INTERMEDIATE QUALITY REPORT

Cross-Sectional Survey 2008

ITALY

1. COMMON CROSS-SECTIONAL EUROPEAN UNION INDICATORS

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

In the following tables the overarching indicators, the social inclusion indicators and the pensions indicators are reported.

Portfolio of Overarching Indicators calculated from SILC

[OV-1] At-risk-of-poverty threshold (illustrative values)

Household type	currency	2008
A1 (Single person)	EUR	9382
	NAC	9382
	PPS	9033
A2_2CH_LT14 (Two adults with two children younger than 14 years)	EUR	19702
	NAC	19702
	PPS	18969

[OV-1a] At-risk-of-poverty rate (by age and gender)

Age	Sex	2008
TOTAL	T	19
	M	17
	F	20
Y0_17	T	25
Y18_64	T	16
	M	15
	F	18
Y65_MAX	T	21
	M	17
	F	24

[OV-1b] Relative median at-risk-of-poverty gap (by age and gender)

age	sex	2008
TOTAL	T	23
	M	23
	F	23
Y0_17	T	24
Y18_64	T	26
	M	25
	F	26
Y65_MAX	T	19
	M	16
	F	20

[OV-9] At-risk-of-poverty rate anchored at a fixed moment in time (2005) (by age and gender)

age	sex	2008
TOTAL	T	18
	M	17
	F	20
Y0_17	T	24
Y18_64	T	16
	M	15
	F	17
Y65_MAX	T	20
	M	17
	F	23

[OV-11] In-work at-risk-of-poverty rate (by gender)

sex	2008
T	9
M	11
F	6

[OV-2] Inequality of income distribution S80/S20 income quintile share ratio

	2008
S80_S20	5.1

[OV-7a] Relative median income ratio

	2008
R_GE65_45TO54 (Persons aged 65 years and over compared to persons aged between 45 and 54 years)	0.8

[OV-7b] Aggregate replacement ratio

	sex	2008
R_PN_WK (Ratio of income from pensions of persons aged between 65 and 74 years and income from work of persons aged between 50 and 59 years)	T	0.51
	M	0.58
	F	0.39

[OV-C11] At-risk-of-poverty rate before social transfers (by age and gender)

age	sex	2008
TOTAL	T	43
	M	40
	F	46
Y0_17	T	34
Y18_64	T	32
	M	30
	F	35
Y65_MAX	T	84
	M	83
	F	86

Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC

[SI-P1] At-risk-of-poverty threshold (illustrative values)

Household type	currency	2008
A1 (Single person)	EUR	9382
	NAC	9382
	PPS	9033
A2_2CH_LT14 (Two adults with two children younger than 14 years)	EUR	19702
	NAC	19702
	PPS	18969

[SI-P1a] At-risk-of-poverty rate, by gender and selected age groups

age	sex	2008
TOTAL	T	19
	M	17
	F	20
Y0_17	T	25
Y18_64	T	16
	M	15
	F	18
Y65_MAX	T	21
	M	17
	F	24

[SI-P3] Relative median at-risk-of-poverty gap, by age and gender

age	sex	2008
TOTAL	T	23
	M	23
	F	23
Y0_17	T	24
Y18_64	T	26
	M	25
	F	26
Y65_MAX	T	19
	M	16
	F	20

[SI-S1] At-risk-of-poverty rate, by age and gender

age	sex	2008
TOTAL	T	19
	M	17
	F	20
Y0_17	T	25
Y18_24	T	21
	M	19
	F	23
Y25_49	T	17
	M	16
	F	18
Y50_64	T	13

age	sex	2008
	M	12
	F	14
Y65_MAX	T	21
	M	17
	F	24

[SI-S1a] At-risk-of-poverty rate, by household type

Household type	2008
TOTAL	19
HH_NDCH (Households without dependent children)	15
A1_LT64 (One adult younger than 64 years)	20
A1_GE65 (One adult older than 65 years)	33
A1F (Single female)	32
A1M (Single male)	19
A2_2LT65 (Two adults younger than 65 years)	11
A2_GE1_GE65 (Two adults, at least one aged 65 years and over)	17
A_GE3 (Three or more adults)	9
HH_DCH (Households with dependent children)	22
A1_DCH (Single parent with dependent children)	36
A2_1DCH (Two adults with one dependent child)	15
A2_2DCH (Two adults with two dependent children)	22
A2_GE3DCH (Two adults with three or more dependent children)	38
A_GE3_DCH (Three or more adults with dependent children)	20

[SI-S1b] At-risk-of-poverty rate, by work intensity of the household and by gender and selected age

Age	sex	Household type	Household Work intensity	2008
TOTAL	T	HH_NDCH (Households without dependent children)	MAXWORK	4
			SOMEWORK	9
			NONEWORK	31
		HH_DCH (Households with dependent children)	MAXWORK	6
			SOMEGE05	27
			SOMELT05	44
			NONEWORK	69
	M	HH_NDCH (Households without dependent children)	MAXWORK	4
			SOMEWORK	9
			NONEWORK	29
		HH_DCH (Households with dependent children)	MAXWORK	6
			SOMEGE05	26
			SOMELT05	44
			NONEWORK	70
	F	HH_NDCH (Households without dependent children)	MAXWORK	5
			SOMEWORK	10
			NONEWORK	33
		HH_DCH (Households with dependent children)	MAXWORK	6
			SOMEGE05	27
			SOMELT05	45
			NONEWORK	69

Age	sex	Household type	Household Work intensity	2008
Y0_17	T	HH_NDCH (Households without dependent children)	MAXWORK	.
			SOMEWORK	.
			NONEWORK	.
		HH_DCH (Households with dependent children)	MAXWORK	7
			SOMEGE05	31
			SOMELT05	54
			NONEWORK	80
Y18_64	T	HH_NDCH (Households without dependent children)	MAXWORK	5
			SOMEWORK	9
			NONEWORK	33
		HH_DCH (Households with dependent children)	MAXWORK	5
			SOMEGE05	24
			SOMELT05	41
			NONEWORK	63
	M	HH_NDCH (Households without dependent children)	MAXWORK	4
			SOMEWORK	9
			NONEWORK	32
		HH_DCH (Households with dependent children)	MAXWORK	4
			SOMEGE05	23
			SOMELT05	40
			NONEWORK	63
	F	HH_NDCH (Households without dependent children)	MAXWORK	5
			SOMEWORK	10
			NONEWORK	33
		HH_DCH (Households with dependent children)	MAXWORK	5
			SOMEGE05	25
			SOMELT05	42
			NONEWORK	63
Y65_MAX	T	HH_NDCH (Households without dependent children)	MAXWORK	3
			SOMEWORK	6
			NONEWORK	26
		HH_DCH (Households with dependent children)	MAXWORK	6
			SOMEGE05	16
			SOMELT05	30
			NONEWORK	71
	M	HH_NDCH (Households without dependent children)	MAXWORK	2
			SOMEWORK	5
			NONEWORK	23
		HH_DCH (Households with dependent children)	MAXWORK	10
			SOMEGE05	10
			SOMELT05	31
			NONEWORK	67
	F	HH_NDCH (Households without dependent children)	MAXWORK	3
			SOMEWORK	9
			NONEWORK	31
		HH_DCH (Households with dependent children)	MAXWORK	3

Age	sex	Household type	Household Work intensity	2008
			SOMEGE05	20
			SOMELT05	27
			NONEWORK	77

[SI-S1c] At-risk-of-poverty rate, by most frequent activity status and by gender

Most frequent activity status	sex	2008
EMP (Employment)	T	9
	M	11
	F	6
NOT_EMP (Non employment)	T	25
	M	22
	F	26
UNE (Unemployment)	T	42
	M	46
	F	38
RETIR (Retired)	T	15
	M	15
	F	15
INACT_OTH (Inactive population - Other)	T	29
	M	27
	F	29

[SI-S1d] At-risk-of-poverty rate, by accommodation tenure status and by gender and selected age groups

Age	sex	Accomodation tenure status	2008
TOTAL	T	OWNER	16
		RENT	29
	M	OWNER	15
		RENT	28
	F	OWNER	18
		RENT	31
Y0_17	T	OWNER	20
		RENT	42
Y18_64	T	OWNER	14
		RENT	27
	M	OWNER	13
		RENT	25
	F	OWNER	15
		RENT	29
Y65_MAX	T	OWNER	20
		RENT	25
	M	OWNER	16
		RENT	24
	F	OWNER	23
		RENT	26

[SI-S1e] Dispersion around the at-risk-of-poverty threshold [by gender and selected age group]

	age	sex	2008
LI_R_MD40	TOTAL	T	7
		M	6
		F	7
	Y0_17	T	9
	Y18_64	T	7
		M	6
		F	7
	Y65_MAX	T	4
		M	3
		F	5
LI_R_MD50	TOTAL	T	12
		M	11
		F	13
	Y0_17	T	15
	Y18_64	T	11
		M	10
		F	12
	Y65_MAX	T	12
		M	8
		F	14
LI_R_MD70	TOTAL	T	26
		M	24
		F	28
	Y0_17	T	34
	Y18_64	T	23
		M	21
		F	25
	Y65_MAX	T	30
		M	25
		F	33

[SI-C1] Inequality of income distribution S80/S20 income quintile share ratio

	2008
S80_S20	5.1

[SI-C2] Inequality of income distribution Gini coefficient

	2008
GINI	31

[SI-C5] At-risk-of-poverty rate anchored at a fixed moment in time (2005) (by age and gender)

age	sex	2007
TOTAL	T	18
	M	17
	F	20
Y0_17	T	24
Y18_64	T	16
	M	15
	F	17

age	sex	2007
Y65_MAX	T	20
	M	17
	F	23

[SI-C6] At-risk-of-poverty rate before social transfers, by gender and selected age groups (except pensions)

age	sex	2008
TOTAL	T	23
	M	22
	F	25
Y0_17	T	32
Y18_64	T	21
	M	20
	F	22
Y65_MAX	T	23
	M	20
	F	26

[SI-C8] In-work at-risk-of-poverty rate (by full-time/part-time work)

	2008
FULLTIME	8
PARTTIME	13

Portfolio of Pension Indicators calculated from SILC - Adequacy of pensions

[PN-P1] At-risk-of-poverty rate of older people

age	sex	2008
Y0_64	T	18
	M	17
	F	19
Y65_MAX	T	21
	M	17
	F	24

[PN-P2] Relative median income ratio of elderly people (65+)

	sex	2008
R_GE65_45TO54 (Persons aged 65 years and over compared to persons aged between 45 and 54 years)	T	0.83
	M	0.88
	F	0.8

[PN-P3] Aggregate replacement ratio

	sex	2008
R_PN_WK (Ratio of income from pensions of persons aged between 65 and 74 years and income from work of persons aged between 50 and 59 years)	T	0.51
	M	0.58
	F	0.39

[PN-S1] At-risk-of-poverty rate of older people

age	sex	2008
Y0_59	T	18
	M	18
	F	19
Y0_74	T	18
	M	17
	F	19
Y60_MAX	T	19
	M	16
	F	22
Y75_MAX	T	22
	M	17
	F	25

[PN-S2] Relative median income ratio of elderly people (60+)

	sex	2008
R_GE60_45TO54 (Persons aged 60 years and over compared to persons aged between 45 and 54 years)	T	0.87
	M	0.92
	F	0.84

[PN-S4] Inequality of income distribution S80/S20 income quintile share ratio

age	2008
Y0_64	5.3
Y65_MAX	4.4

[PN-S5] Relative median at-risk-of-poverty gap of elderly people

age	sex	2008
Y65_MAX	T	19
	M	16
	F	20
Y75_MAX	T	17
	M	13
	F	20

[PN-S6] At-risk-of-poverty rate for pensioners

	sex	2008
RETIR (Retired)	T	15
	M	15
	F	15

[PN-S7] At-risk-of-poverty rate of older people by accommodation tenure status

age	accomodartion tenure status	2008
Y60_MAX	OWNER	19
	RENT	25
Y65_MAX	OWNER	20
	RENT	25
Y75_MAX	OWNER	21
	RENT	25

[PN-S8] Dispersion around the at-risk-of-poverty threshold

	age	2008
At risk of poverty rate 50% median	Y60_MAX	11
	Y65_MAX	12
	Y75_MAX	11
At risk of poverty rate 70% median	Y60_MAX	28
	Y65_MAX	30
	Y75_MAX	31

[PN-P9] Gender differences in the at-risk-of-poverty rate of older people

	age	2008
A1 (Single person)	Y0_64	-9
	Y65_MAX	-10

[PN-P10] Gender differences in the relative median income ratio of older people

	indic_il	2008
A1 (Single person)	R_GE65_LT65 (Persons aged 65 years and over compared to persons aged less then 65 years)	0.07

[PN-S11] Gender differences in the relative median income ratio of older people

	indic_il	2008
A1 (Single person)	R_GE60_LT60 (Persons aged 60 years and over compared to persons aged less then 60 years)	0.11
	R_GE75_LT75 (Persons aged 70 years and over compared to persons aged less then 75 years)	-0.01

2. ACCURACY

2.1. Sampling design

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.

Sample size (number of SSU)	Number of PSU	Number of SSU (Total)	Avarage number of SSU for each PSU
<25	630	8895	14.1
26-50	231	7084	30.7
51-75	33	1935	58.6
76-100	6	542	90.3
101-250	10	1571	157.1
>250	2	901	450.5
Total	912	20928	22.9

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 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:

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

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(reg)+0.75* T(mr), has been applied to inflate the achivied 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 reuirements.
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**

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

Weighting factors have been calculated taking into account the units' probability of selection, the non-response adjustment and the calibration to external data relating to the distribution of households and persons in the target population.

2.1.8.1 Design weight

Wave 1;

In case of the households at the first wave, 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. 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.

Wave 2, 3, 4;

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 form 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).

2.1.8.2 Non-response adjustments

In the 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 probability for each household identified by the information we had on the extracted sample (for the households at wave 1) or gathered from the previous year of survey (for the households at wave 2, 3, 4). The response probability is obtained by a logistic regression model.

The re-calculated weight $\hat{p}_j$ for the generic household j is:

$\hat{p} = p_j / \pi_j$, where p_j is the design weight and π_j is the response probability.

Wave 1: the information used for the “new” households are:

territorial domain (NUTS II level), demographic size of the municipalities, number of household components and sex, age and nationality of the householder (gathered from demographic registers).

Wave 2, 3, 4: the information used for the “old” households are:

territorial domain (NUTS II), demographic size of the municipalities, number of household components, type of income sources, tenure status, rotational group, household disposability to the interview in previous year, nationality, sex, age, education and professional condition of the household components.
Even if for wave 2, 3 and 4 we have information on education and professional condition of the sample, in conformity with the previous year of survey 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 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);

2.1.8.4 Final cross-sectional weights

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.

2.1.9. Substitutions

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

2.2. Sampling errors

With reference to the survey - year 2008-, sampling errors were calculated for the following EU indicators based on the cross-sectional component of EU-SILC.
In particular, sampling errors of the above indicators were estimated by the following steps:
1) linearization of the statistics of interest and derivation of a fictive variable for each of them (using SAS programs developed by EUROSTAT);
2) calculation of sampling variance using GENESEES software (software used at ISTAT to evaluate sampling errors).

2.2.1. Standard errors and effective sample size

The following table contains respectively the value, the absolute sampling error, the percentage relative sampling error, the effective sample size (sample respondent persons) for each of the above indicators.

EU indicators- year 2008: sampling errors and effective sample size

	Value	Absolute sampling error	Relative sampling error %	Effective sample size (persons)
	(a)	(b)	(c)=(b)/(a)*100	
At risk of pov. threshold	9382	47.51	0.51	52433
At risk of pov. rate 60% (after s.t.)	19	0.33	1.85	52433
At risk of pov. rate 40% (after s.t.)	7	0.26	4.35	52433
At risk of pov. rate 50% (after s.t.)	12	0.32	2.95	52433
At risk of pov. rate 70% (after s.t.)	26	0.31	1.18	52433
At risk of pov. rate 60% (before s.t.) without pensions	43	0.31	0.73	52433
At risk of pov. rate 60% (before s.t.) with pensions	23	0.31	1.36	52433
S80/S20	5	0.09	1.79	52433
Relative median at risk pov. gap	23	0.67	3.03	9107
Gini index	31	0.26	0.85	52433
Equivalised disposable income	17724	94.45	0.53	52433

At risk of pov. rate 60% (after s.t.)				
Age and Gender				
0-17	25	0.68	2.84	9223
18-24	21	1.03	4.90	3825
25-49	17	0.44	2.73	18545
50-64	13	0.46	3.50	10145
18-64	16	0.37	2.33	32515
65+	21	0.56	2.69	10695
18+	17	0.31	1.85	43210
0-59	18	0.43	2.37	38448
60+	19	0.47	2.49	13985
0-74	18	0.38	2.10	47653
75+	22	0.75	3.42	4780
Female 0-17	25	0.94	3.90	4534
Female 18-24	23	1.24	5.37	1928
Female 25-49	18	0.49	2.70	9431
Female 50-64	14	0.56	3.97	5203
Female 18-64	18	0.41	2.42	16562
Female 65+	24	0.67	2.93	6057
Female 18+	19	0.35	1.84	22619
Female 0-59	19	0.46	2.41	19405
Female 60+	22	0.60	2.73	7748
Female 0-74	20	0.41	2.15	24238
Female 75+	25	0.93	3.71	2915
Male 0-17	25	0.91	3.80	4689
Male 18-24	19	1.48	7.79	1897
Male 25-49	16	0.50	3.31	9114
Male 50-64	12	0.57	5.21	4942
Male 18-64	15	0.42	3.00	15953
Male 65+	17	0.72	4.21	4638
Male 18+	15	0.36	2.42	20591
Male 0-59	18	0.49	2.86	19043
Male 60+	16	0.54	3.59	6237
Male 0-74	17	0.42	2.46	23415
Male 75+	17	1.05	6.54	1865
Female	20	0.37	1.85	27153
Male	17	0.37	2.20	25280

At risk of pov. rate 60% anchored at a fixed moment in time				
Age and Gender				
Total	18	0.35	1.94	52433
Female 0-17	24	0.94	3.90	4534
Female 18-64	17	0.40	2.34	16562
Female 65+	23	0.68	2.96	6057
Male 0-17	24	0.90	3.76	4689
Male 18-64	15	0.43	3.05	15953
Male 65+	17	0.64	4.00	4638
Female	20	0.38	1.99	27153
Male	17	0.40	2.49	25280

Dispersion around poverty threshold (40%)				
Age and Gender				
Total	7	0.24	3.99	52433
0-17	9	0.55	6.10	9223
18-64	7	0.25	4.14	32515
65+	4	0.26	6.54	10695
Female	7	0.27	3.84	27153
Female 0-17	9	0.66	7.38	4534
Female 18-64	7	0.29	4.11	16562
Female 65+	5	0.36	7.20	6057
Male	6	0.27	4.49	25280
Male 0-17	9	0.68	7.60	4689
Male 18-64	6	0.28	5.56	15953
Male 65+	3	0.32	10.83	4638

Dispersion around poverty threshold (50%)				
Age and Gender				
Total	12	0.31	2.81	52433
0-17	15	0.66	4.39	9223
18-64	11	0.33	3.28	32515
65+	12	0.46	4.21	10695
60+	11	0.40	4.03	13985
75+	11	0.63	5.75	4780
Female	13	0.35	2.91	27153
Female 0-17	15	0.83	5.57	4534
Female 18-64	12	0.35	3.16	16562
Female 65+	14	0.61	4.69	6057
Female 60+	13	0.53	4.09	7748
Female 75+	14	0.84	5.98	2915
Male	11	0.34	3.39	25280
Male 0-17	16	0.79	4.94	4689
Male 18-64	10	0.38	4.19	15953
Male 65+	8	0.50	6.22	4638
Male 60+	8	0.43	5.33	6237
Male 75+	7	0.67	9.57	1865

Dispersion around poverty threshold (70%)				
Age and Gender				
Total	26	0.33	1.27	52433
0-17	34	0.69	2.09	9223
18-64	23	0.36	1.55	32515
65+	30	0.61	2.12	10695
60+	28	0.52	1.94	13985
75+	31	0.87	2.82	4780
Female	28	0.37	1.32	27153
Female 0-17	34	0.94	2.84	4534
Female 18-64	25	0.41	1.70	16562
Female 65+	33	0.74	2.31	6057
Female 60+	31	0.64	2.14	7748
Female 75+	34	1.02	2.99	2915
Male	24	0.38	1.58	25280
Male 0-17	33	0.89	2.70	4689
Male 18-64	21	0.43	2.03	15953
Male 65+	25	0.77	3.09	4638
Male 60+	24	0.63	2.74	6237
Male 75+	25	1.24	4.95	1865

S80/S20				
Age and Gender				
0-64	5	0.10	1.99	41738
65+	4	0.10	2.52	10695

At risk of pov. rate 60% (after s.t.)				
Frequent activity status				
Frequent activity status and gender: total population	18	0.39	2.32	44031
Employment	9	0.26	3.31	19471
Unemployment	42	1.53	3.73	2378
Retired	15	0.51	3.39	9373
Inactive population- other	28	0.59	2.11	12809
Non employment	25	0.45	1.87	24560
Frequent activity status and gender: females	19	0.43	2.27	22974
Females employment	6	0.35	5.86	7843
Females unemployment	38	1.65	4.35	1331
Females retired	15	0.68	4.53	4108
Females inactive population- other	29	0.62	2.20	9692
Total females non employment	26	0.49	1.89	15131
Frequent activity status and gender: males	16	0.45	3.01	21057
Males employment	11	0.36	3.60	11628
Males unemployment	46	2.27	5.06	1047
Males retired	15	0.59	4.19	5265
Males inactive population- other	27	1.11	4.29	3117
Total males non employment	22	0.61	2.77	9429

At risk of pov. rate 60% (after s.t.)				
Household type				
Total no dependent children	15	0.32	2.15	26450
One person household, under 65 years	20	0.98	4.89	2652
One person household, 65 years and over	33	1.00	3.13	2862
One person household, male	19	1.01	5.60	2131
One person household, female	32	0.91	2.93	3383
One person household, total	26	0.68	2.63	5514
2 adults, no dependent children, both adults under 65 years	11	0.64	6.45	4612
2 adults, no dependent children, at least one adult 65 years or more	17	0.75	4.42	6466
Other households without dependent children	9	0.55	6.91	9858
Total dependent children	22	0.57	2.60	25983
Single parent household, one or more dependent children	36	2.20	6.29	1524
2 adults, one dependent child	15	0.92	6.12	6711
2 adults, two dependent children	22	0.94	4.48	9028
2 adults, three or more dependent children	38	2.89	7.61	2774
other households with dependent children	20	1.33	6.67	5946

Accomodation tenure status				
Owner	16	0.38	2.36	44396
Rent	29	0.87	3.00	8037

Accomodation tenure status (Owner)				
0-17	20	0.78	3.90	7574
18-64	14	0.41	3.13	27390
65+	20	0.57	2.87	9432
60+	19	0.50	2.80	12351
75+	21	0.81	3.86	4239
Female	18	0.41	2.40	22958
Female 0-17	20	0.98	5.14	3728
Female 18-64	15	0.44	2.91	13947
Female 65+	23	0.74	3.22	5283
Male	15	0.42	2.99	21438
Male 0-17	20	0.96	4.81	3846
Male 18-64	13	0.46	3.80	13443
Male 65+	16	0.66	4.14	4149

Accomodation tenure status (Rent)				
0-17	42	1.85	4.50	1649
18-64	27	1.04	3.98	5125
65+	25	1.60	6.67	1263
60+	25	1.43	5.72	1634
75+	25	2.21	8.85	541
Female	31	1.12	3.73	4195
Female 0-17	42	2.45	5.83	806
Female 18-64	29	1.13	4.04	2615
Female 65+	26	1.98	7.92	774
Male	28	1.16	4.13	3842
Male 0-17	41	2.17	5.42	843
Male 18-64	25	1.20	5.00	2510
Male 65+	24	2.18	9.46	489

At risk of pov. rate 60% (before s.t.)				
without pension				
Age and gender				
Female18- 64	35	0.43	1.28	16562
Female 65+	86	0.55	0.64	6057
Female 18+	48	0.35	0.72	22619
Male 18-64	30	0.45	1.54	15953
Male 65 +	83	0.70	0.85	4638
Male 18+	41	0.38	0.92	20591
0-17	34	0.66	1.94	9223
18-64	32	0.38	1.18	32515
65+	84	0.49	0.58	10695
18+	45	0.31	0.71	43210
female	46	0.34	0.75	27153
male	40	0.37	0.95	25280

At risk of pov. rate 60%(before s.t.)				
with pension				
Age and gender				
Female18- 64	22	0.40	1.84	16562
Female 65+	26	0.68	2.62	6057
Female 18+	23	0.34	1.48	22619
Male 18-64	20	0.42	2.22	15953
Male 65 +	20	0.73	3.84	4638
Male 18+	20	0.37	1.94	20591
0-17	32	0.66	2.14	9223
18-64	21	0.36	1.73	32515
65+	23	0.57	2.47	10695
18+	22	0.31	1.46	43210
female	25	0.35	1.44	27153
male	22	0.37	1.77	25280

Relative median at risk pov. Gap				
Age and gender				
Female 18-64	26	0.85	3.41	2753
Female 65+	20	0.51	2.54	1388
Female 18+	23	0.56	2.54	4141
Male 18-64	25	1.04	4.35	2261
Male 65 +	16	0.71	4.45	762
Male 18+	22	0.83	3.77	3023
0-17	24	1.39	5.80	1989
18-64	26	0.84	3.23	5014
65 +	19	0.48	2.53	2150
18+	23	0.61	2.77	7164
female	23	0.65	2.96	5125
male	23	0.85	3.70	4028

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; the one belonging to the second rotational group was extracted in July 2006 and validated within September 2006, the one belonging to the third rotational group was extracted in July 2007 and validated within September 2007, while the others households were extracted in July 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. q*uestionnaire*. The final version of the questionnaire, as used in the survey 2007, is based on (i) the first three 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

The following table shows the number of households for which the interview is accepted for the database and number of persons of 16 years or older who are members of the households for which the interview is accepted for the database, by rotational group.

Rotational Group (DB075)	Households (%)	Persons of 16 years or older (%)
1	4560 (21.79)	9773 (22.07)
2	4893 (23.38)	10296 (23.25)
3	5360 (25.61)	11394 (25.73)
4	6115 (29.22)	12823 (28.95)
Total	**20928 (100.00)**	**44286 (100.00)**

2.3.3.2. Unit non-response

For the Italian 2007 SILC survey the address contact rate (Ra), the proportion of completed household interviews accepted for the database (Rp), the household non-response rate (NRh), the proportion of complete personal interviews within the households accepted for the database (Rp), the individual non-response rates (*NRp*) and the overall individual non-response rates (*NRp_overall*) are shown below:

TYPE OF RATE	NEW REPLICATION	TOTAL SAMPLE
RA	0.988	0.991
RH	0.807	0.855
NRH	20.253	15.203
RP	1	1
NRP	0.000	0.000
NRP_OVERALL	20.253	15.203

where:

NRh = (1-(Ra * Rh)) * 100

Where:

$$Ra = \frac{\text{Number of addresses successfully contacted}}{\text{Number of valid addresses selected}} = \frac{\sum[DB120 = 11]}{\sum[DB120 = all] - \sum[DB120 = 23]}$$

Ra is the address contact rate

$$Rh = \frac{\text{Number of household interviews completed and accepted for database}}{\text{Number of eligible households at contacted addresses}} = \frac{\sum[DB135 = 1]}{\sum[DB130 = all]}$$

Rh is the proportion of complete household interviews accepted for the database

DB120 is the record of contact at the address

DB130 is the household questionnaire result, and

DB135 is the household interview acceptance result

NRp=(1-(Rp)) * 100

Where:

$$Rp = \frac{\text{Number of personal interviews completed}}{\text{Number of eligible individuals in the households whose interviews were completed and accepted for the database}} = \frac{\sum[RB250 = 11 + 12 + 13]}{\sum[RB245 = 1 + 2 + 3]}$$

Rp is the proportion of complete personal interviews within the households accepted for the database

RB245 is the respondent status, and

RB250 is the data status.

Overall individual non-response rates (NRp_overall) has been computed as follows:
NRp_overall = (1-(Ra * Rh * Rp)) * 100

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

Freuency *Percent* *Row Pct* *Col Pct* Rotational Group (**DB075**)	**DB120**					**DB130**						**DB135**
	11	**21**	**22**	**23**	**Total**	**11**	**21**	**22**	**23**	**24**	**Total**	**1**
1	5199	22	6	86	5313	4560	298	93	51	197	5199	4560
	20.5	0.1	0.0	0.3	20.9	18.6	1.2	0.4	0.2	0.8	21.3	21.8
	97.9	0.4	0.1	1.6		87.7	5.7	1.8	1.0	3.8		100.0
	21.3	15.5	8.8	12.2		21.8	16.6	12.6	23.9	24.8		21.8
2	5635	27	14	140	5816	4893	401	150	43	148	5635	4893
	22.2	0.1	0.1	0.6	22.9	20.0	1.6	0.6	0.2	0.6	23.0	23.4
	96.9	0.5	0.2	2.4		86.8	7.1	2.7	0.8	2.6		100.0
	23.0	19.0	20.6	19.8		23.4	22.4	20.2	20.2	18.6		23.4
3	6061	29	19	129	6238	5360	403	150	38	110	6061	5360
	23.9	0.1	0.1	0.5	24.6	21.9	1.7	0.6	0.2	0.5	24.8	25.6
	97.2	0.5	0.3	2.1		88.4	6.7	2.5	0.6	1.8		100.0
	24.8	20.4	27.9	18.3		25.6	22.5	20.2	17.8	13.9		25.6
4	7575	64	29	352	8020	6115	692	348	81	339	7575	6115
	29.8	0.3	0.1	1.4	31.6	25.0	2.8	1.4	0.3	1.4	31.0	29.2
	94.5	0.8	0.4	4.4		80.7	9.1	4.6	1.1	4.5		100.0
	31.0	45.1	42.7	49.8		29.2	38.6	47.0	38.0	42.7		29.2
Total	24470	142	68	707	25387	20928	1794	741	213	794	24470	20928
	96.4	0.6	0.3	2.8	100.0	85.5	7.3	3.0	0.9	3.2	100.0	100.0

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

In Italy the substitution of non-respondents units is not applied.

2.3.3.5. Item non-response

Table 1. Distribution of item non-response

	(A) % of households having received an amount	(B) % of households with missing values (before imputation)	(C) % of households with partial information (before imputation)
Item non-response			
Total household gross income[4]	99.41	0.32	86.10
Total disposable household income	99.60	0.46	62.51
Total disposable household income before social transfers other than old-age and survivors' benefits	99.30	0.78	61.06
Total disposable household income including old-age and survivors' benefits	95.51	2.86	58.92
Net income components at household level[5]			
Imputed rent	0,00	0,00	0,00
Income from rental of a property or land	8.49	3.45	0.72
Family/children related allowances	28.81	1.96	0.50
Social exclusion not elsewhere classified	0.61	0.06	0.00
Housing allowances	1.85	0.15	0.01
Regular inter-household cash transfer received	5.38	0.54	0.05
Interest, dividends, profit from capital investments in unincorporated business	54.05	16.07	2.82
Interest repayments on mortgage	12.13	12.13	0.00
Income received by people aged under 16	0.64	0.10	0.04
Regular taxes on wealth	69.87	33.29	11.01
Regular inter-household cash transfer paid	4.61	0.31	0.04
Repayments/receipts for tax adjustment	66.43	0.15	0.16
Gross income component at household level[6]			
Imputed rent	88.73	0.00	0.00
Income from rental of a property or land	8.49	3.45	4.74
Family/children related allowances	28.81	1.96	0.68
Social exclusion not elsewhere classified	0.61	0.06	0.01
Housing allowances	1.85	0.15	0.08
Regular inter-household cash transfer received	5.38	0.54	0.21
Interest, dividends, profit from capital investments in unincorporated business	54.05	16.07	37.98
Interest repayments on mortgage	12.13	12.13	0.00
Income received by people aged under 16	0.64	0.10	0.04
Regular taxes on wealth	69.87	33.29	11.01
Regular inter-household cash transfer paid	4.61	0.31	0.04
Tax on income and social contributions	95.19	8.53	75.02

Table 1. Distribution of item non-response

	(A) % of persons 16 having received an amount	(B) % of persons 16 with missing values (before imputation)	(C) % of persons 16 with partial information (before imputation)
Item non-response			
Net income components at personal level[6]			
Employee cash or near cash income	40.45	5.57	1.59
Non cash employee income	10.01	7.97	1.03
Company car	0.84	0.00	0.00
Employer's social insurance contribution	6.05	0.79	0.00
Contributions to individual private pension plans	16.14	2.48	0.19
Cash benefits or losses from self-employment	25.80	3.39	0.00
Value of goods produced by own-consumption	0.18	0.01	0.00
Pension from individual private plans	9.77	0.37	0.06
Unemployment benefits	30.27	0.04	0.17
Old-age benefits	1.62	0.00	0.00
Survivor' benefits	3.22	0.02	0.01
Disability benefits	0.52	0.07	0.00
Education related allowances	40.45	5.57	1.59
Gross income components at personal level[6]			
Employee cash or near cash income	40.45	0.36	9.35
Non cash employee income	10.01	7.97	1.41
Company car	0.84	0.00	0.05
Employer's social insurance contribution	39.68	39.68	0.00
Contributions to individual private pension plans	6.05	0.79	0.00
Cash benefits or losses from self-employment	16.14	0.34	3.23
Value of goods produced by own-consumption	25.80	3.39	0.00
Pension from individual private plans	0.18	0.00	0.02
Unemployment benefits	9.77	0.14	9.45
Old-age benefits	30.27	0.03	0.73
Survivor' benefits	1.62	0.00	0.02
Disability benefits	3.22	0.02	0.07
Education related allowances	0.52	0.07	0.00
Gross monthly earnings of employees	33.25	3.25	0.00

Note to table 2.3.3.5

The variable “interest repayments on mortgage” is derived on the basis of survey’s information and the percentage of households having received an amount is equal to the percentage of households with missing value before imputation. For old age benefits, disability benefits and survivor’ benefits, administrative data cover about 95% of Eu-Silc pensioners.

2.3.3.6 The total item non-response and number of obs in the sample at unit level of the common cross-sectional European Union indicators based on the cross-sectional component of EU-SILC, for equivalised disposable income and for the unadjusted gender pay gap

The total item non-response for total disposable household income is 0.46 per cent (number of observations is 108) and the total number of observations is 21.456 (unit=households). For unadjusted gender pay gap the total item non-response is 3.25 per cent (number of observations is 1477) and the total number of observations is 45.427 (unit=individuals 16 +).

2.4. Mode of data collection

The distribution of individuals aged 16 and over by data status (RB250) and by type of interview (RB260) is shown below. As the non-respondent individuals belonging to interviewed households have been completely imputed with donor method, the distribution of individual by data status is that of the achieved sample size of individuals aged 16 and over. reported in § 2.3.3.1.

Frequency *Percent* *Row Pct* *Col Pct* Rotational Group (**DB075**)	**RB250**	**RB260**		**Total**
	11	**Face to face interview-PAPI**	**Proxy interview**	
1	9773	7883	1890	9773
	22.07	17.8	4.27	22.07
		80.66	19.34	
		21.95	22.59	
2	10296	8297	1999	10296
	23.25	18.74	4.51	23.25
		80.58	19.42	
		23.1	23.89	
3	11394	9282	2112	11394
	25.73	20.96	4.77	25.73
		81.46	18.54	
		25.84	25.24	
4	12823	10457	2366	12823
	28.95	23.61	5.34	28.95
		81.55	18.45	
		29.11	28.28	
Total	44286	35919	8367	44286
	100	81.11	18.89	100

2.5. Interview duration

The mean household interview duration, calculated as prescribed amounts to 72 minutes.

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-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-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.

4. COHERENCE

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

In this section we present the main results of the comparison between EU-SILC data and external data sources for the principal income target variables. In particular, we focus on the following net income components: 1) Employee – cash, near cash income, non cash – income (PY010N+PY020N); 3) A variable computed as the sum of Old-age benefits (PY100N), Survival benefits (PY110N) and Disability benefits (PY130N). Data from National Accounts and Labour Force Survey by Istat, Fiscal Agencies of the Ministry of the Economy and Pensions Register by INPS (National Institute for Social Security) are used as external benchmarks. The table 1 below shows the closeness of the EU-SILC net employee income estimate respect to the National Accounts aggregate for the year 2007 (1.2% under). Table 2 shows that the EU-SILC estimate on the number of employed income earners during 2007 approximates to Fiscal Agency data (universe of taxable employed income recipients). Differences in applied definitions (i.e. domestic vs resident employment), reference period and coverage of the two data sources can explain well the gap in estimates. The tax register does not report information on incomes and employees of the hidden economy, that are partially included in the survey.

Table 1

PY010N+PY020N	millions of euro – 2006	
Economic components:	National Accounts* and Fiscal Agencies**	Eu-Silc_08
Gross employee income (cash, near cash, non cash) * (+)	461,208	-
Social contribution paid on employee income* (-)	38,143	-
Tax on employee income** (-)	83,997	-
Net employee income (PY010N+PY020N)	339,068	334,885

Table 2

Number of people who receive employee cash or near cash income	Thousands of units – 2007	
	Fiscal Agencies**	Eu-Silc_08
	20,627 (a)	21,191

Due to lack of harmonization, National Accounts data are not directly comparable with EU-SILC estimates on self-employment incomes. In table 3 are compared the EU-SILC 2006 estimate of number of self-employment incomes earners with the self-employed of other sources. Notice that in LFS a worker is classified as an independent on the basis of his/her main activity. With respect to NA, the estimate of self-employed units in term of full time equalised workers are presented. The EU-SILC estimate is referred to the number of people whose earnings from self-employment may have been temporary and/or from a secondary working activity.

Table 3

	Thousands of units – 2007		
Number of people who receive self-employment benefits (PY050N)	National Accounts (ula*)	Labour force survey estimate Istat	Eu-Silc_08
	7,125	6,055	7,729

(*) full time equivalent unit of workers

Finally, in tables 4 and 5 are reported data on social expenditure and beneficiaries for three kind of functions put all together: old-age, survival and disability. In both cases, EU-SILC 2007 estimates are quite close to the administrative data.

Table 4

PY100N-PY110N-Y130N Millions of euro - 2007

Economic Components:	National Account* and Fiscal Agencies**	Eu-Silc_08
PY100G-PY110G-PY130G (+)	238,579	-
Tax on Old-age-Survival-disability benefits (-)	32,300	-
PY100N-PY110N-PY130N	206,279	199,845

Table 5

	Thousands – 2007	
Number of beneficiaries of Old-age-Survival-disability pensions***	Pension Register of INPS (excluded persons aged under 15 and/or residing abroad)	Eu-Silc_08
	16,105	16,487

(***) the lump-sum transfers recipients are excluded