative of the Italian population (Banca d'Italia, 2006). The paper is organized as follows. Section 2 reviews the literature. In Section 3 we assess the magnitude of response error in the SHIW using National
Accounts. Section 4 describes the adjustment procedure. We develop an ad hoc adjustment procedure for each component of household income. Namely, for the problem of underreporting of secondary incomes we do a statistical matching with administrative data. Adjusted incomes from financial assets are estimating through an external validation sample a survey run by an Italian leading commercial bank in which both survey and administrative data are available. For income from secondary dwellings we replicate an experiment run by Brandolini et. al (2004) using SHIW data. Finally, we deal with the entrepreneurs’ underreporting following the approach proposed by Pissarides and Weber (1989) and Cannari and Violi (1995).

In Sections 5 and 6 we use the adjusted data to study respondents' reporting behaviour and its effect on the distribution of income. Section 7 concludes.