

## RL070: CHILDRENS' CROSS-SECTIONAL WEIGHT FOR CHILDCARE

**Topic and detailed topic:** Technical items / Weights

**Variable type:** Annual

**Unit:** All current household members not over 12 years old (age at the date of interview)

**Reference period:** Current

**Mode of collection:** Constructed

**In use (period):** Yes, since the first year of EU-SILC data collection

**Series' differences:** No changes

### VALUES AND FORMAT

0+ (format 2.5) Weight

### FLAGS

- 1 Filled
- 2 Not applicable (person aged more than 12 years old at the date of interview)
- 7 Not applicable (RB010 ≠ last year of operation)

### DESCRIPTION

In the EU-SILC, in addition to the four usual types of units involved which are "household", "household member", "household member 16+" and "selected respondent", "child" is another type of unit that needs to be considered for childcare data.

The personal cross-sectional weight (applicable to all household members, of all ages (target variable RB050) may be used for the childcare data. However, the calculation of this weight probably does not take into account external control age-distributions for children aged 12 and under. In order to ensure a correct distribution for children by age, it may be better to calculate specific cross-sectional weights for children<sup>48</sup>.

The proposal IS NOT to scale and calculate new weights for children taking into account non-response, household and individual variables, region, children ages...etc.

**The proposal is to adjust the distribution of children for each year of age.** This involves the adjustment of personal cross-sectional weights so as to make the distribution, according to age characteristics, of the children covered in the sample tally with the same information from a more reliable external source (age distribution of children aged 0 to 12 in private households).

$D_n$  = children aged  $n$  at the day of interview ( $n=0$  to  $12$ )<sup>49</sup>

Children's cross-sectional weight for  $D_n$  ( $n=0$  to  $12$ ):  $w_i = w'_i * N'_n / N_n$

$w'_i$  = personal cross-sectional weight for the child ' $i$ '

$N'_n$  = sum of personal cross-sectional weights for children aged  $n$  at the day of interview in the database

$N_n$  = number of children in the demographic population aged  $n$  at the 31/12/N-1 (estimated from external source)

(Children at the end of income reference period).

#### Notes:

The sum of children's cross-sectional weights will correspond to the estimation of the number of children in the population.

The sample size of children will be checked before childcare data are published.

<sup>(48)</sup> This will also enlarge the possibilities for analysis of the detailed data on childcare (estimate total numbers of children cared for, global proportions among all children ...).

<sup>(49)</sup> Note for 0 year old: this includes children born in year N-1. Children born in year N are excluded (aged (-1) at the 31/12/N-1; difficult to take them into account to ensure comparable data between countries because of differences in the dates of the surveys in year N).