

## **Quality Report Belgian SILC2007**

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## **0. Introduction**

This report contains a description of the accuracy, precision and comparability of the Belgian SILC2007-surveydata. It is structured following the guidelines in the commission regulation (EC) no. 28/2004. This results in three chapters:

1. Indicators
2. Accuracy
3. Comparability

The Questionnaires (in French) can be found in annex to this report (see annex 1).

## **1. Indicators**

Explanation on the calculation of the Common Cross-sectional EU indicators, Equivalised disposable income can be found in document EU-SILC 131-rev/04.

The SAS-applications to calculate the indicators were provided by EUROSTAT (OMCind.sas; version 17/03/2008). The input data files of the calculation process (household register file, personal register file, household data file and personal data file) are the output files of the Belgium EU-SILC 2007 survey.

An overview of the common cross-sectional EU indicators based on the cross-sectional component of EU-SILC and equivalised disposable income can be found in annex 1, namely taken literally from the output of the SAS-applications.

Mean equivalized income.	
19116.35 Euro	

Risk – of - poverty threshold.	
1 person household	10538 Euro
2 adults and 2 dependent children	22129 Euro

Risk – of - poverty rate by age and gender.			
	% below ARPT		
	Total	females	males
Total	15	16	14
0-17	17		
18-64	13	13	12
18-24	17	16	17
25-49	11	12	11
50-64	13	14	12
65+	23	25	21

Risk – of - poverty rate by most frequent activity and gender.			
	% below ARPT		
	total	females	males
At work	4	4	4
unemployed	34	32	36
Retired	20	21	18
Other inactive	27	26	28
total inactive	25	25	25

Risk – of - poverty rate by tenure status.	
	% below ARPT
Owner or rent-free tenant	10 29

Risk – of - poverty rate by household type.	
	% below ARPT
total no dependent children	16
1 person (total)	26

2 adults, both < 65 years	8
2 adults, at least one 65+ years	21
Other no dependent children	6
total dependent children	15
single parent, at least 1 dependent child	36
2 adults, 1 dependent child	9
2 adults, 2 dependent children	8
2 adults, 3+ dependent children	18
other households dependent children	12

Risk – of - poverty rate by household type – single households		
		% below ARPT
Female		28
Male		23
< 65		24
65+		29

Risk – of - poverty rate by work intensity		
Household without dependent children	W=0	32
	0<W<1	7
	W=1	2
Household with dependent children	W=0	74
	0<W<0,5	39
	0,5<W<1	13
	W=1	4

Dispersion around at – risk—poverty-threshold	
	% below ARPT
40% of median	4
50% of median	8
70% of median	23

Risk – of - poverty rate by age and gender before all transfers.			
	% below ARPT		
	Total	females	males
Total	42	44	39
0-17	32	31	31
18-64	32	34	34
65+	91	92	89

Risk – of - poverty rate by age and gender before all transfers (including pensions).			
	% below ARPT		
	Total	females	males
Total	28	29	26
0-17	31		
18-64	26	28	25
65+	27	29	24

Relative median risk-of-poverty gap by age and gender.			
	% below ARPT		
	Total	females	males
Total	18	17	19
0-17	18	-	-
18-64	21	20	22
65+	15	17	14

S80/S20 quintile share ratio.	3.9
Gini coefficient.	26

## 2 . Accuracy

### 2.1 Sampling Design

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

The Belgian EU-SILC 2007 survey follows a stratified 2-stage sampling.

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

Primary units:

The *Primary Sampling Units* are the municipalities (or part thereof in the larger ones); in each of the 11 strata, they were drawn PPS, i.e. with repetitions allowed (for instance, Schaerbeek was drawn 6 times). In total, 275 draws were made in 2004, once forever (for the whole duration of EU-SILC).

Secondary units:

The *Final Sampling Units* are the (private) households.

Recall that, in 2004, 40 households had been selected in each PSU, numbered 1 to 40. The first 10 (whether or not they responded irrelevant) vanished from the panel in 2005, the other 30 (including possible split-offs) were followed according to the tracing rules.

Hence, the (cross-sectional) sample of SILC 2007 consists of

- “old” households (drawn between 2004 and 2006)
- and
- “new” households (drawn in 2007, staying until 2010).

In fact, it is only the selection of the new households that gave us some degree of freedom (see in particular 2.1.4)

In the D-file, three variables have been added:

- ✓ DB061 is the identification of the primary units (concatenation of 5 digits for the municipalities and one letter).
- ✓ DB063 is the ‘multiplicity order’, the number of times each PSU was drawn in the sample.
- ✓ DB071 is the order of selection of the new households within each letter.

#### 2.1.3 Stratification and sub-stratification criteria

The stratification criterion is the region (NUTS2 level). The 11 strata are the 10 provinces of Belgium and the Brussels Capital Region.

#### 2.1.4 Sample size and allocation criteria

In 2007 we managed to keep the number of responding households close to 6000, drawing 16 new hh in each PSU.

**Table 1: sample size and achieved response by NUTS2-units**

NUTS2	Name	Old (or strange) hh	New hh	Total hh	Accepted hh (DB135=1)
BE10	Brussels	887	800	1687	856
BE21	Antwerpen	847	688	1535	947
BE22	Limburg	368	256	624	461
BE23	Oost-Vlaanderen	612	512	1124	761
BE24	Vlaams-Brabant	494	416	910	611
BE25	West-Vlaanderen	566	334	900	680
BE31	Brabant Wallon	201	128	329	180
BE32	Hainaut	774	590	1364	851
BE33	Liège	536	399	935	580
BE34	Luxembourg	149	93	242	186
BE35	Namur	219	157	376	235
<b>Total</b>	<b>Belgium</b>	<b>5653</b>	<b>4373</b>	<b>10026</b>	<b>6348</b>

### 2.1.5 Sample selection schemes

Systematic sampling of secondary units (new households) in each primary unit selected, the households have been ordered according to the age of the reference person.

### 2.1.6 Sample distribution over time

### 2.1.7 Renewal of sample: Rotational groups

See above.

### 2.1.8 Weightings

Recall that, for the first year of the panel (=SILC 2004 in Belgium), the computation of weights involved three stages (described in 134-04)

- (a) initial weights
- (b) weights corrected for nonresponse
- (c) final (calibrated) weights

For 2007, a distinction has to be made between

“old” households i.e. households that contain at least one sample person who took part in 2006, and had to be surveyed again in 2007 according to the rotation and tracing rules (excluding the outgoing fourth) (household composition may have changed, whence quotations marks)

“new” households i.e. households that were drawn for the first time in 2007, among those households not containing any sample person already drawn before (quotations marks superfluous)

This distinction pertains to initial weights and nonresponse correction

Since the “old” households are selected indirectly from the 2004, 2005 or 2006 samples, and household composition may have changed, some kind of “weight sharing” must be applied to determine the (2007) initial weights, or rather base weights. On the other hand, “new” households have their own inclusion probability, whose inverse gives the initial weights;

For the “old” households, (2007) nonresponse=attrition can be linked with (2006) SILC information. For the “new” households, all we can rely upon to explain initial nonresponse is auxiliary information (household size, urban/rural character...) from the Population Register.

On the other hand,

Calibration can be done together for “old” and “new” households. With respect to our 2004 model, we decided in 2005 to relax the constraints (basically, calibrating at NUTS1-level instead of NUTS2), in order to decrease the standard deviation of weights.

This introduces the following sections

**2.1.8.1 Initial weights for the new households**

**2.1.8.2 Nonresponse correction for the new households**

**2.1.8.3 Base weights for the old households**

**2.1.8.4 Attrition correction for the old households**

**2.1.8.5 Calibration (all households)**

**2.1.8.1. Initial weights for the new households**

Belgium chose to draw the Primary Sampling Units (= municipalities or parts thereof) “forever”, and to rotate the Secondary Sampling Units (=households) within the selected PSU’s.

The 2004 PPS two-stage sampling design was self-weighting within each stratum  $h$ :  $x$  denoting any households in municipality  $X$ , we had (in 2004)

$P(x \text{ drawn}) = P(x \text{ drawn} | X \text{ drawn}) \cdot P(X \text{ drawn}) = n_h / N_X \cdot N_X / N_h \cdot g_h = n_h / N_H \cdot g_h$ , where

$n_h$  denotes the number of households to be drawn in the (selected) PSU (viz. 40)

$N_X$  the number of households in the PSU (in 2004)

$N_h$  the number of households in the stratum (in 2004)

$g_h$  the number of PSU’s drawn in the stratum.

(This is an oversimplification, since PSU are drawn with repetition; the selection probability for a PSU should be replaced by the expectation of selection multiplicity, and the term 40 by a multiple depending on the selection multiplicity...but the idea is the same).

In 2007, the picture has become

$P(x \text{ drawn}) = P(x \text{ drawn} | X \text{ drawn}) \cdot P(X \text{ drawn}) = m_h / M_X \cdot N_X / N_h \cdot g_h$ , where

$m_h$  is the number of households to be drawn in the (selected) PSU (depending on  $h$ )

$M_X$  is the number of households in the PSU (in 2007)

The factor  $N_X / M_X$  indicates the increase-decrease in inclusion probabilities in PSU  $X$  (still assuming  $X$  has been drawn) between 2007 and 2004.



Now it would seem logical to replace  $N_X$  by a smaller number, to account for the households<sup>1</sup> already drawn in 2004, 2005 or 2006, whence immunized from being drawn again in 2007.

However, the following argument shows that (assuming momentarily that  $X$  has been drawn and that the population figures  $N_X$  and  $M_X$  remain stable) matters are not so easy:

$$P(x \text{ drawn in 2007}) = \\ (P(x \text{ drawn in 2007}|x \text{ drawn before}) \cdot P(x \text{ drawn before})) + \\ (P(\text{drawn in 2007}|x \text{ not drawn before}) \cdot P(x \text{ not drawn before})),$$

the first term vanishes and the second equals  $n_h/(M_X-b)$ .  $(N_X-b)/N_h$ , where  $b$  denotes the number of hh already drawn; since both fraction terms are much larger than  $b$  (at least 900 in all selected PSU's), the ratio  $(N_X-b)/(M_X-b)$  is (close to 1, and) very close to  $N_X/M_X$ . Since the term  $b$  is an approximation anyway, we chose to stick to  $m_h/M_X$ .  $N_X/N_h$ .  $g_h$  as inclusion probabilities, and its inverse for initial weights **INIwei=DB080**. Note that, with this concept of DB080, the “new” hh correspond to the total Belgian population (some 4,5 millions private hh); before calibrating, these weights will be scaled down “to make room” for the old hh; recovering the strange hh means that the sum of the pre-calibration weights will be slightly larger than 4,5 millions (average of g-weights slightly less than 1)

### ***2.1.8.2. Nonresponse correction for the new households***

Following Eurostat's suggestion (see Document 065, WEIGHTING II. WEIGHTING FOR THE FIRST YEAR OF EACH SUB-SAMPLE), we replaced the homogeneous response groups (based on household size crossed with urbanity) ratio by a multiple regression model (based on the same dummy variables). By “responding”, we mean only those households whose results were accepted (DB135=1). For technical reasons, we used linear regression instead of logistic; since the (predicted) response turned out to be close to 50% for all categories, this is harmless.

The file was split by NUTS1 and the following variables were used

- DB100 = urbanity (constant in BE1 = Brussels; 3 values, so 2 dummies needed in model, elsewhere )
- HOUSEHOLD size, recoded into the four values “one”, “two”, “three” and “four or more” (so three dummies)

The regression produced a new variable “expresp”, allowing us to define **NRwei** = INIwei/expresp

### ***2.1.8.3 Attrition for the old households***

Before “sharing” the 2006 weights, a correction for attrition should be introduced. This year, we elected to perform this correction at the level of individuals, since a 2006 sample person either stays in the panel or leaves it (rotated out, left population, noncontact, refusal or inability to respond, while the structure of a household can change. Note that all household characteristics (e.g. HH020) can be distributed to the members.

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<sup>1</sup> Perhaps a bit less (households that vanished already subtracted) or a bit more (split households, both components of which stayed in PSU, should be subtracted twice)

This year, we chose to separate the “Children” (for which only basic personal information from the R-file and the distributed H-file is available) from the “Adults” (present in the 2006 P-file as well), i.e. those persons born in 1989 or before.

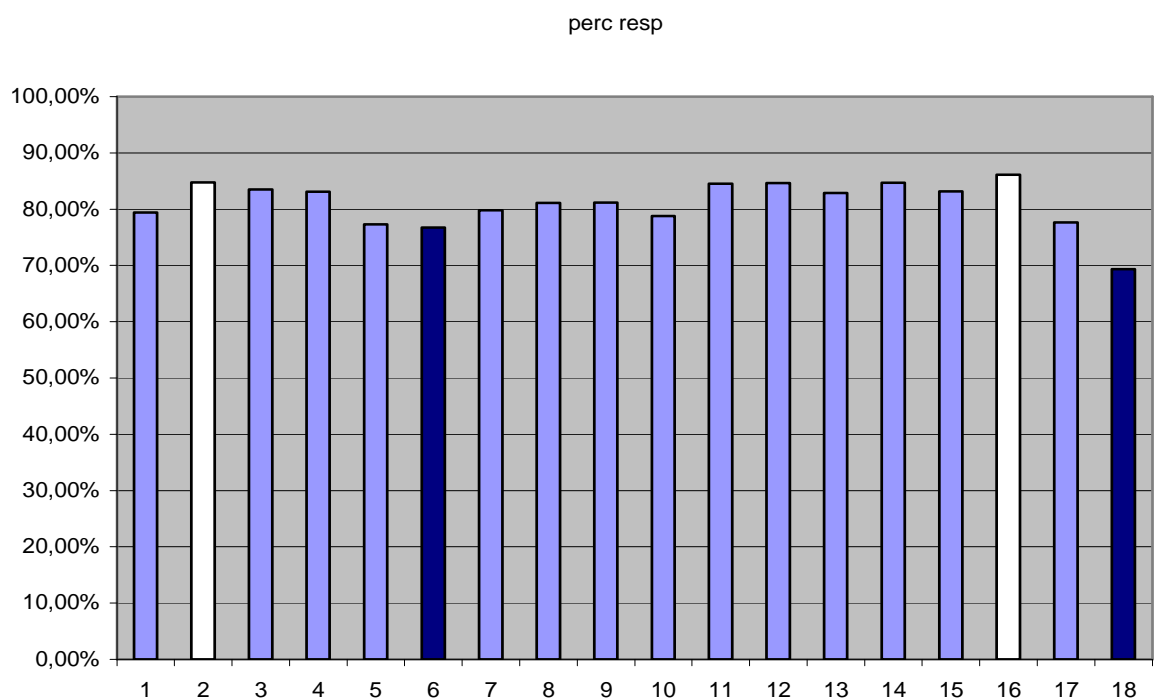
In the children’s model, the following predictors (all, except the last, from the 2006 file – although this does not matter much for group A) were used, grouped by type

- A. individual demographic information: age<sup>2</sup> from RB080, sex = RB090, country of birth (= pb210 for adults, but available for children too in our Belgian files);
- B. housing information: dwelling type = HH010 and tenure = HH020
- C. household type: a limited number of dummies, as there is at least one dependent child;
- D. monetary indicators: we refrained from taking the equivalised income (outliers), but took a transform of it, as well as the dummy “poor or not” and the subjective ability to make ends meet = HS120
- E. sampling and rotation: number of years in panel (from DB075) and urbanisation (=DB100)
- F. one variable (paradata) related to fieldwork in 2006 (computed from HB040 and HB050)
- G. one variable indicating a possible change of interviewer (suitably imputed for hh that did not participate in 2007)

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<sup>2</sup> Let us start with a picture (Z in function of age class, “1” denoting the range 0-4, ..., “17” the range “80-84”, “18” corresponds to ‘85 or older”, age computed here as 2006-rb080)

The highest 2 scores are depicted in white, the lowest 2 in dark blue. We distinguish two local maxima (one among children 5-9, the other one in the area of “old but not too old”) and two local minima (one among “young adults” and one for “very old”).



For the adults, the same predictors were used, and moreover

H. variables from the P-file (related to education level and health);

I. a “Belgian” variable, corresponding to satisfaction with the society in general) were integrated.

We used linear regression; (with some truncation, when the estimated response propensity turned out to be larger than one).

#### 2.1.8.4 Weight sharing

We followed Eurostat’s recommendation "EU-SILC weighting procedures: an outline" and shared the calibrated 2006 weights, after correcting for attrition (instead of the initial weights, see Lavallée).

This can be illustrated by an imaginary example, dealing simultaneously with fusions (persons *A* & *B* in same 2006 hh, *C* in another 2006 hh, so “fusion” in the sense of DB110 occurs), new members (a baby like *E* or already in population like *D*); we focus on the 2007 hh, what happened to those who co-resided with *A* and *B* or with *C* in 2006 (left or split) is irrelevant!

Note that

- RB050 = weight 2006: same for *A* & *B*, vacuous for *D* and *E*
- Newi: in general a bit larger than RB050; *A*’s differs from *B*’s (attrition correction at individual level)
- Somwe = 950+1000+850 involves only *A*, *B* and *C*
- *Weiind*: =  $\frac{1}{4} * \text{somwe}$  (*A B C D* : four contribute to the denominator)<sup>3</sup>

Person in 2007 hh	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
RB110 (2007)	1	1	2	3	4
RB050 (weight 2006)	800	800	600	---	---
Newi = Weight 2006 (after attrition correction)	950	1000	850	---	---
Somwe (sum Newi over 2007 hh)	2800	2800	2800	2800	2800
<i>Weiind</i>	700	700	700	700	700

*Weiind* will be injected as “initial” weight in the final calibration job.

#### 2.1.8.4 Calibration

We first put the pieces together: *weiind* is defined as

<sup>3</sup> Do we abide by the Eurostat rules (starting from base weights, it is unclear whether “their” attrition correction precedes or follows weight sharing) ?

There remain some additional categories of persons to be considered:

-Children born to sample women. They receive the weight of the mother (this assumes that the baby belongs to his/her mother’s hh)

-Persons moving into sample households from outside the survey population. They receive the average of base weights of existing household members (vacuous here, as RB110 enables us to identify the newborns, but not the immigrants or the –few- persons moving from a collective to a private hh)

-Persons moving into sample households from other non-sample households in the population – these are “co-residents” and are given zero base weight.

- new = started in 2007 (initial weight, corrected for initial nonresponse, scaled, see 2.1.8.1)
- old = took part in 2006 (2006 weight, corrected for attrition and weight sharing if necessary, see 2.1.8.4)
- strange = did not take part in 2006 (initial weight, non correction)

In terms of persons, the weiind statistics were

Type	# ind	Mean of weiind
NEW	4884	612,08
OLD	10009	869,74
BACK	600	408,37
Total	15493	770,65

Recall that 11 *sampling* strata were used (provinces= NUTS2); we use 3 *extrapolation* strata (the 3 NUTS1 regions BRUssels=BE1, VLAanderen=BE2 and WALlonia=BE3)

Calibration model

**VLA, WAL:**

SIZE4+(AGE8XSEX2)+PROV5 → 20 individual<sup>4</sup> + 4 household constraints

**BRU:**

SIZE4+(AGE8XSEX2) → 16 individual + 4 household constraints

Prov = province where interviewed (differs from DB040 in two cases)

Individual constraints 27=16+11 (age\*sex + prov; note that each province belongs to one single region (extrapolation stratum), for the other two regions, the total is set to 0 and the condition is vacuous)

Household constraints 4 (size: "1", "2", "3 or "4 & more",)

Calibration type (after some trials and errors...): linear

### 2.1.8.7 Final longitudinal weights

Combination of steps above...

### 2.1.8.8. Final cross-sectional weights

**Statistics**

	N	Minimum	Maximum	Mean	Std. Dev.
Final weights	6348	156,53	4576,81	715,74	300,13

*Historical remark: .*

Year	n	Min	Max	Mean	Std	Calibration
2004	5275	135,49	5816,95	841,64	292,64	Exponential
2005	5137	58,18	7878,79	871,64	325,86	Truncated
2006	5860	192,51	3292,18	771,67	246,75	Linear, modified intermediate weights
2007	6348	156,53	4576,81	715,74	300,13	Linear

<sup>4</sup> Five provinces and 16 age\*sex categories, but sum over provinces = sum over age\*sex

### **2.1.9 Substitutions**

No substitution was applied in our survey.

## 2.2 Sampling errors

### 2.2.1 Standard errors and effective sample size

In table 2 an overview of the **standard errors** for the common cross-sectional EU indicators and equivalised disposable income.

An overview of the achieved **sample size** for the 'Laeken indicators' and equivalised disposable income can be found in table 8 of §2.3.3.6.

The design effect is not computed yet for the intermediary report but will be provided in the final quality report.

Table 2: Standard errors for the common cross-sectional EU indicators, equivalised disposable income

Table 2: Standard errors for the common cross-sectional EU indicators, equivalised disposable income and the gender pay gap

Risk – of - poverty threshold. SE	
1 person household	135.6 Euro

Risk – of - poverty rate by age and gender. SE prop. below ARPT			
	<b>Total</b>	<b>females</b>	<b>males</b>
<b>Total</b>	0.84%	0.93%	0.97%
<b>0-15</b>	1.87%	2.20%	2.23%
<b>0-64</b>	0.94%	1.01%	1.08%
<b>16+</b>	0.80%	0.92%	0.94%
<b>16-64</b>	0.86%	0.95%	1.04%
<b>16-24</b>	2.11%	2.54%	2.86%
<b>25-49</b>	1.00%	1.10%	1.32%
<b>50-64</b>	1.37%	1.67%	1.62%
<b>65+</b>	1.97%	2.40%	2.16%

Risk – of - poverty rate by most frequent activity and gender. SE prop. below ARPT			
	<b>total</b>	<b>females</b>	<b>males</b>
<b>Total</b>	0.84%	0.93%	0.97%
<b>At work</b>	0.57%	0.68%	0.80%
<b>unemployed</b>	3.03%	3.90%	4.28%
<b>Retired</b>	1.72%	2.24%	1.93%
<b>Other inactive</b>	1.96%	2.08%	3.07%
<b>total inactive</b>	1.37%	1.53%	1.75%

Risk – of - poverty rate by tenure status. SE prop. below ARPT	
<b>Total</b>	0.84%
<b>Owner or rent-free</b>	0.81%
<b>tenant</b>	2.46%

Risk – of- poverty rate by household type. SE prop below ARPT	
<b>total no dependent children</b>	1.05%
<b>1 person (total)</b>	2.12%
<b>2 adults, both &lt; 65 years</b>	1.66%
<b>2 adults, at least one 65+ years</b>	2.36%
<b>Other no dependent children</b>	2.04%
<b>total dependent children</b>	1.45%
<b>single parent, at least 1 dependent child</b>	4.63%
<b>2 adults, 1 dependent child</b>	2.29%
<b>2 adults, 2 dependent children</b>	1.86%
<b>2 adults, 3+ dependent children</b>	4.07%
<b>other households dependent children</b>	5.36%

Risk – of - poverty rate by household type – single households SE prop. below ARPT	
<b>Female</b>	2.84%
<b>Male</b>	3.08%
<b>&lt; 65</b>	2.60%
<b>65+</b>	3.37%

Risk – of - poverty rate by work intensity SE prop. Below ARPT	
<b>Household without dependent children</b>	W=0 2.88%
	0<W<1 1.72%
	W=1 0.81%
<b>Household with dependent children</b>	W=0 5.46%
	0<W<0,5 11.10%
	0,5<W<1 2.42%
	W=1 0.86%

Dispersion around at – risk—poverty-threshold SE prop. Below ARPT	
<b>40% of median</b>	0.61%
<b>50% of median</b>	0.74%
<b>70% of median</b>	0.90%

Risk – of – poverty rate by age and gender before all transfers. SE prop. below ARPT			
	<b>Total</b>	<b>females</b>	<b>males</b>
<b>Total</b>	0.90%	1.02%	1.04%
<b>0-15</b>	2.06%	2.58%	2.43%
<b>16+</b>	0.86%	0.97%	1.03%
<b>16-64</b>	1.00%	1.11%	1.19%
<b>65+</b>	2.02%	2.46%	2.27%

Risk – of – poverty rate by age and gender before all transfers (including pensions). SE prop. below ARPT			
	<b>Total</b>	<b>females</b>	<b>males</b>
<b>Total</b>	0.90%	0.99%	1.04%
<b>0-15</b>	2.06%	2.57%	2.44%
<b>16+</b>	0.86%	0.93%	1.04%
<b>16-64</b>	1.04%	1.15%	1.22%
<b>65+</b>	1.22%	1.23%	1.71%

Relative median risk-of-poverty rate gap by age and gender SE prop. below ARPT			
	<b>Total</b>	<b>females</b>	<b>males</b>
<b>Total</b>	1.06%	1.07%	1.04%
<b>0-15</b>	1.06%	-	-
<b>16+</b>	1.06%	1.07%	1.03%
<b>16-64</b>	1.02%	1.03%	1.00%
<b>65+</b>	1.10%	1.11%	1.07%

S80/S20 quintile share ratio. 0.16

Gini coefficient. 1.10





## 2.3 Non-sampling errors

### 2.3.1 Sampling frame and coverage errors

The sampling frame is the Central Population Register. This Register includes all private households and their current members residing in the territory. Persons living in collective households and in institutions are excluded from the target population. The Central Population Register of 1 February was used.

Updating actions: Central Population Register is updated two times during a month. The changes were communicated to the interviewers.

As there was a period of one month between the drawing of households and the survey itself, over-coverage, under-coverage and misclassification could be happen.

Over-coverage: Persons who died before the survey. Households who moved outside Belgium before the survey. Address is not the principal residence.

Under-coverage: Immigrants who came in Belgium before the survey. Persons who moved from a household to create a new household. Diplomats exempt from an inscription in the national register. Refugees on a waiting list.

Misclassification: Household who moved from a region in Belgium to another region of Belgium.

The size of coverage errors is not available but it was obviously small.

### 2.3.2 Measurement and processing errors

#### 2.3.2.1. Measurement errors

Measurement errors can occur from different sources, such as the survey instrument, the information system, the interviewer, the mode of collection (CAPI interview). We describe here a few elements by which possible measurement errors can be detected or which show on the other side the efforts taken to avoid as much as possible measurement errors.

#### • *Questionnaire construction*

- ✓ The questionnaire of the SILC2007 survey is the result of several steps:
- ✓ For building up the questionnaire we took the blue print questionnaire of Eurostat as the basis (documents SILC055, SILC065 and EU-SILC65/02 Addendum II). The order of the questions and the groups (themes of) questions is taken from this blue print. The majority of the questions are almost literally copied (and translated), other questions are changed, however, because experiences in Belgium gave better results posing the questions in another way (The questionnaires were developed in collaboration with the universities that have the experience of the ECHP/PSBH project in Belgium).

- ✓ After each survey an evaluation of the questionnaire was made (detection of the problematic or difficult to answer questions based on the comments of the interviewers and on a study of the item non-response). When building up the SILC2007 questionnaire we took account of this evaluation.

• ***Evaluation of the duration of the interview and the level of difficulty of the questions***

At the end of the interview, the household contact person was asked the following two evaluative questions:

*We would like to thank you for your co-operation. We are at the end of the questionnaire.*

*For the evaluation of this questionnaire we would like to ask following questions.*

*1. How easy or difficult did you find the answering of the questionnaire in general?*

*Very difficult (code 1)*

*Difficult (code 2)*

*Not difficult but neither easy (code 3)*

*Easy (code 4)*

*Very easy (code 5)*

*2. What do you think of the length of the questionnaire?*

*Too long (code 1)*

*Neither too long neither too short (code 2)*

*Too short (code 3)*

In tables 3A and 3B the distribution of the answers on these questions are presented.

**Table 3A : Opinion on degree of difficulty of the questionnaire**

	N	%
Very difficult	17	.3
Difficult	211	3.3
Neither difficult/ Nor easy	2218	34.9
Easy	3412	53.7
Very easy	466	7.3
missing	24	.4
total	6348	100.0

**Table 3B : Opinion on the duration of the interview**

	N	%
Too long	221	3,5
Neither too long/ Neither too short	5967	94
Too short	136	2,1
missing	24	0,4
total	6348	100

For the majority of the participating households (61%), the questions were easy or very easy to interpret. For 94% of the households the interview was neither too long, nor too short. This figure is better than in 2006 where 90 % of the respondents found the interview neither too long nor too short and is probably the result of an attempt of Statistics Belgium to limit the charge on the respondent in every step of the interview.

As an evaluation after the survey we have sent the households and the interviewers each a different evaluation questionnaire. These questionnaires (the French version) can be found in annex to this Quality Report (see annex 2).

- ***Mismatch in time between household composition and household income (see also §3.1)***

A number of inconsistencies result from a mismatch between the composition of the household at the moment of the interview (between April and November of year x) and the income of the previous year (year x-1).

This mismatch can bias the measurement of poverty status in several ways. For example:

- ✓ Persons who were full-time students in year x-1 (and depending on their parents), but were employed at the time of the interview (and living independently in a one person household for example) will report an income equal to 0 in year x-1 and will be wrongly classified as a poor household.

Other examples can also occur for persons where the household composition changed:

- ✓ For a housewife who was married in year x-1, but divorced and is working at the time of the survey there will also be a mismatch
- ✓ For a household which received family allowances for a student in year x-1, but where the student is no longer part of the household in year x there will also be a mismatch
- ✓ For a household with a person working in year x-1, but retired at the moment of the survey (in year x) a mismatch will also occur. Take notice of the fact that, as the examples show the bias can go in both directions: under and over reporting of income. In each one of the examples, the choice to situate the income reference period in the past is the cause, however.

- ***Error in the routing***

There was one error in the routing. In the household questionnaire, in the part concerning childcare, the selection was made on the base of actual age instead of age in the income reference period. So we missed information for some children born in 1994.

- ***Interview training (Number of training days and information on the intensity and efficiency of interview training)***

Overall we had the impression that the working-experience of the interviewers with EU-SILC starts to pay off. In our opinion the basis data were better for SILC 2007 than for previous waves. All new interviewers have to follow a two day formation. All trained interviewers followed a formation for an hour and half.

They both had to complete a test-interview before they could download their data. So we can be sure they can completely manage the use of the PC and that they know the questionnaire before they go on the field.

A training group for new interviewers consisted of minimum 5 to maximum 20 interviewers, and according to the size of the training group there were 1 or 2 trainers.

Even though the accent was given to the practical side of the training (getting to know the questions and mastering the CAPI-program by imitating interview situations), three manuals were distributed and explained during the training:

- A general manual ('Manuel general aux enquêteurs') containing information about the objectives of the survey, the organisation of the survey, legal and administrative aspects around the survey, fieldwork aspect (how to contact the household, how to introduce oneself, who answers which questions, time delays, ...) and the content of the questionnaires.
- A second manual ('Manuel contenu') with all kinds of additional explanations and examples for certain questions/answers.
- A third manual ('Manuel CAPI') about the use of the portable PC for the SILC Computer Assisted Personal Interviews and about the data entry program itself.

The first day of the training there was half a day for learning about and discussing the first two manuals. In the afternoon the trainees received their laptop and got to know the survey and the tool to carry out the interview in practice. One test-interview was simulated collectively. The second day of the training a small part of the time was dedicated to testing to send the data electronically after carrying out the interview. All the rest of the day interviewers practiced several interviews and interview situations with each other on the basis of household profiles that were given. There was also a lot of time for questions and discussions in between these test-interviews. At the end of the training sessions the instructors had a good image on the degree in which each interviewer ameliorated during the training and on the degree in which they mastered the work. For certain interviewers two days of training was more than enough to master the work, for others it was necessary that they practiced some more at home on specific aspects of carrying out this survey (for example using of the CAPI-program itself, working on the content of the survey, ...). They were recommended to do so before carrying out their first real interview. They were often also recommended to start interviewing one-person households.

A training group for trained interviewers consisted maximum 30 interviewers with two trainers. The accent was also given on the content: questions that changed, the module 2007 and questions, which are misunderstood by the interviewers. We made an extra manual for trained interviewers. The trained interviewers obtained four manuals:

- A general manual ('Manuel general aux enquêteurs') containing information about the objectives of the survey, the organisation of the survey, legal and administrative aspects around the survey, fieldwork aspect (how to contact the household, how to introduce oneself, who answers which questions, time delays, ...) and the content of the questionnaires.
- A second manual ('Manuel contenu') with all kinds of additional explanations and examples for certain questions/answers.
- A third manual ('Manuel CAPI') about the use of the portable PC for the SILC Computer Assisted Personal Interviews and about the data entry program itself.

- A fourth manual ('Modifications du questionnaire : module 2007) about the module, changed questions and questions misunderstood by the interviewers.

• ***Skills testing before starting the fieldwork***

Interviewers were selected from the interviewer database that Statistics Belgium has centralised for all the survey's that are carried out by the institute. For each interviewer a basic curriculum vitae is present in the database (mentioning for example for which surveys they have experience, their language knowledge, their knowledge of pc, ...). A specific unit at Statistics Belgium ('Unité Corps Enquêteurs') is occupied with the selection of the interviewers for each survey; they have good contact with and knowledge of the interviewers. They try to find the best interviewer for each of the geographical areas to cover for SILC. This is not always an easy task because for certain geographical areas several interviewers are candidate, but for other geographical unit there are few or no candidates. Note that interviewers in Belgium most often carry out this work as a second or casual occupation.

• ***Skills control during the fieldwork***

During the fieldwork we controlled the work of the interviewers by looking at some of their completed questionnaires. We gave extra attention to all new interviewers and to some trained interviewers that we suspected to be less accurate. Remarks (positive as negative) resulting from these controls were immediately communicated to the interviewer so they could improve their way of working and interviewing.

• ***Number of households by interviewer***

Groups of secondary units consisted of about 35 households, depending on the strata. Most of the interviewers had one group of households. Nevertheless several interviewers also had more groups:

interviewers with 1 group:	73
interviewers with 2 groups:	49
interviewers with 3 groups:	15
interviewers with 4 groups:	7
interviewers with 5 groups:	2
interviewers with 6 groups:	1
interviewers with 7 groups:	1

### 2.3.2.2. Processing errors

Belgium used the CAPI–method to interview the persons. The questionnaire was programmed in Blaise. So processing errors due to data entry (from a written to an electronic format) were reduced to a minimum.

Statistics Belgium programmes several data entry and coding controls in the Blaise program. Below an overview of both data entry and coding controls is presented.

#### • *Data entry controls*

**Table 4: Overview of data entry controls**

Question number	Control	Remarks
Contact form		
Column 21, 22, 23 and 24	You can't combine father, mother or being spouse with 'being younger than 12 years'.	
Column 8,21 and 22	It's not possible to combine being 'female' and being 'father'. It's not possible to combine being 'male' and being 'mother'.	
Column 21 and 22	Mother and father have to be older than their children (and at least being older than 12 years).	
Column 21, 22, 23, 24	Parents of the spouses or of the partners must be different.	
Column 23, 24	You can't mix 'spouse' and 'partner'. Must choose one of both for the couple.	
Household questionnaire		
H5 and H7:	It is not possible to combine H5, code 6 with H7 code 2, 3, 4, 5, 6, 7, 8, 9, 10	
H13	Enter a numeric value between 1900 and 2007	
H19	The first of the reimbursement must be between 1954 and 2007 (included). The year of the first purchase must be at the same time or later than the date of buying.	
H27, category g, H45 category g:	Code 1 is only possible if at question H5, code 3,4,5,6 or 7	
H44	Not possible to answer more than 12 months	
H95	Persons have to be between the age of 11 and 23 (included) to obtain a scholarship for secondary school	

H97 Persons have to be between the age of 16 and 99 (included) to obtain a scholarship for higher education

Individual questionnaire

Question I6, I7 and I8	You can't combine code 2 of questions I6 and I7 with code 1, 2, 3, 4 and 10 of the question I8.	
Question I6 , I7 and I8	You can't combine code 1 of question I6 or question I7 with code 5, 6, 7, 8, 9 and 11 of the question I8.	
Question I13 and I14:	You can't combine code 1,2,3,4 and 10 question in I13 with code 2 and 3 in question I14	
Question I13 et I16	You can't combine code 1, 2, 3, 4 and 10 of the question I13 with code 1, 2 of the question I16.	
Question I14 and I16	You can't combine code 2 or 3 of the question I14 and code 3 or 4 of the question I16.	
Question I21 and I22	You can't combine code 1,2,3,4 or 10 in question I21 with code 2 or 3 in question I22.	
Question I21 and I29.	You can't combine code 1, 2, 3, 5, 6 of the question I29 with the code 1, 2, 3, 4 or 10 of the question I21.	
Question I29 and I22	You can't combine code 7 of the question I 29 with code 2 or 3 of the question I22.	
Question I37	Age has to be less than current age and not less than 8 year.	
Question I38	Number of years can't be higher than current age minus the age mentioned in question I37.	
Question I 52, I 92.	Can't be higher than 12 months.	
Question I 116	Can't enter a year which is before date of birth.	
Question I25 (I26) (gross income) and question I27 (I28) (net income)	Amounts given in question I25 can't be higher than the amounts given in the question I27.	Ditto for the questions I47 (I48) and I50 (I51), I53 and I54, I55 and I56, I90 and I91, and I93 and I94, I98_A, B, C, D, E, F, G, H and I99 and I102_A, B, C, D, E and I115_ A, B, C, D, E and I116_ A, B
Question I25 and I 26	If the person didn't give an exact amount at the question I25, please go to the question I26.	Ditto for the question I27 and I28; I47 and I48; I50 and I51

Next to these controls, some warnings were implemented in order to ask the interviewer to verify the introduced data in the case of abnormally high or low

amounts. A warning is a simple text box with a message such as ‘This amount is very low, are you sure the amount is right?’ or ‘This amount is very high, are you sure the amount is right?’. The interviewer has then to confirm the value or to change it in case of error.

Household questionnaire	
H16	If lower than 500 or higher than 1000000
H22 (monthly)	If lower than 20 or higher than 2000
H22 (half-yearly)	If lower than 100 or higher than 10000
H22 (yearly)	If lower than 200 or higher than 20000
H23 (monthly)	If lower than 20 or higher than 2000
H23 (half-yearly)	If lower than 100 or higher than 10000
H23 (yearly)	If lower than 200 or higher than 20000
H26	If lower than 25 or higher than 5000
H33	If lower than 50 or higher than 10000
H34, H37, H41	If lower than 100 or higher than 5000
H43, H77, H84	If lower than 25 or higher than 1000
H66	If lower than 100 or higher than 25000
H71B	If lower than 25 or higher than 750
H79, H86	If lower than 25 or higher than 1000
H93	If lower than 100 or higher than 1500
Individual questionnaire	
I25, I27, I47, I50, I90, I91	If lower than 500 or higher than 5500
I53, I54, I55, I56, I86, I93, I94	If lower than 6000 or higher than 66000
I58	If higher than 1200
I98B, I98C, I115B, I115C	If higher than 1350
I99, I102B, I102C	If higher than 5400

Some warnings concern other values than amounts. It’s the case for H17 when the value is higher than 30 years (‘A period of 30 years is really exceptional, are you sure it is right?’) and for H18 when the interest equals 0 or is higher than 15. It’s also the case for H90 for households who say they didn’t receive family allowance where children are currently living in the household (‘Are you sure you didn’t receive any family allowance in 2006 (there is a person of less than 18 year in your household)?’).



• **Coding controls**

For the questions relating to occupation (ISCO) and the economic activity of the local unit (NACE) of the main job for respondent, the interviewer could directly insert the corresponding code of the Statistics Belgium. If the interviewer didn't know the corresponding code he could look it up in his computer. If he still hesitated, he could enter a brief description beside the code he entered. These comments were compared with the codes after the fieldwork to correct the data if necessary.

We had to recode the question concerning the 'highest degree currently obtained' to match it to the ISCED-coding scheme.

**Table 5 : 'Quel est le plus haut diplôme ou le plus haut certificat que vous avez obtenu (jusqu'à présent)' – coding and recoding to ISCED-codingscheme**

Coding SILC 2003	ISCED
<b>Pas de diplôme ou certificat</b>	0
<b>Enseignement primaire</b>	1
<b>Certificat de l'enseignement primaire spécial)</b>	1
<b>Certificat de l'enseignement secondaire spécial</b>	2 or 3
<b>Enseignement secondaire (ancien système)</b>	
- Enseignement secondaire inférieur	2
- Contrat d'apprentissage/Enseignement secondaire professionnelle à temps partiel	3
- Enseignement secondaire supérieur – général	3
- Enseignement secondaire supérieur – technique	3
- Enseignement secondaire supérieur – artistique	3
- Enseignement secondaire supérieur – professionnel	3
<b>Enseignement secondaire (nouveau système)</b>	
- premier degré enseignement secondaire général	2
- premier degré enseignement secondaire professionnel préparatoire	2
- deuxième degré enseignement secondaire général (jusque 4 <sup>e</sup> année)	2
- deuxième degré enseignement secondaire artistique (jusque 4 <sup>e</sup> année)	2
- deuxième degré enseignement secondaire technique (jusque 4 <sup>e</sup> année)	2
- deuxième degré enseignement secondaire professionnel (jusque 4 <sup>e</sup> année)	2
- troisième degré enseignement secondaire général (jusque 6 <sup>e</sup> année)	3
- troisième degré enseignement secondaire artistique (jusque 6 <sup>e</sup> année)	3
- troisième degré enseignement secondaire technique (jusque 6 <sup>e</sup> année)	3
- troisième degré enseignement secondaire professionnel (jusque 6 <sup>e</sup> année)	3
- septième année enseignement secondaire général (jusque 7 <sup>e</sup> année)	4
- septième année enseignement secondaire artistique (jusque 7 <sup>e</sup> année)	4
- septième année enseignement secondaire technique (jusque 7 <sup>e</sup> année)	4

- septième année enseignement secondaire professionnelle (jusque 7 <sup>e</sup> année)	4
- quatrième degré enseignement secondaire professionnel	4

**Enseignement secondaire professionnelle à temps partiel et formation des classes moyennes**

- Deuxième degré enseignement secondaire professionnel à temps partiel	2
- Troisième degré enseignement secondaire professionnel à temps partiel	3
- Certificat de qualification	3
- Contrat d'apprentissage ou formation d'entreprise des classes moyennes	4

**Enseignement supérieur**

- Enseignement supérieur non universitaire de type court	5
- Enseignement supérieur non universitaire de type long	5
- Universitaire : Diplôme de Candidature	5
- Universitaire : Diplôme de Licence	5
- Universitaire : Formation prolongée : complémentaire (DEC) ou approfondi (DEA, Master,...)	5
- Thèse de doctorat	6

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In order to determine the ISCED level attended for persons in education at the moment of the interview (variable PE020) information of two variables (i158 and i159 of the questionnaire) needed to be combined. The coding in question i158 was in too broad categories to determine the ISCED-level directly. Question i159 (in which class were you in 2006-2007?) supplied the necessary information to determine the ISCED-level after all..

**• Other controls and other problems**

- ✓ We checked the number of minutes to complete the household and the individual questionnaires (see §2.5). The household questionnaire took about 19 minutes and the individual questionnaires together 24 minutes in means.

**2.3.3 Non-response errors**

**2.3.3.1 Achieved sample size**

**• Number of households for which an interview is accepted for the database**

Total: 6348

Rotational group breakdown: group 1: 1804  
group 2: 1619  
group 3: 2026  
group 4: 899

**• Number of persons of 16 years or older who are members of the households for which the interview is accepted, and who completed a personal interview**

Total: 12236

Rotational group breakdown: group 1: 3507  
group 2: 3088  
group 3: 3855

group 4: 1786

### 2.3.3.2 Unit non-response

**For the total sample (four rotational groups)**

• ***Household non-response rates (NRh)***

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

where

$$Ra = \frac{\text{Number of addresses successfully contacted}}{\text{Number of valid addresses selected}} \\ = \frac{\sum [DB120 = 11]}{\sum [DB120 = all] - \sum [DB120 = 23]} = \frac{9865}{10026 - 120} = 0.9959$$

$$Rh = \frac{\text{Number of household interviews completed and accepted for the database}}{\text{Number of eligible households at contacted addresses}} \\ = \frac{\sum [DB135 = 1]}{\sum [DB130 = all]} = \frac{6348}{9865} = 0.6435$$

$$NRh = (1 - 0.9959 * 0.6435) * 100 = 35.91\%$$

So, the household non-response rate is 35.9%

• ***Individual non-response rates (NRp)***

$$NRp = (1 - (Rp)) * 100$$

Where

$$Rp = \frac{\text{Number of personal interview completed}}{\text{Number of eligible individuals}}$$

$$= \frac{12236}{12322} = 0.9930$$

$$NRp = (1 - 0.9930) * 100 = 0.7\%$$

So, the individual non-response rate is 0.7%

• ***Overall individual non-response rates (\*NRp)***

$$*NRp = (1 - (Ra * Rh * Rp)) * 100 = \\ (1 - (0.9959 * 0.6435 * 0.9930)) * 100 = 36.36\%$$

So, the overall individual non-response rate is 36.36 %.

**For the new households (rotational group 3)**

• **Household non-response rates (NRh)**

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

where

$$Ra = \frac{\text{Number of addresses successfully contacted}}{\text{Number of valid addresses selected}}$$

$$= \frac{\sum [DB120 = 11]}{\sum [DB120 = all] - \sum [DB120 = 23]} = \frac{4215}{4373 - 118} = 0.9906$$

$$Rh = \frac{\text{Number of household interviews completed and accepted for the database}}{\text{Number of eligible households at contacted addresses}} =$$

$$= \frac{\sum [DB135 = 1]}{\sum [DB130 = all]} = \frac{2026}{4215} = 0.4807$$

$$NRh = (1 - 0.9906 * 0.4807) * 100 = 52.38\%$$

So, the household non-response rate is 52%

• **Individual non-response rates (NRp)**

$$NRp = (1 - (Rp)) * 100$$

Where

$$Rp = \frac{\text{Number of personal interview completed}}{\text{Number of eligible individuals}}$$

$$= \frac{3855}{3889} = 0.9913$$

$$NRp = (1 - 0.9913) * 100 = 0.87\%$$

So, the individual non-response rate is 0.87%

• **Overall individual non-response rates (\*NRp)**

$$*NRp = (1 - (Ra * Rh * Rp)) * 100 =$$

$$(1 - (0.9906 * 0.4807 * 0.9913)) * 100 = 52.7961$$

So, the overall individual non-response rate is 53 %.

2.3.3.3 Distribution of households by ‘record of contact at address’ (DB120), by ‘household questionnaire result’ (DB130) and by ‘household interview acceptance’ (DB135)

**Table 6A: Distribution of households by ‘record of contact at address’ (DB120), by ‘household questionnaire result’ (DB130) and by ‘household interview acceptance’ (DB135)**

	Number	Percentage	Group1		Group2		Group3		Group4	
<b>Total</b> (DB120 =11 to 23)	10026	100%	2509	100%	2070	100%	4373	100%	1074	100%
Address contacted (DB120 =11)	9865	98.4	2507	99.9	2069	99.9	4215	96.4	1074	100
Address non-contacted (DB120 =21 to 23)	161	1.6	2	0.1	1	0.1	158	3.6	0	0
<b>Total address non-contacted</b>	161	100	2	100	1	100	158	100	0	0
Address cannot be located (DB120 =21)	35	22	1	50	0	0	34	21	0	0
Address unable to access (DB120 =22)	6	4	0	0	0	0	6	4	0	0
Address does not exist (DB120 =23)	120	74	1	50	1	100	118	75	0	0

**Table 6B: Distribution of households by ‘household questionnaire result’ (DB130) and by ‘household interview acceptance’ (DB135)**

	Number	Percentage	Group1		Group2		Group3		Group4	
<b>Total</b>	9865	100	2507	100%	2069	100%	4215	100%	1074	100%
Household questionnaire completed (DB130 =11)	6349	64.4	1805	72	1619	78	2026	48	899	84
Interview not completed (DB130 =21 to 24)	3516	35.6	702	28	450	22	2189	52	175	16
<b>Total interview not completed</b> (DB130 =21 to 24)	3516	100	702	100	450	100	2189	100	175	100
Refusal to cooperate (DB130 =21)	1990	57	303	43	251	56	1355	62	81	46

Entire household temporarily away (DB130=22)	673	19	132	19	69	15	427	20	45	26
Household unable to respond (DB130=23)	271	8	72	10	57	13	118	5	24	14
Other reasons	582	16	195	28	73	16	289	13	25	14
<b>Household questionnaire completed</b> (DB135=1+2)	6349	100	1805	100	1619	100	2026	100	899	100
Interview accepted for database (DB135=1)	6348	99.9	1804	99.9	1619	100	2026	100	899	100
Interview rejected (DB135=2)	1	0.1	0	0.1	0	0	0	0	0	0

Longitudinal rate for the 3 groups to follow :  $4322/5650=76.5\%$

### 2.3.3.4 Distribution of substituted units

No substitution was applied in our survey.

### 2.3.3.5 Item non-response

In table 7 an overview of the item non-response for all income variables is presented. The percentage households having received an amount, the percentage of households with missing values and the percentage of households with partial information is calculated.

These percentages are calculated as follows:

- % of households having received an amount : number of households (or persons) who have received something (yes to a filter) / total
- % of households with missing values : number of households (or persons) who said that they have received something but did not give any amount (no partial information) / number of households (or persons) who have received something (yes to a filter)
- % of households with partial information: number of households (or persons) who said that they have received something but gave partial information (amounts were not given for all components) / number of households (or persons) who have received something (yes to a filter)

**Table 7: Overview of the non-response for the income variables - % households having received an amount, % of households with missing values and % of households with partial information.**

<b>Item non-response</b>	<b>% of households having received an amount</b>	<b>% of households with missing values</b>	<b>% of households with partial information</b>
Total gross household income (HY010)	<b>99.8</b>	<b>10.4</b>	<b>57.3</b>
Total disposable household income (HY020)	<b>99.9</b>	<b>4.5</b>	<b>64.6</b>
Total disposable household income before social transfers except old-age and survivor's benefits (HY022)	<b>96.8</b>	<b>3.6</b>	<b>67.1</b>
Total disposable household income before social transfers including old-age and survivor's benefit (HY023)	<b>94.4</b>	<b>1.2</b>	<b>70.5</b>
<b>Net income components at household level</b>			
Family related allowances (HY050N)	<b>35.9</b>	<b>1.6</b>	<b>1.4</b>
Interests, dividends, etc. (HY090N)	<b>68</b>	<b>68.7</b>	<b>0</b>

<b>Gross income components at household level</b>			
Income from rental of a property or land (HY040G)	7.3	7.8	0.4
Family related allowances (HY050G)	35.9	1.6	2.1
Social exclusion not elsewhere classified (HY060G)	1.8	0.9	0
Housing allowance (HY070G)	0.7	21.3	0
Regular inter-household cash transfer received (HY080G)	7.8	5.1	0.8
Interest repayments on mortgage (HY100G)	31.1	18.5	0
Income received by people aged < 16 (HY110G)	0.2	0	0
Regular inter-household cash transfer paid (HY130G)	7.2	2.6	0.7
Tax on income and social contributions (HY140G)	89.6	9	38.7
<b>Net income components at personal level</b>			
Employee cash or near cash income (PY010N)	47.7	7.9	12.1
Cash benefits or losses from self-employment (PY050N)	6.2	30.3	0.3
Pension from individual private plans (PY080N)	0.2	0	0
Unemployment benefits (PY090N)	12.6	6.7	0.3
Old age benefits (PY100N)	18.2	5.9	0.3
Survivor' benefits (PY110N)	0.8	5.2	0
Sickness benefits (PY120N)	1.7	9.4	0
Disability benefits (PY130N)	3.3	3.4	0
<b>Gross income components at personal level</b>			
Employee cash or near cash income (PY010G)	47.7	13.2	17.8



Non cash employee income (PY020G)	8	0	0
Non cash employee income: company car (PY021G)	3.6	0	0
Cash benefits or losses from self-employment (PY050G)	6.2	71.4	0.3
Pension from individual private plans (PY080G)	0.2	40.9	0
Unemployment benefits (PY090G)	12.6	33.5	0.6
Old age benefits (PY100G)	18.2	34.8	1.2
Survivor' benefits (PY110G)	0.8	30.2	0
Sickness benefits (PY120G)	1.7	27.8	0
Disability benefits (PY130G)	3.3	24.6	0
Education-related allowances (PY140G)	1.8	2.3	0.9

**2.3.3.6 Total item non-response and number of observations in the sample at unit level of the common cross-sectional European Union indicators based on the cross-sectional component of EU-SILC and for equivalised disposable income**

In the table below an overview including interpretation for the non-response is presented.

**Table 8: item non-response and number of observations at unit level of the common cross-sectional European Union indicators and for equivalised disposable income.**

Indicator	Achieved sample size (number of individuals)	Non-response	remarks
Mean Equivalised disposable income	15493	0	-
Risk of poverty threshold: one person household	1770	0	
Risk of poverty threshold: household with 2 adults and 2 dependent children	2956	0	
Risk of poverty rate by age and gender	15426	0	67 newborns were not included.
Risk of poverty rate by most frequent activity and gender	12117	119	12236 persons were interviewed: 119 persons have no 'most frequent activity' (6 months or less)
Risk of poverty rate by household type	15435	0	-

Risk of poverty rate by household type: Single households	<b>1770</b>	<b>0</b>	
Risk of poverty rate by tenure status	<b>15493</b>	<b>0</b>	
Risk of poverty rate by work intensity of the household	<b>13691</b>	<b>1802</b>	For 5118 households Wi is calculated (missing for 1230 households).
Dispersion around at risk poverty threshold	<b>15493</b>	<b>0</b>	
Relative median risk-of-poverty gap by age and gender	<b>2421</b>	<b>0</b>	
Risk-of-poverty rate by age and gender before all transfers (including pensions)	<b>15426</b>	<b>0</b>	67 newborns were not included.
S80/S20 quintile share ratio	<b>15493</b>	<b>0</b>	-
Gini coefficient	<b>15493</b>	<b>0</b>	-

## 2.4 Mode of data collection

In tables 9 and 10 the distributions of household members aged 16 and over by 'data status' (RB250) and by 'type of interview' (RB260) are presented.

**Table 9: Distribution of household members aged 16 and over by RB250 (Household members RB245=1)**

	<b>Total</b>	<b>RB250=11</b>	<b>RB250=14</b>	<b>RB250=21</b>	<b>RB250=23</b>	<b>RB250=31</b>	<b>RB250=32</b>	<b>RB250=33</b>
Total	12322	12236	86	0	0	0	0	0
%	100	99.3	0.7	0	0	0	0	0
Group 1	3533	3507	26	0	0	0	0	0
Group 2	3106	3088	18	0	0	0	0	0
Group 3	3889	3855	34	0	0	0	0	0
Group 4	1794	1786	8	0	0	0	0	0

**Table 10: Distribution of household members aged 16 and over by RB260 (Household members RB250=11)**

	<b>Total</b>	<b>RB260=2</b>	<b>RB260=5</b>
Total	12236	10495	1741
%	100	85.8	14.2
Group 1	3507	2975	532
Group 2	3088	2641	447
Group 3	3855	3378	477
Group 4	1786	1501	285

## 2.5 Interview duration

Mean interview duration per household: 43 min.

## **2.6 Imputation procedure**

### **2.6.0 Preceding important remark**

In contrast to 2004 and as 2005 – from 2006 onwards (so also in 2007) the calendar question (i40 in the questionnaire) was presented to every respondent rather than only those who indicated that had been a change in their social-economic position. It enabled us to assess and check much more thoroughly the link between the social-economic position and the income variables. Notably for the self-employed this resulted in a substantive number of cases (being identified as being self-employed) who would be otherwise (and who were to some extent in 2004) not identified as being self-employed. These cases mainly concern people in jobs ‘somewhere on the bridge’ between being self-employed and employee but who nevertheless indicated in the calendar that they were self-employed.

### **2.6.1 Overall strategy: Emphasis on internal information and integration of outlier detection- , imputation- and control-phases.**

Between 2006 and 2007 there was no major changes in our overall strategy.

- Emphasis on internal information.

We can't emphasise enough that to correct and impute our data (for any variable) we relied:

- 1) as much as possible on internal information present in the data itself**
- 2) on formal and legal sources of information and
- 3) only as final resort turned to statistical procedures (random imputations for ex.)

- An integrated strategy.

As it was the case for SILC-2004, 2005 and 2006 we used from SILC-2007 again an 'integrated approach' to organise the detection of outliers and the imputations. Crucial to the understanding of our way of working are the concepts of what we call 'vertical' and 'horizontal integration'.

By 'vertical integration' we mean that the phases of outlier detection and imputation were done together for each variable separately (1) rather than that both phases were done separately for all variables together (2). The differences between (1) – the way we did things for SILC 2004 - and (2) the way it was done for SILC 2003 – are subtle but nevertheless more than semantics, especially when combined with horizontal integration.

By horizontal integration we mean that information for each respondent on one variable was checked against information on another variable or another source. Information on the monthly gross income for example was – if both possible and applicable- checked with information on the net income, the yearly income, the current income (if no changes had occurred), the household income, other 'proxi'-variables to income (status etc...) and very important external sources of information like legislation.

The interplay between what we call vertical and horizontal integration leads to a dynamic strategy: variables are checked for outliers and inconsistencies, variables are compared to each other and corrected, (corrected) variables are immediately imputed consistently to the information in other (also corrected) variables – and this several times repeated.

We believe that the emphasis of this strategy on consistency of internal information for respondents throughout the survey and the use of external sources of information (legislation) is a far more successful way of detecting outliers and imputing missing values compared to methods of screening for outliers entirely based on (univariate) distributional features of variables (box-plot methods for example) and imputation methods mainly based on statistical probability models (IVE for example).

**Outlier detection:** The shift in strategy also implies – of course - a shift in the techniques that are used. As far as the outlier detection concerns there is far less emphasis on univariate - purely distributional related methods like box-plots but more emphasis on inconsistency checks. For the income variables these checks were done in 2 ways: i. comparison of ratio's between variables and ii. comparison of the relative position of a respondent's answer on one variable to its position on another variable.

i. Comparison of ratio's between variables:

Comparison of the ratio between two inputs on comparable income variables is a straightforward way to detect outliers. Atypical large or small ratios between gross and net variants of income variables are obviously an indication of 'something being wrong'.

ii. Comparison of relative positions on income variables:

The central issue in this procedure is the comparison of two income variables by comparison of the normal scores calculated for each case on both variables, after log-transformation. The log-transformation is necessary to normalize the otherwise poisson-distributed income variables.

The inputs of both comparable incomes are considered to be consistent if both normal scores are within predefined boundaries (for example -1,96 and 1,96) and/or the difference between the normal scores is limited (less than 1,96).

There is an indication of bias if the input of one of the incomes for a case is situated within 'normal boundaries' ( -1.96 – 1.96) but the other input is not and/or if the difference between the two normal scores differ substantially (>1.96). In fact, the entire procedure consist out of 4 steps:

1. Identification of the variables to be compared.
2. Log-transformations, normality checks, calculation of means and standard deviations.
3. Calculation of normal scores.
4. Consistency control and identification of inconsistencies.

iii. Other techniques :

There was explicitly more emphasis on the above techniques but this does not imply that the 'conventional' box-plot method was not used at all. In this method input outside the interval below were considered to be outliers:

[First Quartile – 1,5 \* (Third Quartile – First Quartile) ; Third Quartile + 1,5 \* (Third Quartile – First Quartile)]

Furthermore and as already mentioned, where applicable and usable legal maximums and minimums were also used to some extent.

Finally, we also checked for outliers via controls on a ‘case to case’ base in which we maximally used information of proxy-variables like professional status and other variables. In this process manifest errors in proxy- and/or other variables associated with the income variables were also removed/corrected (for example ‘the number of months’).

**Imputation:** We did no longer make use of IVE. Instead we i. corrected (not imputed – in fact) a greater number of cases and if correction was not desirable or possible, but information on a directly comparable variable was present anyway (see section on internal information above), we ii. resorted to direct imputation, via a regression model.

i. Corrections.

Corrections were also mainly done on basis of information in other comparable variables. Gross-net ratio of around 40 - 1 Euro = +/- 40Belgian Francs - or 12 - yearly income entered as monthly or vice versa - lead to simple corrections of the gross or the net, for example.

ii. Regressions.

If correction was not desirable or possible but information on a directly comparable variable was present anyway, we resorted to direct imputation, via a regression model, of the variable for which input was missing. Below we describe how this was done for net –gross imputation, which were the most prevalent instances of that sort. The method was extended, however, to other imputations (imputations of the 2005 income based on the current income, for example).

Missing values on gross income variables (PY010G, PY020G, ... and components) were, if collected, imputed on the basis of the corresponding net variables (PY010N, PY020N, ... and components). The implementation of this imputation procedure was quasi-similar for almost all (income) variables on which it was applied. The procedure implied 6-steps:

1. Identification of the ‘reference cases’ (both gross and net collected) and identification of the cases to be imputed (net collected – gross missing).
2. Calculation of the gross/net ratio for the reference cases. Cases with an extreme value on this ratio were excluded from further use in the procedure.
3. Curve estimation of the relation (regression model) between gross and net income. The best fitting model (linear, logarithmic, quadratic, exponential) was being implemented.
4. Implementation of the regression model for the reference cases to identify outliers.

5. Re-implementation of the regression model for the reference cases after removal of the outliers.
6. Actual imputation step: missing (gross) values are imputed on the basis of
  - a) net values and
  - b) the estimates for the relation between gross and net income assessed in the steps above.

In step 1 the cases of which both gross and net income were collected are identified. We refer to these cases as 'reference cases' (step 1). The relationship between their net and gross income serves as reference for the imputation of the gross incomes for the cases where only the net was collected (cases to be imputed).

To avoid bias in this imputation model atypical reference cases (both outliers and errors) were identified and removed at several steps in the procedure (step 2 and 4).

In step 2 (reference)cases for whom the ratio between gross and net income exceeded what can be considered typical for the taxation regime applicable to the income concerned, were excluded.

In the case of almost all variables the boundary value of this ratio was set at 2,5. This boundary was arbitrary chosen.

Scrutiny of the excluded cases, however, validates this value's potential to discriminate between incomes which were subjected to real(istic) taxation and outliers or errors.

The latter category seldom counted more than a few percent of the total population in the survey and their gross/net ratio often exceeded the 2,5 considerably.

Further exploration also revealed that the exclusion of these cases from the procedure results in a dramatic increase of the fit of the regression model on which the imputation is based.

In step 4 outliers in the regression model were identified and removed using default regression diagnostics.

The underlying probability model of the net-gross relation was assessed with SPSS' 'curve-estimation' procedure (step 3). It can be hypothesised that in most taxation schemes this relation will not be linear as higher revenues will be subjected to disproportionate higher taxes. The concern therefore is that application of a linear regression model may lead to biased result. Step 3 is an answer to that concern, which turned out to be unfounded, however. In fact, for most variables the linear model fitted the data well. For a few variables the fit of the quadratic model was slightly better, however. Overall, and we underline this, the fit was very good and R-squares very high (always > 0.85)

The estimates of this regression model (step 5) served as direct input for the implementation of the actual imputation (step 6).

iii. Other techniques.

Although we preferred the techniques above we were in some instances forced to resort to other techniques (due to lack of information – for example).

For some cases we imputed median values calculated after categorising using relevant variables. Most of the median values imputed, were for example, calculated after categorisation for status.

## 2.6.2 Description on imputation per target variable

In the following table is shown which imputation method we used for each target variable (and also for each component within the Belgian questionnaire). The percentage of imputed cases and the total number of observations is added.

**Table 11: Percentage of imputation over the total number of observations per (target) variable**

Income Component		Question in the Belgian questionnaire		Percentage imputed cases (total number of observations)	Method
Code	Description	Code	Description		
HY040	Income from rental of a property or land	H37	Rental of a part of the house	14.3 (28)	1) median
HY040	Income from rental of a property or land	H74	Rental of property or land other than own house	1.0 (481) 1.8 (481) [5.0 (481)]	1) Hot deck (imputation of a randomly drawn given amount) 2) imputation based on SILC 2006 [3) Median of predefined intervals (classes) ]
HY040	Income from rental of a property or land			8.2 (481)	
HY050	Family/child ren related allowances	H91	Child allowance	0.6 (2265) 0.9 (2265)	1) Regression with number of children and age of the oldest child as auxiliary variables 2) SILC 2006 is source
HY050	Family/child ren related allowances	H93	Birth grant	4.1 (169)	1) Median of the given amounts (in classes based on number of children)
HY050	Family/child ren related allowances	(I116)	Income maintenance benefit in the event of	0 (121)	No imputations



childbirth

<b>HY050</b>	<b>Family/child ren related allowances</b>	<b>(I117)</b>	<b>Parental leave benefit</b>	<b>3.6 (84)</b> <b>8.3 (84)</b>	<b>1) correction</b> <b>2) imputation fixed amount</b>
<b>HY050</b>	<b>Family/child ren related allowances</b>			<b>3.6 (2276)</b>	
<b>HY060</b>	<b>Social assistance</b>	<b>H71A, H71B</b>		<b>0.9 (116)</b>	
<b>HY070</b>	<b>Housing allowance</b>	<b>H43</b>	<b>Allowance for housing (tenants)</b>	<b>9.1 (22)</b>	<b>1) Median</b>
<b>HY070</b>	<b>Housing allowance</b>	<b>H26</b>	<b>Intervention of authorities for repayments on mortgage</b>	<b>32 (25)</b>	<b>1) Median</b>
<b>HY070</b>	<b>Housing allowance</b>			<b>21.3 (47)</b>	
<b>HY080</b>	<b>Regular inter-household cash transfer received</b>	<b>H86</b>	<b>Alimony and child support received</b>	<b>1.7 (354)</b>	<b>1) Median</b>
<b>HY080</b>	<b>Regular inter-household cash transfer received</b>	<b>H88</b>	<b>Regular cash support</b>	<b>11.6 (189)</b> <b>0.5 (189)</b>	<b>1) Hot deck</b> <b>2) SILC 2006 is source</b>
<b>HY080</b>	<b>Regular inter-household cash transfer received</b>			<b>5.9 (493)</b>	
<b>HY090</b>	<b>Interests, dividends, etc.</b>			<b>68.7 (4314)</b>	
<b>HY110</b>	<b>Income received by people aged &lt; 16</b>	<b>H69</b>		<b>0 (18)</b>	<b>No imputation</b>

<b>HY130</b>	<b>Regular inter-household cash transfer paid</b>	<b>H79</b>	<b>Alimony and child support paid</b>	<b>1.5 (273)</b>	<b>05: Median</b>
<b>HY130</b>	<b>Regular inter-household cash transfer paid</b>	<b>H81</b>	<b>Regular cash support</b>	<b>4.6 (219)</b> <b>0.5 (219)</b>	<b>01: Hot deck</b> <b>09: deductive imputation based on answer in 2008</b>
<b>HY130</b>	<b>Regular inter-household cash transfer paid</b>			<b>3.3 (460)</b>	
<b>HY140</b>	<b>Tax on income and social contributions</b>	<b>I130</b>	<b>Repayments for tax adjustment</b>	<b>4.6 (2032)</b>	<b>1) other source was used for control: fiscal data</b>
<b>HY140</b>	<b>Tax on income and social contributions</b>	<b>I132</b>	<b>Receipts for tax adjustment</b>	<b>4.6 (3649)</b>	<b>1) other source was used for control: fiscal data</b>
<b>HY140</b>	<b>Tax on income and social contributions</b>			<b>47.7 (5687)</b>	<b>Tax was computed as the sum of all differences between gross and net in income variables, corrected by tax adjustment. In case a gross-net model or a net-gross regression was used, the difference (tax) was considered as imputed.</b>
<b>PY010</b>	<b>Employee cash income – Gross income</b>	<b>I47-I48 (scale)</b>	<b>Monthly Wages and salaries</b>	<b>1.15 (5693)</b> <b>12.17 (5693)</b> <b>1.33 (5693)</b> <b>2.93 (5693)</b> <b>0.17 (5693)</b>	<b>1) Corrections</b> <b>2) Net income is given, imputation based on regression</b> <b>3) current income is given, imputation based on regression</b> <b>4) Imputation on basis of EU-SILC 2006</b> <b>5) annual income is source</b>
<b>PY010</b>	<b>Employee cash income – Net income</b>	<b>I50-I51 (scale)</b>	<b>Monthly Wages and salaries</b>	<b>1.01 (5693)</b> <b>2.17 (5693)</b>	<b>1) Corrections</b> <b>2) current income is given,</b>

				3.99 (5693)	imputation based on regression
				0.17 (5693)	3) Imputation on basis of EU-SILC 2006
					4) annual income is source
PY010	Employee cash income	I52	Number of months I47-I48	0.1 (5693)	1) correction
PY010	Employee cash income	(i60_a_ne)	Pay for overtime	5.8 (190)	1) imputation based on SILC2006
PY010	Employee cash income	(i60_b_ne)	Commissions	8.2 (61)	1) imputation based on SILC2006
PY010	Employee cash income	(i60_c_ne)	Tips	4.3 (23)	1) imputation based on SILC2006
PY010	Employee cash income	(i60_d_ne)	Additional payments based on productivity	3.0 (100)	1) imputation based on SILC2006
PY010	Employee cash income	(i60_e_ne)	End of the year payments	4.2 (3887)	1) imputation based on SILC2006
				4.4 (3887)	2) regression – a.o. income as independent variable
PY010	Employee cash income	(i60_f_ne)	Thirteenth month payment	2.3 (653)	1) imputation based on SILC2006
				6.6 (653)	2) regression – a.o. income as independent variable
				0.2 (653)	3) correction
PY010	Employee cash income	(i60_g_ne)	Fourteenth month payment	2.1 (47)	1) imputation based on SILC2006
PY010	Employee cash income	(i60_h_ne)	Holiday payments	4.2 (4649)	1) imputation based on SILC2006
				3.6 (4649)	2) regression – a.o. income as independent variable
				0.2 (4649)	3) correction
PY010	Employee cash income	(i60_i_ne)	Profit sharing	0.8 (118)	1) imputation based on SILC2006
PY010	Employee cash income	(i60_j_ne)	Shares	5.7 (35)	1) imputation based on SILC2006
PY010	Employee cash income	(i60_k_ne)	Allowances for mobile-phone costs	2.2 (446)	1) imputation based on SILC2006
				0.22 (446)	2) correction

PY010	Employee cash income	(i60_l_ne)	Allowances for gas/electricity and dwelling related cost	11.11 (27)	1) imputation based on SILC2006
				48,15 (27)	2) median imputed
PY010	Employee cash income	(i60_m_ne)	Allowances car insurance	1.72 (116)	1) imputation based on SILC2006
				65.5 (116)	2) median imputed
PY010	Employee cash income	(i60_n_ne)	Allowances gasoline/petrol	0.7 (430)	1) imputation based on SILC2006
				26,6 (430)	2) median imputed
PY010	Employee cash income	(i60_o_ne)	Allowances paid for working in remote locations	2.5 (21.4)	1) median imputed
PY010	Employee cash income	(i60_p_ne)	Other additional payments	0.0 (179)	No imputation
PY010	Employee cash income	I53	Income from irregular jobs : wages and salaries	1.8 (221)	1) only gross value was recorded
				0.9 (221)	2) Imputation based on SILC 2006
PY010	Employee cash income	I93	Income from jobs other than main job : wages and salaries	13.2 (53)	1) imputation fixed amount
PY010G	Employee cash income			31.0 (5877)	Please consider high number of net-gross imputations (see variable I47 above)
PY010N	Employee cash income			20.0 (5877)	Please consider high number of imputations for which an alternative income was the source (see variable I50 above)
PY050	cash benefits or losses from self-employment	I93	Income for jobs other than main job : self-employed	31.00 (71)	1) imputation fixed amount
PY050G	cash benefits or losses from self-employment			71.2 (768)	Please take notice of the important remarks in 2.6.0 and 2.6.1 to assess the nature of the imputations for the self-employed.

PY050N	cash benefits or losses from self-employment			30.2 (768)	Please take notice of the important remarks in 2.6.0 and 2.6.1 to assess the nature of the imputations for the self-employed.
PY080	Pension from Individual private plans	I109	Savings for ones old day (Epargne-pension)	18 (11)	No imputations
PY080	Pension from Individual private plans	I112	Life insurance (Assurance-vie)	(11)	No imputations
PY090	Unemployment benefits	I98_a	Subsistence income for persons entering the labour market	3.4 (29)	1) legal amount was imputed
PY090	Unemployment benefits	i98_b	Full unemployment benefits	2.2 (1031) 0.5 (1031) 0.2 (1031) 2.1 (1031)	1) SILC 2006 is source 2) indirect imputation via HH-income 3) correction 4) legal amount
PY090	Unemployment benefits	I98_c	Partial unemployment benefits	(129)	No imputations
PY090	Unemployment benefits	I98_d	Other financial assistance (Allocation de garantie de revenus)	(20)	No imputations
PY090	Unemployment benefits	(I98_e)	Other financial assistance (Allocation du fonds de sécurité d'existence)	10 (20)	1) Net income is given, imputation based on regression
PY090	Unemployment benefits	(I98_f)	Vocational training allowance	6.7 (15)	1) Net income is given, imputation based on regression
PY090	Unemployment benefits	(I98_h)	Other cash benefits	4.2 (24) 4.2 (24)	1) Net income is given, imputation based on regression

2) imputation legal amount

PY090	Unemployment benefits	I99_b	Early retirement benefits	2.2 (275) 1,8 (275)	1) current income is source 2) SILC 2006 is source
PY090	Unemployment benefits			7,1 (1556) 32.3 (1556)	1) imputations 2) net income was given
PY100	Old age benefits	I104	Pension Fund (Fonds de pension)	(56)	No imputations
PY100	Old age benefits	I106	Group insurance (Assurance-groupe)	(15)	No imputations
PY100	Old age benefits	(I_102_B)	Old age pensions	4.2 (1973) 0.8 (1973) 0.3 (1973) 0.1 (1973)	1) SILC-2006 is source 2) current pension is source 3) indirect imputation via HH-income 4) correction
PY100	Old age benefits	(I_102_C)	Other financial assistance to old aged people <sup>5</sup>	(16)	No imputations
PY100	Old age benefits	(I_102_D)	Other financial assistance to old aged people <sup>6</sup>	(22)	No imputations
PY100	Old age benefits	(I_102_E)	Type of old age benefits not given	5.4 (37)	04: Net pension is source
PY100	Old age benefits			5.2 (2225) 29.1 (2225)	1) imputed 2) only net pension was given

<sup>5</sup> Revenus garantis aux personnes âgées

<sup>6</sup> Complément au revenu garanti aux personnes âgées

PY110	Survivor's benefits <sup>7</sup>	(I102_A)		2.5 (365) [32,3 (365)]	1) SILC 2006 is source [2) Net pension is given]
PY120	Sickness benefits	(I115_c)	Paid sick leave (temporary inability to work due to sickness)	0.8 (130) 1.5 (130) 0.8 (130)	1) current income is source 2) SILC 2006 is source 3) legal amount is imputed
PY120	Sickness benefits	(I115_d)	Paid sick leave (temporary inability to work due to professional sickness or injury)	5.9 (17)	1) correction
PY120	Sickness benefits	(I115_e)	Other sickness benefits	5.3 (38)	1) imputation of fixed amount
PY120	Sickness benefits			9.5 (212)	
PY130	Disability benefits	I115_a	Disability pension	0.3 (312) 0.6 (312)	1) current income is source 2) correction
PY130	Disability benefits	(I115_b)	Integration income for the handicapped	9.8 (61) 1.6 (61)	1) correction 2) Silc 2006 is source
PY130	Disability benefits			3.4 (411)	
PY140	Education-related allowances			3.2 (219)	Note that in the P-file all grants received by someone in the household are given to the reference person of the household as they can concern persons aged under 16 who are not present in the P-file.

<sup>7</sup> Individuals could answer 'yes' to the filter of question I102\_a and be more than 65 years. After imputation, the values of the benefits were classified as old-age benefits.

## **Additional remarks on imputations.**

### **○ Gross/Net imputations.**

For a limited number of monetary variables a limited number of respondents had given only a value for the gross variant of the variable (the opposite – only net is given - occurred much more). For these cases a net value was imputed on basis of the gross using the Belgian rules of taxation. A small number of net- pensions and unemployment benefits were imputed in this way.

All the gross-net imputation for PY100 and PY110 was done following the Belgian taxing rules. We first (1) had to determine the status of the person (isolated or married, with or without dependant children, ...), then (2) we applied all the taxing rules including reductions of taxes for e.g. dependant child. (3) Once this model has been applied to gross-net transformation, we could use it for the net to gross (very more useful in fact). To do that, we applied the model on each possible amount as fictive gross amount. As result, we got each possible net amount. We then only had to do the correspondence between net and gross amount.

### **○ Imputation of ‘total housing cost’**

For the calculation of the total housing cost, we examined the current costs for small, average and large usage and used these amounts for both outlier detection and imputation, while taking into account other variables such as the number of household members and the household income. The cost for the water usage for example can be subdivided in subscriber money (fixed) and costs for the actual usage (variable). The cost for the usage of electricity depends largely whether the heating is electric or not: Singles in an apartment without electric heating consume approximately 600 kWh per year (~ 7 euro), while large consumers with accumulation warmth have an annual usage of approximately 20.000 kWh (~ 240 euro).

## **2.6.3 Imputation of partial unit non-response**

The method chosen for Belgium was imputation of an income for each member of the household who did not answer the questionnaire. Imputation is based on the variable RB210 (basic activity status) of the individual given in the R-file. When the answer is missing or 4 (other inactive person), it is chosen not to impute any income. When available, we preferably used the longitudinal information's from 2006 for imputation. For the other cases the chosen method for imputation was imputation of a sub-category median based on age and sex. Net incomes were computed with a gross to net model, based on the imputed gross incomes.



## 2.7 Collection variable company Car

Since 2005, we decided to work with **the national rules of the tax authorities**. The benefit for individuals of using a company car for private goals was not directly assessed at the interview but afterwards calculated by applying the applicable taxation rules.

The fiscal benefit of all nature that a person has - due to disposition of a company car for private goals - is calculated by multiplying a fixed amount of kilometres driven for private use by a coefficient. To calculate the latest we need the fiscal cylinder capacity of the car. This fixed amount of kilometres driven for private use is for the tax authorities 5000 km if the distance home-work is less than 25 km, and 7500 if it's more than 25 km.

Since 2005, we asked directly the fiscal cylinder capacity and the distance between work and home. In case of non response of the cylinder capacity, we asked the mark, type and registration year of the car. Than we had to use an imputation method.

Imputation: To calculate the cylinder capacity, we did the following. We assumed that a company car is mostly diesel driven. We looked up for each mark, type and diesel engine what the corresponding cylinder capacity is. If we had several cylinder capacities for the type of the mark, we calculated the weighted mean of the cylinder capacity. If there is not diesel version for a type of car, we did the same logic but than for petrol.

Once we had that we could easily find the corresponding fiscal coefficient. Than we only had to multiply it by the fixed amount of kilometres driven for private use to obtain the fiscal benefit of all nature

Example:

Type of car	Fiscal cylinder capacity	Forfait	Distance home work	Fixed amount	Fiscal benefit of all nature
Smart fortwo	5	0,1898	< 25 km	5000	949 €
Smart fortwo	5	0,1898	> 25 km	7500	1423.5 €

After we calculated the fiscal benefit of all nature for a whole year, we weighted it for respondents who didn't dispose for a whole year of the company car. **The fiscal benefit of all nature is a gross non-cash employee income.**

## 2.8 Imputed rent

From 2007 onwards a measure for ‘imputed rent’ needs to add to the data.

Below we briefly explain the implementation of imputed rent (IR – hereafter) in the Belgian EU-SILC 2007 data. The text gives insight in the variables and methods used and in the results but is, overall, non-technical. For more in-depth technical background on the subject please turn to the appropriate documentation available via Eurostat (Doc. EU-SILC/162/06/EN).

In order to assess IR it was agreed on with Eurostat to use a (two-step) Heckman regression. The Heckman method involves in essence (A) the resolution of a probit regression model with tenure status of the household dwelling (dichotomy tenant/non-tenant) as dependent variable and conventional explanatory variables (Doc. EU-SILC/162/06/EN). (B) The coefficients found for the inverse of Mills ratio are then introduced in a regression model to counter selection bias in the estimated IR outcomes.

One difficulty in the first step is choosing the right variables. The Eurostat guidelines were closely followed for that purpose and also previous work on the subject of IR for the household budget survey was helpful. The following variables - or rather sets of variables - were selected:

- Characteristics and ‘state’ of the dwelling: type, number of rooms, presence of problems with the dwelling
- A number of neighborhood characteristics (with some emphasis on the presence of problems).
- Characteristics of the household: ages of the members of the household, their activity status, educational attainment, household type, number of children, number of persons in the household

One difficulty was that individual characteristics (age, activity status, educational attainment) needed to be aggregated on the household level. That was done by the creation of dummy variables for each category of the individual characteristics measuring the presence or the absence of that category on the level of the household. The table below gives an overview.

Not all variables originated from the SILC-database. Calculated for each municipality from the Belgian census 2001 — the distribution renters/owners was added to the equation.

**Table: Overview of the variables in the analysis.**

Label in output-files	Variable	Operationalisation/ measurement level
HH_INC_Q	Household income – HY020	quintiles
HT	householdtype	Categorical – see EUR.doc....
N_HH	Number of persons in the household	Metric
HH010	Dwelling type	Categorical – see EUR.doc.065
HH030	Number of rooms	Metric
HH050	Ability to keep dwelling warm	Categorical
HH080	Bath or shower	Categorical
HH090	Indoor flushing toilet	Categorical
HS160	Problems with dwelling	Categorical
HS170	Noise from neighbours	Categorical
HS180	Pollution	Categorical
HS190	Crime, violence or vandalism	Categorical
PERC_RENT	% HH renting in community of residence	Source census 2001
AGE_1	<18 yrs.	Dummy
AGE_2	>= 18 yrs. - < 25 yrs.	Dummy
AGE_3	>= 25 yrs. - < 45 yrs.	Dummy
AGE_4	>= 45 yrs. - < 65 yrs.	Dummy
AGE_5	>= 65 yrs.	Dummy
ACTSTA_1	Activity status – working	Dummy
ACTSTA_2	Activity status – unemployed	Dummy
ACTSTA_3	Activity status – retired	Dummy
ACTSTA_4	Activity status – non active	Dummy
EDUC_1	ISCED – 0 – 1	Dummy
EDUC_2	ISCED – 2	Dummy
EDUC_3	ISCED – 3 – 4	Dummy
EDUC_4	ISCED – 5 – 6	Dummy

## EXPLORATORY ANALYSIS.

To get a first insight in the impact of each of the variables on the dependent variable tenure status (tenant/owner) a number of (mainly) bivariate logistic regressions were done.

Overall, the results show that the majority of the variables are associated with tenure status. All variables were therefore further kept in the analysis.

The explanatory analysis also resulted in the identification of a small number of missing values on some of the variables. Imputations were necessary to avoid distortion of further analysis.

The following imputations were done:

HH010 → 212 missing cases were coded as a separate category.

HH030 → 212 missing cases were given the median value (5)

HH031 → 17 missing cases were given the median value (1996)

HH040 → 1 missing case was given the value 1

HH050 → 5 missing cases were given the value 5

HS160 → 2 missing cases were given the value 2

HS180 → 3 missing cases were given the value 2

HS190 → 3 missing cases were given the value 2

## PROBIT-REGRESSION.

The probit-regression part of the analysis was done in SAS. The output of this analysis is available on demand.

## LINEAIR-REGRESSION.

The final estimation of IR is based on a linear regression model in which the observed rent for the renters is the dependent quantity and a number of dwelling-related characteristics are the independent variables.

An important note here is that, that dummy variables for the arrondissement of residence – variables ARR in the output – were introduced in the model. Arrondissements are (in fact) a (juridical – not political) administrative level between municipalities and provinces. We believe they are excellent indicators of regional differences and tendencies on scale smaller than provinces but bigger than municipalities.

The inverse-mills coefficient was significant at <0.001 level.

The output of the final regression is available on demand.

## RESULTS.

The table below resumes our final results for the imputed rent variable:

**Table: final results**

	TENSTA			
	OWNERS (and others)		RENTERS	
	OBS.RENT	IR	OBS.RENT	IR
<b>Mean</b>	.	420.22	414.93	415.01
<b>StdDev</b>	.	119.02	200.76	95.78
<b>Median</b>	.	424.29	400.00	421.91
<b>Min</b>	.	0.00	50.00	1.19
<b>Max</b>	.	777.30	3700.00	761.31
<b>P5</b>	.	212.37	173.00	256.89
<b>Q1</b>	.	341.08	286.00	353.82
<b>Q3</b>	.	504.55	500.00	477.00
<b>P95</b>	.	605.29	715.00	562.14

The results are given on a monthly basis. Mean estimated imputed rent on basis of the fitted regression is 420 Euro for owners and slightly less, 415 Euro, for renters. Differences with the observed mean rent are quasi nil for the latter. Differences in the median estimated imputed rent are equally small.

### 3. Comparability

#### 3.1 Basic concepts and definitions

##### The reference population

The reference population is all citizens living officially living at Belgian territory (population de jure). This means that the source of our sample is the central population register. This Register includes all private households and their current members residing in the territory. Persons living in collective households and in institutions are excluded from the target population.  
(see also §2.3.1)

##### The private household definition

The definition of household that Eurostat recommends is used. Household is defined as a person living alone or a group of people who live together in the same dwelling and share expenditures including the joint provision of the essentials of living.

##### The household membership

The definition of household membership is the same as mentioned in the Eurostat document EU-SILC065/03 about the description of target variables (Chapter 'Units'). All household members of 16 year and older **at the end of the income reference period**, are selected for a personal interview.

##### The income reference period used

The income reference period is a fixed twelve-month period, namely the previous calendar year. For SILC 2007, the income reference period is the year 2006.

##### The period for taxes on income and social insurance contributions

This is also fixed twelve-month period, namely the previous calendar year. For SILC 2007, the period is the year 2006.

##### The lag between the income reference period and current variables

The income reference period is the previous calendar year (year 2006) and the current variables refer to the fieldwork period (April-December2007). Therefore the lag is at minimum 4 months and at maximum 12 months.

##### The total duration of the data collection of the sample

The fieldwork took mainly place in April, May and June 2007. Some interviews also took place in March or from July to November 2007 but they represent less than 10 % of the interviews .

HB050 month of the household interview

		Frequency	Percent	Cumulative Percent
Valid	3.00	22	.3	.3
	4.00	1887	29.7	30.1
	5.00	2412	38.0	68.1
	6.00	1463	23.0	91.1

7.00	330	5.2	96.3
8.00	34	.5	96.8
9.00	11	.2	97.0
10.00	151	2.4	99.4
11.00	38	.6	100.0
Total	6348	100.0	

**Basic information on activity status during the income reference period**

Basic information on activity status during the income reference period was mainly obtained via the calendar question (I40) (in contrast to 2004 where it was obtained by combining the answer for question I8 (PL030) with the answer(s) for question(s) I38 (PL200) and for those with a change I40 (calendar question)). ALSO SEE REMARK 2.6.0.

## 3.2 Components of income

**3.2.1 Differences between the national definitions and standard EU-SILC definitions, and an assessment, if available, of the consequences of the differences mentioned will be reported for the following target variables.**

### **Total household gross income**

$HY010 = PY010 + PY021G + PY050G + PY090G + PY100G + PY110G + PY120G + PY130G + PY140G + HY040G + HY050G + HY060G + HY070G + HY080G + HY090G + HY110G$ .

PY021G only contains the value of company cars and is comparable to the variable PY020G of previous waves of the survey.

PY020G is a new variable from 2007 on which contains in addition to company cars other non-cash income for employees such as luncheon vouchers, goods and services provided free or at reduced price by the employer, ...

### **Total disposable household income**

$HY020 = HY010 - HY140 - HY130$

We didn't take count of HY120G, because regular taxes on wealth do not exist in Belgium.

### **Total disposable household income, before social transfers other than old age and survivors' benefit**

$HY022 = HY020 - tnetrans - HY050N - HY060G - HY070G$

$Tnetrans = PY090N + PY120N + PY130N + PY140N$

### **Total disposable household income, before social transfers including old age and survivors' benefit**

$HY023 = HY020 - tnetran2 - HY050N - HY060G - HY070G$ .

$tnetran2 = PY090N + PY120N + PY130N + PY140G + PY100N + PY110N$ .

### **Imputed rent**

For more information on how imputed rent was implemented in the Belgian EU-SILC data 2007 – see section

### **Income from rental of property or land**

Asked as Eurostat recommends. Income from rental of a property or land refers to the income received, during the income reference period, from renting a property (for example renting a dwelling –not included in the profit/loss of unincorporated enterprises-, receipts from boarders or lodgers, or rent from land) after deducting costs such as mortgage interest repayments, minor repairs, maintenance, insurance and other charges.

### **Family/children related allowances**

Family / children related allowance includes:

- Income maintenance benefit in the event of childbirth
- Birth grant



- Parental leave benefit
- Family or child allowance.

For the SILC 2007 Belgium asked allowances received from the federal government and also birth grants given by some local authorities and medical organizations.

### **Social exclusion payments not elsewhere classified**

Social benefits in the function 'social exclusion not elsewhere classified' includes for Belgium:

- Income support: periodic payments to people with insufficient resources.
- Other cash benefit: support for destitute and vulnerable persons to help alleviate poverty or assist in difficult situations.

Belgium only took into account the Benefits paid by the Public Social Welfare Organization (not the benefits paid by private or non profit organizations).

### **Housing allowances**

The housing allowances for Belgium includes:

- Rent benefit
- Benefit to owner-occupiers: a means-tested transfer by a public authority to owner-occupiers to alleviate their current housing costs: in practice help with paying mortgages and/ or interest

It excludes:

- Social housing policy organized through the fiscal system
- All capital transfers (in particular investment grants), for example rehabilitation subsidy and/or a building subsidy.

### **Regular inter – household cash transfers received**

Regular inter-household cash transfers received refer to regular monetary amounts received, during the income reference period, from other households or persons. More precise, we asked for 'alimony and child support' and 'regular cash support'.

### **Interest, dividends, profit from capital investments in incorporated businesses**

Interest, dividends, profits from capital investment in an unincorporated business refer to the amount of interest from assets such as bank accounts, certificates of deposit, bonds, etc, dividends and profits from capital investment in an unincorporated business, in which the person does not work, received during the income reference period less expenses incurred.

### **Interest paid on mortgage**

Interest paid on mortgage refers to the total gross amount, before deducting any tax credit or tax allowance, of mortgage interest on the main residence of the household during income reference period.

### **Income received by people aged under 16**

Income received by people aged under 16 is defined as the gross income received by all household members aged under sixteen during the income reference period. We asked the reference person the annual amount received by all children under 16 together.

### **Regular taxes on wealth**

This variable isn't asked/measured for the SILC2007 in Belgium. The reason is that the regular tax on wealth doesn't exist.

### **Regular inter-household transfers paid**

Regular inter-household transfer paid refers to regular monetary amount paid, during the income reference period, to other households. More precise, we asked for 'alimony and child support' and 'regular cash support'.

### **Tax on income and social insurance contributions**

Tax on income refers to taxes on income, profits and capital gains. They are assessed on the actual or presumed income of individuals, households or tax-unit. They include taxes assessed on holdings of property, land or real estate when these holdings are used as a basis for estimating the income of their owners.

Taxes on income include the sum of the following calculations:

(Gross income from salaries – net income salaries)

+ (Gross income from self-employments – net income from self-employments)

+ (Gross income from pension allowances – net income from pension allowances)

+ (Gross income from disability, illness allowances – net income disability, illness allowances)

+ (Gross income from jobseeker's allowances - net income from jobseeker's allowances)

We have also taken into account of the money that people have received from the taxes or that people have paid to the taxes in 2006 (based on their incomes of the year 2005).

### **Repayments/receipts for tax adjustments**

Repayments/receipts for tax adjustments refer to the money paid to/received from Taxes Authorities related to the income received. This variable is already included in the variable ' tax on income and social contribution' (see above), so Belgium didn't provide this variable.

### **Cash or near-cash employee income**

It includes:

- Wages and salaries paid in cash for time worked or work done in main and any secondary or casual job(s).
- Remuneration for time not worked (e.g. holiday payments)
- Enhanced rates of pay for overtime
- Fees paid to directors of incorporated enterprises
- Commissions, tips and gratuities
- Supplementary payments (e.g. thirteenth month payments, fourteenth month payments)
- Profit sharing and bonuses paid in cash
- Additional payments based on productivity
- Allowances paid for working in remote locations (regarded as part of the conditions of the job)
- Allowances for transport to or from work

### **Non-cash employee income and company car.**

Before SILC 2007 variable PY020 consisted only out of 'company Car'. From 2007 onwards other non-cash income elements needed to be added. 'Company car' itself was recorded in PY021.

In SILC-2007 PY020 consists of the following elements:

- \* Company car
- \* free or subsidized meals and luncheon vouchers
- \* reimbursement or payment of housing-related expenses
- \* reimbursement or payment of gasoline
- \* reimbursement or payment of car assurance
- \* reimbursement or payment of mobile phone costs

### **Employers' social insurance contribution**

The outcome of variable PY030 was the result of the following model:

For blue collar workers:

$$((PY010G*1,08)/100)*50,5$$

And for white collar workers:

$$PY010G/3$$

Both equations were derived from social security rules.

### **Cash profits or losses from self-employment (including royalties)**

It includes:

- Net operating profit or loss accruing to working owners of, or partners in, an unincorporated enterprise, less interest on business loans.
- Royalties earned on writing, inventions, and so on not included in the profit/loss of unincorporated enterprises.
- Rentals from business buildings, vehicles, equipment, etc not included in the profit/loss of unincorporated enterprises, after deduction of related costs such as interest on associated loans, repairs and maintenance and insurance charges.

### **Value of goods produced for own consumption**

This variable is not recorded in the file because the value of goods produced for the own consumption does not constitute a significant component of the income. The importance of the component has been assessed using HBS.

### **Unemployment benefits**

Unemployment benefits include:

- Full unemployment benefits: benefits compensating for loss of earnings
- Partial unemployment benefits

- Early retirement for labour market reasons
- Vocational training allowance
- Mobility and resettlement
- Severance and termination payments
- Redundancy compensation
- Subsistence income for persons entering the labour market

### **Old-age benefit**

Old age benefit includes:

- Old age pensions
- Anticipated old age pensions
- Partial retirement pensions
- Survivor's benefits paid after the standard retirement age
- Disability cash benefits paid after standard retirement age

### **Survivors' benefits**

It includes:

- Survivor's pension
- Death grant
- Other cash benefit

### **Sickness' benefits**

It includes:

Paid sick leave

### **Disability benefits**

It includes:

- disability pension
- early retirement in case of reduced ability to work
- care allowance
- economic integration of the handicapped
- disability benefits to disabled children in their own right
- other cash benefit

### **Education-related allowances**

It includes allowances referring to grants, scholarships and other education help received by students.

However to obtain this variable we asked the information on household level instead of personal level because in Belgium this is paid on household level. Afterwards we attributed this amount to the persons in the individual file.

**Capacity to face unexpected financial expenses (HS060)** : we take into account the capacity with own means (no borrowing from banks or friends ,...) because these opportunities were the subject of other parts of the question in the Belgian questionnaire .

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

The collection of the income variables is by interview. Belgium has no income variables collected from registers for the survey of 2007.

### 3.2.3 The form in which income variables at component level have been obtained (e.g. gross, net of taxes on income at source and social contributions, net of tax on income at source, net of social contributions)

**Table 12: The form in which income variables at component level have been obtained**

Areas	Qr. Block	Target Variable	Unit of measurement	Tax or tax-exempt	If taxable, how the amount is recorded
Employee Income	PY010	Gross Employee Cash or near cash Income in reference period	Individual level	Taxable	Net + gross
	PY020	Gross Non-Cash Employee income (company car, mail tickets)	Individual level	Not taxable (mail tickets are not taxable for the employee and can not be deducted from taxes by the employer) (the company car itself is not taxable but the kilometres that are done for job/work distances and for private distances are taxed: there is always a minimum of 5000 km taxed)	
Self-employment Income	PY050	Gross Cash Income benefits/Losses from self-employment (including profit/loss from unincorporated enterprise, royalties)	Individual level	Taxable For losses, this means a deduction from taxes of this amount can be done on other income posts of that year or on income of the next year)	Net OR gross
Imputed rent <sup>8</sup>	HY030	imputed rent	Household level	-	
Property income	HY090	Interest, dividends, profit from capital investments in unincorporated business	Individual level	Taxable	Net
	HY040	Income from rental of property or land	Household level	Taxable	Gross
	PY080	Regular pension from Private (non-ESSPROS) schemes	Individual level	Taxable	Gross (for the major part of the pensions)
Current transfer received	HY050	Family-related allowances: parental leave benefits	Individual level	Taxable	Net + gross
Social benefits:		Family-related allowances:	Household level	Not taxable	
ESSPROS	HY060	Social assistance	Individual level	Not taxable	

<sup>8</sup> Information on that component is asked because it is important to know if :  
- an owner is taxed regarding his tenure status (specific tax on property income)  
- a 'rent-free' tenant could be taxed on behalf of the accommodation's owner

	HY070	Housing allowances	Household level	Not taxable	
	PY090	Unemployment Benefits	Individual level	Taxable	Net + gross
	PY100	Old-age benefits	Individual level	Taxable	Net + gross
	PY110	Survivor's Benefits	Individual level	Taxable	Net + gross
	PY120	Sickness Benefits	Individual level	Taxable	Net + gross
	PY130	Invalidity Benefits	Individual level	Taxable	Net + gross
	PY140	Education-related Allowances	Household level	Not taxable	
Regular inter household transfer received	HY080	Regular inter-household cash transfers received	Household level	Not taxable, but taxed if alimentation	Gross
Other income received	HY110	Income received by people aged under 16	Household level	Not taxable	
Interest payments	HY100	Interest repayments on mortgage	Household level	Taxable, this means a deduction from taxes can be done	Gross
Current transfers paid	HY130	Regular inter-household cash transfers paid	Household level	Not taxable or deductible, but taxed if alimentation	Gross

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### 3.2.4 The method used for obtaining income target variables in the required form (i.e. gross values)

See above for information on control, correction, imputation and creation of the gross target variables.

#### **4. Coherence**

We were not able yet to run the same tests we ran last year. It's clear however that the differences we see in the indicators are minor than what we saw last year and that the results are in general closer to the averages of the previous waves.

One of the most striking and deviating results is the level of poverty that we observe among the unemployed (increase of +/- 4%). Closer investigation revealed that this increase is almost completely situated in the French speaking part of the country where the unemployment rate is generally higher than in the Dutch speaking part of Belgium. This might indicate that this increase is true in nature and not caused by panel related dynamics as we have seen last year. Further investigation would be welcomed however.

**Annex 1: Common cross-sectional EU indicators based on the cross-sectional component of EU-SILC and equivalised disposable income**

*Portfolio of Overarching Indicators calculated from SILC  
[OV-1] At-risk-of-poverty threshold (illustrative values)*

<b>hhtyp</b>	<b>currency</b>	<b>2007</b>
<b>A1 (Single person)</b>	<b>EUR</b>	<b>10540q</b>
	<b>NAC</b>	<b>10540q</b>
	<b>PPS</b>	<b>9759q</b>
<b>A2_2CH_LT14 (Two adults with two children younger than 14 years)</b>	<b>EUR</b>	<b>22134q</b>
	<b>NAC</b>	<b>22134q</b>
	<b>PPS</b>	<b>20494q</b>

*li01 - BE - Belgique/België - 09-01-15 - 80317*



*Portfolio of Overarching Indicators calculated from SILC  
[OV-1a] At-risk-of-poverty rate (by age and gender)*

age	sex	2007
<b>TOTAL</b>	<b>T</b>	<b>15q</b>
	<b>M</b>	<b>14q</b>
	<b>F</b>	<b>16q</b>
<b>Y0_17</b>	<b>T</b>	<b>17q</b>
<b>Y18_64</b>	<b>T</b>	<b>13q</b>
	<b>M</b>	<b>12q</b>
	<b>F</b>	<b>13q</b>
<b>Y65_MA X</b>	<b>T</b>	<b>23q</b>
	<b>M</b>	<b>21q</b>
	<b>F</b>	<b>25q</b>

*li02 - BE - Belgique/België - 09-01-15 - 80317*

*Portfolio of Overarching Indicators calculated from SILC*  
*[OV-1b] Relative median at-risk-of-poverty gap (by age and gender)*

age	sex	2007
<b>TOTAL</b>	<b>T</b>	<b>18q</b>
	<b>M</b>	<b>19q</b>
	<b>F</b>	<b>17q</b>
<b>Y0_17</b>	<b>T</b>	<b>18q</b>
<b>Y18_64</b>	<b>T</b>	<b>21q</b>
	<b>M</b>	<b>22q</b>
	<b>F</b>	<b>20q</b>
<b>Y65_MA X</b>	<b>T</b>	<b>15q</b>
	<b>M</b>	<b>17q</b>
	<b>F</b>	<b>14q</b>

*li11 - BE - Belgique/België - 09-01-15 - 80317*

*Portfolio of Overarching Indicators calculated from SILC*  
*[OV-9] At-risk-of-poverty rate anchored at a fixed moment in time (2005) (by age and gender)*

*li22 - BE - Belgique/Belgïe - 09-01-15 - 80317*

*Portfolio of Overarching Indicators calculated from SILC  
[OV-11] In-work at-risk-of-poverty rate (by gender)*

sex	2007
T	4q
M	4q
F	4q

*iw01 - BE - Belgique/Belgie - 09-01-15 - 80317*

*Portfolio of Overarching Indicators calculated from SILC*  
*[OV-2] Inequality of income distribution S80/S20 income quintile share ratio*

<b>indic_il</b>	<b>2007</b>
<b>S80_S20</b>	<b>3.9q</b>

*di11 - BE - Belgique/België - 09-01-15 - 80317*

*Portfolio of Overarching Indicators calculated from SILC  
[OV-7a] Relative median income ratio*

<b>indic_il</b>	<b>2007</b>
<b>R_GE65_45TO54 (Persons aged 65 years and over compared to persons aged between 45 and 54 years)</b>	<b>0.72q</b>

*pnp2 - BE - Belgique/België - 09-01-15 - 80317*

*Portfolio of Overarching Indicators calculated from SILC*  
*[OV-7b] Aggregate replacement ratio*

indic_il	sex	2007
<b>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)</b>	<b>T</b>	<b>0.44q</b>
	<b>M</b>	<b>0.46q</b>
	<b>F</b>	<b>0.45q</b>

*pnp3 - BE - Belgique/België - 09-01-15 - 80317*

*Portfolio of Overarching Indicators calculated from SILC*  
*[OV-C11] At-risk-of-poverty rate before social transfers (by age and gender)*

age	sex	2007
<b>TOTAL</b>	<b>T</b>	<b>41q</b>
	<b>M</b>	<b>39q</b>
	<b>F</b>	<b>44q</b>
<b>Y0_17</b>	<b>T</b>	<b>32q</b>
<b>Y18_64</b>	<b>T</b>	<b>32q</b>
	<b>M</b>	<b>30q</b>
	<b>F</b>	<b>34q</b>
<b>Y65_MA X</b>	<b>T</b>	<b>91q</b>
	<b>M</b>	<b>89q</b>
	<b>F</b>	<b>92q</b>

*li09 - BE - Belgique/België - 09-01-15 - 80317*



*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-P1] At-risk-of-poverty threshold (illustrative values)*

<b>hhtyp</b>	<b>currency</b>	<b>2007</b>
<b>A1 (Single person)</b>	<b>EUR</b>	<b>10540q</b>
	<b>NAC</b>	<b>10540q</b>
	<b>PPS</b>	<b>9759q</b>
<b>A2_2CH_LT14 (Two adults with two children younger than 14 years)</b>	<b>EUR</b>	<b>22134q</b>
	<b>NAC</b>	<b>22134q</b>
	<b>PPS</b>	<b>20494q</b>

*li01 - BE - Belgique/België - 09-01-15 - 80317*

*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-P1a] At-risk-of-poverty rate, by gender and selected age groups*

age	sex	2007
<b>TOTAL</b>	<b>T</b>	<b>15q</b>
	<b>M</b>	<b>14q</b>
	<b>F</b>	<b>16q</b>
<b>Y0_17</b>	<b>T</b>	<b>17q</b>
<b>Y18_64</b>	<b>T</b>	<b>13q</b>
	<b>M</b>	<b>12q</b>
	<b>F</b>	<b>13q</b>
<b>Y65_MAX</b>	<b>T</b>	<b>23q</b>
	<b>M</b>	<b>21q</b>
	<b>F</b>	<b>25q</b>

*li02 - BE - Belgique/België - 09-01-15 - 80317*

*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-P3] Relative median at-risk-of-poverty gap, by age and gender*

age	sex	2007
<b>TOTAL</b>	<b>T</b>	<b>18q</b>
	<b>M</b>	<b>19q</b>
	<b>F</b>	<b>17q</b>
<b>Y0_17</b>	<b>T</b>	<b>18q</b>
<b>Y18_64</b>	<b>T</b>	<b>21q</b>
	<b>M</b>	<b>22q</b>
	<b>F</b>	<b>20q</b>
<b>Y65_MA X</b>	<b>T</b>	<b>15q</b>
	<b>M</b>	<b>17q</b>
	<b>F</b>	<b>14q</b>

*li11 - BE - Belgique/België - 09-01-15 - 80317*

*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-S1] At-risk-of-poverty rate, by age and gender*

age	sex	2007
<b>TOTAL</b>	<b>T</b>	<b>15q</b>
	<b>M</b>	<b>14q</b>
	<b>F</b>	<b>16q</b>
<b>Y0_17</b>	<b>T</b>	<b>17q</b>
<b>Y18_24</b>	<b>T</b>	<b>17q</b>
	<b>M</b>	<b>17q</b>
	<b>F</b>	<b>17q</b>
<b>Y25_49</b>	<b>T</b>	<b>11q</b>
	<b>M</b>	<b>11q</b>
	<b>F</b>	<b>12q</b>
<b>Y50_64</b>	<b>T</b>	<b>13q</b>
	<b>M</b>	<b>12q</b>
	<b>F</b>	<b>14q</b>
<b>Y65_MA X</b>	<b>T</b>	<b>23q</b>
	<b>M</b>	<b>21q</b>
	<b>F</b>	<b>25q</b>

*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-S1a] At-risk-of-poverty rate, by household type*

<b>hhtyp</b>	<b>2007</b>
<b>TOTAL</b>	<b>15q</b>
<b>HH_NDCH (Households without dependent children)</b>	<b>16q</b>
<b>A1_LT64 (One adult younger than 64 years)</b>	<b>24q</b>
<b>A1_GE65 (One adult older than 65 years)</b>	<b>29q</b>
<b>A1F (Single female)</b>	<b>28q</b>
<b>A1M (Single male)</b>	<b>23q</b>
<b>A2_2LT65 (Two adults younger than 65 years)</b>	<b>8q</b>
<b>A2_GE1_GE65 (Two adults, at least one aged 65 years and over)</b>	<b>20q</b>
<b>A_GE3 (Three or more adults)</b>	<b>6q</b>
<b>HH_DCH (Households with dependent children)</b>	<b>15q</b>
<b>A1_DCH (Single parent with dependent children)</b>	<b>36q</b>
<b>A2_1DCH (Two adults with one dependent child)</b>	<b>9q</b>
<b>A2_2DCH (Two adults with two dependent children)</b>	<b>8q</b>
<b>A2_GE3DCH (Two adults with three or more dependent children)</b>	<b>18q</b>
<b>A_GE3_DCH (Three or more adults with dependent children)</b>	<b>13q</b>

*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-S1b] At-risk-of-poverty rate, by work intensity of the household and by gender and selected age*

age	sex	hhtyp	workint	2007				
TOTAL	T	HH_NDCH (Households without dependent children)	MAXWORK	2q				
			SOMEWORK	6q				
			NONEWORK	32q				
			HH_DCH (Households with dependent children)	MAXWORK	4q			
				SOMEGE05	13q			
				SOMELT05	38q			
					NONEWORK	74q		
					M	HH_NDCH (Households without dependent children)	MAXWORK	3q
							SOMEWORK	6q
NONEWORK	33q							
		HH_DCH (Households with dependent children)	MAXWORK	4q				
			SOMEGE05	12q				
			SOMELT05	40q				
				NONEWORK	77q			
				F	HH_NDCH (Households without dependent children)	MAXWORK	2q	
						SOMEWORK	7q	
NONEWORK	31q							
		HH_DCH (Households with dependent children)	MAXWORK	4q				
			SOMEGE05	14q				
			SOMELT05	37q				
				NONEWORK	72q			
				Y0_17	T	HH_NDCH (Households without dependent children)	MAXWORK	.q
							SOMEWORK	.q
NONEWORK	.q							
		HH_DCH (Households with dependent children)	MAXWORK	4q				
			SOMEGE05	15q				

age	sex	hhtyp	workint	2007
			SOMELT05	44q
			NONEWORK	78q
Y18_64	T	HH_NDCH (Households without dependent children)	MAXWORK	2q
			SOMEWORK	6q
			NONEWORK	34q
		HH_DCH (Households with dependent children)	MAXWORK	4q
			SOMEGE05	12q
			SOMELT05	35q
			NONEWORK	71q
	M	HH_NDCH (Households without dependent children)	MAXWORK	3q
			SOMEWORK	6q
			NONEWORK	36q
		HH_DCH (Households with dependent children)	MAXWORK	3q
			SOMEGE05	11q
			SOMELT05	33q
			NONEWORK	75q
	F	HH_NDCH (Households without dependent children)	MAXWORK	2q
			SOMEWORK	7q
			NONEWORK	32q
		HH_DCH (Households with dependent children)	MAXWORK	4q
			SOMEGE05	13q
			SOMELT05	36q
			NONEWORK	68q
Y65_MAX	T	HH_NDCH (Households without dependent children)	MAXWORK	3q
			SOMEWORK	7q
			NONEWORK	16q
		HH_DCH (Households with dependent children)	MAXWORK	2q
			SOMEGE05	12q

age	sex	hhtyp	workint	2007
			<b>SOMELT05</b>	<b>7q</b>
			<b>NONEWORK</b>	<b>73q</b>
	<b>M</b>	<b>HH_NDCH (Households without dependent children)</b>	<b>MAXWORK</b>	<b>3q</b>
			<b>SOMEWORK</b>	<b>6q</b>
			<b>NONEWORK</b>	<b>17q</b>
		<b>HH_DCH (Households with dependent children)</b>	<b>MAXWORK</b>	<b>.q</b>
			<b>SOMEGE05</b>	<b>.q</b>
			<b>SOMELT05</b>	<b>20q</b>
			<b>NONEWORK</b>	<b>86q</b>
	<b>F</b>	<b>HH_NDCH (Households without dependent children)</b>	<b>MAXWORK</b>	<b>4q</b>
			<b>SOMEWORK</b>	<b>9q</b>
			<b>NONEWORK</b>	<b>12q</b>
		<b>HH_DCH (Households with dependent children)</b>	<b>MAXWORK</b>	<b>4q</b>
			<b>SOMEGE05</b>	<b>17q</b>
			<b>SOMELT05</b>	<b>.q</b>
			<b>NONEWORK</b>	<b>57q</b>



*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-S1c] At-risk-of-poverty rate, by most frequent activity status and by gender*

<b>wstatus</b>	<b>sex</b>	<b>2007</b>
<b>EMP (Employment)</b>	<b>T</b>	<b>4q</b>
	<b>M</b>	<b>4q</b>
	<b>F</b>	<b>4q</b>
<b>NOT_EMP (Non employment)</b>	<b>T</b>	<b>25q</b>
	<b>M</b>	<b>25q</b>
	<b>F</b>	<b>25q</b>
<b>UNE (Unemployment)</b>	<b>T</b>	<b>34q</b>
	<b>M</b>	<b>36q</b>
	<b>F</b>	<b>32q</b>
<b>RETIR (Retired)</b>	<b>T</b>	<b>20q</b>
	<b>M</b>	<b>18q</b>
	<b>F</b>	<b>21q</b>
<b>INACT_OTH (Inactive population - Other)</b>	<b>T</b>	<b>27q</b>
	<b>M</b>	<b>28q</b>
	<b>F</b>	<b>26q</b>

*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-S1d] At-risk-of-poverty rate, by accommodation tenure status and by gender and selected age groups*

age	sex	tenstatu	2007
<b>TOTAL</b>	<b>T</b>	<b>OWNER</b>	<b>10q</b>
		<b>RENT</b>	<b>29q</b>
	<b>M</b>	<b>OWNER</b>	<b>10q</b>
		<b>RENT</b>	<b>28q</b>
	<b>F</b>	<b>OWNER</b>	<b>11q</b>
		<b>RENT</b>	<b>30q</b>
<b>Y0_17</b>	<b>T</b>	<b>OWNER</b>	<b>9q</b>
		<b>RENT</b>	<b>40q</b>
<b>Y18_64</b>	<b>T</b>	<b>OWNER</b>	<b>7q</b>
		<b>RENT</b>	<b>26q</b>
	<b>M</b>	<b>OWNER</b>	<b>7q</b>
		<b>RENT</b>	<b>25q</b>
	<b>F</b>	<b>OWNER</b>	<b>8q</b>
		<b>RENT</b>	<b>28q</b>
<b>Y65_M A X</b>	<b>T</b>	<b>OWNER</b>	<b>22q</b>
		<b>RENT</b>	<b>26q</b>
	<b>M</b>	<b>OWNER</b>	<b>20q</b>
		<b>RENT</b>	<b>21q</b>
	<b>F</b>	<b>OWNER</b>	<b>23q</b>
		<b>RENT</b>	<b>29q</b>

*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-S1e] Dispersion around the at-risk-of-poverty threshold [by gender and selected age group]*

<b>indic_il</b>	<b>age</b>	<b>sex</b>	<b>2007</b>
<b>LI_R_MD 40</b>	<b>TOTAL</b>	<b>T</b>	<b>4q</b>
		<b>M</b>	<b>4q</b>
		<b>F</b>	<b>3q</b>
	<b>Y0_17</b>	<b>T</b>	<b>4q</b>
	<b>Y18_64</b>	<b>T</b>	<b>4q</b>
		<b>M</b>	<b>4q</b>
		<b>F</b>	<b>3q</b>
	<b>Y65_MA X</b>	<b>T</b>	<b>3q</b>
		<b>M</b>	<b>3q</b>
		<b>F</b>	<b>3q</b>
<b>LI_R_MD 50</b>	<b>TOTAL</b>	<b>T</b>	<b>8q</b>
		<b>M</b>	<b>8q</b>
		<b>F</b>	<b>8q</b>
	<b>Y0_17</b>	<b>T</b>	<b>9q</b>
	<b>Y18_64</b>	<b>T</b>	<b>7q</b>
		<b>M</b>	<b>7q</b>
		<b>F</b>	<b>7q</b>
	<b>Y65_MA X</b>	<b>T</b>	<b>10q</b>
		<b>M</b>	<b>10q</b>
		<b>F</b>	<b>10q</b>
<b>LI_R_MD 70</b>	<b>TOTAL</b>	<b>T</b>	<b>23q</b>
		<b>M</b>	<b>21q</b>
		<b>F</b>	<b>25q</b>
	<b>Y0_17</b>	<b>T</b>	<b>25q</b>
	<b>Y18_64</b>	<b>T</b>	<b>19q</b>
		<b>M</b>	<b>17q</b>
		<b>F</b>	<b>21q</b>

<b>indic_il</b>	<b>age</b>	<b>sex</b>	<b>2007</b>
	<b>Y65_MA X</b>	<b>T</b>	<b>37q</b>
		<b>M</b>	<b>34q</b>
		<b>F</b>	<b>39q</b>

*li02 - BE - Belgique/België - 09-01-15 - 80317*

*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-C1] Inequality of income distribution S80/S20 income quintile share ratio*

<b>indic_il</b>	<b>2007</b>
<b>S80_S20</b>	<b>3.9q</b>

*di11 - BE - Belgique/België - 09-01-15 - 80317*

*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-C2] Inequality of income distribution Gini coefficient*

<b>indic_il</b>	<b>2007</b>
<b>GINI</b>	<b>26q</b>

*di12 - BE - Belgique/Belgie - 09-01-15 - 80317*

*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-C5] At-risk-of-poverty rate anchored at a fixed moment in time (2005) (by age and gender)*

*li22 - BE - Belgique/België - 09-01-15 - 80317*

*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC*  
*[SI-C6] At-risk-of-poverty rate before social transfers, by gender and selected age groups (except pensions)*

age	sex	2007
<b>TOTAL</b>	<b>T</b>	<b>28q</b>
	<b>M</b>	<b>26q</b>
	<b>F</b>	<b>29q</b>
<b>Y0_17</b>	<b>T</b>	<b>31q</b>
<b>Y18_64</b>	<b>T</b>	<b>26q</b>
	<b>M</b>	<b>25q</b>
	<b>F</b>	<b>28q</b>
<b>Y65_MA X</b>	<b>T</b>	<b>27q</b>
	<b>M</b>	<b>24q</b>
	<b>F</b>	<b>29q</b>

*li10 - BE - Belgique/België - 09-01-15 - 80317*



*Streamlined Social Inclusion Portfolio: Social Inclusion indicators calculated from EU-SILC  
[SI-C8] In-work at-risk-of-poverty rate (by full-time/part-time work)*

<b>break_il</b>	<b>2007</b>
<b>FULLTI ME</b>	<b>3q</b>
<b>PARTTI ME</b>	<b>6q</b>

*iw07 - BE - Belgique/Belgie - 09-01-15 - 80317*

*Portfolio of Pension Indicators calculated from SILC - Adequacy of pensions  
[PN-P1] At-risk-of-poverty rate of older people*

age	sex	2007
Y0_64	T	14q
	M	13q
	F	14q
Y65_MA X	T	23q
	M	21q
	F	25q

*li02 - BE - Belgique/België - 09-01-15 - 80317*

*Portfolio of Pension Indicators calculated from SILC - Adequacy of pensions  
[PN-P2] Relative median income ratio of elderly people (65+)*

<b>indic_il</b>	<b>sex</b>	<b>2007</b>
<b>R_GE65_45TO54 (Persons aged 65 years and over compared to persons aged between 45 and 54 years)</b>	<b>T</b>	<b>0.72q</b>
	<b>M</b>	<b>0.75q</b>
	<b>F</b>	<b>0.71q</b>

*pnp2 - BE - Belgique/Belgie - 09-01-15 - 80317*

*Portfolio of Pension Indicators calculated from SILC - Adequacy of pensions  
[PN-P3] Aggregate replacement ratio*

indic_il	sex	2007
<b>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)</b>	<b>T</b>	<b>0.44q</b>
	<b>M</b>	<b>0.46q</b>
	<b>F</b>	<b>0.45q</b>

*pnp3 - BE - Belgique/Belgie - 09-01-15 - 80317*