# Intermediate Quality Report 

relating to the

# EU-SILC 2004 operation 

## Denmark

Copenhagen 2006

## 1. COMMON CROSS-SECTIONAL EUROPEAN UNION INDICATORS

1.1. Common cross-sectional EU indicators based on the cross-sectional component of EU-SILC

|  | Total | Female | Male |
| :--- | :--- | :--- | :--- |
| At-risk-of-poverty rate after social transfers - total | 10,9 | 11,2 | 10,7 |
| At-risk-of-poverty rate after social transfers - 0-15 years | 9,1 | 9,1 | 9,0 |
| At-risk-of-poverty rate after social transfers - 16-24 years | 27,0 | 29,5 | 24,6 |
| At-risk-of-poverty rate after social transfers - 25-49 years | 8,8 | 8,3 | 9,3 |
| At-risk-of-poverty rate after social transfers - 50-64 years | 4,2 | 3,9 | 4,6 |
| At-risk-of-poverty rate after social transfers - 65+ years | 17,0 | 17,8 | 16,0 |
| At-risk-of-poverty rate after social transfers - 16+ years | 11,4 | 11,7 | 11,1 |
| At-risk-of-poverty rate after social transfers - 16-64 years | 10,1 | 10,1 | 10,2 |
| At-risk-of-poverty rate after social transfers - 0-64 years | 9,9 | 9,9 | 9,9 |
|  |  |  |  |
| At-risk-of-poverty rate after social transfers - employed | 4,8 | 4,2 | 5,3 |
| At-risk-of-poverty rate after social transfers - unemployed | 33,0 | 32,4 | 33,8 |
| At-risk-of-poverty rate after social transfers - retired | 19,1 | 14,1 | 24,5 |
| At-risk-of-poverty rate after social transfers - other inactive | 14,3 | 15,4 | 12,7 |
|  |  |  |  |
| At-risk-of-poverty rate after social transfers - single, < 65 <br> years | 25,8 |  |  |
| At-risk-of-poverty rate after social transfers - single, 65+ <br> years | 20,4 |  |  |
| At-risk-of-poverty rate after social transfers - single Total | 24,1 | 23,2 | 25,1 |
|  |  |  |  |
| At-risk-of-poverty rate after social transfers - 2 adults, no <br> children, both < 65 | 5,1 |  |  |
| At-risk-of-poverty rate after social transfers - 2 adults, no <br> children, at least one 65+ | 12,8 |  |  |
| At-risk-of-poverty rate after social transfers - other <br> households without children | 2,6 |  |  |
|  |  |  |  |


| At-risk-of-poverty rate after social transfers - single parent, at least one child | 15,9 |  |  |
| :---: | :---: | :---: | :---: |
| At-risk-of-poverty rate after social transfers - 2 adults, 1 child | 4,0 |  |  |
| At-risk-of-poverty rate after social transfers - 2 adults, 2 children | 3,8 |  |  |
| At-risk-of-poverty rate after social transfers - 2 adults, 3+ children | 13,5 |  |  |
| At-risk-of-poverty rate after social transfers - other households with children | 3,9 |  |  |
|  |  |  |  |
| At-risk-of-poverty rate after social transfers - households without children | 14,2 |  |  |
| At-risk-of-poverty rate after social transfers - households with children | 7,3 |  |  |
|  |  |  |  |
| At-risk-of-poverty rate after social transfers - owner or rentfree | 7,5 |  |  |
| At-risk-of-poverty rate after social transfers - tenant | 18,0 |  |  |
| At-risk-of-poverty rate after social transfers - households without children, $\mathrm{w}=0$ | 20,6 |  |  |
| At-risk-of-poverty rate after social transfers - households without children, $0<\mathrm{w}<1$ | 7,2 |  |  |
| At-risk-of-poverty rate after social transfers - households without children, $\mathrm{w}=1$ | 4,9 |  |  |
| At-risk-of-poverty rate after social transfers - households with children, $\mathrm{w}=0$ | 40,3 |  |  |
| At-risk-of-poverty rate after social transfers - households with children, $0<\mathrm{w}<0.5$ | 6,5 |  |  |
| At-risk-of-poverty rate after social transfers - households with children, $0.5<\mathrm{w}<1$ | 8,7 |  |  |
| At-risk-of-poverty rate after social transfers - households with children, $w=1$ | 4,5 |  |  |
|  |  |  |  |
| Relative median at-risk-of-poverty gap - total | 982 | 521 | 467 |
| Relative median at-risk-of-poverty gap - 0-15 years | 189 |  |  |
| Relative median at-risk-of-poverty gap - 16-64 years | 557 | 296 | 362 |
| Relative median at-risk-of-poverty gap - 65+ years | 236 | 135 | 101 |
| Relative median at-risk-of-poverty gap - $16+$ years | 793 | 431 | 362 |
|  |  |  |  |
| Dispersion around the risk-of-poverty threshold - 40\% | 3,2 | 3,0 | 3,3 |
| Dispersion around the risk-of-poverty threshold - 50\% | 6,1 | 5,9 | 6,2 |
| Dispersion around the risk-of-poverty threshold - 70\% | 18,5 | 19,4 | 17,6 |


|  |  |  |  |
| :--- | :--- | :--- | :--- |
| At-risk-of-poverty rate before social transfers transfers <br> except old-age and survivors' benefits - total | 30,8 | 31,5 | 30,0 |
| At-risk-of-poverty rate before social transfers transfers <br> except old-age and survivors' benefits - 0-15 years | 26,1 | 25,0 | 27,2 |
| At-risk-of-poverty rate before social transfers transfers <br> except old-age and survivors' benefits - 16-64 years | 29,3 | 30,8 | 27,9 |
| At-risk-of-poverty rate before social transfers - 65+ years | 43,5 | 42,0 | 45,4 |
| At-risk-of-poverty rate before social transfers transfers <br> except old-age and survivors' benefits - 16+ years | 31,9 | 33,1 | 30,7 |
| At-risk-of-poverty rate before all social transfers - total | 38,7 | 41,0 | 36,3 |
| At-risk-of-poverty rate before all social transfers - 0-15 <br> years | 26,2 | 25,2 | 27,2 |
| At-risk-of-poverty rate before all social transfers - 16-64 <br> years | 29,8 | 31,4 | 28,3 |
| At-risk-of-poverty rate before all social transfers - 65+ years | 94,6 | 96,0 | 92,7 |
| At-risk-of-poverty rate before all social transfers - 16+ years | 41,8 | 44,8 | 38,7 |
|  | 3,4 |  |  |
| Inequality of income distribution S80/S20 income quintile <br> share | 3,4 | 23,9 |  |
| Gini coefficient |  |  |  |

### 1.2. Other indicators

### 1.2.1. Equivalised disposable income

Mean equivalised disposable income: $22.725,89$ EURO

### 1.2.2. The unadjusted gender pay gap

The gender pay gap is not computed on the basis of EU-SILC.

## 2. ACCURACY

### 2.1. Sample design

The sample is drawn as a sample of persons. The household is defined as the household he/she is member of at the beginning of the survey year (1 January). The generel sample design is rotational sample, with 4 rotating subsamples.

### 2.1.1. Type of sampling design (stratified, multi-stage, clustered)

The sample design is simple random sampling.

### 2.1.2. Sampling units (one stage, two stages)

It is a one stage sample. The sampling unit is an individual person. The sampling frame is all persons aged $13+$. Only persons aged $16+$ are included in the cross sectional sample.

### 2.1.3. Stratification and substratification criteria

No stratification.

### 2.1.4. Sample size and allocation criteria

Total number of persons aged $16+$ 4.259.358

Number of addresses in the sampling frame..................................2.628.664
Number of persons/households sampled.............................................10.663
Number persons living at the address of the selected person.............. 27.758
2.1.5. Sample selection schemes

Not applicable, since Denmark uses simple random sampling.
2.1.6. Sample distribution over time

### 2.1.7. Renewal of sample: rotational groups

Will be described in the final report.

### 2.1.8. Weightings

The weighting procedure is described in detail in Appendix 1.
2.1.8.1. Design factor
2.1.8.2. Non-response adjustments
2.1.8.3. Adjustments to external data (level, variables used and sources)
2.1.8.4. Final cross-sectional weight

### 2.1.9. Substitutions

No substitution

### 2.2. Sampling errors

### 2.2.1. Standard error and effective sample size

The effective sample size is 6.866

### 2.3. Non-sampling errors

### 2.3.1. Sampling frame and coverage errors

The sample frame is the Register of Population Statistics of Statistics Denmark (version 1 January 2004).

The register is based on Central Population Register (CPR) run by the Ministry of the Interior. CPR is updated by the municipalities. The register is a continously updated register.

There are few if any coverage problems. All persons living in Denmark are registered in the register and the register as mentioned is updated continously.

### 2.3.2. Measurement and processing errors

### 2.3.2.1. Measurement errors

The data comes from interviewing or from registers. Income and demografic data primarily comes from registers, while social data primarily comes from interviews. The questionnaire does not include other questions than the SILC-questions. The questionnaire has between 40 and 50 questions dependent on the type of household.

Interview-method was telephone interviewing for households with a telephone and postal questionnaire for households without a telephone. The questionnaire was programmed in BLAISE. To obtain contact by telephone at least 5 calls was conducted. Households contacted by mail got one reminder, if they did not respond on the first letter.

The interviews were conducted by the interviewers of Statistics Denmark. In addition to their usual training and education they got a special introduction to the SILC-questionnaire of 2 hours.

### 2.3.2.2. Processing errors

The questionnaire is programmed in BLAISE. Several entry controls is build in the questionnaire. The system for processing, checking and editing data is programmed in SAS. Finally the files are transformed into Eurostats' standard format and tested using the checking program developed by Eurostat.

During the checking procedure errors are corrected.

### 2.3.3. Non-response errors

The following information will be provided:

### 2.3.3.1. Achieved sample size was

Achieved sample size is 6.866
Number of households for which an interview is accepted for the database: 6.866

Number of persons of 16 years or older, who are members of the households and for whom the interview is accepted for the database: 13.584

If the household part of the interview and the personal interview of household represent is acceptable, all members of the household are accepted for the database also in case unit non-response for the person. The necessary information about his/hers income, activity status etc. is drawn from registers.

### 2.3.3.2.-2.3.3.3 Unit non-response

## Table 1: Unit non-response by data collection method



## Notes:

Researcher-protected in CPR: If people do not want to be contacted by researchers they can get their adress in CPR researcher-protected.

## Tabel 2: Contacted

| contact |  |  |
| :---: | :---: | :---: |
| fffffff |  |  |
| Adress contacted |  |  |
| Adress unable to contact | 171 | 1.60 |
| Adress not contacted etc 684 6. 61 |  |  |
| ffffffffffffffffffffffffff |  |  |
| Tot | 66 | 00.0 |

Notes.
Adress unable to contact: Not known at the adress or has moved to unknown adress. Adress not contacted: Researcher-protected in CPR.

Table 3: Household questionaire result


Notes.
Other reasons: Houshold not contacted cf. table 2 or paper questionaire send by post not returned.

## Table 4: Household questionaire result by collection methode


2.3.3.4. Distribution of substituted units (if applicable) by 'record of contact at address'

No substitution

### 2.3.3.5. Item non-response

Information about income is taken from a register. Therefore Denmark has no item non-esponse for income variables.
2.3.3.6. Total item non-response and number of observations in the sample at unit level of the common cross-sectional European Union indicators based on the cross-sectional component of EU-SILC, for equivalised disposable income and for the unadjusted gender pay gap (if applicable)

### 2.4. Mode of data collection

Denmark is one of the countries, which uses a sample of persons rather than a sample of complete households in the interview survey.

The establishment of the sample and the delimitation of the household are undertaken in the way described below.

A sample of persons is selected from the Central Population Register (CPR).
All other persons living at the same address is identified using information in the register. In the same way, married couples, couples not married but expected to become partners, the ID's of fathers and mothers living at the address etc. is identified. In the following, the results will be called the "registerhousehold". The register household can be considered as a hypothesis to be checked in the survey.

As a general rule, the selected person becomes the respondent of the household questionnaire, and therefore the person to be interviewed about, the composition of the household, etc. The only exception is the case, where the selected person is under 25 years and has parents living at the address. In this case, we randomly select one of the parents to represent the household (the household represent).

After the interview, a "statistical household" following Eurostat's definition is defined. Persons in the register-household, who do not belong to the statistical household, will be excluded from the sample and persons belonging to the statistical household, who are not found in the register-household is included.

### 2.5. Interview duration

The file we received from our interviewer unit did not include information about minutes to complete the personal questionaire. We are working on finding a solution. We use telephone interviewing, so results from Denmark would in any case not be comparable with results from other member states.

## 3. COMPARABILITY

### 3.1. Basic concepts and definitions

## Reference population:

Privat households residing in Denmark 1 January 2004 and members of these households.
No difference from EU-SILC concept

## Private household definition:

No difference from EU-SILC concept.
Household membership:
No difference from EU-SILC concept.
Income reference period(s) used:
Calender year 2002
Period for taxes on income and social insurance contributions:
Calender year 2002
Reference period for taxes on wealth:

Calender year 2002
Lag between the income reference period and current variables:
4-6 months
Total duration of the data collection of the sample:
3 months
Information on activity status during the income reference period:
Calender year 2002
No difference from EU-SILC concept.

### 3.2. Components of income

3.2.1. Differences between the national definitions and standard EU-SILC definitions.

Only insignificant departures from doc EUSILC 065/rev03 occurs.

### 3.2.2. The source or procedure used for the collection of income variables

The variables concerning income, wealth and taxes are almost entirely monitored using registers. The most important source is the registers of the Central Customs and Tax Administration, but in order to be able to make the breakdown of total income in its components data from other sources, especially registers from the Joint Local Authority Register System and data reported directly to Statistics Denmark, are also used.
3.2.3. The form in which income variables at component level have been obtained. Income components were collected gross.
3.2.4. The method used for obtaining income target variables in the required form (i.e. as gross values)

They were collected gross.
Cf. 3.2.1

## 4. COHERENCE

4.1. Comparison of income target variables and number of persons who receive income from
each 'income
component', with external sources

All income target variables are monitored using external sources.

## Appendix 1

## Information on weighting procedure for SILC 2004

This paper describes the method which is used to determine cross-sectional weights for the SILC-sample 2004.

## Sampling design

SILC 2004 is a continuation of the SILC 2003 survey. Out of 8211 sampled persons in the 2003-sample, 7686 are selected at random to continue in 2004. The sample is subsequently supplemented by another 2980 persons, which are drawn randomly from the register of persons over 15 who live in private households. In total, SILC 2004 contains 10666 sampled persons. The whole household to which the sampled persons belong, are observed.

Compared to 2003, the household around persons that remain in the sample may have changed. For instance, due to a divorce, the household around sampled person X may have been split up in two separate households. In such a case, only the part around the sampled person is observed in SILC 2004.

## Description of weighting procedure

## Step 1: Design weights.

Let $N$ be the number of persons over 15 in the population, and $n$ be the sample size. Let furthermore $M_{h}$ be the present number of persons over 15 in household $h$. The design weight for a sampled person $i$ is given by

$$
p b 070_{i}=\frac{N}{n} .
$$

Every sampled person has a weight $p b 070_{i}$.

Since the complete household $h$ to which a sampled person $i$ belongs is observed, the inclusion probability of household $h$ is proportional to the number of persons over 15 in that household. The design weight of household $h$ is therefore given by

$$
d b 080_{h}=\frac{N}{n M_{h}} .
$$

The inclusion probability is the inverse of this quantity. Every household that is sampled via a sampled person has a weight $d b 080_{h}$.

Note that the household design weight applies both to households around sampled persons that are new in the survey, as well as to the households around persons that continue in the survey from SILC 2003, even if its household composition has changed (i.e., the number of persons over 15 has changed from 2003 to 2004). For instance, in case of a household splitting
up in two parts, the inclusion probability of the original household has to be divided over the two new parts such that the sum of their inclusion probabilities equals the original inclusion probability. That is, the respective design weights are proportional to the present number of persons over 15. The same applies evidently when households merge, or combinations between merging and splitting.

## Step 2: Initial correction for non-response.

Let $m$ be the number of responding households. The household design weights are initially corrected for this non-response by multiplying the design weights by a factor $n / m$, that is, after a first non-response correction we have the household weights

$$
d b 080_{h}^{\text {corrected }}=\frac{N}{m M_{h}} .
$$

Step 3: Further correction for non-response and calibration on registers. Because of selective non-response, the household weights $d b 080_{h}^{\text {corrected }}$ give a rather skewed picture of the population of households. Therefore, these weights are corrected further for non-response. Simultaneously, these weights are calibrated such that certain known population totals from registers are reproduced.

The sample data refers to households and in performing the non-response correction and register calibration, both household and person information of all persons in the households is included.

The non-response turns out to be correlated most with the total net household income, the size of the household, and the education level of the person with the highest professional status in that household. Non-response correction will be performed at a household level (that is, households are counted).

In addition to correcting for skewness due to non-response, it is important that the SILC cross-sectional weights reproduce certain demographic and poverty distributions from the register of persons. In particular, the weights should reproduce correct population totals for the number of persons by:

- Age ( 5 year age groups $0-15,16-19,20-24, \ldots, 70-74,75+$ ) and sex.
- Economic status and poverty.
- Professional status and poverty.
- Age ( 5 classes $0-15,16-24,25-49,50-64,65+$ ), sex and poverty.
- Family type and poverty.
- Education.
- Equivalised income group.

A last requirement we want to include, is that the household weights should reproduce a correct distribution of age (in 5 classes) and sex, if the age and sex of the sampled person is assumed to be representative for the whole household (that is, if only the responding sampled persons are used, they should also reproduce the correct age-sex distribution for persons over 15).

All in all, the following weighting model is used:

```
[hhsize] \(\times 1+\)
[famincgrp] \(\times 1+\)
[educationgrp] \(\times 1+\)
\([\) sexhh \(\times\) agehh \(] \times M+\)
[eq_incgrp] \(\times A+\)
\([1] \times\) sexagecat \(1+\ldots+[1] \times\) sexagecat \(28+\)
\([\) poverty \(] \times\) ec_status1 \(+\ldots+\) [poverty \(] \times\) ec_status \(5+\)
\([\) poverty \(] \times\) profession \(1+\ldots+[\) poverty \(] \times\) profession \(8+\)
\([\) poverty \(] \times\) sexagegrp \(1+\ldots+[\) poverty \(] \times\) sexagegrp10 +
[poverty \(\times\) famtype] \(\times A+\)
\([1] \times\) education \(1+\ldots+[1] \times\) education 4.
```

The notation [ var1 x var2 ] x var3 stands for a count over numerical variable 'var3' in the population of households with respect to combination of categorical variables 'var1 x var 2'. For instance, [ var1 ] x 1 stands for a 'frequency count' of households in the population broken down to categorical variable 'var1'. If the numerical variable is unequal to ' 1 ', persons are counted instead of households.

The meaning of the variables is as follows:
Hhsize: Number of persons (all ages) in household (4 categories: 1, 2, 3, 4 or more).

Famincgrp: Net family income in household (5 categories: 112499 and less, $112500-159999,160000-234999,235000-329999,330000$ and more; boundaries are chosen such that each group contains approximately $20 \%$ of the population of households).

Educationgrp: Highest education obtained (according to the register) of the person with the highest education in the household (3 categories: Isced 0-12, Isced 3-4, Isced 5-7).

Sexhh: Gender of sampled person in household (male/female).
Agehh: Age group of sampled person in household (5 classes: 0-15, 16-24, $25-49,50-64,65+$; by definition $0-15$ is empty).

Eq_incgrp: Equivalised income group of household (3 classes: below 'at risk of poverty threshold', between 'at risk of poverty threshold' and median, above median), where the 'at risk of poverty threshold' is defined as $60 \%$ of the median of the equivalised income of all persons in the population. ${ }^{1}$

[^0]Poverty: Indication whether the household is below or above the 'at risk of poverty threshold'.

Famtype: Type of family living in household (10 classes: one person under 65 no children, one person 65 or older no children, two persons both under 65 no children, two persons at least one 65 or older no children, other household without children, one adult one or more children, two adults one child, two adults two children, two adults three or more children, other household with children).

M: Number of persons over 15 in household (equal to $M_{h}$ ).
A: Number of persons (all ages) in household.
Sexagecat1 to Sexagecat28: Number of persons in household that belong to the following sex and age groups: 1: male $0-15, \mathbf{2}$ : male $16-19,3$ : male $20-$ $24, \ldots, 13$ : male $70-74,14$ : male $75+$, 15: female $0-15,16$ : female $16-19$, 17: female $20-24, \ldots, 27$ : female $70-74,28$ : female $75+$.

Ec_status1 to Ec_status5: Number of persons in household that are 1: employed (excl self employed), 2: self-employed, 3: unemployed, 4: retired, and 5 : other economically inactive.

Profession1 to Profession8: Number of persons in household that are in one out of 8 profession groups based on Disco.

Sexagegrp1 to Sexagegrp10: Number of persons in household that belong to the following sex and age groups: 1: male $0-15, \mathbf{2}$ : male $16-24, \mathbf{3}$ : male $25-49,4$ : male 50-64, 5: male 65+, 6: female 0-15, 7: female 16-24, 8: female 25-49, 9: female 50-64, 10: female 65+.

Education1 to Education4: Number of persons in household with highest level of education equal to 1: Unknown or Isced 0 and 1, 2: Isced 2, 3: Isced 3 and 4, 4: Isced 5, 6, and 7.

The first three terms in the weighting model are inserted for non-response correction on the household level. These terms also ensure that the calibrated household weights will sum up to the correct number of households in Denmark.

The fourth term in the weighting model ensures that the household weights are chosen such that they return the correct number of persons over 15 in the population that are in a certain sex by age class, where sex and age class refer to the sampled person in the household.

The remaining terms in the weighting model ensure that the weight of each person in the household (which is identical to the household weight) is such that the population totals with respect to age and sex, education level, and 'at risk of poverty' rate broken down to several relevant variables on a person level are reproduced.

The weighting procedure with the linear model as specified above is performed in CLAN, using a regression estimator. The weights $d b 080_{i}^{\text {corrected }}$ are used as initial weights. The final weights are bounded from below, such that they always are larger than $0.02 \times d b 080_{h}^{\text {corrected }}$. Since the minimum value of $d b 080_{h}^{\text {corrected }}$ is 77 , the final weights are always larger then one.

The bounding procedure used in CLAN works as follows. The final weights are initially calculated without lower bounds. For all records with final weight below the lower bound, the final weight is fixed to the lower bound. The final weights are then recalculated for the remaining records. If they all are above the lower bound, one is ready. Otherwise the weights below the lower bound are set to the lower bound and the weights of the remaining records are again recalculated. This procedure is iterated until all weights are above or equal to the lower bound.

In the present case, 12 households get a weight equal to the lower bound. In fact, it turned out that there is no solution at all for the bounding problem, since there is one responding household that - no matter what - gets zero final weight (this is due to a seldom combination of the auxiliary information which does not occur in the register ${ }^{2}$ ). Therefore one is forced to take this particular respondent out of the response and subsequently use bounded weights on the remainder. The zero-weight respondent is afterwards added to the data with final weight equal to zero.

The resulting, bounded, final weights are denoted with $d b 090_{h}$. These weights are household weights. Every household in the response has a weight $d b 090_{h}$.

## Step 4: Personal cross-section weights (all ages).

The household weights $d b 090_{h}$ also give the weight of each person $i$ within the household $h$, irrespective of age. Thus,

$$
r b 050_{i}=d b 090_{h} .
$$

Every person belonging to a responding household has a weight $r b 050_{i}$. In total, there are 17295 persons living in the 6868 responding households.

## Step 5: Personal cross-section weights (over 15).

The household weights $d b 090_{h}$ also give the weight of each person within the household, irrespective of age. Thus,

$$
p b 040_{i}=d b 090_{h},
$$

where it is assumed that there is no non-response among persons over 15 in households that have responded. Every person over 15 belonging to a responding household has a weight $p b 040_{i}$. In total, there are 13589 persons over 15 living in the 6868 responding households.

## Step 6: Personal cross-section weights (for sampled persons).

[^1]By multiplying the household weights $d b 090_{h}$ by $M_{h}$, the number of persons over 15 in the household, one obtains the calibrated weight for the sampled person in that household. Thus,

$$
p b 060_{i}=M_{h} \times d b 090_{h} .
$$

Only the sampled persons belonging to responding households have a weight $p b 060_{i}$.

This weight should be used to estimate population totals based on the sampled persons only. Since the sampled persons all are over 15, these weights sum up to the number of persons over 15 in the population (actually by sex and age class, see the fourth term in the weighting model).

## External information

The following external information on population totals is used to calculate the weights.
Sample size: $n=10666$.
Number of respondents (households): $m=6868$.
Number of persons over 15: $M=N=4259358$
Number of persons all ages: A=5 326221
Population of private households (with at least 1 person over 15): $N_{h h}=2628664$.
Population totals of the auxiliary variables in the weighting model:

| Auxiliary variable | class 1 | class 2 | class 3 | class 4 | class 5 | class 6 | class 7 | class 8 | class 9 | class 10 | class 11 | $\begin{array}{r} \text { class } \\ 12 \end{array}$ | class 13 | class 14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [poverty] x ec_status1 | 98886 | $\begin{array}{r} 22210 \\ 02 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x ec_status2 | 39692 | 15718 9 |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x ec_status3 | 14728 | $\begin{array}{r} 11367 \\ 9 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x ec_status4 | $\begin{array}{r} 12666 \\ 8 \end{array}$ | $\begin{array}{r} 51996 \\ 3 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x ec_status5 | 30588 1 | $\begin{array}{r} 17285 \\ 33 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x sexagegrp1 | 49382 | $\begin{array}{r} 49732 \\ 6 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x sexagegrp2 | 64911 | $\begin{array}{r} 19821 \\ 8 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x sexagegrp3 | 89158 | $\begin{array}{r} 87119 \\ 6 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x sexagegrp4 | 24310 | $\begin{array}{r} 50018 \\ 8 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x sexagegro5 | 53304 | $\begin{array}{r} 28323 \\ 0 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x sexagegrp6 | 47725 | $\begin{array}{r} 47243 \\ 0 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x sexagegrp7 | 75552 | $\begin{array}{r} 18089 \\ 2 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x sexagegrp8 | 78587 | $\begin{array}{r} 86534 \\ 3 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x sexagegrp9 | 21187 | $\begin{array}{r} 50354 \\ 3 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x sexagegrp10 | 81739 | $\begin{array}{r} 36800 \\ 0 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x profession1 | 45544 8 | $\begin{array}{r} 26274 \\ 00 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |


| [poverty] x profession2 | 21870 | 23501 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [poverty] x profession3 | 5576 | 14671 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x profession4 | 61489 | $\begin{array}{r} 60896 \\ 6 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x profession5 | 13489 | $\begin{array}{r} 29031 \\ 7 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x profession6 | 15317 | $\begin{array}{r} 44244 \\ 7 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x profession7 | 12083 | $32665$ |  |  |  |  |  |  |  |  |  |  |  |  |
| [poverty] x profession8 | 583 | 62858 |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }_{\text {A }}^{[f a m t y p e ~ x ~ p o v e r t y] ~} x$ | 20161 9 | $\begin{array}{r} 57539 \\ 5 \end{array}$ | 76083 | $\begin{array}{r} 28764 \\ 8 \end{array}$ | 47422 | $\begin{array}{r} 92985 \\ 8 \end{array}$ | 61716 | $\begin{array}{r} 42510 \\ 4 \end{array}$ | 3670 | $\begin{array}{r} 17316 \\ 1 \end{array}$ | 59770 | $\begin{array}{r} 28494 \\ 6 \end{array}$ | 23718 | $54325$ |
| [hhsize] x 1 | $\begin{array}{r} 11407 \\ 45 \end{array}$ | $\begin{array}{r} 81013 \\ 9 \end{array}$ | $\begin{array}{r} 28401 \\ 1 \end{array}$ | $\begin{array}{r} 39376 \\ 9 \end{array}$ |  |  |  |  |  |  |  |  |  |  |
| [famincgrp] x 1 | 43929 4 | $\begin{array}{r} 50385 \\ 4 \end{array}$ | $\begin{array}{r} 54805 \\ 9 \end{array}$ | $\begin{array}{r} 48025 \\ 5 \end{array}$ | $\begin{array}{r} 65720 \\ 2 \end{array}$ |  |  |  |  |  |  |  |  |  |
| [educationgrp] x 1 | 81499 | $\begin{array}{r} 11084 \\ 66 \end{array}$ | $\begin{array}{r} 70519 \\ 9 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |
| [sexhh x agehh] x M | 0 | $\begin{array}{r} 26312 \\ 9 \end{array}$ | $\begin{array}{r} 96035 \\ 4 \end{array}$ | $\begin{array}{r} 52449 \\ 8 \end{array}$ | $\begin{array}{r} 33653 \\ 4 \end{array}$ | 0 | $\begin{array}{r} 25644 \\ 4 \end{array}$ | $\begin{array}{r} 94393 \\ 0 \end{array}$ | $\begin{array}{r} 52473 \\ 0 \end{array}$ | $\begin{array}{r} 44973 \\ 9 \end{array}$ |  |  |  |  |

Population totals of the auxiliary variables in the weighting model:

| Amainuaite |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Uxesegasal | 56mi |  |  |  |  |  |  |  |  |  |  |
| U10 enaear | ${ }^{1+08}$ |  |  |  |  |  |  |  |  |  |  |
| Ux emeneas |  |  |  |  |  |  |  |  |  |  |  |
| aremear |  |  |  |  |  |  |  |  |  |  |  |
| U14enemat | gox |  |  |  |  |  |  |  |  |  |  |
| Uxemearas | ${ }^{2 \times 3}$ |  |  |  |  |  |  |  |  |  |  |
| uxeemearar | \%om |  |  |  |  |  |  |  |  |  |  |
| uxemenas |  |  |  |  |  |  |  |  |  |  |  |
| Ux emenema | \%982 |  |  |  |  |  |  |  |  |  |  |
| Uresemata |  |  |  |  |  |  |  |  |  |  |  |
| Uxemeasal | \% |  |  |  |  |  |  |  |  |  |  |
| Uxesemeatar | ${ }^{\text {12x }}$ |  |  |  |  |  |  |  |  |  |  |
| Uxesemata | ${ }^{\text {seax }}$ |  |  |  |  |  |  |  |  |  |  |
| atemean |  |  |  |  |  |  |  |  |  |  |  |
| Uxeseneatat |  |  |  |  |  |  |  |  |  |  |  |
| Uxemeasalt |  |  |  |  |  |  |  |  |  |  |  |
| Uxesematat |  |  |  |  |  |  |  |  |  |  |  |
| Uxemeasars |  |  |  |  |  |  |  |  |  |  |  |
| uxemenate |  |  |  |  |  |  |  |  |  |  |  |
| Ux seoseaso | 20ent |  |  |  |  |  |  |  |  |  |  |
| uxemearar | , |  |  |  |  |  |  |  |  |  |  |
| Ux seopeasaz | 8xa |  |  |  |  |  |  |  |  |  |  |
| U14enaeas | reed |  |  |  |  |  |  |  |  |  |  |




[^0]:    1 The household equivalized income is calculated as the household total net income divided by equivalized household size according to the modified OECD scale (which gives a weight of 1.0 to the first adult, 0.5 to other persons aged 14 or over who are living in the household and 0.3 to each child aged less than 14). All persons in a household have the same equivalized income.

[^1]:    2 The household around a sampled person according to the register can deviate from the actually observed household since changes in the register are usually not immediately registered.

