**STATISTICS SWEDEN**



Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

# Final Quality report for the Swedish EU-SILC

# The 2005 – 2006 -2007-2008 longitudinal component

**Statistics Sweden December 2010-12-27**

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

# Contents

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

# 1. Common longitudinal European Union indicators based on the longitudinal component of EU-SILC

The Swedish EU-SILC panel survey 2005, 2006, 2007 and 2008 were carried out as an integrated part of the Swedish survey of living conditions (ULF). For the longitudinal EU-SILC survey 2005-2006-2007-2008 we made a separate sample starting 2004 with four panels to rotate according to the regulations. In year 2005 panel 5 was included for the first time, next year 2006 for the second time as well as panel 6 was included for the first time. Year 2007 panel 5 was included for the third time, panel 6 for the second time and panel 7 for the first time. Year 2008 the panel 8 was included för the first time.

The micro data registers transmitted to Eurostat contain all 2005-2006-2007-2008 longitudinal indicators stipulated in the regulation and comprises a panel of four years 2005 to 2008 a indicator which reveal social exclusion. See below the percent of population which at least has been two times in the longitudinal panel (2005-2008).

| At-persistent-risk-of-poverty rate (by age and gender) | | |
|---|---|---|
| **Gender** | **Age** | **%** |
| **Both** | **total** | 8,6 |
| | >18 years < 65 years | 5,9 |
| | > 65 years | 16,8 |
| **Male** | **total** | 7,5 |
| | >18 years < 65 years | 6,4 |
| | > 65 years | 10,8 |
| **Female** | **total** | 9,6 |
| | >18 years < 65 years | 5,5 |
| | > 65 years | 21,8 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Average equivalised disposable income broken down by household size,age group and gender. Cross 2005, 2006,2007 and 2008 in SKr.

| Year of the survey | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|
| By household size | | | | |
| 1 household member | 300 953 | 292 390 | 308 149 | 323 367 |
| 2 household members | 327 800 | 329 576 | 351 994 | 369 221 |
| 3 household members | 278 128 | 265 941 | 286 063 | 310 494 |
| 4 + household members | 227 890 | 218 950 | 235 060 | 262 683 |
| By age groups | | | | |
| < 25 | 235 062 | 205 452 | 220 649 | 241 009 |
| 25 - 34 | 333 008 | 311 352 | 325 046 | 354 111 |
| 35 - 44 | 364 017 | 356 764 | 390 567 | 414 965 |
| 45 - 54 | 342 160 | 334 976 | 371 692 | 400 667 |
| 55 - 64 | 349 456 | 357 315 | 378 374 | 402 575 |
| 65 + | 257 770 | 261 890 | 279 175 | 275 134 |
| By sex | | | | |
| Male | 314 301 | 312 339 | 333 216 | 355 912 |
| Female | 305 159 | 297 957 | 320 052 | 331 875 |
| Total | 309 610 | 304 905 | 326 407 | 343 466 |

# 2. Accuracy

## 2.1 Sample design

### 2.1.1. Type of sample design

The principal of our sampling is a stratified sample with approximately the same sample fraction within each stratum. As described above the total sample consists of four panels according to the rotating rules.

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Every year a systematic sample is drawn from the register of total population (TPR). This is sorted by age and covers the entire population according to the national registration. Such sample is regarded as simple random sample. Like in the ULF–survey the sample unit was individuals and all individuals (selected persons) who have been included in ULF at any time during the preceding seven years are eliminated from the sample. In 2006, 2007 and 2008 the 'old' panels were complemented with a sample among immigrants and individuals 16 years old who had "grown into" the population since the sample was originally drawn.

### 2.1.2 Sample unit

According to EU-SILC definitions the units of study of interest are both the household and the individuals or household member living in the same household as the selected person.

Sample unit is individuals in TRP aged 16 years and older and household members living in the same household. It is not possible to find all household members using TPR as a sampling frame. We can find persons who are married with the selected persons and who have children under 18 years together with the selected persons and children belonging to these households. Household members in other types of households can not be included in the sampling phase. For this reason it is only possible to detect the correct household consistence for the respondent individuals in the sample.

### 2.1.3 Stratification and sub-stratification criteria

No stratification was applied in the sampling procedure.

### 2.1.4 Sample size and allocation criteria (households=selected persons)

| | Panel | | | | |
|---|---|---|---|---|---|
| | 5 | 6 | 7 | 8 | Total |
| Respondent | 1729 | 1676 | 2179 | 1907 | 7491 |
| Not found | 252 | 255 | 319 | 296 | 1122 |
| Refused | 290 | 352 | 429 | 427 | 1498 |
| Over-coverage | 25 | 21 | 30 | 31 | 107 |
| Total | 2296 | 2304 | 2957 | 2661 | 10218 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

### 2.1.5 Sample selections schemes.

2004 we constructed a sampling frame from the register of total population (RTP). The sampling frame was on an individual level, but for each individual we have a notation of all members of his corresponding household (married couples according to the RTP). The frame was sorted in age order and the sample was drawn systematically.

The following year, 2005, we repeated the same procedure when sampling the new panel 5 as described in the next section. This time we excluded the individuals and the household-members who belonged to panel 1. We also complement the remaining panels, panel 2-4, with young people and immigrants who have "grown into the population". Therefore we construct a special sampling frame with those individuals and make a systematic random sample.

2006 panel 2 was excluded and the new panel 6 was drawn in the same way as 2005. 2007 panel 3 was excluded and the new panel 7 was drawn in the same way.

### 2.1.6 Sample distribution over time

The original sample for the SILC-panel was drawn in August 2004 and randomly distributed into four parts, panel 1 to panel 4. In August 2005 panel 5 was drawn and in August 2006 panel 6 was drawn. The data collection was carried out for the whole sample in the last quarter of 2004 respective 2005, 2006 and 2007.

### 2.1.7 Renewal of sample: Rotation groups

The panel rotating system stated 2004 when panel 1, 2, 3 and 4 were sampled. 2005 the sample in panel 2, 3 and 4 was included in the survey and a new Panel 5 was drawn. In the year 2006 a new panel 6 and panel 3, 4 , 5 and 6 are included in the sample complemented with young people and immigrants included in the population since 2004, 2005. In 2007 a new panel 7 and panel 4 , 5 and 6 are included in the sample complemented with young people and immigrants included in the population since 2004, 2005 and 2006.

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

### 2.1.8 Weightings – Design factor and non-response adjustment

For the time being non-response adjustment is carried out by means of post-stratification separately within each panel. Post-stratification refers to sex, age 16-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84 and 84+ years of the sampled individuals. All members in the sampled individuals' household belong to the same post-stratum.

These categories generate 16 post strata. The Stratum 1- 8 contains men and stratum 9-16 women, complemented young individuals belong to stratum 17 and immigrants stratum 18 where the sizes of the strata are derived from TPR .

#### 2.1.8.1 Design factor

Within each post-stratum the design-weights of the sampled individuals are computed as the inverse of the probability of inclusion. D-weight_ ind. =N/Total. For the 16+ -aged members of this individual the D-weight_ind. is divided by the number of 16+ -aged individuals (=1 or 2).

#### 2.1.8.2 Non-response adjustment

As a first step the population-size for each post-stratum is adjusted according to detected over-coverage. Ncorr=N*(total-overcov.)/total. In next step the weights are computed as:
S-weight_ind=Ncorr/respondent.

#### 2.1.8.3 Adjustments to external data

From the register of total population (RTP) we compute the number of individuals and the number households according to married people within each stratum when the sample is drawn. We have no possibilities to calibrate with other external data.

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

#### 2.1.8.4 Final longitudinal weight

In the first wave data from four panels are included. As in the cross-sectional estimation, the weights within each panel are divided by four, as the total sum of weights shall sum up to the population total.

#### 2.1.8.5 Non-response adjustments

In the estimates of the longitudinal study from 2004 to 2007 only the individuals (and there households-members) who are responding all four years are included. The longitudinal weights sum up to population size the starting year 2004 corrected for over-coverage detected in 2004.

Within each stratum the weights are calculated as the quota:
S-weightL_ind=(corrected population size 2004)/(number of respondent households all three years)

#### 2.1.8.6 Adjustments to external data

From the register of total population (RTP) we compute the number of individuals and the number households according to married people within each stratum when the sample is drawn. We have no possibilities to calibrate with other external data.

#### 2.1.8.7 Final Longitudinal weight

Se section 2.1.8.5

#### 2.1.8.8 Final household cross-sectional weight

The household-weights are computed as:
For the 16+ -aged members of the individual the D-weight_ind is divided by the number of 16+ -aged individuals (=1 or 2).

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

### 2.1.9 Substitutions

Substitution has not been applied. The most important reason for this is that the Swedish laws do not allow us to make imputation. The sampling frame is the (TRP) Total Population Register of Sweden. TPR is updated more or less every day. The main outlines for organization of population statistics is according to Swedish law, the main rule is that all persons residing in the country shall be registered at the property unit in the parish where they reside. In case of partial non response we leave the values as missing. For this reason it is not relevant to fulfil the two following sections.

#### 2.1.9.1 Method of selection of substitutes

- n.a

#### 2.1.9.2 Main characteristics of substituted units compared to original units, by region (if available)

- n.a

#### 2.1.9.3 Distribution of substituted units by record of contact at address (DB120), household questionnaire result (DB130) and household interview acceptance (DB135) of the original units

- n.a

## 2.2 Sampling errors

Information concerning effective sample sizes and standard errors for the common longitudinal EU indicators will be available in the following tables.

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Table 1 : Components of the income variables at household level 2005

| Variable | | N | Mean | Std Dev |
|---|---|---|---|---|
| | TOTAL HOUSEHOLD GROSS INCOME | 6133 | 426469,5 | 310994,7 |
| HY020 | TOTAL DISPOSABLE HOUSEHOLD INCOME | 6133 | 290639,9 | 182904,6 |
| HY022 | TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL TRANSFERS OTHER THAN OLDAGE AND SURVIVOR'S BENEFITS | 6133 | 243967,3 | 188367,4 |
| HY023 | TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL TRANSFERS INCLUDING OLDAGE AND SURVIVOR'S BENEFITS | 6133 | 204411,4 | 203398,8 |
| HY040G | INCOME FROM RENTAL OF A PROPERTY OR LAND GROSS | 6133 | 389,3 | 3993,3 |
| HY040N | INCOME FROM RENTAL OF A PROPERTY OR LAND NET | 6133 | 272,5 | 2795,3 |
| HY050G | FAMILY/CHILDREN RELATED ALLOWANCES GROSS | 6133 | 12995,7 | 28125,0 |
| HY050N | FAMILY/CHILDREN RELATED ALLOWANCES NET | 6133 | 11642,9 | 23502,4 |
| HY060G | SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED GROSS | 6133 | 1578,3 | 13109,6 |
| HY060N | SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED NET | 6133 | 1578,3 | 13109,6 |
| HY070G | HOUSING ALLOWANCES GROSS | 6133 | 2146,8 | 7831,1 |
| HY070N | HOUSING ALLOWANCES NET | 6133 | 2146,8 | 7831,1 |
| HY080G | REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED GROSS | 6133 | 496,2 | 3732,6 |
| HY080N | REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED NET | 6133 | 496,2 | 3732,6 |
| HY090G | INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN UNINCORPORATED BUSINESS GROSS | 6133 | 10310,6 | 103921,4 |
| HY090N | INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN UNINCORPORATED BUSINESS NET | 6133 | 7219,3 | 72744,9 |
| HY100G | INTEREST REPAYMENTS ON MORTGAGE GROSS | 6133 | 10301,2 | 17677,0 |
| HY100N | INTEREST REPAYMENTS ON MORTGAGE NET | 6133 | 7210,9 | 12373,9 |
| HY110G | INCOME RECEIVED BY PEOPLE AGED UNDER 16 GROSS | 6133 | 361,1 | 4418,6 |
| HY110N | INCOME RECEIVED BY PEOPLE AGED UNDER 16 NET | 6133 | 295,6 | 3645,1 |
| HY120G | REGULAR TAXES ON WEALTH GROSS | 6133 | 7561,7 | 15590,5 |
| HY120N | REGULAR TAXES ON WEALTH NET | 6133 | 7561,7 | 15590,5 |
| HY130G | REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID GROSS | 6133 | 624,5 | 3928,8 |
| HY130N | REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID NET | 6133 | 624,5 | 3928,8 |
| HY140G | TAX ON INCOME AND SOCIAL CONTRIBUTIONS GROSS | 6133 | 127620,3 | 127488,9 |
| HY140N | TAX ON INCOME AND SOCIAL CONTRIBUTIONS NET | 6133 | 127620,3 | 127488,9 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Table 2: Components of the income variables at household level 2006

| | N | Mean | Std Dev |
|---|---|---|---|
| TOTAL HOUSEHOLD GROSS INCOME | 6803 | 435983,6 | 295326,2 |
| TOTAL DISPOSABLE HOUSEHOLD INCOME | 6803 | 21,0 | 0,9 |
| TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL TRANSFERS OTHER THAN OLDAGE AND SURVIVOR'S BENEFITS | 6803 | 298986,8 | 171772,2 |
| TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL TRANSFERS INCLUDING OLDAGE AND SURVIVOR'S BENEFITS | 6803 | 11,0 | 0,4 |
| INCOME FROM RENTAL OF A PROPERTY OR LAND GROSS | 6803 | 300,9 | 3170,8 |
| INCOME FROM RENTAL OF A PROPERTY OR LAND NET | 6803 | 210,6 | 2219,6 |
| FAMILY/CHILDREN RELATED ALLOWANCES GROSS | 6803 | 12038,8 | 27229,9 |
| FAMILY/CHILDREN RELATED ALLOWANCES NET | 6803 | 10687,7 | 22544,0 |
| SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED GROSS | 6803 | 1303,4 | 11016,5 |
| SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED NET | 6803 | 1303,4 | 11016,5 |
| HOUSING ALLOWANCES GROSS | 6803 | 1845,0 | 7363,6 |
| HOUSING ALLOWANCES NET | 6803 | 1845,0 | 7363,6 |
| REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED GROSS | 6803 | 940,7 | 4896,6 |
| REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED NET | 6803 | 940,7 | 4896,6 |
| INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN UNINCORPORATED BUSINESS GROSS | 6803 | 9957,0 | 75402,6 |
| INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN UNINCORPORATED BUSINESS NET | 6803 | 6971,7 | 52781,6 |
| INTEREST REPAYMENTS ON MORTGAGE GROSS | 6803 | 5703,5 | 10300,2 |
| INTEREST REPAYMENTS ON MORTGAGE NET | 6803 | 3992,5 | 7210,2 |
| INCOME RECEIVED BY PEOPLE AGED UNDER 16 GROSS | 6803 | 336,3 | 4261,9 |
| INCOME RECEIVED BY PEOPLE AGED UNDER 16 NET | 6803 | 272,6 | 3559,9 |
| REGULAR TAXES ON WEALTH GROSS | 6803 | 8346,9 | 24805,7 |
| REGULAR TAXES ON WEALTH NET | 6803 | 8346,9 | 24805,7 |
| REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID GROSS | 6803 | 292,1 | 2396,2 |
| REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID NET | 6803 | 292,1 | 2396,2 |
| TAX ON INCOME AND SOCIAL CONTRIBUTIONS GROSS | 6803 | 128309,5 | 121803,0 |
| TAX ON INCOME AND SOCIAL CONTRIBUTIONS NET | 6803 | 128309,5 | 121803,0 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Table 3 : Components of the income variables at household level 2007

| | | | |
|---|---|---|---|
| **TOTAL HOUSEHOLD GROSS INCOME** | 395 632 | 7 183 | 3 610 |
| **TOTAL DISPOSABLE HOUSEHOLD INCOME** | 274 446 | 7 183 | 2 119 |
| **TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL** | 234 603 | 7 183 | 2 155 |
| **TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL** | 185 961 | 7 183 | 2 348 |
| | | | |
| **INCOME FROM RENTAL OF A PROPERTY OR LAND NET** | 214 | 7 183 | 39 |
| **FAMILY/CHILDREN RELATED ALLOWANCES NET** | 9 030 | 7 183 | 270 |
| **SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED NET** | 1 300 | 7 183 | 123 |
| **HOUSING ALLOWANCES NET** | 2 587 | 7 183 | 104 |
| **REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED NET** | 802 | 7 183 | 53 |
| **INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN** | 8 629 | 7 183 | 929 |
| **INTEREST REPAYMENTS ON MORTGAGE NET** | 3 564 | 7 183 | 81 |
| **INCOME RECEIVED BY PEOPLE AGED UNDER 16 NET** | 304 | 7 183 | 45 |
| **REGULAR TAXES ON WEALTH NET** | 7 131 | 7 183 | 349 |
| **REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID NET** | 268 | 7 183 | 27 |
| **TAX ON INCOME AND SOCIAL CONTRIBUTIONS NET** | 113 715 | 7 183 | 1 425 |
| | | | |
| **INCOME FROM RENTAL OF A PROPERTY OR LAND GROSS** | 306 | 7 183 | 55 |
| **FAMILY/CHILDREN RELATED ALLOWANCES GROSS** | 10 243 | 7 183 | 326 |
| **SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED GROSS** | 1 300 | 7 183 | 123 |
| **HOUSING ALLOWANCES GROSS** | 2 587 | 7 183 | 104 |
| **REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED GROSS** | 802 | 7 183 | 53 |
| **INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN** | 12 325 | 7 183 | 1 327 |
| **INTEREST REPAYMENTS ON MORTGAGE GROSS** | 5 091 | 7 183 | 115 |
| **INCOME RECEIVED BY PEOPLE AGED UNDER 16 GROSS** | 373 | 7 183 | 53 |
| **REGULAR TAXES ON WEALTH GROSS** | 7 131 | 7 183 | 349 |
| **REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID GROSS** | 268 | 7 183 | 27 |
| **TAX ON INCOME AND SOCIAL CONTRIBUTIONS GROSS** | 113 715 | 7 183 | 1 425 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Table 4 : Components of the income variables at household level 2008

| | | | |
|---|---|---|---|
| **TOTAL HOUSEHOLD GROSS INCOME** | 412 482 | 7 452 | 3 813 |
| **TOTAL DISPOSABLE HOUSEHOLD INCOME** | 293 825 | 7 452 | 2 443 |
| **TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL** | 248 299 | 7 452 | 2 496 |
| **TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL** | 183 261 | 7 452 | 2 863 |
| | | | |
| **INCOME FROM RENTAL OF A PROPERTY OR LAND NET** | 182 | 7 452 | 33 |
| **FAMILY/CHILDREN RELATED ALLOWANCES NET** | 9 425 | 7 452 | 278 |
| **SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED NET** | 1 349 | 7 452 | 125 |
| **HOUSING ALLOWANCES NET** | 2 521 | 7 452 | 101 |
| **REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED NET** | 789 | 7 452 | 51 |
| **INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN** | 10 982 | 7 452 | 932 |
| **INTEREST REPAYMENTS ON MORTGAGE NET** | 6 751 | 7 452 | 145 |
| **INCOME RECEIVED BY PEOPLE AGED UNDER 16 NET** | 310 | 7 452 | 44 |
| **REGULAR TAXES ON WEALTH NET** | 5 937 | 7 452 | 177 |
| **REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID NET** | 230 | 7 452 | 24 |
| **TAX ON INCOME AND SOCIAL CONTRIBUTIONS NET** | 112 490 | 7 452 | 1 442 |
| | | | |
| **INCOME FROM RENTAL OF A PROPERTY OR LAND GROSS** | 260 | 7 452 | 48 |
| **FAMILY/CHILDREN RELATED ALLOWANCES GROSS** | 10 632 | 7 452 | 333 |
| **SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED GROSS** | 1 349 | 7 452 | 125 |
| **HOUSING ALLOWANCES GROSS** | 2 521 | 7 452 | 101 |
| **REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED GROSS** | 789 | 7 452 | 51 |
| **INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN** | 15 687 | 7 452 | 1 331 |
| **INTEREST REPAYMENTS ON MORTGAGE GROSS** | 9 644 | 7 452 | 207 |
| **INCOME RECEIVED BY PEOPLE AGED UNDER 16 GROSS** | 385 | 7 452 | 54 |
| **REGULAR TAXES ON WEALTH GROSS** | 5 937 | 7 452 | 177 |
| **REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID GROSS** | 230 | 7 452 | 24 |
| **TAX ON INCOME AND SOCIAL CONTRIBUTIONS GROSS** | 112 490 | 7 452 | 1 442 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Table 5 : Components of the income variables at personal level 2005

| Variable | | N | Mean | Std Dev |
|---|---|---|---|---|
| PY010G | EMPLOYEE CASH OR NEAR CASH INCOME GROSS | 12191 | 143927,8 | 174097,6 |
| PY010N | EMPLOYEE CASH OR NEAR CASH INCOME NET | 12191 | 97531,8 | 106283,3 |
| PY020G | NON-CASH EMPLOYEE INCOME GROSS | 12191 | 2120,3 | 15348,0 |
| PY020N | NON-CASH EMPLOYEE INCOME NET | 12191 | 1305,4 | 8386,1 |
| PY035G | CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS GROSS | 12191 | 2154,1 | 7130,8 |
| PY035N | CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS NET | 12191 | 2154,1 | 7130,8 |
| PY050G | CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT GROSS | 12191 | 5981,6 | 57739,8 |
| PY050N | CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT NET | 12191 | 3948,3 | 37132,2 |
| PY080G | PENSION FROM INDIVIDUAL PRIVATE PLANS GROSS | 12191 | 1938,6 | 12642,3 |
| PY080N | PENSION FROM INDIVIDUAL PRIVATE PLANS NET | 12191 | 1330,9 | 8307,3 |
| PY090G | UNEMPLOYMENT BENEFITS GROSS | 12191 | 5095,9 | 22042,5 |
| PY090N | UNEMPLOYMENT BENEFITS NET | 12191 | 3732,0 | 16078,4 |
| PY100G | OLD-AGE BENEFITS GROSS | 12191 | 27368,6 | 69136,8 |
| PY100N | OLD-AGE BENEFITS NET | 12191 | 19545,6 | 46921,0 |
| PY110G | SURVIVOR' BENEFITS GROSS | 12191 | 483,9 | 5963,3 |
| PY110N | SURVIVOR' BENEFITS NET | 12191 | 354,0 | 4227,8 |
| PY120G | SICKNESS BENEFITS GROSS | 12191 | 5720,6 | 24567,8 |
| PY120N | SICKNESS BENEFITS NET | 12191 | 4092,3 | 17531,3 |
| PY130G | DISABILITY BENEFITS GROSS | 12191 | 6495,4 | 27879,6 |
| PY130N | DISABILITY BENEFITS NET | 12191 | 4810,0 | 20493,0 |
| PY140G | EDUCATION-RELATED ALLOWANCES GROSS | 12191 | 3126,5 | 11927,9 |
| PY140N | EDUCATION-RELATED ALLOWANCES NET | 12191 | 3114,3 | 11806,9 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Table 6 : Components of the income variables at personal level 2006

| Variable | | N | Mean | Std Dev |
|---|---|---|---|---|
| PY010G | EMPLOYEE CASH OR NEAR CASH INCOME GROSS | 13591 | 148262,7 | 172225,0 |
| PY010N | EMPLOYEE CASH OR NEAR CASH INCOME NET | 13591 | 101553,2 | 106852,9 |
| PY020G | NON-CASH EMPLOYEE INCOME GROSS | 13591 | 1971,9 | 10245,6 |
| PY020N | NON-CASH EMPLOYEE INCOME NET | 13591 | 1255,0 | 6301,2 |
| PY035G | CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS GROSS | 13591 | 2086,3 | 5246,7 |
| PY035N | CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS NET | 13591 | 2086,3 | 5246,7 |
| PY050G | CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT GROSS | 13591 | 6891,6 | 61356,8 |
| PY050N | CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT NET | 13591 | 4623,5 | 40249,2 |
| PY080G | PENSION FROM INDIVIDUAL PRIVATE PLANS GROSS | 13591 | 2383,1 | 15243,6 |
| PY080N | PENSION FROM INDIVIDUAL PRIVATE PLANS NET | 13591 | 1636,1 | 9886,4 |
| PY090G | UNEMPLOYMENT BENEFITS GROSS | 13591 | 5228,4 | 21868,8 |
| PY090N | UNEMPLOYMENT BENEFITS NET | 13591 | 3871,8 | 16131,4 |
| PY100G | OLD-AGE BENEFITS GROSS | 13591 | 27018,3 | 68309,1 |
| PY100N | OLD-AGE BENEFITS NET | 13591 | 19361,5 | 47209,6 |
| PY110G | SURVIVOR' BENEFITS GROSS | 13591 | 464,4 | 5715,2 |
| PY110N | SURVIVOR' BENEFITS NET | 13591 | 343,6 | 4099,3 |
| PY120G | SICKNESS BENEFITS GROSS | 13591 | 5168,8 | 22944,4 |
| PY120N | SICKNESS BENEFITS NET | 13591 | 3723,1 | 16442,5 |
| PY130G | DISABILITY BENEFITS GROSS | 13591 | 6660,4 | 28151,4 |
| PY130N | DISABILITY BENEFITS NET | 13591 | 4940,3 | 20706,3 |
| PY140G | EDUCATION-RELATED ALLOWANCES GROSS | 13591 | 3190,1 | 12095,0 |
| PY140N | EDUCATION-RELATED ALLOWANCES NET | 13591 | 3182,6 | 12005,1 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Table 7: Components of the income variables at personal level 2007

| Components of the income variables at personal level | | | |
|---|---|---|---|
| | number | mean | standard error |
| EMPLOYEE CASH OR NEAR CASH INCOME NET | 14204 | 103565 | 925 |
| NON-CASH EMPLOYEE INCOME NET | 14204 | 1298 | 133 |
| CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS NET | 14204 | 2057 | 49 |
| CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT NET | 14204 | 4406 | 283 |
| VALUE OF GOODS PRODUCED BY OWN-CONSUMPTION NET | 14204 | 0 | 0 |
| PENSION FROM INDIVIDUAL PRIVATE PLANS NET | 14204 | 1945 | 87 |
| UNEMPLOYMENT BENEFITS NET | 14204 | 3770 | 133 |
| OLD-AGE BENEFITS NET | 14204 | 26551 | 445 |
| SURVIVOR' BENEFITS NET | 14204 | 483 | 43 |
| SICKNESS BENEFITS NET | 14204 | 3611 | 135 |
| DISABILITY BENEFITS NET | 14204 | 5536 | 186 |
| EDUCATION-RELATED ALLOWANCES NET | 14204 | 3125 | 102 |
| | | | |
| EMPLOYEE CASH OR NEAR CASH INCOME GROSS | 14204 | 149726 | 1479 |
| NON-CASH EMPLOYEE INCOME GROSS | 14204 | 2123 | 273 |
| CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS GROSS | 14204 | 2057 | 49 |
| CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT GROSS | 14204 | 6465 | 437 |
| VALUE OF GOODS PRODUCED BY OWN-CONSUMPTION GROSS | 14204 | 0 | 0 |
| PENSION FROM INDIVIDUAL PRIVATE PLANS GROSS | 14204 | 2817 | 132 |
| UNEMPLOYMENT BENEFITS GROSS | 14204 | 5044 | 178 |
| OLD-AGE BENEFITS GROSS | 14204 | 36692 | 636 |
| SURVIVOR' BENEFITS GROSS | 14204 | 670 | 60 |
| SICKNESS BENEFITS GROSS | 14204 | 4974 | 186 |
| DISABILITY BENEFITS GROSS | 14204 | 7407 | 251 |
| EDUCATION-RELATED ALLOWANCES GROSS | 14204 | 3141 | 103 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Table 8: Components of the income variables at personal level 2008

| | | | |
|---|---|---|---|
| **EMPLOYEE CASH OR NEAR CASH INCOME NET** | 114 753 | 14 889 | 986 |
| **NON-CASH EMPLOYEE INCOME NET** | 622 | 14 889 | 29 |
| **CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS NET** | 2 124 | 14 889 | 48 |
| **CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT NET** | 4 391 | 14 889 | 445 |
| **VALUE OF GOODS PRODUCED BY OWN-CONSUMPTION NET** | 0 | 14 889 | 0 |
| **PENSION FROM INDIVIDUAL PRIVATE PLANS NET** | 2 086 | 14 889 | 91 |
| **UNEMPLOYMENT BENEFITS NET** | 2 431 | 14 889 | 103 |
| **OLD-AGE BENEFITS NET** | 27 122 | 14 889 | 453 |
| **SURVIVOR' BENEFITS NET** | 473 | 14 889 | 41 |
| **SICKNESS BENEFITS NET** | 3 184 | 14 889 | 123 |
| **DISABILITY BENEFITS NET** | 5 764 | 14 889 | 186 |
| **EDUCATION-RELATED ALLOWANCES NET** | 3 131 | 14 889 | 102 |
| | | | |
| **EMPLOYEE CASH OR NEAR CASH INCOME GROSS** | 159 332 | 14 889 | 1 540 |
| **NON-CASH EMPLOYEE INCOME GROSS** | 906 | 14 889 | 48 |
| **CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS GROSS** | 2 124 | 14 889 | 48 |
| **CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT GROSS** | 6 411 | 14 889 | 585 |
| **VALUE OF GOODS PRODUCED BY OWN-CONSUMPTION GROSS** | 0 | 14 889 | 0 |
| **PENSION FROM INDIVIDUAL PRIVATE PLANS GROSS** | 3 000 | 14 889 | 136 |
| **UNEMPLOYMENT BENEFITS GROSS** | 3 180 | 14 889 | 135 |
| **OLD-AGE BENEFITS GROSS** | 37 480 | 14 889 | 653 |
| **SURVIVOR' BENEFITS GROSS** | 644 | 14 889 | 56 |
| **SICKNESS BENEFITS GROSS** | 4 237 | 14 889 | 165 |
| **DISABILITY BENEFITS GROSS** | 7 631 | 14 889 | 249 |
| **EDUCATION-RELATED ALLOWANCES GROSS** | 3 137 | 14 889 | 103 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

## 2.3 Non-sampling errors

### 2.3.1 Sampling frame and coverage errors

The sampling frame is the (TRP) Total Population Register of Sweden. TPR is updated more or less every day. The main outlines for organization of population statistics is according to Swedish law, the main rule is that all persons residing in the country shall be registered at the property unit in the parish where they reside.

Since 1 July 1991, local registration functions are performed by the Tax Offices. Between 1686 and 1991, the Parish Offices of the Church of Sweden carried out the local work. A major means of identifying any person is the personal identity number that is assigned to every individual registered in the Population Registration System. The number follows a person from birth to death and is entered in most personal registers in Sweden, making it possible to identify individuals in different administrative materials and collate data. The personal identity number consists of ten digits. The first six digits show the year, month and day of birth. The next three digits are the birth number which is odd for men and even for women. The last digit is a checking digit.

As part of the partial computerization of Sweden's continuous population registration in 1966, Statistics Sweden was granted permission to set up and maintain a register of the entire national population, referred to as the Total Population Register (TPR).

The vital statistics are based on notifications of births, deaths, changes in marital status, and changes in citizenship, internal migration, immigration and emigration. The TPR receives these daily from the Tax Authorities. The notifications relate to the registered population. Thus, vital statistics are based on the National Registration and consequently conform to its concepts and definitions.

Received information is checked mechanically with respect to the validity of the codes and the logical contents of the information and quality tests comprises, among other things, regional codes, connections between age and marital status, etc. Beginning in 1998 the cut-off date is 31 January in the year after the event took place. The change in cut-off date in 1998 will have no effect on comparisons between years.

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Over-coverage consists of people who have died and people who have left the country but are still registered in Sweden. The sample is drawn several months before the fieldwork start. However a check is made close to the start (the sample is matched to TPR) and people who have died since the sample was drawn are excluded. People who die after that point are registered by the interviewers.

Over-coverage in terms of people who have left Sweden permanently but are still registered in TPR is more difficult to discover. Recent attempts to estimate the size of this over-coverage have given the figure 35 000. Applied on EU-SILC this means 30 individual of which many are discovered by the interviewers. The error is negligible.

If we regard TPR as our population under-coverage by definition does not exist. There are of course people who reside in Sweden illegally or while waiting for residence permit.

### 2.3.2 Measurement and processing errors

#### 2.3.2.1 Measurement errors

Following a basic introductory course in survey methods, new interviewers participate in an additional one-day course that includes approximately six hours of intensive training (ULF including EU-SILC). The various sections of the interview protocol are thoroughly reviewed, and practice in handling certain complicated questions is provided.
The interviewer may miss-understand certain instructions or responses, which contributes to the survey's systematic error level. Each interviewer conducts on average roughly 40? interviews per year. Systematic mistakes by an occasional interviewer may not distort the survey data to any great extent, but it is not possible to specify how much error of that sort occurs. The interviewer's personality and behaviour may influence the responses, particularly with respect to" subjective" questions, such as those relating to attitudes. In some cases interview questions are not presented properly. To the extent that such mistakes cannot subsequently be corrected, there is an increase in partial response.

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

The respondent may disremember, provide consciously or unconsciously distorted responses or may simply be unable to answer questions.

Most of the EU-SILC questions refer to the present, for which memory errors can not constitute a major source of error. But there are questions about frequency during a longer reference period that are more complicated.

The questions in the EU-SILC protocol are in most cases not very difficult to answer. It is fairly certain that some questions are interpreted differently by different persons. Particular caution should be observed of responses to questions relating to attitudes and frequency in the interpretation.

The EU-SILC data are from 2005 and 2006 through face-to-face interviews and half of the interviews during 2006 was computer aid CATI. Telephone interviews with CATI are from 2007 on currently use as the main way to make interviews. Experiments with split samples have been carried out. The results indicate very little difference between the two interview methods. Indirect interviews can be a source of errors. Applied on appropriate questions experience says that indirect interviews can be an efficient method to collect information.

#### 2.3.2.2 Processing errors

Data are checked interactively (values, syntax, logics) as an integrated part of the data entry process. (CAPI/CATI is not applied) followed by the Eurostat 21 control program (after transformation to EU-SILC file format).

All components necessary to derive Gross total income, disposable income etc. are collected from administrative registers. No imputations have been applied for these indictors.

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

### 2.3.3 Non-response errors

#### 2.3.3.1 Achieved sample size

Table 9 : DB135 Household interview acceptance value = 1 (accept) DB135

| | 2005 | 2006 | 2007 | 2008 | Total |
|---|---|---|---|---|---|
| 0 | 567 | 628 | 778 | 748 | 2721 |
| 1 | 1729 | 1676 | 2179 | 1868 | 7452 |
| Total | 2296 | 2304 | 2957 | 2616 | 10173 |
| | 75,3% | 72,7% | 73,7% | 71,4% | 73,3% |

Table 10 : RB100 Sample person or co resident value 1 = sample person, value 2 = co resident RB100

| | 2005 | 2006 | 2007 | 2008 | Total |
|---|---|---|---|---|---|
| Sampled | 1729 | 1676 | 2179 | 1868 | 7452 |
| Coresident | 2679 | 2657 | 3309 | 2728 | 11373 |
| Total | 4408 | 4333 | 5488 | 4596 | 18825 |

The data file on individuals contains information for all respondent households. During the interview we ask for which persons who in fact live in the household of the selected person (to detect differences from the TPR). This correction is only possible to make for respondent households. Response rate is not possible to calculate as household composition for non-response households is not completely known.

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

### 2.3.3.2 Unit non-response

Table 11: Households and individuals non response rates NRh

**2005-2006**

| res_05 | res_06 | | | | |
|---|---|---|---|---|---|
| | Answer | Not found | Refused | Owercov | Total |
| Answer | 1486 | 113 | 112 | 19 | 1730 |
| Not found | 132 | 131 | 31 | 17 | 311 |
| Refused | 48 | 31 | 149 | 4 | 232 |
| Owercov | 0 | 0 | 0 | 0 | 0 |
| Total | 1666 | 275 | 292 | 40 | 2273 |

**2006-2007**

| res_06 | res_07 | | | | |
|---|---|---|---|---|---|
| | Answer | Not found | Refused | Owercov | Total |
| Answer | 1520 | 80 | 77 | 11 | 1688 |
| Not found | 90 | 134 | 35 | 5 | 264 |
| Refused | 56 | 26 | 206 | 3 | 291 |
| Owercov | 0 | 0 | 0 | 0 | 0 |
| Total | 1666 | 240 | 318 | 19 | 2243 |

**2007-2008**

| res_07 | res_08 | | | | |
|---|---|---|---|---|---|
| | Answer | Not found | Refused | Owercov | Total |
| Answer | 1547 | 68 | 54 | 17 | 1686 |
| Not found | 66 | 139 | 33 | 3 | 241 |
| Refused | 83 | 37 | 200 | 2 | 322 |
| Owercov | 0 | 0 | 0 | 0 | 0 |
| Total | 1696 | 244 | 287 | 22 | 2249 |

| 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|
| 1730 | 1486 | 1452 | 1409 |
| 100% | 85,9% | 83,9% | 81,4% |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

**2.3.3.3 Distribution of households (original units) by 'record of contact at address' (DB120), by 'household questionnaire result' (DB130) and by 'household interview acceptance' (DB135), for each rotational group (if applicable) and for the total.**

DB110 Household status
DB120 Contac at address
DB130 Household questionnaire result

Table 12: Distribution of household by DB110 .

| 2005 | Panel | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|---|---|---|---|---|---|---|---|---|---|
| | 4 | 1848 | 434 | 6 | 19 | 24 | 2 | 40 | 2373 |
| | | | | | | | | | |
| **2006** | Panel | **1** | **2** | **3** | **4** | **5** | **6** | **7** | |
| | 4 | 1477 | 255 | 0 | 25 | 12 | | 64 | 1833 |
| | 5 | 1680 | 330 | 1 | 43 | 31 | | 222 | 2307 |
| | | | | | | | | | |
| **2007** | Panel | **1** | **2** | **3** | **4** | **5** | **6** | **7** | |
| | 4 | 1255 | 275 | 0 | 16 | 22 | | 71 | 1639 |
| | 5 | 1293 | 330 | 0 | 12 | 13 | | 66 | 1714 |
| | 6 | 1626 | 359 | 1 | 22 | 31 | | 244 | 2283 |
| | Total | 4174 | 964 | 1 | 50 | 66 | | 381 | 5636 |

| 2008 | Panel | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|---|---|---|---|---|---|---|---|---|---|
| | 5 | 1290 | 199 | 2 | 12 | 11 | | 30 | 1544 |
| | 6 | 1360 | 178 | 2 | 13 | 13 | | 50 | 1616 |
| | 7 | 2307 | 328 | 2 | 29 | 21 | | 238 | 2925 |
| | Total | 4957 | 705 | 6 | 54 | 45 | | 318 | 6085 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Table 13: Distribution of household by DB120

| 2005 | Panel | 11 | 21 | 22 | 23 | |
|---|---|---|---|---|---|---|
| | 2 | 394 | 63 | | 0 | 457 |
| | 3 | 414 | 53 | | 3 | 470 |
| | 4 | 402 | 70 | | 2 | 474 |
| | Total | 1210 | 186 | | 5 | 1401 |

| 2006 | Panel | 11 | 21 | 22 | 23 | |
|---|---|---|---|---|---|---|
| | 3 | 294 | | | | |
| | 4 | 255 | | | | |
| | 5 | 330 | | | | |
| | Total | 879 | | | | |

| 2007 | Panel | 11 | 21 | 22 | 23 | |
|---|---|---|---|---|---|---|
| | 4 | 275 | | | 0 | 275 |
| | 5 | 330 | | | 0 | 330 |
| | 6 | 358 | | | 1 | 359 |
| | Total | 963 | | | 1 | 964 |

| 2008 | Panel | 11 | 21 | 22 | 23 | Total |
|---|---|---|---|---|---|---|
| | 5 | 2107 | 161 | 3 | 25 | 2296 |
| | 6 | 2106 | 176 | 1 | 21 | 2304 |
| | 7 | 2701 | 226 | 0 | 30 | 2957 |
| | 8 | 2399 | 182 | 1 | 31 | 2613 |
| | Total | 9313 | 745 | 5 | 107 | 10170 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Table 14: Distribution of household by DB130

| **Panel 5** | **11** | **21** | **22** | **23** | **24** | |
|---|---|---|---|---|---|---|
| **2005** | 1742 | 5 | 0 | 0 | 0 | 1747 |
| **2006** | 1486 | 112 | 0 | 19 | 0 | 1617 |
| **2007** | 1367 | 53 | 0 | 18 | 0 | 1438 |
| **2008** | 1729 | 290 | 5 | 74 | 9 | 2107 |
| **Total** | 6324 | 460 | 5 | 111 | 9 | 6909 |

| **Panel 6** | **11** | **21** | **22** | **23** | **24** | |
|---|---|---|---|---|---|---|
| **2006** | 1627 | 4 | 0 | 4 | 0 | 1635 |
| **2007** | 1404 | 94 | 0 | 15 | 0 | 1513 |
| **2008** | 1676 | 352 | 12 | 60 | 6 | 2106 |
| **Total** | 4707 | 450 | 12 | 79 | 6 | 5254 |

| **Panel 7** | **11** | **21** | **22** | **23** | **24** | |
|---|---|---|---|---|---|---|
| **2007** | 2164 | 394 | 9 | 39 | 3 | 2609 |
| **2008** | 2179 | 429 | 20 | 66 | 7 | 2701 |
| **Total** | 4343 | 823 | 29 | 105 | 10 | 5310 |

### 2.3.3.4. Distribution of persons for membership status (RB110)

Table 15: distributions of person by memberships status RB110.

| **2005** Panel | **1** | **2** | **3** | **4** | **5** | **6** | |
|---|---|---|---|---|---|---|---|
| **4** | 4149 | 3 | 86 | 41 | 487 | 8 | 4774 |
| **5** | 4506 | 0 | 0 | 0 | 0 | 0 | 4506 |
| **6** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 8655 | 3 | 86 | 41 | 487 | 8 | 9280 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

**2006**

| Panel | 1 | 2 | 3 | 4 | 5 | 6 | |
|---|---|---|---|---|---|---|---|
| **4** | 3589 | 13 | 57 | 51 | 217 | 9 | 3936 |
| **5** | 3587 | 2 | 59 | 51 | 403 | 17 | 4119 |
| **6** | 4192 | 0 | 0 | 0 | 0 | 0 | 4192 |
| **Total** | 11368 | 15 | 116 | 102 | 620 | 26 | 12247 |

**2007**

| Panel | 1 | 2 | 3 | 4 | 5 | 6 | |
|---|---|---|---|---|---|---|---|
| **4** | 3297 | 5 | 47 | 45 | 161 | 20 | 3575 |
| **5** | 3290 | 1 | 36 | 51 | 168 | 9 | 3555 |
| **6** | 3497 | 9 | 37 | 39 | 213 | 17 | 3812 |
| **Total** | 10084 | 15 | 120 | 135 | 542 | 46 | 10942 |

2008

| Panel | 1 | 2 | 3 | 4 | 5 | 6 | |
|---|---|---|---|---|---|---|---|
| **5** | **3438** | **1** | **35** | **38** | **121** | **16** | **3649** |
| **6** | **3545** | **1** | **31** | **45** | **108** | **28** | **3758** |
| **7** | **5153** | **1** | **135** | **70** | **212** | **20** | **5591** |
| **Total** | **12136** | **3** | **201** | **153** | **441** | **64** | **12998** |

With the sampling design we just follow the selected persons and examine their household conditions. We do not examine persons (and their eventual households) who are excluded from the selected persons households during the interview.

### 2.3.3.5 Item non-response

For the respondent selected individuals we know all the individuals belonging to his household. For those households calculations of income variables are based on administrative register data. Imputation

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

procedures are consequently not necessary. But for not respondent selected individuals we do not know the correct composition of their households, and therefore it is not meaningful to collect any information from any administrative register.

### 2.4 Mode of data collection

The main data collection method was personal interview during 2004-2005 and during 2006 was telephone interview. From 2007 mainly by telephone interview .

Table 16 : Distribution of households and individuals by RB250 data status

RB250 samples individual and co residents

Data Status value

Value 13 = information completed from both: interview and registers

Value 21= individual unable to respond

Value 23 = refusal to cooperate

Value 31-33 no contact or not completed

All households members

| | 13 | 21 | 23 | 31 | 32 | 33 | |
|---|---|---|---|---|---|---|---|
| **2005** | 6859 | 13 | 2 | 73 | 12 | 130 | 7089 |
| **2006** | 9157 | 0 | 0 | 0 | 0 | 0 | 9157 |
| **2007** | 8068 | 0 | 0 | 0 | 0 | 0 | 8068 |
| **2008** | 3695 | 0 | 0 | 0 | 0 | 0 | 3695 |
| **Total** | 27779 | 13 | 2 | 73 | 12 | 130 | 28009 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

Sampled individuals

| | 13 | 21 | 23 | 31 | 32 | 33 | |
|---|---|---|---|---|---|---|---|
| **2005** | 3345 | 13 | 2 | 73 | 12 | 130 | 3575 |
| **2006** | 4583 | 0 | 0 | 0 | 0 | 0 | 4583 |
| **2007** | 4107 | 0 | 0 | 0 | 0 | 0 | 4107 |
| **2008** | 1868 | 0 | 0 | 0 | 0 | 0 | 1868 |
| **Total** | 13903 | 13 | 2 | 73 | 12 | 130 | 14133 |

Coo-residents

| | 13 | 21 | 23 | 31 | 32 | 33 | |
|---|---|---|---|---|---|---|---|
| **2005** | 3345 | 13 | 2 | 73 | 12 | 130 | 3575 |
| **2006** | 4583 | 0 | 0 | 0 | 0 | 0 | 4583 |
| **2007** | 4107 | 0 | 0 | 0 | 0 | 0 | 4107 |
| **2008** | 1827 | 0 | 0 | 0 | 0 | 0 | 1827 |
| **Total** | 13862 | 13 | 2 | 73 | 12 | 130 | 14092 |

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

RB260 type of Interview

Data Status value 1 = face to face PAPI

Data bstatus value 3 = CATI

All households members

| | 1 | 3 | 5 | Total |
|---|---|---|---|---|
| **2005** | 5 | 6509 | 345 | 6859 |
| **2006** | 5 | 8868 | 284 | 9157 |
| **2007** | 0 | 7870 | 198 | 8068 |
| **2008** | 10 | 7209 | 226 | 7445 |
| **Total** | 20 | 30456 | 1053 | 31529 |

Sampled individuals

| | 1 | 3 | 5 | Total |
|---|---|---|---|---|
| **2005** | 2 | 3183 | 160 | 3345 |
| **2006** | 2 | 4461 | 120 | 4583 |
| **2007** | 0 | 4019 | 88 | 4107 |
| **2008** | 6 | 3618 | 103 | 3726 |
| **Total** | 10 | 15281 | 471 | 15761 |

Coo-residents

| | 1 | 3 | 5 | Total |
|---|---|---|---|---|
| **2005** | 3 | 3326 | 185 | 3514 |
| **2006** | 3 | 4407 | 164 | 4574 |
| **2007** | 0 | 3851 | 110 | 3961 |
| **2008** | 5 | 3592 | 123 | 3719 |
| **Total** | 11 | 15176 | 582 | 15768 |

## 2.5 Imputation procedure

See below

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

### 2.6 Imputed rent

Imputed rent (HY030) was calculating by using variables HH010, HH020, HH030 and a variable based on regional classifications described, the dwelling costs was imputed from our national household budget survey and our national housing survey.

### 2.7 Company car

The variable was only collected in 2007. Until this variable was included in Non Cash employee income PY020G / PY020Y.

## 3. Comparability

### 3.1 Basic concepts and definitions

The reference population

-Reference population is the whole Swedish population except short term migration, people who stay in Sweden 3-12 months, is not covered.

Private household definition

-The regulation definition of Eurostat SILC is applied.

The household membership

-The regulation definition is applied

-The income reference period used is: year N

-The period for taxes on income and social insurance contributions is : year N

The lag between the income reference period and current variables

-The field work is carried out during January-December year N.

The total duration of the data collection of the sample

-The data collection was 12 month, January-December

The basic information on activity status during the income reference period

-The twelve calendar months proceeding the month of the interview

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

## 3.2 Components of income

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

Only minor deviations with little impact on the results:
Non-cash employee income includes more than company car (housing cost/ interest on loans below market price etc).

Regular inter-household cash transfers paid/received do only consider transactions between parents not living together. Other types of alimonies or cash transfers are not included.

Imputed rent (HY030) was calculating by using variables HH010, HH020, HH030 and a variable based on regional classifications described, the dwelling costs was imputed from our national household budget survey and our national housing survey.

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

The income variables as well as wealth and taxes is collected by administrative registers and one of the important source is the register of The Swedish National tax Agency and others databases and registers in Swedish Statistics .

### 3.2.3 The form in which income variables at component level have been obtained

Gross but exclusive of employers' social contributions

### 3.2.4 The method used for obtaining income target variables in the required format

The components were gross and available from administrative registers with the exception of employers' social contributions.

## 3.3 Tracing rules

The sampling unit is individual, and we include all household-members at the time when the sample is drawn the first year. During the following three year the sampled individuals are included in the panel

Social Welfare Statistics Unit
Göran Råbäck
Alvaro Miranda

wave, and there household-situation is examined. If there original household from the first year has been split, we only follow the sampled individual. The household-situation for not sampled household-members is not examined if they no longer belong to the household of the sampled individuals.

# 4. Coherence

## 4.1 Comparison of income target variables

The EU-SILC income information is collected from the different administrative sources covering the whole population. The non-response bias has little impact on the estimates. The source of income components is the registers in Swedish Statistics.