

Survey Mode Effects on Item Non Response and Income Inequality Measurement

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Measures of income inequality are often based on household surveys, such as the Survey of Consumer Finances (SCF), the Panel Study of Income Dynamics (PSID), and the EU - Statistics on Income and Living Conditions (EU-SILC). Such surveys tend to be plagued by selective nonresponse and misreporting, in particular in the upper and lower tails of the income distribution. Furthermore, nonresponse and misreporting might differ across various interview methodologies, in particular between face-to-face and telephone interviews, complicating the interpretability and comparability of the resulting inequality measures.

In this paper, we exploit the particular structure of the two consecutive waves of the EU-SILC survey conducted in Austria in 2007 and 2008. In 2007, all households in the sample were interviewed using Computer Assisted Personal Interviewing (CAPI), in 2008 the same (and some new households accounting for the rotating panel structure) households were interviewed again. Roughly half of the households that participated in both waves continued to be interviewed using CAPI, while the other half switched to Computer Assisted Telephone Interviewing (CATI). We exploit the panel structure of these data, controlling for a rich set of covariates from the baseline survey, in order to estimate the causal effect of interview method on item-nonresponse, for components of income, and on the observed level of total income. We combine these estimates with nonparametric reweighting and regression approaches in order to estimate the effect of interview method on the unconditional observed income distribution.

We find that selective item-nonresponse in the tails is significantly higher for CATI, and incomes for CATI tend to be closer to the mean income. On average the item-non-response is about 20%-30% percent higher in a household interviewed through CATI instead of CAPI. Furthermore, inequality measured by the Gini coefficient is reduced by about 10% by a switch of the interview method from CAPI to CATI.

Relation to selective literature:

Whereas Lohmann (2010) examined the nuances of EU-SILC's compilation of partly register- and partly survey-data, our analysis sheds further light on the effects of the use of different interviewing modes.

Henning Lohmann (2010): "Comparability of EU-SILC survey and register data: The relationship among employment, earnings, and poverty," Paper presented at the 31st IARIW General Conference, St. Gallen, Switzerland, August 22-28.