FINAL QUALITY REPORT
LONGITUDINAL SURVEY
2006-2007-2008-2009

ITALY

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

The at-persistent-risk-of-poverty rate is defined as the percentage of persons with an equivalised disposable income below the respective at-risk-of-poverty threshold in the last wave and at least twice in the previous three years, and is estimated using Eurostat's program.

Table 1. At-persistent-risk-of-poverty by age and sex

Age	Sex	Thresohold = 60% median	Thresohold = 50% median
		%	%
0-17	T	16.4	9.2
	M	16.7	8.9
	F	16.1	9.4
18-64	T	10.8	6.2
	M	9.8	5.5
	F	11.9	6.8
65+	T	17.0	7.1
	M	14.5	5.5
	F	18.8	8.3
TOTAL	T	13.0	6.8
	M	11.8	6.0
	F	14.1	7.6

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.

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.

Table 1. Sampling unites by rotational group

DB075	Sample size (number of SSU)	Number of PSU	Number of SSU (Total)	Average number of SSU for each PSU
2	<=25	95	1346	14.17
2	26-50	183	5294	28.93
2	51-75	3	185	61.67
2	76-100	2	175	87.50
2	101-250	4	589	147.25
2	>=250	1	432	432.00
2	Total	288	8021	27.85
3	<=25	95	1346	14.17
3	26-50	182	5246	28.82
3	51-75	3	185	61.67
3	76-100	2	175	87.50
3	101-250	4	589	147.25
3	>=250	1	432	432.00
3	Total	287	7973	27.78
4	<=25	95	1346	14.17
4	26-50	183	5293	28.92
4	51-75	3	185	61.67
4	76-100	2	175	87.50
4	101-250	4	589	147.25
4	>=250	1	432	432.00
4	Total	288	8020	27.85

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 deff, 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:

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

where n_r and N_r are sample and population dimension of administrative regions, $\overline{b}_{rSR}$ is the average household dimension and $\overline{b}_{rNSR}$ 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(reg)+0.75* T(mr), has been applied to inflate the achieved sample size so that

n(sel)=n(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 re-calculate at each step deff and sampling dimensions to satisfy given requirements.
Allocation inside regions averaging proportional and uniform allocation.

Table 1. Deft by rotational group

Macroregions	Deft income	Deft poverty	Deft income	Deft 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 individuals at the first wave, the base weight is equal to the household cross-sectional weight. 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 only one municipality is extracted.

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 individuals belonging to respondent households were totally imputed.
Concerning with the non-response adjustment at household level, the base weights were adjusted through a correction factor for total non-response worked out as the reciprocal of the response probability obtained through a logistic model. The model uses information on the extracted sample available from registers (for the households at wave 1).
The re-calculated weight $\hat{p}_j$ for the generic household j is:

$$\hat{p}_j = p_j \frac{1}{\gamma_j}$$, where p_j is the design weight and γ_j is the probability to participate the survey.

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).
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 non-response in an income survey is highly correlated with the labour market condition (especially for self-employed) and with the educational 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 X1, X2…Xp 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 Xr 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-yars 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, hence the procedure used both household and personal variables. 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 are adjusted through a correction factor for total non-response worked out as the reciprocal of the response probability identified through a logistic regression model; the model uses information gathered from the previous year of survey.
The re-calculated weight $\hat{p}_j$ for the generic individual j:

$$\hat{p}_j = p_j \frac{1}{\gamma_j}$$, where p_j is the base weight of the previous year and γ_j is the probability to participate the survey.

The information used:
territorial domain (NUTS II), demographic size of the municipalities, number of household members, nationality, sex, age, education and professional condition of the household members.

2.1.8.6 Adjustments to external data
No adjustment to external data is 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 previous year of survey corrected for unit non-response, except for co-residents for 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 are obtained applying a calibration of the household weights to external data sources (registers). Let X1, X2…Xp 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 Xr 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 2009 -, standard errors are 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 2009)

| Income components | Mean | Number of observations | | Standard Error |
		Before imputation	After imputation	
Total household gross income	39545.32	20320	20492	278.40
Total disposable household income	29750.03	20274	20492	176.72
Total disposable household income before social transfers other than old-age survivors' benefits	28468.96	20133	20492	177.65
Total disposable household including old-age survivors' benefits	21877.61	18497	20492	178.30
Net income components at household level				
Income from rentals of properties or lands	6879.39	914	1873	301.45
Family/children related allowances	1026.31	5602	6006	20.58
Social exclusion	5613.92	170	197	824.35
Housing allowances	1069.40	379	425	78.02
Transfers received	4659.64	992	1112	231.58
Interest, dividends, profits	922.75	6706	10720	31.18
Interest repayments on mortgage	3602.89	0	2724	106.50
Income of people aged less than 16	1768.48	95	111	324.30
Regular taxes on wealth	352.79	3398	8415	7.24
Transfers paid	4096.09	863	941	212.75
Repayments/receipts for tax adjustment	-412.70	14019	14046	0.00
Gross income components at household level				
Income from rentals of properties or lands	9522.22	914	1873	448.02
Family/children related allowances	1026.31	5602	6006	20.58
Social exclusion	5613.92	170	197	824.35
Housing allowances	1069.40	379	425	78.02
Transfers received	4659.64	992	1112	231.58
Interest, dividends, profits	1187.12	6706	10720	39.96
Interest repayments on mortgage	3602.89	0	2724	106.50
Income of people aged less than 16	1768.48	95	111	324.30
Regular taxes on wealth	352.79	3398	8415	7.24
Transfers paid	4096.09	863	941	212.75

Table 1 (Follows). Mean, number of observations and standard errors(cross-sectional component 2009)

Income components	Mean	Number of observations		Standard Error
		Before imputation	After imputation	
Net income components at personal level				
Employee cash or near-cash income	15714.65	16464	17670	127.13
Non cash employee income	1315.23	1878	4502	32.42
Contributions to individual private pension plan	1789.33	2208	2546	68.69
Cash benefit or losses from self-employment	18438.18	4979	6790	429.43
Pension from individual private plans	6667.63	74	75	1504.42
Unemployment benefits	2949.06	3965	4149	91.42
Old-age benefits	12922.87	13040	13069	94.47
Survivor' benefits	6716.19	678	679	403.17
Disability benefits	5975.47	1385	1392	226.53
Education related allowances	6290.57	212	257	933.33
Gross income components at personal level				
Employee cash or near-cash income	21645.28	17535	17670	196.54
Non cash employee income	1370.83	1878	4502	35.13
Contributions to individual private pension plan	1789.33	2208	2546	68.69
Cash benefit or losses from self-employment	26564.45	6671	6790	658.53
Pension from individual private plans	9429.27	75	75	2302.82
Unemployment benefits	3493.75	4049	4149	111.14
Old-age benefits	15489.37	13048	13069	132.28
Survivor' benefits	7845.41	678	679	483.90
Disability benefits	6895.63	1385	1392	271.34
Equivalised disposable income				
Subclasses by household size				
1 household member	16658.90	5309	5425	223.90
2 household members	19518.39	5776	5816	330.45
3 household members	19389.63	4429	4462	340.48
4 and more	16718.46	4760	4789	244.76
Population by age group				
<25	16072.48	12661	12816	147.06
25-34	18173.87	5963	6021	167.93
35-44	17985.95	7941	8029	160.61
45-54	19357.69	7318	7386	193.38
55-64	21317.16	6373	6416	260.50
65+	17065.30	10518	10528	157.68
Population by sex				
Male	18503.92	24404	24609	112.50
Female	17419.36	26370	26587	99.12

With reference to the component of the survey - year 2006-2007-2008-2009, DB075=2 -, standard errors are 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 2).

Table 2. 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	40776.94	4408	4426	587.5
Total disposable household income	30535.08	4410	4429	368.8
Total disposable household income before social transfers other than old-age survivors' benefits	29458.77	4388	4421	369.1
Total disposable household including old-age survivors' benefits	22252.33	4003	4149	362.2
Net income components at household level				
Income from rentals of properties or lands	7935.29	198	386	990.9
Family/children related allowances	996.28	1269	1347	39.9
Social exclusion	3885.2	20	26	1458.2
Housing allowances	806.64	62	71	128.4
Transfers received	5314.01	198	215	521.3
Interest, dividends, profits	987.26	1516	2311	86.0
Interest repayments on mortgage	3584.47	0	511	234.4
Income of people aged less than 16	1629.03	20	23	708.2
Regular taxes on wealth	365.08	799	1917	15.7
Transfers paid	3996.85	163	175	518.1
Repayments/receipts for tax adjustment	-379.22	3032	3039	0.0
Gross income components at household level				
Income from rentals of properties or lands	11289.97	198	386	1565.6
Family/children related allowances	996.28	1269	1347	39.9
Social exclusion	3885.2	20	26	1458.2
Housing allowances	806.64	62	71	128.4
Transfers received	5314.01	198	215	521.3
Interest, dividends, profits	1274.39	1516	2311	112.3
Interest repayments on mortgage	3584.47	0	511	234.4
Income of people aged less than 16	1629.03	20	23	708.2
Regular taxes on wealth	365.08	799	1917	15.7
Transfers paid	3996.85	163	175	518.1

Table 2 (Follows). 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	16105.88	3445	3703	258.3
Non cash employee income	1238.79	353	857	58.1
Contributions to individual private pension plan	1881.18	460	521	139.7
Cash benefit or losses from self-employment	19464.73	1034	1419	870.1
Pension from individual private plans	7531.12	19	19	2428.3
Unemployment benefits	2714.01	778	812	145.3
Old-age benefits	13090.72	2964	2969	200.5
Survivor' benefits	6465.08	168	168	662.4
Disability benefits	6039.79	272	273	441.4
Education related allowances	3666.59	35	43	914.6
Gross income components at personal level				
Employee cash or near-cash income	22222.99	3688	3703	388.7
Non cash employee income	1298.48	353	857	63.9
Contributions to individual private pension plan	1881.18	460	521	139.7
Cash benefit or losses from self-employment	28082.95	1396	1419	1470.4
Pension from individual private plans	10927.17	19	19	3789.6
Unemployment benefits	3214.82	793	812	177.9
Old-age benefits	15765.79	2967	2969	278.8
Survivor' benefits	7626.57	168	168	840.8
Disability benefits	7033.65	272	273	569.1
Education related allowances	3666.59	35	43	914.6
Equivalised disposable income				
Subclasses by household size				
1 household member	16929.85	1186	1207	388.2
2 household members	19975.77	1253	1261	738.3
3 household members	20324.82	939	945	746.1
4 and more	17067.71	1032	1035	453.8
Population by age group				
<25	16450.92	2701	2722	276.1
25-34	18623.78	1664	1676	380.8
35-44	19103.16	1622	1639	300.5
45-54	21997.75	1395	1400	446.4
55-64	18327.66	1198	1208	326.8
65+	17430.52	2405	2407	370.8
Population by sex				
Male	18799.77	5220	5249	238.4
Female	17772.16	5765	5803	211.0

With reference to the component of the survey - year 2007-2008-2009, DB075=3 -, standard errors are 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 3).

Table 3. 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	40164.24	4890	4914	696.0
Total disposable household income	30141.72	4888	4920	423.6
Total disposable household income before social transfers other than old-age survivors' benefits	28829.64	4852	4899	431.2
Total disposable household including old-age survivors' benefits	22208.09	4427	4579	463.6
Net income components at household level				
Income from rentals of properties or lands	7248.2	235	460	629.9
Family/children related allowances	975.1	1453	1534	34.4
Social exclusion	3551.16	35	41	1228.0
Housing allowances	1120.23	84	95	155.9
Transfers received	5497.76	223	250	459.7
Interest, dividends, profits	905.72	1656	2544	49.6
Interest repayments on mortgage	3481.74	0	661	196.6
Income of people aged less than 16	1972.15	31	34	428.3
Regular taxes on wealth	380.76	764	1953	16.6
Transfers paid	4638.65	213	229	397.1
Repayments/receipts for tax adjustment	-400.21	3362	3366	0.0
Gross income components at household level				
Income from rentals of properties or lands	10050.83	235	460	921.4
Family/children related allowances	975.1	1453	1534	34.4
Social exclusion	3551.16	35	41	1228.0
Housing allowances	1120.23	84	95	155.9
Transfers received	5497.76	223	250	459.7
Interest, dividends, profits	1160.75	1656	2544	61.8
Interest repayments on mortgage	3481.74	0	661	196.6
Income of people aged less than 16	1972.15	31	34	428.3
Regular taxes on wealth	380.76	764	1953	16.6
Transfers paid	4638.65	213	229	397.1

Table 3 (Follows). 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	15721.5	4022	4312	221.5
Non cash employee income	1371.42	479	1094	67.6
Contributions to individual private pension plan	1744.51	503	578	121.9
Cash benefit or losses from self-employment	19728.68	1215	1678	1142.0
Pension from individual private plans	5159.97	14	14	1965.2
Unemployment benefits	3136.24	959	1003	199.8
Old-age benefits	12702.2	3145	3152	178.5
Survivor' benefits	7523.89	167	168	730.5
Disability benefits	5871.57	388	389	421.2
Education related allowances	5498.59	62	76	1328.1
Gross income components at personal level				
Employee cash or near-cash income	21639.39	4282	4312	337.3
Non cash employee income	1424.92	479	1094	72.0
Contributions to individual private pension plan	1744.51	503	578	121.9
Cash benefit or losses from self-employment	28615.51	1655	1678	1153.6
Pension from individual private plans	6957.92	14	14	2633.1
Unemployment benefits	3708.43	987	1003	246.3
Old-age benefits	15138.7	3146	3152	247.8
Survivor' benefits	8725.47	167	168	865.2
Disability benefits	6804.27	388	389	515.9
Education related allowances	5498.59	62	76	1328.1
Equivalised disposable income				
Subclasses by household size				
1 household member	16359.33	1288	1310	379.6
2 household members	19216.82	1368	1379	771.8
3 household members	20319.95	1083	1092	668.7
4 and more	17506.23	1149	1157	590.4
Population by age group				
<25	16718.07	3004	3044	355.5
25-34	18027.92	1871	1890	315.3
35-44	20183.85	1800	1818	556.0
45-54	21807.49	1600	1615	671.6
55-64	18435.48	1464	1477	338.4
65+	16981.95	2531	2534	272.9
Population by sex				
Male	19154.84	5907	5960	261.6
Female	17502.22	6363	6418	222.2

With reference to the component of the survey - year 2008-2009, **DB075=4** -, standard errors are 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 4).

Table 4. Mean, number of observations and standard errors (DB075 = 4)

Income components	Mean	Number of observations		Standard Error
		Before imputation	**After imputation**	
Total household gross income	39938.94	5153	5184	609.7
Total disposable household income	30005.86	5145	5189	377.4
Total disposable household income before social transfers other than old-age survivors' benefits	28683.24	5104	5170	378.5
Total disposable household including old-age survivors' benefits	21460.76	4710	4911	387.9
Net income components at household level				
Income from rentals of properties or lands	6920.53	221	473	523.1
Family/children related allowances	1044.14	1412	1518	35.5
Social exclusion	7264.49	45	51	1767.4
Housing allowances	1049.98	111	119	133.2
Transfers received	4056.15	257	285	388.1
Interest, dividends, profits	955.77	1725	2754	60.3
Interest repayments on mortgage	3369.86	0	698	159.4
Income of people aged less than 16	1535.97	18	19	514.7
Regular taxes on wealth	353.61	919	2173	12.6
Transfers paid	4105.03	202	226	370.0
Repayments/receipts for tax adjustment	-360.24	3583	3590	0.0
Gross income components at household level				
Income from rentals of properties or lands	9518.11	221	473	780.1
Family/children related allowances	1044.14	1412	1518	35.5
Social exclusion	7264.49	45	51	1767.4
Housing allowances	1049.98	111	119	133.2
Transfers received	4056.15	257	285	388.1
Interest, dividends, profits	1229.73	1725	2754	76.4
Interest repayments on mortgage	3369.86	0	698	159.4
Income of people aged less than 16	1535.97	18	19	514.7
Regular taxes on wealth	353.61	919	2173	12.6
Transfers paid	4105.03	202	226	370.0

Table 4 (Follows). Mean, number of observations and standard errors (DB075 = 4)

Income components	Mean	Number of observations		Standard Error
		Before imputation	After imputation	
Net income components at personal level				
Employee cash or near-cash income	15735.96	4214	4503	265.3
Non cash employee income	1310.03	475	1157	57.5
Contributions to individual private pension plan	1808.52	545	649	123.9
Cash benefit or losses from self-employment	19064.63	1279	1765	1057.4
Pension from individual private plans	4946.29	15	16	1856.6
Unemployment benefits	3184.64	1012	1060	192.1
Old-age benefits	13043.8	3291	3298	171.6
Survivor' benefits	6031.27	152	152	668.6
Disability benefits	6127.61	333	334	384.2
Education related allowances	5500.81	41	50	2344.2
Gross income components at personal level				
Employee cash or near-cash income	21671.36	4460	4503	409.0
Non cash employee income	1367.83	475	1157	61.2
Contributions to individual private pension plan	1808.52	545	649	123.9
Cash benefit or losses from self-employment	27648.25	1728	1765	1649.7
Pension from individual private plans	6780.8	16	16	2822.5
Unemployment benefits	3782.13	1030	1060	235.4
Old-age benefits	15660.5	3294	3298	237.5
Survivor' benefits	7147.26	152	152	844.9
Disability benefits	7135.59	333	334	464.7
Education related allowances	5500.81	41	50	2344.2
Equivalised disposable income				
Subclasses by household size				
1 household member	16597.07	1307	1350	399.9
2 household members	19440.26	1468	1479	617.6
3 household members	19457.65	1156	1167	644.5
4 and more	17180.87	1214	1224	552.4
Population by age group				
<25	16428.55	3241	3290	308.5
25-34	18272.67	2090	2121	365.7
35-44	19494.55	1854	1879	435.0
45-54	20805.3	1591	1603	484.0
55-64	18358.99	1518	1540	335.2
65+	17167.4	2641	2644	273.1
Population by sex				
Male	18662.29	6277	6353	217.6
Female	17574.44	6658	6724	195.0

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 households' sample of the second rotational group (DB075 = 2) was extracted in July 2006 and validated within September 2006; the sample of the third rotational group (DB075 = 3) was extracted in July 2007 and validated within September 2007; the sample of the forth rotational group (DB075 = 4) was extracted in July 2008 and validated within September 2008.

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 is based on (i) the experience of the previous 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 inconsistence 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.

	2006	2007	2008	2009
DB075=2 & DB135 = 1	6167	5315	4893	4448
DB075=3 & DB135 = 1	-	6111	5355	4938
DB075=4 & DB135 = 1	-	-	6115	5220
Total	6167	11426	16363	14606

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			
		2006	**2007**	**2008**	**2009**
DB075=2	**RB100 = 1**	12956	11087	10038	8943
	RB100 = 2	-	153	258	402
DB075=3	**RB100 = 1**	-	12947	11236	10221
	RB100 = 2	-	-	152	260
DB075=4	**RB100 = 1**	-	-	12823	10828
	RB100 = 2	-	-	-	163
Total	**RB100 = 1**	12956	24034	34097	29992
	RB100 = 2	-	153	410	825
Total		12956	24187	34507	30817

Unit non-response

Table 1.1 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 1.2 Unit non-response, Rotational Group 3, first wave 2007

TYPE OF RATE	VALUE
RA	0.991
RH	0.811
NRH	19.698
RP	1
NRP	0
NRP_OVERALL	19. 698

Table 1.3 Unit non-response, Rotational Group 4, first wave 2008

TYPE OF RATE	VALUE
RA	0.988
RH	0.807
NRH	20.253
RP	1
NRP	0
NRP_OVERALL	20.253

Table 2. Household response rates by rotational group and wave

	Rotational Group 2			Rotational Group 3		Rotational Group 4
	Waves 2006-2007	Waves 2007-2008	Waves 2008-2009	Waves 2007-2008	Waves 2008-2009	Waves 2008-2009
WAVE RESPONSE RATE	86.42	85.75	86.56	87.51	86.89	85.39
REFUSAL RATE	6.43	6.91	5.63	6.44	5.65	6.69
NO-CONTACTED AND OTHERS RATE	6.67	6.57	7.08	5.43	6.52	7.32
LONGITUDINAL FOLLOW-UP RATE	-	90.24	91.97	-	91.71	-
FOLLOW-UP RATIO	-	91.88	93.13	-	93.43	-
ACHIEVED SAMPLE SIZE RATIO	86.42	91.73	90.89	87.51	91.62	85.39

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

	Rotational Group 2			Rotational Group 3		Rotational Group 4
	Waves 2006-2007	Waves 2007-2008	Waves 2008-2009	Waves 2007-2008	Waves 2008-2009	Waves 2008-2009
WAVE RESPONSE RATE OF SAMPLE PERSONS	87.40	88.82	89.00	88.90	90.04	86.00
WAVE RESPONSE RATE OF CO-RESIDENTS	NA	NA	NA	NA	NA	NA
LONGITUDINAL FOLLOW-UP RATE	85.09	86.54	87.25	86.61	88.09	84.11
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	85.04	86.34	86.31	86.22	88.01	84.01
ACHIEVED SAMPLE SIZE RATIO FOR SAMPLE PERSONS & CO-RESIDENTS	86.21	87.45	88.05	87.38	89.10	85.27
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 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	531?	405	296	29	67	6112
%	8?	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 1.2 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	5398	143	16	12	42	0	3	111	91	5816
%	92.8	2.5	0.3	0.2	0.7	0	0.1	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	161	43	148	5646
%	86.7	7.1	2.9	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 1.3 Distribution of households by DB110, DB120, DB130 and DB135, Rotational Group 2, 4th wave 2009

Household Status - Rotational Group 2, Wave=2009

	DB110=1	DB110=2	DB110=3	DB110=4	DB110=5	DB110=6	DB110=7	DB110=8	DB110=11	TOTAL
N	4918	110	15	6	29	0	4	71	67	5220
%	94.2	2.1	0.3	0.1	0.6	0	0.1	1.4	1.3	100

Record of Contact at Address - Rotational Group 2, Wave=2009

	DB120=11	DB120=21	DB120=22	DB120=23	TOTAL
N	179	1	0	1	181
%	98.9	0.6	0	0.6	100

Household Questionnaire Result – Rotational Group 2, Wave=2009

	DB130=11	DB130=21	DB130=22	DB130=23	DB130=24	TOTAL
N	4448	296	102	37	214	5097
%	87.3	5.8	2	0.7	4.2	100

Household Interview Acceptance - Rotational Group 2, Wave=2009

	DB135=1	DB135=2	TOTAL
N	4448	0	4448
%	100	0	100

Table 1.4 Distribution of households by DB110, DB120, DB130 and DB135, Rotational Group 3, 2nd 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	5839	122	16	10	40	0	0	121	84	6232
%	93.7	2	0.3	0.2	0.6	0	0	1.9	1.3	100

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

	DB120=11	DB120=21	DB120=22	DB120=23	TOTAL
N	234	5	1	3	243
%	96.3	2.1	0.4	1.2	100

Household Questionnaire Result - Rotational Group 3, Wave=2008

	DB130=11	DB130=21	DB130=22	DB130=23	DB130=24	TOTAL
N	5355	403	167	38	110	6073
%	88.2	6.6	2.7	0.6	1.8	100

Household Interview Acceptance - Rotational Group 3, Wave=2008

	DB135=1	DB135=2	TOTAL
N	5355	0	5355
%	100	0	100

Table 1.5 Distribution of households by DB110, DB120, DB130 and DB135, Rotational Group 3, 3rd wave 2009

Household Status - Rotational Group 3, Wave=2009

	DB110=1	DB110=2	DB110=3	DB110=4	DB110=5	DB110=6	DB110=7	DB110=8	DB110=11	TOTAL
N	5411	121	12	4	34	0	15	108	67	5772
%	93.7	2.1	0.2	0.1	0.6	0	0.3	1.9	1.2	100

Record of Contact at Address - Rotational Group 3, Wave=2009

	DB120=11	DB120=21	DB120=22	DB120=23	TOTAL
N	227	1	1	0	229
%	99.1	0.4	0.4	0	100

Household Questionnaire Result - Rotational Group 3, Wave=2009

	DB130=11	DB130=21	DB130=22	DB130=23	DB130=24	TOTAL
N	4938	327	121	53	199	5638
%	87.6	5.8	2.1	0.9	3.5	100

Household Interview Acceptance - Rotational Group 3, Wave=2009

	DB135=1	DB135=2	TOTAL
N	4938	0	4938
%	100	0	100

Table 1.6 Distribution of households by DB110, DB120, DB130 and DB135, Rotational Group 4, 2nd wave 2009

Household Status - Rotational Group 4, Wave=2009

	DB110=1	DB110=2	DB110=3	DB110=4	DB110=5	DB110=6	DB110=7	DB110=8	DB110=11	TOTAL
N	5836	141	15	5	32	0	8	95	78	6210
%	94	2.3	0.2	0.1	0.5	0	0.1	1.5	1.3	100

Record of Contact at Address - Rotational Group 4, Wave=2009

	DB120=11	DB120=21	DB120=22	DB120=23	TOTAL
N	234	2	0	0	236
%	99.2	0.8	0	0	100

Household Questionnaire Result - Rotational Group 4, Wave=2009

	DB130=11	DB130=21	DB130=22	DB130=23	DB130=24	TOTAL
N	5220	415	120	36	279	6070
%	86	6.8	2	0.6	4.6	100

Household Interview Acceptance – Rotational Group 4, Wave=2009

	DB135=1	DB135=2	TOTAL
N	5220	0	5220
%	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 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
%	96.70	0.69	1.52	0.58	0.10	0.40	0.01	100

Table 1.2 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
%	96.41	0.75	1.63	0.48	0.15	0.47	0.11	100

Table 1.3 Distribution of persons for membership status (RB110), Rotational Group 2, 4th wave 2009

	Current Household Member				No Current Household Member			TOTAL
	RB110=1	RB110=2	RB110=3	RB110=4	RB120=2-4	RB110=6	RB110=7	
N	10824	55	119	54	16	58	15	11141
%	97.15	0.49	1.07	0.48	0.14	0.52	0.13	100

Table 1.4 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	13023	106	206	73	38	71	0	13517
%	96.35	0.78	1.52	0.54	0.28	0.53	0.00	100

Table 1.5 Distribution of persons for membership status (RB110), Rotational Group 3, 3rd wave 2009

	Current Household Member				No Current Household Member			TOTAL
	RB110=1	RB110=2	RB110=3	RB110=4	RB120=2-4	RB110=6	RB110=7	
N	12031	96	193	59	18	60	13	12470
%	96.48	0.77	1.55	0.47	0.14	0.48	0.10	100

Table 1.6 Distribution of persons for membership status (RB110), Rotational Group 4, 2nd wave 2009

	Current Household Member				No Current Household Member			TOTAL
	RB110=1	RB110=2	RB110=3	RB110=4	RB120=2-4	RB110=6	RB110=7	
N	12709	75	220	73	25	58	0	13160
%	96.57	0.57	1.67	0.55	0.19	0.44	0.00	100

Table 2.1 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	0.0	100

Table 2.2 Distribution of persons moving out by variable RB120, Rotational Group 2, 3rd wave 2008

	RB110=5				TOTAL
	RB120=1	RB120=2	RB120=3	RB120=4	
N	183	3	15	0	201
%	91	1.5	7.5	0.0	100

Table 2.3 Distribution of persons moving out by variable RB120, Rotational Group 2, 4th wave 2009

	RB110=5				TOTAL
	RB120=1	RB120=2	RB120=3	RB120=4	
N	126	4	12	0	142
%	88.7	2.8	8.5	0.0	100

Table 2.4 Distribution of persons moving out by variable RB120, Rotational Group 3, 2nd wave 2008

	RB110=5				TOTAL
	RB120=1	RB120=2	RB120=3	RB120=4	
N	192	13	25	0	230
%	83.5	5.7	10.9	0.0	100

Table 2.5 Distribution of persons moving out by variable RB120, Rotational Group 3, 3rd wave 2009

	RB110=5				TOTAL
	RB120=1	RB120=2	RB120=3	RB120=4	
N	190	2	16	0	208
%	91.3	1	7.7	0.0	100

Table 2.6 Distribution of persons moving out by variable RB120, Rotational Group 4, 2nd wave 2009

	RB110=5				TOTAL
	RB120=1	RB120=2	RB120=3	RB120=4	
N	176	3	22	0	201
%	87.6	1.5	10.9	0.0	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	**2006**				**2007**				**2008**				**2009**		
	(A)	(B)	(C)		(A)	(B)	(C)		(A)	(B)	(C)		(A)	(B)	(C)
Total household gross income	NA	NA	NA		99.54	0.28	81.08		99.63	0.5	88.38		99.52	0.48	88.77
Total disposable household income	99.46	0.42	37.7		99.54	0.41	23.03		99.63	0.51	62.18		99.53	0.63	57.24
Total disposable household income before social transfers other than old-age and survivors' benefits	99.19	0.57	36.05		99.06	0.5	23.19		99.31	0.86	60.61		99.21	0.97	55.63
Total disposable household income including old-age and survivors' benefits	93.51	1.3	35.2		94.59	1.1	20.23		95.45	2.91	58.51		93.38	3.37	53.1
Net income components at household level															
Imputed rent	NA	NA	NA		NA	NA	NA		NA	NA	NA		NA	NA	NA
Income from rentals of properties or lands	7.23	0.75	0.05		7.11	0.63	0.18		8.51	3.5	0.73		9.03	4.55	0.86
Family/children related allowances	27.44	1.83	0.7		27.74	2.25	0.59		28.71	1.98	0.54		30.12	1.81	0.56
Social exclusion	0.62	0.16	0.00		0.66	0.13	0.00		0.63	0.06	0.00		0.81	0.12	0.00
Housing allowances	1.77	0.42	0.00		1.79	0.2	0.03		1.94	0.17	0.02		1.95	0.19	0.03
Transfers received	4.65	0.36	0.05		5.2	0.53	0.06		5.45	0.56	0.04		5.13	0.49	0.84
Interest. Dividends. Profits	45.65	6.41	1.82		47.13	7.41	2.52		54.12	15.77	2.84		52.1	18.57	2.71
Interest repayments on mortgage	10.39	10.39	0.00		11.44	11.44	0.00		12.67	12.67	0.00		12.8	12.8	0.00
Income of people aged less than 16	0.52	0.08	0.00		0.76	0.09	0.27		0.65	0.1	0.03		0.52	0.05	0.03
Regular taxes on wealth	65.38	2.4	0.84		66.8	3.15	1.69		69.65	33.26	10.58		41.37	24.38	3.9
Transfers paid	5.25	0.28	0.00		4.78	0.26	0.03		4.69	0.27	0.04		4.31	0.36	0.08
Repayments/receipts for tax adjustment	37.99	3.29	1.33		62.87	0.77	0.67		66.01	0.15	0.17		68.43	0.12	0.21

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

Gross income components at household level												
Imputed rent	NA	NA	NA	88.11	100	0.00	88.27	100	0.00	88.92	100	0.00
Income from rentals of properties or lands	NA	NA	NA	7.11	0.63	6.09	8.51	3.5	4.74	9.03	4.55	4.24
Family/children related allowances	NA	NA	NA	27.74	2.25	0.59	28.71	1.98	0.54	30.12	1.81	0.56
Social exclusion	NA	NA	NA	0.66	0.13	0.00	0.63	0.06	0.00	0.81	0.12	0.00
Housing allowances	NA	NA	NA	1.79	0.2	0.03	1.94	0.17	0.02	1.95	0.19	0.03
Transfers received	NA	NA	NA	5.2	0.53	0.06	5.45	0.56	0.04	5.13	0.49	0.84
Interest. Dividends. Profits	NA	NA	NA	47.13	7.41	39.72	54.12	15.77	38.35	52.1	18.57	33.51
Interest repayments on mortgage	NA	NA	NA	11.44	11.44	0.00	12.67	12.67	0.00	12.8	12.8	0.00
Income of people aged less than 16	NA	NA	NA	0.76	0.09	0.27	0.65	0.1	0.03	0.52	0.05	0.03
Regular taxes on wealth	NA	NA	NA	66.8	3.15	1.69	69.65	33.26	10.58	41.37	24.38	3.9
Transfers paid	NA	NA	NA	4.78	0.26	0.03	4.69	0.27	0.04	4.31	0.36	0.08
Tax on income and social contributions	NA	NA	NA	94.21	9.38	70.78	95.18	42.38	45.02	95.35	39.96	47.54

(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	2006				2007				2008				2009		
	(A)	(B)	(C)		(A)	(B)	(C)		(A)	(B)	(C)		(A)	(B)	(C)
Net income components at personal level															
Employee cash or near-cash income	40.41	1.13	10.61		40.54	0.32	0.54		40.45	5.74	1.64		40.62	2.72	5.95
Non cash employee income	NA	NA	NA		9.65	7.88	0.88		10.18	8.06	1.09		10.09	5.84	0.82
Company car	0.74	0.00	0.00		0.73	0.00	0.00		0.87	0.01	0.00		0.79	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	7.11	0.63	0.00		6.31	0.71	0.00		6.09	0.79	0.00		5.67	0.78	0.00
Cash benefit or losses from self-employment	16.7	2.38	0.41		16.54	3.65	0.35		16.1	2.43	0.17		15.78	4.33	0.23
Value of goods produces by own-consumption	NA	NA	NA		26.49	0.00	0.00		26.1	0.00	0.00		25.38	0.00	0.00
Pension from individual private plans	0.22	0.00	0.00		0.23	0.01	0.00		0.17	0.00	0.00		0.16	0.00	0.00
Unemployment benefits	8.74	0.17	0.04		9.17	0.3	0.04		9.82	0.39	0.07		9.33	0.41	0.05
Old-age benefits	29.08	0.05	0.03		29.8	1.29	1.29		30.23	0.04	0.16		30.56	0.06	0.18
Survivor' benefits	1.69	0.00	0.00		1.79	0.00	0.00		1.63	0.00	0.00		1.58	0.00	0.00
Disability benefits	3.11	0.03	0.00		3.26	0.19	0.00		3.19	0.03	0.01		3.23	0.01	0.00
Education related allowances	0.76	0.08	0.00		0.59	0.07	0.00		0.54	0.08	0.00		0.55	0.1	0.00

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

Gross income components at personal level														
Employee cash or near-cash income	NA	NA	NA		40.54	0.06	3.17		40.45	0.38	9.46		40.62	0.29	10.82
Non cash employee income	NA	NA	NA		9.65	7.88	0.88		10.18	8.06	1.48		10.09	5.84	1.27
Company car	NA	NA	NA		0.73	0.00	0.05		0.87	0.00	0.05		0.79	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		6.31	0.71	0.00		6.09	0.79	0.00		5.67	0.78	0.00
Cash benefit or losses from self-employment	NA	NA	NA		16.54	0.6	4.1		16.1	0.32	3.21		15.78	0.27	5.21
Value of goods produces by own-consumption	NA	NA	NA		26.49	3.03	0.00		26.1	3.43	0.00		25.38	2.32	0.00
Pension from individual private plans	NA	NA	NA		0.23	0.00	0.01		0.17	0.00	0.01		0.16	0.00	0.01
Unemployment benefits	NA	NA	NA		9.17	0.30	8.80		9.82	0.16	9.46		9.33	0.21	9.08
Old-age benefits	NA	NA	NA		29.8	0.70	2.36		30.23	0.04	0.67		30.56	0.04	0.69
Survivor' benefits	NA	NA	NA		1.79	0.01	0.06		1.63	0.00	0.03		1.58	0.00	0.03
Disability benefits	NA	NA	NA		3.26	0.11	0.09		3.19	0.02	0.07		3.23	0.01	0.05
Education related allowances	NA	NA	NA		0.59	0.07	0.00		0.54	0.08	0.00		0.55	0.10	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.)

Mode of data collection

Table 1.1 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=2	N	12956	12956
	%	100	100
Total	N	12956	12956
	%	100	100

Note: at first wave all household members 16+ are defined as sample persons

Table 1.2 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=2	N	11240	11240
	%	100	100
DB075=3	N	12947	12947
	%	100	100
Total	N	24187	24187
	%	100	100

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

		RB250=11	Total
DB075=2	N	11087	11502
	%	100	100
DB075=3	N	12947	12956
	%	100	100
Total	N	24034	24034
	%	100	100

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

		RB250=11	Total
DB075=2	N	153	153
	%	100	100
DB075=3	N	0	0
	%	-	-
Total	N	153	153
	%	100	100

Table 1.3 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=2	N	10296	10296
	%	100	100
DB075=3	N	11388	11388
	%	100	100
DB075=4	N	12823	12823
	%	100	100
Total	N	34507	34507
	%	100	100

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

		RB250=11	Total
DB075=2	N	10038	10038
	%	100	100
DB075=3	N	11236	11236
	%	100	100
DB075=4	N	12823	12823
	%	100	100
Total	N	34097	34097
	%	100	100

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

		RB250=11	Total
DB075=2	N	258	258
	%	100	100
DB075=3	N	152	152
	%	100	100
DB075=4	N	0	0
	%	-	-
Total	N	410	410
	%	100	100

Table 1.4 The distribution of household member by RB250 and Rotational Group (DB075), Wave 2009

Household Members 16+ (RB245= 1 to 3), Wave 2009

		RB250=11	Total
DB075=2	N	9345	9345
	%	100	100
DB075=3	N	10481	10481
	%	100	100
DB075=4	N	10991	10991
	%	100	100
Total	N	30817	30817
	%	100	100

Sample Persons 16+ (RB245= 1 to 3 and RB100=1), Wave 2009

		RB250=11	Total
DB075=2	N	8943	8943
	%	100	100
DB075=3	N	10221	10221
	%	100	100
DB075=4	N	10828	10828
	%	100	100
Total	N	29992	29992
	%	100	100

Co-residents 16+ (RB245= 1 to 3 and RB100=2), Wave 2009

		RB250=11	Total
DB075=2	N	402	402
	%	100	100
DB075=3	N	260	260
	%	100	100
DB075=4	N	163	163
	%	100	100
Total	N	825	825
	%	100	100

Table 2.1 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	
		Missing	Face to face interview-PAPI	Proxy interview	Total
DB075=2	N	219	10843	1894	12956
	%	1.69	83.69	14.62	100
Total	N	219	10843	1894	12956
	%	1.69	83.69	14.62	100

Note: at first wave all household members 16+ are defined as sample persons

Table 2.2 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	
		Missing	Face to face interview-PAPI	Proxy interview	Total
DB075=2	N	170	9230	1840	11240
	%	1.51	82.12	16.37	100
DB075=3	N	204	10780	1963	12947
	%	1.58	83.26	15.16	100
Total	N	374	20010	3803	24187
	%	1.55	82.73	15.72	100

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

		RB260=.	RB260=1	RB260=5	
		Missing	Face to face interview-PAPI	Proxy interview	Total
DB075=2	N	166	9123	1798	11087
	%	1.5	82.29	16.22	100
DB075=3	N	204	10780	1963	12947
	%	1.58	83.26	15.16	100
Total	N	370	19903	3761	24034
	%	1.54	82.81	15.65	100

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

		RB260=.	RB260=1	RB260=5	
		Missing	Face to face interview-PAPI	Proxy interview	Total
DB075=2	N	4	107	42	153
	%	2.61	69.93	27.45	100
DB075=3	N	0	0	0	0
	%	-	-	-	-
Total	N	4	107	42	153
	%	2.61	69.93	27.45	100

Table 2.3 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	
		Missing	Face to face interview-PAPI	Proxy interview	Total
DB075=2	N	0	8297	1999	10296
	%	-	80.58	19.42	100
DB075=3	N	0	9278	2110	11388
	%	-	81.47	18.53	100
DB075=4	N	0	10457	2366	12823
	%	-	81.55	18.45	100
Total	N	0	28032	6475	34507
	%	-	81.24	18.76	100

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

		RB260=.	RB260=1	RB260=5	
		Missing	Face to face interview-PAPI	Proxy interview	Total
DB075=2	N	0	8123	1915	10038
	%	-	80.92	19.08	100
DB075=3	N	0	9174	2062	11236
	%	-	81.65	18.35	100
DB075=4	N	0	10457	2366	12823
	%	-	81.55	18.45	100
Total	N	0	27754	6343	34097
	%	-	81.40	18.60	100

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

		RB260=.	RB260=1	RB260=5	
		Missing	Face to face interview-PAPI	Proxy interview	Total
DB075=2	N	0	174	84	258
	%	-	67.44	32.56	100
DB075=3	N	0	104	48	152
	%	-	68.42	31.58	100
DB075=4	N	0	0	0	0
	%	-	-	-	-
Total	N	0	278	132	410
	%	-	67.80	32.20	100

Table 2.4 The distribution of household member by RB260 and Rotational Group (DB075), Wave 2009

Household Members 16+ (RB245=1 to 3) and RB250 in 11 or 13, Wave 2009

		RB260=.	RB260=1	RB260=5	
		Missing	Face to face interview-PAPI	Proxy interview	Total
DB075=2	N	0	7618	1727	9345
	%	-	81.52	18.48	100
DB075=3	N	0	8488	1993	10481
	%	-	80.98	19.02	100
DB075=4	N	0	8952	2039	10991
	%	-	81.45	18.55	100
Total	N	0	25058	5759	30817
	%	-	81.31	18.69	100

Sample Persons 16+ (RB245=1 to 3 and RB100=1) and RB250 in 11 or 13, Wave 2009

		RB260=.	RB260=1	RB260=5	
		Missing	Face to face interview-PAPI	Proxy interview	Total
DB075=2	N	0	7349	1594	8943
	%	-	82.18	17.82	100
DB075=3	N	0	8303	1918	10221
	%	-	81.23	18.77	100
DB075=4	N	0	8839	1989	10828
	%	-	81.63	18.37	100
Total	N	0	24491	5501	29992
	%	-	81.66	18.34	100

Co-residents 16+ (RB245=1 to 3 and RB100=2) and RB250 in 11 or 13, Wave 2009

		RB260=.	RB260=1	RB260=5	
		Missing	Face to face interview-PAPI	Proxy interview	Total
DB075=2	N	0	269	133	402
	%	-	66.92	33.08	100
DB075=3	N	0	185	75	260
	%	-	71.15	28.85	100
DB075=4	N	0	113	50	163
	%	-	69.33	30.67	100
Total	N	0	567	258	825
	%	-	68.73	31.27	100

2.5. Imputation procedure

The imputation procedure for each quantitative variable is implemented by using the IMPUTE module of the software Iveware, 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 Fellegy-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-trasformation bias) with self-selection correction à la heckman. In the first stage, we run distinct probit models for owners/renters at a below-the-market price/free tenants vs tenants at a market 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 market 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 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 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-trasformation bias) with self-selection correction à la heckman. In the first stage, distinct probit models for owners/renters at a below-the- market price/free tenants vs tenants at a market price are estimated.

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 market 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'.

— 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

The standard EUSILC tracing rules are applied.