What difference does a survey make? Comparing incomes of the 65+ in Europe between EU-SILC and SHARE.

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Abstract

In this paper, we investigate the striking differences in estimates of the level of income, poverty and inequality among persons aged 65 years and over, if data from the EU Statistics on Income and Living Conditions (EU-SILC) and from the Survey of Health, Ageing and Retirement in Europe (SHARE) are compared. In both surveys, income is captured through a range of rather detailed questions. But, while the income questions in SHARE are standardized across countries, EU-SILC provides only a common framework for the various national data collections, and questionnaire design varies substantially across countries. However, to our knowledge, there has been little systematic research on the effects of different ways to ask for household income components in surveys on the results in terms of the level and distribution of household income. This paper tries to fill some of this gap. More in particular, we analyse for a wide range of European countries whether differences in the level and distribution of incomes can be related to sampling variance, weighting procedures, differences in asking for incomes of other household members, the definition of pension income and the detail of questions regarding income from financial assets.

The starting point for this validation exercise are the most recent SHARE dataset that includes income and wealth variables, namely SHARE wave 2 (2006/2007), and EU-SILC 2007
With these data, income statistics for the elderly of 12 European countries can be compared. Whenever possible, we also compare results to macro level data from administrative data sources such as ESSPROS.

We find that poverty rates for persons aged 65 and more in SHARE are much larger than in EU-SILC in many countries (see Figure 1). Preliminary results suggest that the main reason for this, is that incomes of other household members than the respondent and her or his partner are relatively badly captured in SHARE through a single catch-all question, in contrast to the more comprehensive approach applied in EU-SILC (see Figure 2). Furthermore, we find that the match in aggregate amounts of public pensions between EU-SILC and administrative data from ESSPROS is quite reasonable, and the same is true for the comparison between EU-SILC and SHARE, though not in all countries. Pensions seem particularly underestimated in Belgium in EU-SILC and in Poland in SHARE.

The distributions of property income as they appear from EU-SILC and SHARE are quite similar in the Netherlands and in Sweden. This is remarkable, as in those countries registers are the source of the EU-SILC income data, whereas this is not the case for SHARE. Apparently, property income can be measured adequately in surveys, provided the questions are detailed. Very large amounts of property income seem to be often missed, though. Otherwise, it is not clear that the more detailed questions on property in SHARE are very superior to the less intensive approach in most EU-SILC questionnaires. SHARE seems to be better at capturing very small and modest amounts, but this is not clearly the case for larger amounts.
Figure 1: At-risk-of-poverty rate for persons aged 65 and over, EU-SILC (2007) and SHARE (wave 2) compared, poverty threshold equal to 60 per cent of national median equivalent net disposable household income in EU-SILC 2007 (applied both in EU-SILC and in SHARE)

![Figure 1 Graph](image1)

Note: AROP60. 95% confidence intervals. Source: EU-SILC 2007 UDB, version 6; SHARE Wave 2; own calculations.

Figure 2: The difference in at-risk-of-poverty estimates for persons aged 65 and over between EU-SILC (2007) and SHARE (wave 2) if incomes of other household members are excluded (‘unit income’)

![Figure 2 Graph](image2)

Note: SHARE minus EU-SILC estimate of AROP60, persons aged 65 and over. 95% confidence intervals. Source: EU-SILC 2007 UDB, version 6; SHARE Wave 2; own calculations.