

**QUALITY REPORT
FINAL LONGITUDINAL SURVEY
2005-2006-2007-2008**

1. COMMON LONGITUDINAL EUROPEAN UNION INDICATORS BASED ON THE LONGITUDINAL COMPONENT OF EU-SILC

For the first time the longitudinal dataset 2005-2008 of the EU-SILC operation comprises a four-years panel, making it possible the calculation of the at-persistent-risk-of-poverty rate. It is defined as the percentage of persons with an equivalised disposable income below the respective at-risk-of-poverty threshold for the last wave and at least two times in the preceding three years.

The reference population comprises all persons who were in the panel for all four waves. The share of persons is weighted using the base weight of the last wave; for each year, the median and two thresholds (respectively 60% or 50% of the median) are estimated from the cross-sectional sample¹.

Table 1. Types of at-persistent-risk-of-poverty

| Duration of at-risk-of-poverty | T = 2008 | T-1 = 2007 | T-2 = 2006 | T-3 = 2005 | Threshold = 60% median | Threshold = 50% median |
|--------------------------------|----------|-------------|-------------|-------------|------------------------|------------------------|
| T & 3 times in preceding waves | At risk | At risk | At risk | At risk | 8.8 | 4.9 |
| T & 2 times in preceding waves | At risk | At risk | At risk | Not at risk | 1.84 | 0.8 |
| | At risk | At risk | Not at risk | At risk | 1.41 | 0.92 |
| | At risk | Not at risk | At risk | At risk | 0.89 | 0.53 |
| | | | | | 12.94 | 7.15 |

Table 2. At-persistent-risk-of-poverty by age and sex

| Age | Sex | Threshold = 60% median % | Threshold = 50% median % |
|-------|-----|--------------------------|--------------------------|
| 0+ | T | 12.94 | 7.15 |
| | M | 11.78 | 6.29 |
| | F | 14.02 | 7.95 |
| 0-17 | T | 18.19 | 10.08 |
| 18-64 | T | 11.31 | 6.56 |
| | M | 10.32 | 5.8 |
| | F | 12.31 | 7.32 |
| 65+ | T | 14.14 | 6.85 |
| | M | 11.46 | 4.67 |
| | F | 16.06 | 8.42 |

2. ACCURACY

2.1. Sampling design for the first wave of the longitudinal component

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

Two stage sampling design: The first stage units (or primary sampling units PSU) are the municipalities, the second stage units (SSU) are the households.

The PSU are stratified according to their size in terms of number of residents. Stratification is carried out inside each administrative region. Four municipalities are selected in each strata.

Use of clustering:

Municipalities are clusters of households, households are clusters of individuals.

¹ As a result, these estimates are not fully comparable with what reported in the Final Quality Report 2007. In that case the at-risk-of-poverty thresholds were estimated for each wave by observations in the four-year panel.

2.1.2 Sampling units (one stage, two stages)

Primary sampling units are the municipalities.

Secondary sampling units are the households selected from municipalities' registers with systematic sampling and not selected with PPS.

Extracted sample

| DB075 | Sample size (number of SSU) | Number of PSU | Number of SSU (Total) | Average number of SSU for each PSU |
|-------|-----------------------------|---------------|-----------------------|------------------------------------|
| 1 | <=25 | 200 | 1563 | 7.8 |
| 1 | 26-50 | 184 | 5345 | 29.0 |
| 1 | 51-75 | 3 | 185 | 61.7 |
| 1 | 76-100 | 2 | 175 | 87.5 |
| 1 | 101-250 | 4 | 591 | 147.8 |
| 1 | >=250 | 1 | 432 | 432.0 |
| 1 | Total | 394 | 8291 | 21.0 |
| 2 | <=25 | 174 | 1511 | 8.7 |
| 2 | 26-50 | 183 | 5328 | 29.1 |
| 2 | 51-75 | 3 | 187 | 62.3 |
| 2 | 76-100 | 2 | 175 | 87.5 |
| 2 | 101-250 | 4 | 589 | 147.3 |
| 2 | >=250 | 1 | 433 | 433.0 |
| 2 | Total | 367 | 8223 | 22.4 |
| 3 | <=25 | 144 | 1363 | 9.5 |
| 3 | 26-50 | 185 | 5356 | 29.0 |
| 3 | 51-75 | 3 | 185 | 61.7 |
| 3 | 76-100 | 2 | 175 | 87.5 |
| 3 | 101-250 | 4 | 589 | 147.3 |
| 3 | >=250 | 1 | 432 | 432.0 |
| 3 | Total | 339 | 8100 | 23.9 |

2.1.3 Stratification and sub-stratification criteria

Stratification of primary sampling units by the number of inhabitants so that the total number of inhabitants in each stratum is approximately constant (this guarantees self-weighting design in each region).

Municipalities which sizes are higher than a threshold are self-representing units i.e. are strata themselves and included with certainty in the sample of PSU.

Secondary sampling units are not stratified.

2.1.4 Sample size and allocation criteria

Sample size have been determined on the basis of expected deft reported in table 1 for macroregions (North, Centre, South). Data of ECHP for years 1995-1999, have been the basis for the evaluation of deft, results on income and poverty have been averaged over the 5 available years. National intra-classes correlation coefficient inside households, ρ_{SR} , and inside municipality, ρ_{NSR} , have been estimated on the basis of the above averages; then following formula to evaluate *deff* has been applied:

$$deff_r = \frac{n_r}{N_r^2} \left\{ \frac{N_{r,SR}^2}{n_{r,SR}} (1 + \rho_{SR} (\bar{b}_{r,SR} - 1)) + \frac{N_{r,NSR}^2}{n_{r,NSR}} (1 + \rho_{NSR} (\bar{b}_{r,NSR} - 1)) \right\}$$

where n_r and N_r are sample and population dimension of administrative regions, $\bar{b}_{r,SR}$ is the average household dimension and $\bar{b}_{r,NSR}$ is the average number of individuals selected in each municipalities.

On the basis of survey on income of year 2003, the following response rates have been estimated:

- T(reg) for regions by municipality type (municipality type: metropolitan, over 50.000 residents and others);
- T(mr) for macro-regions by municipality type.

Then to smooth the estimates, $T(c) = 0.25 * T(\text{reg}) + 0.75 * T(\text{mr})$, has been applied to inflate the achieved sample size so that

$$n(\text{sel}) = n(\text{ach}) / T(c).$$

The sample inside macro-regions has been allocated by means of a generalized version (Falorsi et al, 1998 and Falorsi e Russo, 2003.) of Bethel methods (Bethel 1989), with iterative procedure that recalculate at each step deff and sampling dimensions to satisfy given requirements. Allocation inside regions averaging proportional and uniform allocation.

Table 1

| Macroregions | Deft income | Deft poverty | Deff income | Deff poverty |
|--------------|-------------|--------------|-------------|--------------|
| 1 | 2.64 | 1.59 | 6.97 | 2.54 |
| 2 | 2.26 | 1.43 | 5.09 | 2.05 |
| 3 | 2.69 | 1.61 | 7.24 | 2.61 |
| Italy | 2.61 | 1.58 | 6.84 | 2.50 |

The sampling size of each rotational group is one/fourth of the above size.

2.1.5 Sample selection schemes

PSU are selected with probability proportional to their size (number of residents) by means of systematic sampling method by Madow (1949) inside each stratum.

Households are selected with equal probability by systematic sampling in each selected municipality from municipality-registers.

2.1.6 Sample distribution over the time

The sample is not distributed over time.

2.1.7 Renewal of sample: Rotational groups

Rotational design is used for households; the whole sample is composed of four rotational groups. Each group is included in the sample for four waves of the survey. Each year one fourth of the sample is renewed, replacing the group entered in the sample four years before.

| | A | B | C | D | E | F | G | H | I |
|-----|----|----|----|----|----|----|----|----|---|
| T | A4 | B3 | C2 | D1 | | | | | |
| T+1 | | B4 | C3 | D2 | E1 | | | | |
| T+2 | | | C4 | D3 | E2 | F1 | | | |
| T+3 | | | | D4 | E3 | F2 | G1 | | |
| T+4 | | | | | E4 | F3 | G2 | H1 | |

| | | | | | |
|-----|--|----|----|----|----|
| T+5 | | F4 | G3 | H2 | I1 |
|-----|--|----|----|----|----|

Each group is associated to one municipality of the strata. The self-representative municipalities are enclosed in each of the rotational groups: in such case the households referring to these municipalities are divided in 4 independent samples.

2.1.8. Weightings

FOR THE FIRST WAVE OF THE EU-SILC LONGITUDINAL COMPONENT

2.1.8.1 Design factor

In case of the individuals at the first wave, the base weight is equal to the household cross-sectional weight, and is the same for all the household components. The design weight of each household was given by the inverse of its inclusion probability and was calculated taking into account the population of the stratum, the population and the number of households in the extracted municipalities and the number of extracted households in the municipality. In every stratum it is extracted one municipality.

Let p_{ji} be the design weight of the generic household j in the municipality i :

$$p_{ji} = \frac{1}{\pi_{hi}} = \frac{P_h}{P_{hi}} \frac{M_{hi}}{m_{hi}}$$

where :

h is the stratum index;

i is the municipality index;

π_{hi} is the inclusion probability of the households resident in the municipality i of the stratum h ;

P_h is the population resident in the stratum h ;

P_{hi} is the population in the municipality i of the stratum h ;

M_{hi} is the number of households resident in the municipality i of the stratum h ;

m_{hi} is the number of sample households in the municipality i of the stratum h .

2.1.8.2 Non-response adjustments

For the first wave of the longitudinal sample, we observe two different non-response level: individual-level and household-level.

Concerning with the individual-level non-response, the records of the non-respondent individual belonging to respondent households were totally imputed.

Concerning with the non-response adjustment at the household level, the base weights were adjusted by a correction factor for total non-response worked out as the reciprocal of the response ratio for subgroups of households identified by the information we had on the extracted sample (for the households at wave 1). The groups are identified by segmentation obtained with a chi-squared decision tree.

The re-calculated weight $\hat{p}_{j,k}$ for the generic household j in the sub-group k is:

$$\hat{p}_{jk} = p_{jk} \frac{N_{Ek}}{N_{Ok}}, \text{ where } p_{jk} \text{ is the design weight, } N_{Ek} \text{ is the number of households extracted in the}$$

sub-group k , and N_{Ok} is the number of respondent households.

The information used are:

territorial domain (NUTS II level), demographic size of the municipalities, number of household components and nationality of the householder (gathered from demographic registers), type of income sources (gathered from fiscal registers).

A first stage of calibration procedure was adopted to assure the same structure as the population of the Labour Force Survey with regard to the education and professional position of the population. This is due to the fact that in Italy the non-response in an income survey is correlated with the position in the labour market (especially for self-employed) and with the education level of the respondents.

2.1.8.3 Adjustments to external data (level, variables used and sources)

After the non-response adjustments, the final weights were obtained applying a calibration of the household weights to external data sources (registers). Let $X_1, X_2 \dots X_p$ denote the external (known) variables

The calibration procedure consists of calculating the household weights ψ_j , such as:

- The calibrated weights are “not very different” from the weights \hat{p}_j
- The totals X_r of the calibration variables are exactly estimated by the same totals in the sample obtained with the weights ψ .

The external known totals regarding the households at the first participation are the following:

For the entering rotational sub-group:

- 1) Distribution of the population by sex and five age-groups at NUTS I level. The age groups are: 0-15, 16-25, 26-45, 46-65, 65+ at the end of the income reference period (year t-1);
- 2) Amount of non-national population at NUTS I level (year t-1).
- 3) Distribution of the population by demographic size of the municipality at Nuts I level (year t-1) (three classes).
- 4) Number of households at NUTS I level at the time of the survey (year t).

For the entire sample:

- 1) Distribution of the population by sex and fourteen 5-years age-groups at NUTS I level (year t-1). The age groups are: 0-15, 16-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75+ at the end of the income reference period (year t-1);
- 2) Distribution of the population by sex and five age-groups at NUTS II level (year t-1). The age groups are: 0-15, 16-25, 26-45, 46-65, 65+ at the end of the income reference period (year t-1);
- 3) Distribution of non-national population by sex and by UE and non UE distribution at NUTS I level (year t-1).
- 4) Distribution of the population by demographic size of the municipality at Nuts I level (year t-1) (six classes).
- 5) Number of households at NUTS II level at the time of the survey (year t)

2.1.8.4 Final longitudinal weights

For the first wave of each panel, the base weight is equal to the cross-sectional weight. We applied an integrative calibration, that means that we used both household and personal variables in the procedure. The calibration is performed at household level using the household variables and the individual variables in their aggregate form as calibration variables. This technique ensures that members in the same household all receive the same weight. A trimming procedure was applied to avoid extreme values of weights.

FOR THE SECOND WAVE OF THE EU-SILC LONGITUDINAL COMPONENT

2.1.8.5 Non-response adjustments

In the longitudinal component of the survey we observe non-response at individual-level.

Concerning with the non-response adjustment at the individual level, the base weights were adjusted by a correction factor for total non-response worked out as the reciprocal of the response ratio for identified through the information gathered from the previous year of survey. The response probability is obtained through a logistic regression model.

The re-calculated weight $\hat{p}_{j,k}$ for the generic individual j in the sub-group k is:

$$\hat{p}_{jk} = p_{jk} \frac{N_{Ek}}{N_{Ok}}, \text{ where } p_{jk} \text{ is the base weight of the previous year, } N_{Ek} \text{ is the number of}$$

individuals interviewed in the sub-group k , and N_{Ok} is the number of respondent individuals.

The information used to identify the sub-groups are:

territorial domain (NUTS II), demographic size of the municipalities, number of household components, type of income sources, level of household income, nationality, sex, age, education and professional condition of the household components.

2.1.8.6 Adjustments to external data

No adjustment to external data was applied for the individuals participating not for the first time.

2.1.8.7 Final longitudinal weights

The longitudinal weight is only at individual level and is equal to the base weight at the first year of participation corrected for non-response.

2.1.8.8 Final household cross-sectional weights

In case of the households at the second, third or fourth wave, an indirect sampling of households is done through the panel of persons aged 14+ at the time of the panel selection. In this case, the inclusion probabilities cannot be calculated. Then, the solution consists of applying the Weight Share Method. Within a household, each member has been assigned a weight coming from the final cross-sectional weight of the precedent year of survey corrected for unit non-response, except for co-residents from whom the weight is =0. Average of these weights over all the household members (including co-residents) is assigned to each member (including co-residents).

After the non-response adjustments, the final weights were obtained applying a calibration of the household weights to external data sources (registers). Let $X_1, X_2 \dots X_p$ denote the external (known) variables

The calibration procedure consists of calculating the household weights ψ_j , such as:

- The calibrated weights are “not very different” from the weights \hat{p}_j
- The totals X_r of the calibration variables are exactly estimated by the same totals in the sample obtained with the weights ψ .

The external known totals are the following:

For the entire sample:

- 1) Distribution of the population by sex and fourteen 5-years age-groups at NUTS I level (year t-1). The age groups are: 0-15, 16-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75+ at the end of the income reference period (year t-1);
- 2) Distribution of the population by sex and five age-groups at NUTS II level (year t-1). The age groups are: 0-15, 16-25, 26-45, 46-65, 65+ at the end of the income reference period (year t-1).
- 3) Distribution of non-national population at NUTS I level by sex; by UE and non UE distribution; by age in two classes: 0-17, 18+ at the end of the income reference period (year t-1).
- 4) Distribution of the population by demographic size of the municipality at Nuts I level (year t-1) (six classes).
- 5) Number of households at NUTS II level at the time of the survey (year t)

For the entering rotational sub-group (at first wave):

- 1) Distribution of the population by sex and five age-groups at NUTS I level. The age groups are: 0-15, 16-25, 26-45, 46-65, 65+ at the end of the income reference period (year t-1).
- 2) Amount of non-national population at NUTS I level distinct in two classes: 0-17, 18+ at the end of the income reference period (year t-1).
(year t-1).
- 3) Distribution of the population by demographic size of the municipality at Nuts I level (year t-1) (three classes).
- 4) Number of households at NUTS I level at the time of the survey (year t)

For the other sub-groups:

- 1) Population at NUTS I level (year t-1)
- 2) Number of households at NUTS I level (year t);

2.1.9. Substitutions

In Italy no substitution of unit non-response has been applied.

2.2. Sampling errors

With reference to the cross-sectional component of the survey - year 2008 -, standard errors were calculated for the mean of the Income components (listed in Table 1) and for the mean of the Equivalised disposable income by household size, population age groups, population by sex (see Table 1).

Table 1. Mean, number of observations and standard errors(cross-sectional component 2008)

| Income components | Mean | Number of observations | | Standard |
|--|----------|------------------------|------------------|----------|
| | | Before imputation | After imputation | Error |
| Total household gross income | 39354.92 | 20737 | 20928 | 271.55 |
| Total disposable household income | 29392.01 | 20748 | 20928 | 169.89 |
| Total disposable household income before social transfers other than old-age survivors' benefits | 28018.43 | 20617 | 20928 | 170.63 |
| Total disposable household including old-age survivors' benefits | 21138.69 | 19381 | 20928 | 169.53 |
| Net income components at household level | | | | |
| Income from rentals of properties or lands | 6670.52 | 1042 | 1766 | 345.13 |
| Family/children related allowances | 1085.17 | 5617 | 6029 | 27.74 |
| Social exclusion | 4838.08 | 116 | 128 | 781.83 |
| Housing allowances | 2214.72 | 354 | 386 | 265.88 |
| Transfers received | 4533.84 | 1013 | 1125 | 222.79 |
| Interest, dividends, profits | 1042.18 | 7938 | 11288 | 23.58 |
| Interest repayments on mortgage | 3965.39 | 0 | 2530 | 118.01 |
| Income of people aged less than 16 | 3151.99 | 115 | 136 | 656.15 |
| Regular taxes on wealth | 374.74 | 7644 | 14599 | 5.09 |
| Transfers paid | 4255.37 | 907 | 972 | 235.83 |
| Repayments/receipts for tax adjustment | -302.43 | 13855 | 13888 | 15.60 |
| Gross income components at household level | | | | |
| Income from rentals of properties or lands | 9381.43 | 1042 | 1766 | 527.24 |
| Family/children related allowances | 1085.17 | 5617 | 6029 | 27.74 |
| Social exclusion | 4838.08 | 116 | 128 | 781.83 |
| Housing allowances | 2214.72 | 354 | 386 | 265.88 |

(Follows) Table 1. Mean, number of observations and standard errors (cross-sectional component 2008)

| | | | | |
|--|----------|-------|-------|---------|
| Transfers received | 4533.84 | 1013 | 1125 | 222.79 |
| Interest, dividends, profits | 1342.21 | 7938 | 11288 | 29.96 |
| Interest repayments on mortgage | 3965.39 | 0 | 2530 | 118.01 |
| Income of people aged less than 16 | 3151.99 | 115 | 136 | 656.15 |
| Regular taxes on wealth | 374.74 | 7644 | 14599 | 5.09 |
| Transfers paid | 4255.37 | 907 | 972 | 235.83 |
| Net income components at personal level | | | | |
| Employee cash or near-cash income | 15835.85 | 15446 | 17925 | 123.52 |
| Non cash employee income | 1269.77 | 904 | 4429 | 30.09 |
| Contributions to individual private pension plan | 1840.34 | 2334 | 2682 | 72.07 |
| Cash benefit or losses from self-employment | 17513.88 | 6030 | 7125 | 212.54 |
| Pension from individual private plans | 4690.09 | 78 | 81 | 911.38 |
| Unemployment benefits | 3338.44 | 4179 | 4343 | 102.72 |
| Old-age benefits | 12592.04 | 13390 | 13406 | 91.42 |
| Survivor' benefits | 6772.51 | 720 | 721 | 363.35 |
| Disability benefits | 5736.82 | 1414 | 1423 | 225.17 |
| Education related allowances | 4409.60 | 199 | 231 | 595.16 |
| Gross income components at personal level | | | | |
| Employee cash or near-cash income | 21493.97 | 17765 | 17925 | 182.70 |
| Non cash employee income | 1316.21 | 904 | 4429 | 31.87 |
| Contributions to individual private pension plan | 1840.34 | 2334 | 2682 | 72.07 |
| Cash benefit or losses from self-employment | 26246.56 | 6977 | 7125 | 669.02 |
| Pension from individual private plans | 6341.15 | 81 | 81 | 1312.24 |
| Unemployment benefits | 3900.83 | 4281 | 4343 | 123.93 |
| Old-age benefits | 14966.93 | 13392 | 13406 | 125.12 |
| Survivor' benefits | 7997.24 | 720 | 721 | 449.05 |
| Disability benefits | 6547.91 | 1417 | 1423 | 267.48 |
| Education related allowances | 4409.60 | 199 | 231 | 595.16 |
| Gross monthly earnings of employees | 1744.24 | 13284 | 14732 | 14.91 |

(Follows) Table 1. Mean, number of observations and standard errors (cross-sectional component 2008)

| Income components | Mean | Number of observations | | Standard Error |
|-------------------------------------|----------|------------------------|------------------|----------------|
| | | Before imputation | After imputation | |
| <i>Subclasses by household size</i> | | | | |
| 1 household member | 16318.06 | 5416 | 5515 | 222.58 |
| 2 household members | 18932.59 | 5861 | 5900 | 310.68 |
| 3 household members | 18998.30 | 4549 | 4575 | 328.29 |
| 4 and more | 16801.60 | 4922 | 4938 | 229.68 |
| <i>Population by age group</i> | | | | |
| <25 | 15993.69 | 12946 | 13048 | 135.15 |
| 25-34 | 18315.70 | 6316 | 6374 | 161.91 |
| 35-44 | 18167.65 | 8154 | 8225 | 176.59 |
| 45-54 | 18988.81 | 7350 | 7398 | 179.44 |
| 55-64 | 20905.73 | 6671 | 6693 | 252.33 |
| 65+ | 16333.22 | 10676 | 10695 | 131.97 |
| <i>Population by sex</i> | | | | |
| Male | 18298.12 | 25136 | 25280 | 112.53 |
| Female | 17181.43 | 26977 | 27153 | 97.25 |

With reference to the component of the survey - year 2005-2006-2007-2008, DB075=1 -, standard errors were calculated for the mean of the Income components (listed in Table 1) and for the mean of the Equivalised disposable income by household size, population age groups, population by sex (see Table A).

Table A. Mean, number of observations and standard errors (DB075 = 1)

| Income components | Mean | Number of observations | | Standard Error |
|--|---------|------------------------|------------------|----------------|
| | | Before imputation | After imputation | |
| Total household gross income | 40852.8 | 4511 | 4528 | 611.8 |
| Total disposable household income | 30442.1 | 4522 | 4536 | 380.7 |
| Total disposable household income before social transfers other than old-age survivors' benefits | 29042.1 | 4498 | 4525 | 384.9 |
| Total disposable household including old-age survivors' benefits | 21251.4 | 4228 | 4359 | 382.9 |
| Net income components at household level | | | | |
| Income from rentals of properties or lands | 7633.7 | 221 | 373 | 1220.1 |
| Family/children related allowances | 1086.5 | 1243 | 1330 | 55.0 |
| Social exclusion | 5139.9 | 22 | 25 | 1247.9 |
| Housing allowances | 2082.7 | 63 | 68 | 412.5 |
| Transfers received | 4485.7 | 213 | 233 | 385.0 |
| Interest, dividends, profits | 1131.0 | 1659 | 2427 | 55.4 |
| Interest repayments on mortgage | 3694.0 | 0 | 610 | 225.5 |
| Income of people aged less than 16 | 3177.4 | 24 | 29 | 1033.1 |
| Regular taxes on wealth | 388.1 | 1686 | 3199 | 11.7 |
| Transfers paid | 4481.6 | 184 | 205 | 697.2 |
| Repayments/receipts for tax adjustment | -259.3 | 3076 | 3084 | 4.3 |
| Gross income components at household level | | | | |
| Income from rentals of properties or lands | 11103.3 | 221 | 373 | 2003.1 |
| Family/children related allowances | 1086.5 | 1243 | 1330 | 55.0 |
| Social exclusion | 5139.9 | 22 | 25 | 1247.9 |
| Housing allowances | 2082.7 | 63 | 68 | 412.5 |
| Transfers received | 4485.7 | 213 | 233 | 385.0 |
| Interest, dividends, profits | 1450.6 | 1659 | 2427 | 68.8 |
| Interest repayments on mortgage | 3694.0 | 0 | 610 | 225.5 |
| Income of people aged less than 16 | 3177.4 | 24 | 29 | 1033.1 |
| Regular taxes on wealth | 388.1 | 1686 | 3199 | 11.7 |
| Transfers paid | 4481.6 | 184 | 205 | 697.2 |

(Follows) Table A. Mean, number of observations and standard errors (DB075 = 1)

| Income components | Mean | Number of observations | | Standard Error |
|--|---------|------------------------|------------------|----------------|
| | | Before imputation | After imputation | |
| Net income components at personal level | | | | |
| Employee cash or near-cash income | 15914.5 | 3463 | 3961 | 280.5 |
| Non cash employee income | 1304.4 | 173 | 915 | 66.7 |
| Contributions to individual private pension plan | 1840.6 | 505 | 581 | 141.3 |
| Cash benefit or losses from self-employment | 18103.7 | 1313 | 1569 | 1015.3 |
| Pension from individual private plans | 4986.6 | 20 | 22 | 1509.3 |
| Unemployment benefits | 3699.2 | 923 | 953 | 256.4 |
| Old-age benefits | 13235.7 | 2972 | 2975 | 209.4 |
| Survivor' benefits | 6962.5 | 157 | 157 | 666.1 |
| Disability benefits | 5276.0 | 322 | 322 | 394.2 |
| Education related allowances | 5583.9 | 39 | 43 | 1297.9 |
| Gross income components at personal level | | | | |
| Employee cash or near-cash income | 21646.9 | 3930 | 3961 | 411.3 |
| Non cash employee income | 1343.5 | 173 | 915 | 70.5 |
| Contributions to individual private pension plan | 1840.6 | 505 | 581 | 141.3 |
| Cash benefit or losses from self-employment | 27145.1 | 1532 | 1569 | 1546.1 |
| Pension from individual private plans | 6620.8 | 22 | 22 | 2109.2 |
| Unemployment benefits | 4299.4 | 946 | 953 | 305.7 |
| Old-age benefits | 15827.6 | 2973 | 2975 | 287.9 |
| Survivor' benefits | 8181.7 | 157 | 157 | 806.7 |
| Disability benefits | 5971.8 | 322 | 322 | 451.2 |
| Education related allowances | 5583.9 | 39 | 43 | 1297.9 |

(Follows) Table A. Mean, number of observations and standard errors (DB075 = 1)

| Equivalised disposable income | Mean | Number of observations | | Standard Error |
|-------------------------------------|---------|------------------------|------------------|----------------|
| | | Before imputation | After imputation | |
| <i>Subclasses by household size</i> | | | | |
| 1 household member | 16780.6 | 1132 | 1147 | 404.1 |
| 2 household members | 19532.0 | 1295 | 1304 | 680.8 |
| 3 household members | 20041.5 | 986 | 995 | 802.7 |
| 4 and more | 17581.1 | 1109 | 1114 | 534.1 |
| <i>Population by age group</i> | | | | |
| <25 | 16520.6 | 2852 | 2887 | 318.6 |
| 25-34 | 18858.8 | 1380 | 1395 | 346.9 |
| 35-44 | 18904.6 | 1802 | 1815 | 412.5 |
| 45-54 | 19114.6 | 1579 | 1590 | 413.2 |
| 55-64 | 22063.6 | 1496 | 1502 | 507.2 |
| 65+ | 16983.9 | 2367 | 2367 | 317.2 |
| <i>Population by sex</i> | | | | |
| Male | 18913.7 | 5584 | 5621 | 233.8 |
| Female | 17859.1 | 5892 | 5935 | 220.6 |

With reference to the component of the survey - year 2006-2007-2008, DB075=2 -, standard errors were calculated for the mean of the Income components (listed in Table B) and for the mean of the Equivalised disposable income by household size, population age groups, population by sex (see Table B).

Table B. Mean, number of observations and standard errors (DB075 = 2)

| Income components | Mean | Number of observations | | Standard Error |
|--|---------|------------------------|------------------|----------------|
| | | Before imputation | After imputation | |
| Total household gross income | 39981.6 | 4843 | 4865 | 488.3 |
| Total disposable household income | 29890.8 | 4848 | 4871 | 314.4 |
| Total disposable household income before social transfers other than old-age survivors' benefits | 28606.2 | 4821 | 4859 | 313.0 |
| Total disposable household including old-age survivors' benefits | 21243.0 | 4519 | 4660 | 291.4 |
| Net income components at household level | | | | |
| Income from rentals of properties or lands | 7329.8 | 229 | 399 | 691.1 |
| Family/children related allowances | 1061.2 | 1325 | 1422 | 38.6 |
| Social exclusion | 5544.0 | 27 | 33 | 1124.3 |
| Housing allowances | 2863.3 | 70 | 77 | 877.4 |
| Transfers received | 4945.7 | 219 | 242 | 463.2 |
| Interest, dividends, profits | 1090.7 | 1885 | 2649 | 50.0 |
| Interest repayments on mortgage | 3893.9 | 0 | 579 | 214.7 |
| Income of people aged less than 16 | 2881.3 | 29 | 35 | 566.4 |
| Regular taxes on wealth | 387.5 | 1835 | 3463 | 10.7 |
| Transfers paid | 4102.0 | 198 | 215 | 407.8 |
| Repayments/receipts for tax adjustment | -323.3 | 3196 | 3203 | 3.8 |
| Gross income components at household level | | | | |
| Income from rentals of properties or lands | 10347.3 | 229 | 399 | 1060.2 |
| Family/children related allowances | 1061.2 | 1325 | 1422 | 38.6 |
| Social exclusion | 5544.0 | 27 | 33 | 1124.3 |
| Housing allowances | 2863.3 | 70 | 77 | 877.4 |
| Transfers received | 4945.7 | 219 | 242 | 463.2 |
| Interest, dividends, profits | 1398.4 | 1885 | 2649 | 62.7 |
| Interest repayments on mortgage | 3893.9 | 0 | 579 | 214.7 |
| Income of people aged less than 16 | 2881.3 | 29 | 35 | 566.4 |
| Regular taxes on wealth | 387.5 | 1835 | 3463 | 10.7 |
| Transfers paid | 4102.0 | 198 | 215 | 407.8 |

(Follows) Table B. Mean, number of observations and standard errors (DB075 = 2)

| Income components | Mean | Number of observations | | Standard Error |
|--|---------|------------------------|------------------|----------------|
| | | Before imputation | After imputation | |
| Net income components at personal level | | | | |
| Employee cash or near-cash income | 15931.0 | 3472 | 4060 | 222.5 |
| Non cash employee income | 1226.4 | 177 | 966 | 52.9 |
| Contributions to individual private pension plan | 1931.8 | 484 | 566 | 157.1 |
| Cash benefit or losses from self-employment | 17942.0 | 1380 | 1612 | 744.0 |
| Pension from individual private plans | 4272.4 | 18 | 19 | 1249.5 |
| Unemployment benefits | 3240.4 | 942 | 977 | 164.6 |
| Old-age benefits | 12962.0 | 3240 | 3243 | 200.6 |
| Survivor' benefits | 6355.9 | 188 | 188 | 596.2 |
| Disability benefits | 5803.9 | 296 | 297 | 435.7 |
| Education related allowances | 2761.1 | 45 | 52 | 603.3 |
| Gross income components at personal level | | | | |
| Employee cash or near-cash income | 21631.3 | 4029 | 4060 | 326.9 |
| Non cash employee income | 1268.4 | 177 | 966 | 55.5 |
| Contributions to individual private pension plan | 1931.8 | 484 | 566 | 157.1 |
| Cash benefit or losses from self-employment | 26612.4 | 1578 | 1612 | 1130.7 |
| Pension from individual private plans | 6080.6 | 19 | 19 | 1807.6 |
| Unemployment benefits | 3806.9 | 970 | 977 | 198.0 |
| Old-age benefits | 15561.2 | 3240 | 3243 | 276.9 |
| Survivor' benefits | 7521.6 | 188 | 188 | 745.5 |
| Disability benefits | 6615.9 | 297 | 297 | 516.5 |
| Education related allowances | 2761.1 | 45 | 52 | 603.3 |

(Follows) Table B. Mean, number of observations and standard errors (DB075 = 2)

| Equivalised disposable income | Mean | Number of observations | | Standard Error |
|-------------------------------|---------|------------------------|------------------|----------------|
| | | Before imputation | After imputation | |
| Subclasses by household size | | | | |
| 1 household member | 16830.1 | 1283 | 1317 | 437.2 |
| 2 household members | 19194.3 | 1406 | 1409 | 597.6 |
| 3 household members | 19472.1 | 1017 | 1022 | 641.6 |
| 4 and more | 16862.5 | 1142 | 1145 | 415.2 |
| Population by age group | | | | |
| <25 | 16083.9 | 2791 | 2989 | 243.4 |
| 25-34 | 18388.4 | 1399 | 1412 | 290.1 |
| 35-44 | 18248.4 | 1850 | 1867 | 325.8 |
| 45-54 | 18775.7 | 1733 | 1742 | 283.9 |
| 55-64 | 21023.2 | 1575 | 1579 | 443.7 |
| 65+ | 16996.4 | 2587 | 2593 | 323.6 |
| Population by sex | | | | |
| Male | 18407.2 | 5768 | 5795 | 206.7 |
| Female | 17381.2 | 6347 | 6387 | 182.5 |

With reference to the component of the survey - year 2007-2008, **DB075=3** -, standard errors were calculated for the mean of the Income components (listed in Table C) and for the mean of the Equivalised disposable income by household size, population age groups, population by sex (see Table C).

Table C. Mean, number of observations and standard errors (DB075 = 3)

| Income components | Mean | Number of observations | | Standard Error |
|--|---------|------------------------|------------------|----------------|
| | | Before imputation | After imputation | |
| Total household gross income | 39323.7 | 5305 | 5331 | 670.7 |
| Total disposable household income | 29443.9 | 5319 | 5344 | 415.7 |
| Total disposable household income before social transfers other than old-age survivors' benefits | 28092.6 | 5284 | 5324 | 420.6 |
| Total disposable household including old-age survivors' benefits | 21281.2 | 4946 | 5095 | 434.6 |
| Net income components at household level | | | | |
| Income from rentals of properties or lands | 6968.9 | 267 | 444 | 630.5 |
| Family/children related allowances | 1067.0 | 1487 | 1583 | 41.4 |
| Social exclusion | 4264.3 | 26 | 28 | 1249.0 |
| Housing allowances | 1539.7 | 95 | 106 | 250.9 |
| Transfers received | 4309.4 | 265 | 295 | 388.5 |
| Interest, dividends, profits | 1055.3 | 2052 | 2901 | 45.1 |
| Interest repayments on mortgage | 3715.2 | 0 | 688 | 189.0 |
| Income of people aged less than 16 | 3097.2 | 30 | 35 | 502.0 |
| Regular taxes on wealth | 385.4 | 1927 | 3690 | 10.1 |
| Transfers paid | 4017.0 | 242 | 255 | 346.2 |
| Repayments/receipts for tax adjustment | | | | |
| Gross income components at household level | | | | |
| Income from rentals of properties or lands | 9819.5 | 267 | 444 | 957.8 |
| Family/children related allowances | 1067.0 | 1487 | 1583 | 41.4 |
| Social exclusion | 4264.3 | 26 | 28 | 1249.0 |
| Housing allowances | 1539.7 | 95 | 106 | 250.9 |
| Transfers received | 4309.4 | 265 | 295 | 388.5 |
| Interest, dividends, profits | 1357.3 | 2052 | 2901 | 56.4 |
| Interest repayments on mortgage | 3715.2 | 0 | 688 | 189.0 |
| Income of people aged less than 16 | 3097.2 | 30 | 35 | 502.0 |
| Regular taxes on wealth | 385.4 | 1927 | 3690 | 10.1 |
| Transfers paid | 4017.0 | 242 | 255 | 346.2 |

(Follows) Table C. Mean, number of observations and standard errors (DB075 = 3)

| Income components | Mean | Number of observations | | Standard Error |
|--|---------|------------------------|------------------|----------------|
| | | Before imputation | After imputation | |
| Net income components at personal level | | | | |
| Employee cash or near-cash income | 15842.1 | 4067 | 4656 | 220.2 |
| Non cash employee income | 1287.9 | 243 | 1151 | 57.5 |
| Contributions to individual private pension plan | 1773.2 | 598 | 692 | 160.3 |
| Cash benefit or losses from self-employment | 18497.7 | 1570 | 1849 | 1077.5 |
| Pension from individual private plans | 4641.2 | 15 | 15 | 1456.1 |
| Unemployment benefits | 3238.5 | 1073 | 1112 | 176.6 |
| Old-age benefits | 12281.4 | 3416 | 3418 | 178.0 |
| Survivor' benefits | 7615.3 | 183 | 183 | 716.6 |
| Disability benefits | 5581.4 | 405 | 409 | 412.4 |
| Education related allowances | 4200.4 | 58 | 69 | 921.5 |
| Gross income components at personal level | | | | |
| Employee cash or near-cash income | 21449.0 | 4622 | 4656 | 327.0 |
| Non cash employee income | 1340.4 | 243 | 1151 | 61.8 |
| Contributions to individual private pension plan | 1773.2 | 598 | 692 | 160.3 |
| Cash benefit or losses from self-employment | 27901.4 | 1815 | 1849 | 1688.5 |
| Pension from individual private plans | 6035.5 | 15 | 15 | 1898.5 |
| Unemployment benefits | 3788.9 | 1102 | 1112 | 213.1 |
| Old-age benefits | 14552.3 | 3416 | 3418 | 248.1 |
| Survivor' benefits | 9046.3 | 183 | 183 | 908.4 |
| Disability benefits | 6395.1 | 407 | 409 | 501.9 |
| Education related allowances | 4200.4 | 58 | 69 | 921.5 |

(Follows) Table C. Mean, number of observations and standard errors (DB075 = 3)

| Equivalised disposable income | Mean | Number of observations | | Standard Error |
|-------------------------------------|---------|------------------------|------------------|----------------|
| | | Before imputation | After imputation | |
| <i>Subclasses by household size</i> | | | | |
| 1 household member | 16155.6 | 1406 | 1428 | 482.2 |
| 2 household members | 18185.6 | 1476 | 1485 | 668.2 |
| 3 household members | 19468.3 | 1192 | 1198 | 595.0 |
| 4 and more | 17212.0 | 1245 | 1249 | 570.7 |
| <i>Population by age group</i> | | | | |
| <25 | 16505.6 | 3247 | 3269 | 348.4 |
| 25-34 | 18175.1 | 1680 | 1698 | 294.5 |
| 35-44 | 17922.6 | 2010 | 2023 | 394.2 |
| 45-54 | 19898.0 | 1936 | 1948 | 486.9 |
| 55-64 | 20867.3 | 1758 | 1763 | 613.2 |
| 65+ | 15980.6 | 2713 | 2717 | 248.5 |
| <i>Population by sex</i> | | | | |
| Male | 18617.6 | 6450 | 6481 | 254.8 |
| Female | 17116.2 | 6894 | 6937 | 210.1 |

2.3 Non sampling errors

2.3.1. Sampling frame and coverage errors

The sampling frame is composed by the registers of the municipalities.

The sample of the households belonging to the first rotational group was extracted in July 2005 and validated within September 2005; while the others households were extracted in June 2004.

The sampling frame is updated in continuous way by the municipalities in interactive modality.

2.3.2. Measurement and processing errors

2.3.2.1. Measurement errors

We consider that the following sources of measurement errors are likely to affect the collected data:

1. *respondents*: (i) memory effect, because information is collected according to respondents memories (official documentation about income is not required; external sources of information, as administrative registers, are used when available); (ii) omission, because respondents might not be willing to provide correct information about income or other living conditions; (iii) proxy effect, because in a few cases some individuals are allowed to provide information about other household members;
2. *interviewers*, who might provide the respondents with an incorrect interpretation of the questions, or might mistake when filling the questionnaire. Istat territorial offices are firstly trained and provided with training tools (e.g. instruction manuals, or presentations). Then, they are responsible for the interviewers training: they establish the timing and the duration of the training meetings, as well as provide support during the field work and control for the quality of the interviewers' work. Training strategies have been outlined also on the experience of pilot surveys;
3. *data entry* personnel, who might enter incorrect information, although some automatic controls are implemented in the registration software;
4. *questionnaire*. The final version of the questionnaire, as used in the survey 2006, is based on (i) the first two waves of SILC surveys; (ii) the support of experts working in other research institutes; and (iii) a cognitive laboratory on self-employment. Information is collected through three main questionnaires: the first one collects information about each household member's demographic characteristics, and child care; the second one collects information at household level; the third one collects information at individual level (about individual aged 16 and over).

2.3.2.2. Processing errors

Description of data entry procedure

Data entry procedure is realised through a software application implemented using Blaise. The procedure contains automatic controls about: range of variable, main routes of questionnaire and any logical controls referred to internal inconsistency of collected information. Every control is set-up like "soft" in order to reduce typing errors.

Furthermore, the procedure provides for "hard" control in order to compare register and questionnaire information about household's composition.

Coding controls

Coding controls are implemented in post-data-collection-process based on donor method.

Main errors detected in the post data collection process

Main errors detected are:

- Missing value.
- Value outside acceptance range.
- Incoherence value compared to other information in the same record.

2.3.3 Non-response errors

2.3.3.1. Achieved sample size

Table 1. Number of Households for which an interview is accepted for the database (DB135 = 1). Longitudinal component by wave.

| | 2005 | 2006 | 2007 | 2008 |
|--------------------------------|------|-------|-------|-------|
| DB075=1 & DB135 = 1 | 6194 | 5426 | 4928 | 4560 |
| DB075=2 & DB135 = 1 | - | 6167 | 5315 | 4893 |
| DB075=3 & DB135 = 1 | - | - | 6115 | 5360 |
| Total | 6194 | 11593 | 16358 | 14813 |

Table 2. Number of persons 16 years or older, number of sample persons (RB100 = 1) and number of co-residents (RB100 = 2), who are members of the households for which the interview is accepted for the database (D135 = 1), and who completed a personal interview (RB250 = 11 to 13). Longitudinal component by wave.

| | | DB135 = 1 & RB250 = 11 to 13 | | | |
|----------------|------------------|------------------------------|-------|-------|-------|
| | | 2005 | 2006 | 2007 | 2008 |
| DB075=1 | RB100 = 1 | 13289 | 11502 | 10299 | 9267 |
| | RB100 = 2 | - | 181 | 290 | 506 |
| DB075=2 | RB100 = 1 | - | 12956 | 11087 | 10038 |
| | RB100 = 2 | - | - | 153 | 258 |
| DB075=3 | RB100 = 1 | - | - | 12956 | 11242 |
| | RB100 = 2 | - | - | - | 152 |
| Total | RB100 = 1 | 13289 | 24458 | 34342 | 30547 |
| | RB100 = 2 | - | 181 | 443 | 916 |
| Total | | 13289 | 24639 | 34785 | 31463 |

2.3.3.2 Unit non-response

Table 1.1 Unit non-response, Rotational Group 1, first wave 2005

| TYPE OF RATE | VALUE |
|--------------|--------|
| RA | 0.989 |
| RH | 0.826 |
| NRH | 18.339 |
| RP | 1 |
| NRP | 0 |
| NRP_OVERALL | 18.339 |

Table 1.2 Unit non-response, Rotational Group 2, first wave 2006

| TYPE OF RATE | VALUE |
|--------------|--------|
| RA | 0.984 |
| RH | 0.819 |
| NRH | 19.417 |
| RP | 1 |
| NRP | 0 |
| NRP_OVERALL | 19.417 |

Table 1.3 Unit non-response, Rotational Group 3, first wave 2007

| TYPE OF RATE | VALUE |
|--------------|--------|
| RA | 0.991 |
| RH | 0.811 |
| NRH | 19.687 |
| RP | 1 |
| NRP | 0 |
| NRP_OVERALL | 19.687 |

Table 2. Household response rates by rotational group and wave

| | Rotational Group 1 | | | Rotational Group 2 | | Rotational Group 3 |
|------------------------------|--------------------|-----------------|-----------------|--------------------|-----------------|--------------------|
| | Waves 2005-2006 | Waves 2006-2007 | Waves 2007-2008 | Waves 2006-2007 | Waves 2007-2008 | Waves 2007-2008 |
| WAVE RESPONSE RATE | 87.31 | 85.7 | 86.84 | 86.42 | 85.75 | 87.5 |
| REFUSAL RATE | 6.76 | 6.61 | 5.59 | 6.43 | 6.91 | 6.43 |
| NO-CONTACTED AND OTHERS RATE | 5.11 | 6.65 | 6.6 | 6.67 | 6.57 | 5.44 |
| LONGITUDINAL FOLLOW-UP RATE | - | 90.9 | 91.76 | - | 90.04 | - |
| FOLLOW-UP RATIO | - | 92.31 | 93.33 | - | 91.68 | - |
| ACHIEVED SAMPLE SIZE RATIO | 87.31 | 90.53 | 91.99 | 86.42 | 91.73 | 87.5 |

Table 3. Personal interview response rates by rotational group and wave

| | Rotational Group 1 | | | Rotational Group 2 | | Rotational Group 3 |
|--|--------------------|-----------------|-----------------|--------------------|-----------------|--------------------|
| | Waves 2005-2006 | Waves 2006-2007 | Waves 2007-2008 | Waves 2006-2007 | Waves 2007-2008 | Waves 2007-2008 |
| WAVE RESPONSE RATE OF SAMPLE PERSONS | 88.5 | 88.35 | 89.12 | 87.40 | 88.82 | 88.891 |
| WAVE RESPONSE RATE OF CO-RESIDENTS | NA | NA | 100.00 | NA | NA | NA |
| LONGITUDINAL FOLLOW-UP RATE | 85.8 | 86.29 | 87.12 | 85.09 | 86.54 | 86.583 |
| RATE (RB205=21, 22, 23, 31, 32, 33) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ACHIEVED SAMPLE SIZE RATIO FOR SAMPLE PERSONS | 85.8 | 86.25 | 85.95 | 85.04 | 86.34 | 86.192 |
| ACHIEVED SAMPLE SIZE RATIO FOR SAMPLE PERSONS & CO-RESIDENTS | 87.15 | 87.38 | 88.38 | 86.21 | 87.45 | 87.357 |
| ACHIEVED SAMPLE SIZE RATIO FOR CO-RESIDENTS SELECTED IN THE FIRST WAVE | NA | NA | NA | NA | NA | NA |
| WAVE RESPONSE RATE FOR NON-SAMPLE PERSONS | 100 | 100 | 100 | 100 | 100 | 100 |

2.3.3.3 Distribution of households by household status, by record of contact at address, by household questionnaire result and by household interview acceptance

Table 1.1 Distribution of households by DB110, DB120, DB130 and DB135, Rotational Group 1, 2nd wave 2006

Household Status - Rotational Group 1, Wave=2006

| | DB110=1 | DB110=2 | DB110=3 | DB110=4 | DB110=5 | DB110=6 | DB110=7 | DB110=8 | DB110=11 | TOTAL |
|---|---------|---------|---------|---------|---------|---------|---------|---------|----------|-------|
| N | 5829 | 196 | 11 | 11 | 36 | 0 | 0 | 158 | 111 | 6352 |
| % | 91.8 | 3.1 | 0.2 | 0.2 | 0.6 | 0 | 0 | 2.5 | 1.7 | 100 |

Record of Contact at Address - Rotational Group 1, Wave=2006

| | DB120=1 | DB120=21 | DB120=22 | DB120=23 | TOTAL |
|---|---------|----------|----------|----------|-------|
| N | 343 | 1 | 2 | 8 | 354 |
| % | 96.9 | 0.3 | 0.6 | 2.3 | 100 |

Household Questionnaire Result - Rotational Group 1, Wave=2006

| | DB130=1 | DB130=21 | DB130=22 | DB130=23 | DB130=24 | TOTAL |
|---|---------|----------|----------|----------|----------|-------|
| N | 5426 | 424 | 219 | 50 | 53 | 6172 |
| % | 87.9 | 6.9 | 3.5 | 0.8 | 0.9 | 100 |

Household Interview Acceptance - Rotational Group 1, Wave=2006

| | DB135=1 | DB135=2 | TOTAL |
|---|---------|---------|-------|
| N | 5426 | 0 | 5426 |
| % | 100 | 0 | 100 |

Table 1.2 Distribution of households by DB110, DB120, DB130 and DB135, Rotational Group 1, 3rd wave 2007

Household Status - Rotational Group 1, Wave=2007

| | DB110=1 | DB110=2 | DB110=3 | DB110=4 | DB110=5 | DB110=6 | DB110=7 | DB110=8 | DB110=11 | TOTAL |
|---|---------|---------|---------|---------|---------|---------|---------|---------|----------|-------|
| N | 5480 | 128 | 18 | 4 | 38 | 1 | 1 | 104 | 78 | 5852 |
| % | 93.6 | 2.2 | 0.3 | 0.1 | 0.6 | 0 | 0 | 1.8 | 1.3 | 100 |

Record of Contact at Address - Rotational Group 1, Wave=2007

| | DB120=11 | DB120=21 | DB120=22 | DB120=23 | TOTAL |
|---|----------|----------|----------|----------|-------|
| N | 224 | 1 | 4 | 3 | 232 |
| % | 96.6 | 0.4 | 1.7 | 1.3 | 100 |

Household Questionnaire Result - Rotational Group 1, Wave=2007

| | DB130=11 | DB130=21 | DB130=22 | DB130=23 | DB130=24 | TOTAL |
|---|----------|----------|----------|----------|----------|-------|
| N | 4928 | 395 | 232 | 59 | 90 | 5704 |
| % | 86.4 | 6.9 | 4.1 | 1 | 1.6 | 100 |

Household Interview Acceptance - Rotational Group 1, Wave=2007

| | DB135=1 | DB135=2 | TOTAL |
|---|---------|---------|-------|
| N | 4928 | 0 | 4928 |
| % | 100 | 0 | 100 |

Table 1.3 Distribution of households by DB110, DB120, DB130 and DB135, Rotational Group 1, 4th wave 2008

Household Status - Rotational Group 1, Wave=2007

| | DB110=1 | DB110=2 | DB110=3 | DB110=4 | DB110=5 | DB110=6 | DB110=7 | DB110=8 | DB110=11 | TOTAL |
|---|---------|---------|---------|---------|---------|---------|---------|---------|----------|-------|
| N | 4986 | 123 | 9 | 9 | 34 | 2 | 6 | 94 | 56 | 5319 |
| % | 93.7 | 2.3 | 0.2 | 0.2 | 0.6 | 0 | 0.1 | 1.8 | 1.1 | 100 |

Record of Contact at Address - Rotational Group 1, Wave=2007

| | DB120=11 | DB120=21 | DB120=22 | DB120=23 | TOTAL |
|---|----------|----------|----------|----------|-------|
| N | 213 | 2 | 0 | 2 | 217 |
| % | 98.2 | 0.9 | 0 | 0.9 | 100 |

Household Questionnaire Result - Rotational Group 1, Wave=2007

| | DB130=11 | DB130=21 | DB130=22 | DB130=23 | DB130=24 | TOTAL |
|---|----------|----------|----------|----------|----------|-------|
| N | 4560 | 298 | 93 | 51 | 197 | 5199 |
| % | 87.7 | 5.7 | 1.8 | 1 | 3.8 | 100 |

Household Interview Acceptance - Rotational Group 1, Wave=2007

| | DB135=1 | DB135=2 | TOTAL |
|---|---------|---------|-------|
| N | 4560 | 0 | 4560 |
| % | 100 | 0 | 100 |

Table 1.4 Distribution of households by DB110, DB120, DB130 and DB135, Rotational Group 2, 2nd wave 2007

Household Status - Rotational Group 2, Wave=2007

| | DB110 =1 | DB110 =2 | DB110 =3 | DB110= 4 | DB110= 5 | DB110 =6 | DB110 =7 | DB110= 8 | DB110= 11 | TOTAL |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------|
| N | 5867 | 137 | 19 | 6 | 32 | 0 | 0 | 111 | 106 | 6278 |
| % | 93.5 | 2.2 | 0.3 | 0.1 | 0.5 | 0 | 0 | 1.8 | 1.7 | 100 |

Record of Contact at Address - Rotational Group 2, Wave=2007

| | DB120=11 | DB120=21 | DB120=22 | DB120=23 | TOTAL |
|---|----------|----------|----------|----------|-------|
| N | 245 | 1 | 1 | 1 | 248 |
| % | 98.8 | 0.4 | 0.4 | 0.4 | 100 |

Household Questionnaire Result - Rotational Group 2, Wave=2007

| | DB130=11 | DB130=21 | DB130=22 | DB130=23 | DB130=24 | TOTAL |
|---|----------|----------|----------|----------|----------|-------|
| N | 5315 | 405 | 296 | 29 | 67 | 6112 |
| % | 87 | 6.6 | 4.8 | 0.5 | 1.1 | 100 |

Household Interview Acceptance - Rotational Group 2, Wave=2007

| | DB135=1 | DB135=2 | TOTAL |
|---|---------|---------|-------|
| N | 5315 | 0 | 5315 |
| % | 100 | 0 | 100 |

Table 1.5 Distribution of households by DB110, DB120, DB130 and DB135, Rotational Group 2, 3rd wave 2008

Household Status - Rotational Group 2, Wave=2008

| | DB110= 1 | DB110= 2 | DB110= 3 | DB110= 4 | DB110= 5 | DB110= 6 | DB110= 7 | DB110= 8 | DB110= 11 | TOTAL |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------|
| N | 5387 | 143 | 16 | 12 | 42 | 0 | 14 | 111 | 91 | 5816 |
| % | 92.6 | 2.5 | 0.3 | 0.2 | 0.7 | 0 | 0.2 | 1.9 | 1.6 | 100 |

Record of Contact at Address - Rotational Group 2, Wave=2008

| | DB120=11 | DB120=21 | DB120=22 | DB120=23 | TOTAL |
|---|----------|----------|----------|----------|-------|
| N | 248 | 2 | 0 | 4 | 254 |
| % | 97.6 | 0.8 | 0 | 1.6 | 100 |

Household Questionnaire Result - Rotational Group 2, Wave=2008

| | DB130=11 | DB130=21 | DB130=22 | DB130=23 | DB130=24 | TOTAL |
|---|----------|----------|----------|----------|----------|-------|
| N | 4893 | 401 | 150 | 43 | 148 | 5635 |
| % | 86.8 | 7.1 | 2.7 | 0.8 | 2.6 | 100 |

Household Interview Acceptance - Rotational Group 2, Wave=2008

| | DB135=1 | DB135=2 | TOTAL |
|---|---------|---------|-------|
| N | 4893 | 0 | 4893 |
| % | 100 | 0 | 100 |

Table 1.6 Distribution of households by DB110, DB120, DB130 and DB135, Rotational Group 3, 4th wave 2008

Household Status - Rotational Group 3, Wave=2008

| | DB110=1 | DB110=2 | DB110=3 | DB110=4 | DB110=5 | DB110=6 | DB110=7 | DB110=8 | DB110=11 | TOTAL |
|---|---------|---------|---------|---------|---------|---------|---------|---------|----------|-------|
| N | 5825 | 121 | 16 | 10 | 40 | 0 | 19 | 123 | 84 | 6238 |
| % | 93.4 | 1.9 | 0.3 | 0.2 | 0.6 | 0 | 0.3 | 2 | 1.3 | 100 |

Record of Contact at Address - Rotational Group 3, Wave=2008

| | DB120=11 | DB120=21 | DB120=22 | DB120=23 | TOTAL |
|---|----------|----------|----------|----------|-------|
| N | 236 | 5 | 0 | 3 | 244 |
| % | 96.7 | 2 | 0 | 1.2 | 100 |

Household Questionnaire Result - Rotational Group 3, Wave=2008

| | DB130=11 | DB130=21 | DB130=22 | DB130=23 | DB130=24 | TOTAL |
|---|----------|----------|----------|----------|----------|-------|
| N | 5360 | 403 | 150 | 38 | 110 | 6061 |
| % | 88.4 | 6.6 | 2.5 | 0.6 | 1.8 | 100 |

Household Interview Acceptance – Rotational Group 3, Wave=2008

| | DB135=1 | DB135=2 | TOTAL |
|---|---------|---------|-------|
| N | 5360 | 0 | 5360 |
| % | 100 | 0 | 100 |

2.3.3.4 Distribution of persons for membership status

Table 1.1 Distribution of persons for membership status (RB110), Rotational Group 1, 2nd wave 2006

| | Current Household Member | | | | No Current Household Member | | | TOTAL |
|---|--------------------------|---------|---------|---------|-----------------------------|---------|---------|-------|
| | RB110=1 | RB110=2 | RB110=3 | RB110=4 | RB120=2-4 | RB110=6 | RB110=7 | |
| N | 13432 | 134 | 246 | 79 | 16 | 70 | 0 | 13977 |
| % | 96.1 | 1 | 1.8 | 0.6 | 0.1 | 0.5 | 0 | 100 |

Table 1.2 Distribution of persons for membership status (RB110), Rotational Group 1, 3rd wave 2007

| | Current Household Member | | | | No Current Household Member | | | TOTAL |
|---|--------------------------|---------|---------|---------|-----------------------------|---------|---------|-------|
| | RB110=1 | RB110=2 | RB110=3 | RB110=4 | RB120=2-4 | RB110=6 | RB110=7 | |
| N | 12183 | 98 | 196 | 64 | 14 | 71 | 11 | 12637 |
| % | 96.4 | 0.8 | 1.6 | 0.5 | 0.1 | 0.6 | 0.1 | 100 |

Table 1.3 Distribution of persons for membership status (RB110), Rotational Group 1, 4th wave 2008

| | Current Household Member | | | | No Current Household Member | | | TOTAL |
|---|--------------------------|---------|---------|---------|-----------------------------|---------|---------|-------|
| | RB110=1 | RB110=2 | RB110=3 | RB110=4 | RB120=2-4 | RB110=6 | RB110=7 | |
| N | 11181 | 90 | 228 | 57 | 18 | 68 | 11 | 11653 |
| % | 95.9 | 0.8 | 2.0 | 0.5 | 0.2 | 0.6 | 0.1 | 100 |

Table 1.4 Distribution of persons for membership status (RB110), Rotational Group 2, 2nd wave 2007

| | Current Household Member | | | | No Current Household Member | | | TOTAL |
|---|--------------------------|---------|---------|---------|-----------------------------|---------|---------|-------|
| | RB110=1 | RB110=2 | RB110=3 | RB110=4 | RB120=2-4 | RB110=6 | RB110=7 | |
| N | 12927 | 92 | 203 | 77 | 14 | 54 | 1 | 13368 |
| % | 96.7 | 0.7 | 1.5 | 0.6 | 0.1 | 0.4 | 0.0 | 100 |

Table 1.5 Distribution of persons for membership status (RB110), Rotational Group 2, 3rd wave 2008

| | Current Household Member | | | | No Current Household Member | | | TOTAL |
|---|--------------------------|---------|---------|---------|-----------------------------|---------|---------|-------|
| | RB110=1 | RB110=2 | RB110=3 | RB110=4 | RB120=2-4 | RB110=6 | RB110=7 | |
| N | 11831 | 92 | 200 | 59 | 18 | 58 | 13 | 12271 |
| % | 96.4 | 0.7 | 1.6 | 0.5 | 0.1 | 0.5 | 0.1 | 100 |

Table 1.6 Distribution of persons for membership status (RB110), Rotational Group 3, 2nd wave 2008

| | Current Household Member | | | | No Current Household Member | | | TOTAL |
|---|--------------------------|---------|---------|---------|-----------------------------|---------|---------|-------|
| | RB110=1 | RB110=2 | RB110=3 | RB110=4 | RB120=2-4 | RB110=6 | RB110=7 | |
| N | 13031 | 108 | 206 | 73 | 39 | 71 | 0 | 13528 |
| % | 96.3 | 0.8 | 1.5 | 0.5 | 0.3 | 0.5 | 0.0 | 100 |

Table 2.1 Distribution of persons moving out by variable RB120, Rotational Group 1, 2nd wave 2006

| | RB110=5 | | | | TOTAL |
|---|---------|---------|---------|---------|-------|
| | RB120=1 | RB120=2 | RB120=3 | RB120=4 | |
| N | 232 | 3 | 13 | 0 | 248 |
| % | 93.5 | 1.2 | 5.2 | 0 | 100 |

Table 2.2 Distribution of persons moving out by variable RB120, Rotational Group 1, 3rd wave 2007

| | RB110=5 | | | | TOTAL |
|---|---------|---------|---------|---------|-------|
| | RB120=1 | RB120=2 | RB120=3 | RB120=4 | |
| N | 188 | 3 | 11 | 0 | 202 |
| % | 93.1 | 1.5 | 5.4 | 0 | 100 |

Table 2.3 Distribution of persons moving out by variable RB120, Rotational Group 1, 4th wave 2008

| | RB110=5 | | | | TOTAL |
|---|---------|---------|---------|---------|-------|
| | RB120=1 | RB120=2 | RB120=3 | RB120=4 | |
| N | 175 | 5 | 13 | 0 | 193 |
| % | 90.7 | 2.6 | 6.7 | 0 | 100 |

Table 2.4 Distribution of persons moving out by variable RB120, Rotational Group 2, 2nd wave 2007

| | RB110=5 | | | | TOTAL |
|---|---------|---------|---------|---------|-------|
| | RB120=1 | RB120=2 | RB120=3 | RB120=4 | |
| N | 179 | 9 | 5 | 0 | 193 |
| % | 92.7 | 4.7 | 2.6 | 0 | 100 |

Table 2.5 Distribution of persons moving out by variable RB120, Rotational Group 3rd wave 2008

| | RB110=5 | | | | TOTAL |
|---|---------|---------|---------|---------|-------|
| | RB120=1 | RB120=2 | RB120=3 | RB120=4 | |
| N | 195 | 14 | 25 | 0 | 234 |
| % | 83.3 | 6 | 10.7 | 0 | 100 |

2.3.3.5 Item Non-response

Table 1.1. Item non-response for income variables at household level. Every available wave of the longitudinal component

| Item Non-response | 2005 | | | 2006 | | | 2007 | | | 2008 | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | (A) | (B) | (C) |
| Total household gross income | NA | NA | NA | NA | NA | NA | 99.5 | 0.3 | 81.1 | 99.6 | 0.43 | 88.1 |
| Total disposable household income | 99.53 | 0.76 | 50.06 | 99.57 | 0.37 | 38.93 | 99.52 | 0.42 | 22.89 | 99.58 | 0.40 | 62.28 |
| Total disposable household income before social transfers other than old-age and survivors' benefits | 99.23 | 0.87 | 46.55 | 99.31 | 0.48 | 37.07 | 99.14 | 0.50 | 23.22 | 99.29 | 0.69 | 60.94 |
| Total disposable household income including old-age and survivors' benefits | 93.59 | 1.73 | 43.67 | 93.69 | 1.35 | 36.10 | 94.66 | 1.09 | 20.08 | 95.28 | 2.80 | 58.75 |
| <i>Net income components at household level</i> | | | | | | | | | | | | |
| Imputed rent | NA |
| Income from rentals of properties or lands | 7.51 | 0.61 | 0.06 | 7.23 | 0.68 | 0.11 | 7.17 | 0.74 | 0.15 | 8.21 | 3.37 | 0.70 |
| Family/children related allowances | 27.99 | 1.61 | 0.65 | 28.36 | 2.24 | 0.75 | 28.11 | 2.30 | 0.51 | 29.26 | 1.89 | 0.50 |
| Social exclusion | 1.02 | 0.15 | 0.00 | 0.70 | 0.21 | 0.00 | 0.61 | 0.13 | 0.00 | 0.58 | 0.07 | 0.00 |
| Housing allowances | 1.94 | 0.58 | 0.02 | 1.68 | 0.47 | 0.00 | 1.64 | 0.25 | 0.02 | 1.69 | 0.16 | 0.01 |
| Transfers received | 4.46 | 0.57 | 0.03 | 4.74 | 0.39 | 0.05 | 5.01 | 0.46 | 0.06 | 5.20 | 0.49 | 0.07 |
| Interest. dividends. Profits | 48.64 | 11.32 | 2.07 | 44.77 | 6.29 | 1.83 | 46.16 | 6.90 | 2.57 | 53.85 | 16.07 | 2.82 |
| Interest repayments on mortgage | 11.98 | 11.45 | 0.00 | 11.01 | 11.01 | 0.00 | 11.74 | 11.74 | 0.00 | 12.67 | 12.67 | 0.00 |
| Income of people aged less than 16 | 0.79 | 0.11 | 0.10 | 0.62 | 0.15 | 0.01 | 0.74 | 0.09 | 0.29 | 0.67 | 0.11 | 0.05 |
| Regular taxes on wealth | 67.06 | 2.60 | 1.37 | 66.89 | 2.65 | 1.07 | 67.25 | 3.07 | 1.74 | 69.88 | 33.11 | 11.09 |
| Transfers paid | 4.52 | 0.32 | 0.03 | 4.84 | 0.29 | 0.01 | 4.65 | 0.26 | 0.03 | 4.56 | 0.34 | 0.05 |
| Repayments/receipts for tax adjustment | 42.93 | 4.18 | 1.68 | 39.14 | 3.26 | 1.36 | 63.21 | 0.76 | 0.66 | 66.32 | 0.12 | 0.14 |
| <i>Gross income components at household level</i> | | | | | | | | | | | | |
| Imputed rent | NA | NA | NA | NA | NA | NA | 88.45 | 100 | 0.00 | 89.31 | 100 | 0.00 |
| Income from rentals of properties or lands | NA | NA | NA | NA | NA | NA | 7.17 | 0.74 | 6.06 | 8.21 | 3.37 | 4.54 |
| Family/children related allowances | NA | NA | NA | NA | NA | NA | 28.11 | 2.30 | 0.51 | 29.26 | 1.89 | 0.50 |
| Social exclusion | NA | NA | NA | NA | NA | NA | 0.61 | 0.13 | 0.00 | 0.58 | 0.07 | 0.00 |
| Housing allowances | NA | NA | NA | NA | NA | NA | 1.64 | 0.25 | 0.02 | 1.69 | 0.16 | 0.01 |
| Transfers received | NA | NA | NA | NA | NA | NA | 5.01 | 0.46 | 0.06 | 5.20 | 0.49 | 0.07 |

| | | | | | | | | | | | | |
|--|----|----|----|----|----|----|-------|-------|-------|-------|-------|-------|
| Interest. dividends. Profits | NA | NA | NA | NA | NA | NA | 46.16 | 6.90 | 39.26 | 53.85 | 16.07 | 37.78 |
| Interest repayments on mortgage | NA | NA | NA | NA | NA | NA | 11.74 | 11.74 | 0.00 | 12.67 | 12.67 | 0.00 |
| Income of people aged less than 16 | NA | NA | NA | NA | NA | NA | 0.74 | 0.09 | 0.29 | 0.67 | 0.11 | 0.05 |
| Regular taxes on wealth | NA | NA | NA | NA | NA | NA | 67.25 | 3.07 | 1.74 | 69.88 | 33.11 | 11.09 |
| Transfers paid | NA | NA | NA | NA | NA | NA | 4.65 | 0.26 | 0.03 | 4.56 | 0.34 | 0.05 |
| Tax on income and social contributions | NA | NA | NA | NA | NA | NA | 94.20 | 9.27 | 70.80 | 94.95 | 42.22 | 44.98 |

(A) % of households having received an amount

(B) % of households with missing values (before imp.)

(C) % of households with partial information (before imp.)

Table 1.2. Item non-response for income variables at personal level. Every available wave of the longitudinal component

| Item Non-response | 2005 | | | 2006 | | | 2007 | | | 2008 | | |
|--|-------|-------|------|-------|------|------|-------|------|------|-------|------|------|
| | (A) | (B) | (C) | (A) | (B) | (C) | (A) | (B) | (C) | (A) | (B) | (C) |
| <i>Net income components at personal level</i> | | | | | | | | | | | | |
| Employee cash or near-cash income | 39.63 | 11.07 | 0.00 | 40.25 | 1.19 | 0.00 | 40.39 | 0.35 | 0.48 | 40.29 | 5.32 | 1.52 |
| Non cash employee income | NA | NA | NA | NA | NA | NA | 9.46 | 7.76 | 0.87 | 9.64 | 7.75 | 0.93 |
| Company car | 1.08 | 0.00 | 0.00 | 0.77 | 0.00 | 0.00 | 0.70 | 0.01 | 0.00 | 0.80 | 0.00 | 0.00 |
| Employer's social insurance contribution | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Contributions to individual private pension plan | 7.64 | 0.79 | 0.00 | 6.69 | 0.63 | 0.00 | 6.20 | 0.74 | 0.00 | 5.84 | 0.80 | 0.00 |
| Cash benefit or losses from self-employment | 18.22 | 4.09 | 0.07 | 16.73 | 2.52 | 0.40 | 16.52 | 3.63 | 0.35 | 15.99 | 2.44 | 0.21 |
| Value of goods produced by own-consumption | NA | NA | NA | NA | NA | NA | 25.76 | 0.00 | 0.00 | 25.18 | 0.00 | 0.00 |
| Pension from individual private plans | 0.21 | 0.02 | 0.00 | 0.23 | 0.00 | 0.00 | 0.20 | 0.01 | 0.00 | 0.18 | 0.01 | 0.00 |
| Unemployment benefits | 9.10 | 0.27 | 2.69 | 8.81 | 0.15 | 0.03 | 9.12 | 0.28 | 0.04 | 9.67 | 0.33 | 0.05 |
| Old-age benefits | 28.17 | 1.20 | 0.31 | 28.83 | 0.04 | 0.04 | 29.76 | 1.30 | 1.37 | 30.63 | 0.02 | 0.16 |
| Survivor' benefits | 1.72 | 0.05 | 0.00 | 1.68 | 0.00 | 0.00 | 1.71 | 0.05 | 0.00 | 1.68 | 0.00 | 0.00 |
| Disability benefits | 3.41 | 0.29 | 0.00 | 3.23 | 0.02 | 0.00 | 3.27 | 0.16 | 0.00 | 3.27 | 0.02 | 0.01 |
| Education related allowances | 0.69 | 0.06 | 0.00 | 0.76 | 0.09 | 0.00 | 0.53 | 0.07 | 0.00 | 0.52 | 0.07 | 0.00 |
| <i>Gross income components at personal level</i> | | | | | | | | | | | | |
| Employee cash or near-cash income | NA | NA | NA | NA | NA | NA | 40.39 | 0.07 | 3.13 | 40.29 | 0.30 | 9.18 |
| Non cash employee income | NA | NA | NA | NA | NA | NA | 9.46 | 7.76 | 0.87 | 9.64 | 7.75 | 1.29 |
| Company car | NA | NA | NA | NA | NA | NA | 0.70 | 0.00 | 0.04 | 0.80 | 0.00 | 0.05 |
| Employer's social insurance contribution | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Contributions to individual private pension plan | NA | NA | NA | NA | NA | NA | 6.20 | 0.74 | 0.00 | 5.84 | 0.80 | 0.00 |

| | | | | | | | | | | | | |
|---|----|----|----|----|----|----|-------|------|------|-------|------|------|
| Cash benefit or losses from self-employment | NA | NA | NA | NA | NA | NA | 16.52 | 0.59 | 4.07 | 15.99 | 0.33 | 3.22 |
| Value of goods produced by own-consumption | NA | NA | NA | NA | NA | NA | 25.76 | 2.83 | 0.00 | 25.18 | 2.93 | 0.00 |
| Pension from individual private plans | NA | NA | NA | NA | NA | NA | 0.20 | 0.00 | 0.02 | 0.18 | 0.00 | 0.02 |
| Unemployment benefits | NA | NA | NA | NA | NA | NA | 9.12 | 0.30 | 8.73 | 9.67 | 0.07 | 9.45 |
| Old-age benefits | NA | NA | NA | NA | NA | NA | 29.76 | 0.69 | 2.47 | 30.63 | 0.02 | 0.78 |
| Survivor' benefits | NA | NA | NA | NA | NA | NA | 1.71 | 0.01 | 0.05 | 1.68 | 0.00 | 0.03 |
| Disability benefits | NA | NA | NA | NA | NA | NA | 3.27 | 0.10 | 0.08 | 3.27 | 0.01 | 0.07 |
| Education related allowances | NA | NA | NA | NA | NA | NA | 0.53 | 0.07 | 0.00 | 0.52 | 0.07 | 0.00 |

(A) % of households having received an amount

(B) % of households with missing values (before imp.)

(C) % of households with partial information (before imp.)

2.4. Mode of data collection

Table 1.1 The distribution of household member by RB250 and Rotational Group (DB075), Wave 2005

Household Members 16+ (RB245= 1 to 3), Wave 2005

| | | RB250=11 | Total |
|---------|---|----------|-------|
| DB075=1 | N | 13289 | 13289 |
| | % | 100 | 100 |
| Total | N | 13289 | 13289 |
| | % | 100 | 100 |

Note: in 2005 all Household Members 16+ are defined as Sample Persons

Table 1.2 The distribution of household member by RB250 and Rotational Group (DB075), Wave 2006

Household Members 16+ (RB245= 1 to 3), Wave 2006

| | | RB250=11 | Total |
|---------|---|----------|-------|
| DB075=1 | N | 11683 | 11683 |
| | % | 100 | 100 |
| DB075=2 | N | 12956 | 12956 |
| | % | 100 | 100 |
| Total | N | 24639 | 24639 |
| | % | 100 | 100 |

Sample Persons 16+ (RB245= 1 to 3 and RB100=1), Wave 2006

| | | RB250=11 | Total |
|---------|---|----------|-------|
| DB075=1 | N | 11502 | 11502 |
| | % | 100 | 100 |
| DB075=2 | N | 12956 | 12956 |
| | % | 100 | 100 |
| Total | N | 24458 | 24458 |
| | % | 100 | 100 |

Co-residents 16+ (RB245= 1 to 3 and RB100=2), Wave 2006

| | | RB250=11 | Total |
|---------|---|----------|-------|
| DB075=1 | N | 181 | 181 |
| | % | 100 | 100 |
| DB075=2 | N | 0 | 0 |
| | % | - | - |
| Total | N | 181 | 181 |
| | % | 100 | 100 |

Table 1.3 The distribution of household member by RB250 and Rotational Group (DB075), Wave 2007

Household Members 16+ (RB245= 1 to 3), Wave 2007

| | | RB250=11 | Total |
|---------|---|----------|-------|
| DB075=1 | N | 10589 | 10589 |
| | % | 100 | 100 |
| DB075=2 | N | 11240 | 11240 |
| | % | 100 | 100 |
| DB075=3 | N | 12956 | 12956 |
| | % | 100 | 100 |
| Total | N | 34785 | 34785 |
| | % | 100 | 100 |

Sample Persons 16+ (RB245= 1 to 3 and RB100=1), Wave 2007

| | | RB250=11 | Total |
|---------|---|----------|-------|
| DB075=1 | N | 10299 | 10299 |
| | % | 100 | 100 |
| DB075=2 | N | 11087 | 11087 |
| | % | 100 | 100 |
| DB075=3 | N | 12956 | 12956 |
| | % | 100 | 100 |
| Total | N | 34342 | 34342 |
| | % | 100 | 100 |

Co-residents 16+ (RB245= 1 to 3 and RB100=2), Wave 2007

| | | RB250=11 | Total |
|---------|---|----------|-------|
| DB075=1 | N | 290 | 290 |
| | % | 100 | 100 |
| DB075=2 | N | 153 | 153 |
| | % | 100 | 100 |
| DB075=3 | N | 0 | 0 |
| | % | - | - |
| Total | N | 443 | 443 |
| | % | 100 | 100 |

Table 1.4 The distribution of household member by RB250 and Rotational Group (DB075), Wave 2008

Household Members 16+ (RB245= 1 to 3), Wave 2008

| | | RB250=11 | Total |
|---------|---|----------|-------|
| DB075=1 | N | 9773 | 9773 |
| | % | 100 | 100 |
| DB075=2 | N | 10296 | 10296 |
| | % | 100 | 100 |
| DB075=3 | N | 11394 | 11394 |
| | % | 100 | 100 |
| Total | N | 31463 | 31463 |
| | % | 100 | 100 |

Sample Persons 16+ (RB245= 1 to 3 and RB100=1), Wave 2008

| | | RB250=11 | Total |
|---------|---|----------|-------|
| DB075=1 | N | 9267 | 9267 |
| | % | 100 | 100 |
| DB075=2 | N | 10038 | 10038 |
| | % | 100 | 100 |
| DB075=3 | N | 11242 | 11242 |
| | % | 100 | 100 |
| Total | N | 30547 | 30547 |
| | % | 100 | 100 |

Co-residents 16+ (RB245= 1 to 3 and RB100=2), Wave 2008

| | | RB250=11 | Total |
|---------|---|----------|-------|
| DB075=1 | N | 506 | 506 |
| | % | 100 | 100 |
| DB075=2 | N | 258 | 258 |
| | % | 100 | 100 |
| DB075=3 | N | 152 | 486 |
| | % | 100 | 100 |
| Total | N | 927 | 927 |
| | % | 100 | 100 |

Table 2.1 The distribution of household member by RB260 and Rotational Group (DB075), Wave 2005

Household Members 16+ (RB245=1 to 3) and RB250 in 11 or 13, Wave 2005

| | | RB260=. | RB260=1 | RB260=5 | Total |
|---------|---|---------|-----------------------------|-----------------|-------|
| | | Missing | Face to face interview-PAPI | Proxy interview | |
| DB075=1 | N | 239 | 11103 | 1947 | 13289 |
| | % | 1.8 | 83.55 | 14.65 | 100 |
| Total | N | 239 | 11103 | 1947 | 13289 |
| | % | 1.8 | 83.55 | 14.65 | 100 |

Note: in 2005 all Household Members 16+ are defined as Sample Persons

Table 2.2 The distribution of household member by RB260 and Rotational Group (DB075), Wave 2006

Household Members 16+ (RB245=1 to 3) and RB250 in 11 or 13, Wave 2006

| | | RB260=. | RB260=1 | RB260=5 | Total |
|---------|---|---------|-----------------------------|-----------------|-------|
| | | Missing | Face to face interview-PAPI | Proxy interview | |
| DB075=1 | N | 152 | 9707 | 1824 | 11683 |
| | % | 1.3 | 83.09 | 15.61 | 100 |
| DB075=2 | N | 219 | 10843 | 1894 | 12956 |
| | % | 1.69 | 83.69 | 14.62 | 100 |
| Total | N | 371 | 20550 | 3718 | 24639 |
| | % | 1.51 | 83.40 | 15.09 | 100 |

Sample Persons 16+ (RB245=1 to 3 and RB100=1) and RB250 in 11 or 13, Wave 2006

| | | RB260=. | RB260=1 | RB260=5 | Total |
|---------|---|---------|-----------------------------|-----------------|-------|
| | | Missing | Face to face interview-PAPI | Proxy interview | |
| DB075=1 | N | 148 | 9563 | 1791 | 11502 |
| | % | 1.29 | 83.14 | 15.57 | 100 |
| DB075=2 | N | 4 | 144 | 33 | 181 |
| | % | 2.21 | 79.56 | 18.23 | 100 |
| Total | N | 152 | 9707 | 1824 | 11683 |
| | % | 1.30 | 83.09 | 15.61 | 100 |

Co-residents 16+ (RB245=1 to 3 and RB100=2) and RB250 in 11 or 13, Wave 2006

| | | RB260=. | RB260=1 | RB260=5 | Total |
|---------|---|---------|-----------------------------|-----------------|-------|
| | | Missing | Face to face interview-PAPI | Proxy interview | |
| DB075=1 | N | 219 | 10843 | 1894 | 12956 |
| | % | 1.69 | 83.69 | 14.62 | 100 |
| DB075=2 | N | 0 | 0 | 0 | 0 |
| | % | - | - | - | - |
| Total | N | 219 | 10843 | 1894 | 12956 |
| | % | 1.69 | 83.69 | 14.62 | 100 |

Table 2.3 The distribution of household member by RB260 and Rotational Group (DB075), Wave 2007

Household Members 16+ (RB245=1 to 3) and RB250 in 11 or 13, Wave 2007

| | | RB260=. | RB260=1 | RB260=5 | Total |
|---------|---|---------|-----------------------------|-----------------|-------|
| | | Missing | Face to face interview-PAPI | Proxy interview | |
| DB075=1 | N | 157 | 8660 | 1772 | 10589 |
| | % | 1.48 | 81.78 | 16.73 | 100 |
| DB075=2 | N | 170 | 9230 | 1840 | 11240 |
| | % | 1.51 | 82.12 | 16.37 | 100 |
| DB075=3 | N | 204 | 10788 | 1964 | 12956 |
| | % | 1.57 | 83.27 | 15.16 | 100 |
| Total | N | 531 | 28678 | 5576 | 34785 |
| | % | 1.53 | 82.44 | 16.03 | 100 |

Sample Persons 16+ (RB245=1 to 3 and RB100=1) and RB250 in 11 or 13, Wave 2007

| | | RB260=. | RB260=1 | RB260=5 | Total |
|---------|---|---------|-----------------------------|-----------------|-------|
| | | Missing | Face to face interview-PAPI | Proxy interview | |
| DB075=1 | N | 140 | 8451 | 1708 | 10299 |
| | % | 1.36 | 82.06 | 16.58 | 100 |
| DB075=2 | N | 166 | 9123 | 1798 | 11087 |
| | % | 1.5 | 82.29 | 16.22 | 100 |
| DB075=3 | N | 204 | 10788 | 1964 | 12956 |
| | % | 1.57 | 83.27 | 15.16 | 100 |
| Total | N | 510 | 28362 | 5470 | 34342 |
| | % | 1.49 | 82.59 | 15.93 | 100 |

Co-residents 16+ (RB245=1 to 3 and RB100=2) and RB250 in 11 or 13, Wave 2007

| | | RB260=. | RB260=1 | RB260=5 | Total |
|---------|---|---------|-----------------------------|-----------------|-------|
| | | Missing | Face to face interview-PAPI | Proxy interview | |
| DB075=1 | N | 17 | 209 | 64 | 290 |
| | % | 5.86 | 72.07 | 22.07 | 100 |
| DB075=2 | N | 4 | 107 | 42 | 153 |
| | % | 2.61 | 69.93 | 27.45 | 100 |
| DB075=3 | N | 0 | 0 | 0 | 0 |
| | % | - | - | - | - |
| Total | N | 21 | 316 | 106 | 443 |
| | % | 4.74 | 71.33 | 23.93 | 100 |

Table 2.4 The distribution of household member by RB260 and Rotational Group (DB075), Wave 2008

Household Members 16+ (RB245=1 to 3) and RB250 in 11 or 13, Wave 2008

| | | RB260=. | RB260=1 | RB260=5 | Total |
|---------|---|---------|-----------------------------|-----------------|-------|
| | | Missing | Face to face interview-PAPI | Proxy interview | |
| DB075=1 | N | 0 | 7883 | 1890 | 9773 |
| | % | - | 80.66 | 19.34 | 100 |
| DB075=2 | N | 0 | 8297 | 1999 | 10296 |
| | % | - | 80.58 | 19.42 | 100 |
| DB075=3 | N | 0 | 9282 | 2112 | 11394 |
| | % | - | 81.46 | 18.54 | 100 |
| Total | N | 0 | 25462 | 6001 | 31463 |
| | % | - | 80.93 | 19.07 | 100 |

Sample Persons 16+ (RB245=1 to 3 and RB100=1) and RB250 in 11 or 13, Wave 2008

| | | RB260=. | RB260=1 | RB260=5 | Total |
|---------|---|---------|-----------------------------|-----------------|-------|
| | | Missing | Face to face interview-PAPI | Proxy interview | |
| DB075=1 | N | 0 | 7545 | 1722 | 9267 |
| | % | - | 81.42 | 18.58 | 100 |
| DB075=2 | N | 0 | 8123 | 1915 | 10038 |
| | % | - | 80.92 | 19.08 | 100 |
| DB075=3 | N | 0 | 9178 | 2064 | 11242 |
| | % | - | 81.64 | 18.36 | 100 |
| Total | N | 0 | 24846 | 5701 | 30547 |
| | % | - | 81.34 | 18.66 | 100 |

Co-residents 16+ (RB245=1 to 3 and RB100=2) and RB250 in 11 or 13, Wave 2008

| | | RB260=. | RB260=1 | RB260=5 | Total |
|---------|---|---------|-----------------------------|-----------------|-------|
| | | Missing | Face to face interview-PAPI | Proxy interview | |
| DB075=1 | N | 0 | 338 | 168 | 506 |
| | % | - | 66.8 | 33.2 | 100 |
| DB075=2 | N | 0 | 174 | 84 | 258 |
| | % | - | 67.44 | 32.56 | 100 |
| DB075=3 | N | 0 | 104 | 48 | 152 |
| | % | - | 68.42 | 31.58 | 100 |
| Total | N | 0 | 616 | 300 | 916 |
| | % | - | 67.25 | 32.75 | 100 |

2.5. Imputation procedure

The imputation procedure for each quantitative variable is implemented by using the IMPUTE module of the software Iweware, as recommended by EUROSTAT.

The imputation procedure for the qualitative variables is based on a 'hot deck' stochastic technique that imputes each missing or inconsistent answer by replacing it with a correct value, taken from the 'nearest donor' (i.e. from a record randomly selected within a group of statistical units similar to the one that presents missing or erroneous answers). In a preliminary step, a set of explicit consistency rules is used to check for logical inconsistencies between the reported answers. The set is then expanded by using the Felleggy-Holt algorithm, in order to account for all the implicit rules (i.e. those logically implied by the explicit ones).

2.6. Imputed rent

It is estimated through a semilogarithmic regression (log of the rent, avoiding the re-transformation bias) with self-selection correction à la heckman. In the first stage, we run distinct probit models for owners/renters at a below-the-mkt price/free tenants vs tenants at a mkt price. Seniority is included between regressors, but its effect is depurated (parameter from regression equal to 0) in estimating predicted values for sub-populations other than tenants at a mkt rate.

2.7. Company cars

The monetary value of company cars is taken from the tables published in the Italian Automobile Club (ACI) for tax purposes. The ACI values are econometric estimates of the user cost.

3. COMPARABILITY

3.1. Basic concepts and definitions

The national concepts use **the differences between the national concepts and standard EU-SILC concepts**, and an assessment, if available, of the consequences of the differences mentioned.

- The reference population: same definition as standard EU-SILC;
- the private household definition: in accordance with the Commission Regulation (EC) N° 1980/2003 (Annex I. paragraph 1.1), that allow to the Member States for using the common household definition defined in their own national statistical system in EU-SILC Italy uses the following Italian household definition: “*cohabitants related through marriage, kinship, affinity, adoption, patronage and affection*”;
- the household membership: the Italian EU-SILC does not include live-in domestic personnel au pairs. Concerning these persons, only some socio-demographic information are collected (date of birth, sex, marital status, duration of stay in the household). The number of these persons included in the sample was 51 (0.19% with respect to the total number of households and 0.08% with respect to interviewed individuals).
- the income reference period(s) used: same definition as standard EU-SILC;
- the period for taxes on income and social insurance contributions: same definition as standard EU-SILC;
- the reference period for taxes on wealth: same definition as standard EU-SILC;
- the lag between the income reference period and current variables: *in the Italian EU-SILC 2007 current variables are referred to the moment of interview that is about 10 months after the end of the income reference period*;
- the total duration of the data collection of the sample: *2 months. starting from the transmission of questionnaires to interviewers until their return back.*
- basic information on activity status during the income reference period: same to the standard EU-SILC concept;

3.2. Components of income

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

- total household gross income: same definition as standard EU-SILC;
- total disposable household income: same definition as standard EU-SILC;
- total disposable household income. before social transfers other than old-age and survivors' benefits: same definition as standard EU-SILC;
- total disposable household income. before social transfers including old-age and survivors' benefits: same definition as standard EU-SILC;
- imputed rent: estimated by a semilogarithmic regression (log of the rent, avoiding the re-transformation bias) with self-selection correction à la heckman. In the first stage, we run distinct probit

models for owners/renters at a below-the-mkt price/free tenants vs tenants at a mkt price. Seniority is included between regressors, but its effect is depurated (parameter from regression equal to 0) in estimating predicted values for sub-populations other than tenants at a mkt rate;

— income from rental of property or land: same definition as standard EU-SILC;

— family/children-related allowances: same definition as standard EU-SILC;

- social exclusion payments not elsewhere classified: same definition as standard EU-SILC;

— housing allowances: same definition as standard EU-SILC;

— regular inter-household cash transfers received: same definition as standard EU-SILC;

— interest, dividends, profit from capital investments in unincorporated businesses: same definition as standard EU-SILC;

— interest paid on mortgages: same definition as standard EU-SILC;

— income received by people aged under 16: same definition as standard EU-SILC;

— regular taxes on wealth: same definition as standard EU-SILC;

— regular inter-household transfers paid: same definition as standard EU-SILC;

— tax on income and social insurance contributions: same definition as standard EU-SILC;

— repayments/receipts for tax adjustments: repayments/receipts for tax adjustments are those paid in the $n+1$ year, where n is the income reference period. This is consistent with the (optional) definition of taxes as 'taxes due on the incomes of the reference period'. An accurate assessment of the differences between the two tax concepts will be feasible after 2009, when it is possible to compare the total taxes due on the incomes of the reference period with the total taxes paid during the same period for the individuals included in the first two-year panel with gross incomes.

— cash or near-cash employee income: same definition as standard EU-SILC;

— non-cash employee income: the value of the company car for personal use is the user's cost estimated by the ACI (Automobile Club Italiano);

— employers' social insurance contributions: includes also contribution for Cococo "co-ordinated and continuative collaborators", a special category of status in employment;

— cash profits or losses from self-employment (including royalties): the standard procedure requires to collect the amount of money drawn out of self-employment activity only when the profit/loss resulting from accounting books or the taxable self-employment income (net of corresponding taxes) are not available. For the Italian EU-SILC, both administrative and survey micro-data are available, through an exact matching of tax and sample records. The income from self-employment is set equal to the maximum value between: (i) the (net) self-employment income resulting from the Tax Report and (ii) the (net) self-employment income reported by the interviewee. In the questionnaire, the self-employment income question is preceded by a 'reminder question' that provides a YES/NO list of the possible personal uses of earnings (consumption and saving). The departure from the standard definition (using both sampling and administrative data) is adopted in order to minimise either tax avoidance in the administrative data or under-reporting in the survey data, depending on which of the two is greater. With respect to the standard one, the procedure adopted for the Italian EU-SILC leads to more comparable data, under the assumption that other countries' self-employment incomes are not underestimated;

- value of goods produced for own consumption: same definition as standard EU-SILC;
- unemployment benefits: same definition as standard EU-SILC;
- old-age benefits: same definition as standard EU-SILC;
- survivors' benefits: same definition as standard EU-SILC;
- sickness benefits. paid sickness leaves of employees are included in the dependent employment incomes;
- disability benefits: same definition as standard EU-SILC;
- education-related allowances: same definition as standard EU-SILC;
- gross monthly earnings for employees: same definition as standard EU-SILC;

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

The sources or procedures used for the collection of income variables are Paper and pencil interviews (PAPI) for all income variable, including the money drawn out of business by the self-employed and administrative data. Administrative data have been linked to sample data and used for estimating data on employee income, pensions and self-employment incomes.

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

All income variables at component level are both net and gross of taxes and social security contribution at source.

3.2.4. The method used for obtaining income target variables in the required form

Gross values are estimated by a new methodology using in conjunction an exact record linkage between survey and fiscal data at micro level and a microsimulation model (Siena Microsimulation Model SM2-EU-SILC). The integration of microsimulation with register data has the advantage of using administrative data for the validation of microsimulation results. On the other hand, SM2-EU-SILC estimates those tax and social insurance contributions not covered by register data. Four main register data are used: 730 tax returns used by employees and pensioners, UNICO tax returns used primarily by self employed workers, CUD employers' tax statements which include also data on social security contributions, and Pension Register Data. Both the use of administrative data and microsimulation estimates improves the quality and the amount of information on gross income variables.

3.3. Tracing rules

They were adopted the standard EUSILC tracing rules.