



EU-SILC 2007 Operation

Final quality report

Czech Republic



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

For the two-year panel EU-SILC (2006-2007) no longitudinal indicators were specified.

2. Accuracy

2.1 Sampling design

2.1.1 Type of sampling

The survey was carried out on the whole territory of the Czech Republic. The sample size of newly selected dwelling (first wave in 2007) was 4 250 dwellings. Dwellings were selected using stratified two-stage sampling design. Small geographical areas (CEUs - census enumeration units) were first sampled as primary sampling units with probability proportional to their size. In the second stage, 10 dwellings were sampled in each sampled CEU.

2.1.2 Sampling units

Census Enumeration Districts (CEUs) constitute the first-stage sampling units. CEUs are small geographical areas covering the whole territory of the country. They are used as enumeration districts during the census, but their use is more general. Continuously updated geographical register is maintained by the CZSO, where these units form the basic geographical layer, on which subsequent aggregations are based. This register is the base for an integrated hierarchical geographical information system and is the base for databases of regional indicators and statistical data.

For each CEU, a list of all buildings is maintained in the register. This list is updated from administrative data of the construction authorities (new buildings', flats' or commercial premises' acceptance protocols, demolitions' protocols). For each building, the number of dwelling units is recorded.

CEUs vary considerably in size measured in number of dwelling units in them. Before drawing of the first stage sample, the sampling frame of CEUs had to be adjusted in two ways:

- As noted above, CEUs have wider use than sampling of dwellings and there are CEUs not containing any buildings dwellings (like industrial areas, railway stations and the like). These CEUs, where the number of dwellings is zero, are dropped from the sampling frame.
- In order to enable incorporation of small census enumeration units into the sampling process (to reach the required full geographical coverage of the national territory), small CEUs (with less than 20 inhabited dwellings) were merged with adjacent CEUs and this larger merged CEU entered the first stage of sampling. Therefore, in some cases, the 10 dwellings sampled in the second stage belong to two, in exceptional cases even more, real administrative CEUs. The survey design variable DB060 (PSU) is later coded according to this adjusted structure of the sampling frame, to keep the dwellings together as they were actually sampled.

In the second stage, 10 dwellings were sampled in each sampled CEU. CZSO's regional fieldwork units (each covering one of the 14 NUTS3 administrative regions) received the list of selected dwellings (address + identification number of the flat in buildings with more than one flat). Before the actual fieldwork, the regional fieldwork units' staff carried out identification of the selected dwellings and filled in the contact names on the list of selected dwellings for interviewers.

The ultimate sampling unit was the dwelling, i.e. all persons with usual residence in that dwelling (their only place of residence or their main place of residence, according to the EU-SILC definition) were included in the survey. This includes also foreign nationals and subtenants living in the selected dwelling.

The household definition is based on the sharing of expenditures concept, in line with the definition of Paragraph 115 of the national Civil Code – based on the declaration of the persons in sampled

dwelling unit that they permanently live together and finance together expenditures to cover their needs.

2.1.3 Stratification criteria

The sampling of CEUs is stratified by region (NUTS4) and municipality size with following four categories:

- below 2 000 inhabitants
- 2 000 – 9 999 inhabitants
- 10 000 – 49 999 inhabitants
- 50 000 and more inhabitants

2.1.4 Sample size and allocation criteria

The total sample size was 11 926 dwellings (12 063 households) from which 4 250 addresses were newly selected and 7 458 dwellings (7 568 households) were revisited (second and third wave). The new sample was allocated to the strata using proportional algorithm (proportionally to the number of dwellings in the sampling frame).

2.1.5 Sample selection schemes

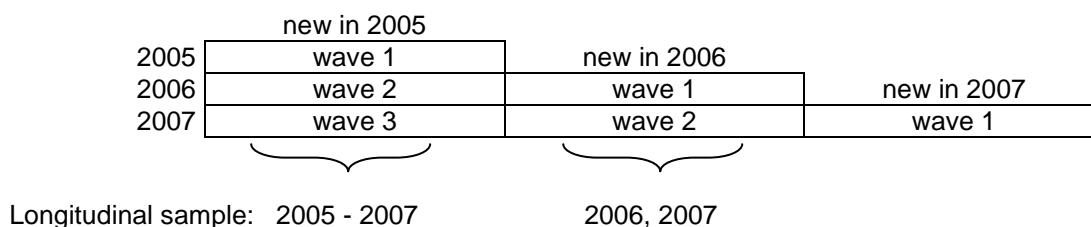
In the first stage, CEUs were sampled with probability proportional to size (number of dwellings). Simple random sampling without replacement is used for sampling of constant number of 10 dwellings in each sampled CEU.

2.1.6 Sample distribution over time

Due to the limited duration of the fieldwork period, the survey was organized as a one-shot survey. The fieldwork started on the 17th of February and ended on the 29th of April. Sample was not distributed into separate waves over the duration of the fieldwork.

2.1.7 Renewal of the sample: Rotational groups

The survey will in the long term use the integrated four-year rotational panel design. Since the 2005 operation was the first year of the survey, there was only one sample replication and no rotation was applied. The 2006 sample consists of two sample replications (household sampled in 2005 (second interviews) and households sampled in 2006 (first interviews)). The 2007 sample consists of three sample replications (household sampled in 2005 (third interviews), households sampled in 2006 (second interviews) and households newly sampled in 2007 (first interviews)). One new sample replication was added also in 2008. The rotational scheme with four replications will be functional starting in 2009, when the households from the 2005 operation will be dropped from the sample.



The sample rotation will be at the level of CEUs as primary sampling units (whole CEUs will be added to/dropped from the sample).

2.1.8 Weightings

2.1.8.1 Design factor

The sample was designed as a self-weighting sample. Design factor for all sampled dwellings is equal to 1.

2.1.8.2 Non-response adjustments

The original sample was designed as a self-weighting probability sample. However, non-ignorable level of non-response biased the structure of the sample of achieved interviews. For example, compared to the available demographic statistics and external data, the achieved average household size was significantly smaller. There was under-representation of the self-employed, of the unemployed as well as of persons living in larger cities. On the other hand, there was overrepresentation of persons in the retirement age and of persons living in family houses.

Due to the limited information on non-respondents of the first wave restricted only to the geographical information obtainable from the sampling frame, the possibilities for modelling using propensity to response models were quite limited. There was an option by second wave households to utilize information, which was obtained from previous SILC wave, and to adjust their previous year weights for attrition. In that case it would be difference between first and next wave weighting procedures. Experimental computations show that this method would entail excessive weights variability increase. Therefore, united calibration for all the waves was used as the method for correcting non-response.

The achieved sample was re-weighted using the integrated calibration technique (producing the same weights on household and personal level). This technique ensures that the weighted sample structure corresponds to a set of known external population characteristics. The calculations were implemented using the CALMAR software in SAS.

2.1.8.3 Adjustments to external data

The calibration was done for weight that were in cross-sectional file obtained. In longitudinal data files was calibration done for DB090 in case of 2006 data.

The following calibration variables were used:

- number of inhabited dwellings in each NUTS3 region, subdivided into family houses (detached and semi-detached houses) and flats, based on the 2001 Census continuously updated from administrative sources of construction authorities
- population characteristics in each NUTS 3 region:
 - o population totals from demographic statistics
 - o economic activity characteristics in each NUTS3 region:
 - number of pensioners (excl. pensions for orphans), based on the administrative data from social security administration
 - number of unemployed (registered unemployed from administrative source of the Ministry of Labour and Social Affairs, corrected for unregistered unemployment using the Labour Force Survey data)
 - number of self-employed (estimate based on the Labour Force Survey)
 - number of children aged 0-15 (from demographic statistics)
- population characteristics at the national level (based on the demographic statistics):
 - o age groups (0-15, 16-24, 25-34, 35-44, 45-54, 55-64, 65+)
 - o gender at the national level
 - o municipality size at the national level (below 2 000 inhabitants, 2 000 - 9 999, 10 000 - 49 999, 50 000+ inhabitants)

Since the target population of the survey were persons living in private households, the demographic statistics aggregate data were adjusted by subtracting institutionalised population (from social security administrative data) and persons in prisons.

2.1.8.4 Final longitudinal weights

In the first wave, the longitudinal base weights (RB060) are identical to the cross-sectional weights.

2.1.8.5 Non-response adjustments

For first wave is the situation same as in case the cross-sectional files. Due to panel data non-response adjustment was feasible for second survey year and personal base weights (RB062) was adjusted to compensate the lost o the sample due to the attrition.

2.1.8.6 Adjustments to external data

The longitudinal weight RB062 was derived from RB060. Because the sum of RB062 weights should be equal the size of the longitudinal population of individuals in scope for the two last waves, the weights was multiplied by ratio of longitudinal and cross-sectional population. The longitudinal population 2005-2006 differs from 2005 population for died and moved abroad people. The sources are same as in 2.1.8.3

2.1.8.7 Final longitudinal weights

No further adjustments were applied to longitudinal weights apart from the methods described in the previous sections.

2.1.8.8 Final cross-sectional weights

Final household cross-sectional weight was result of Calmar calibration.

	N	Minimum	Maximum	Mean	Std. Dev.
Weights DB090	9675	100	3475	417.92	205.52

The number of cross-sectional weights (number of DB090 > 0 is 9 691) differs from the number of successfully interviewed households by 16. There can be more than one household in the dwelling and in these cases occurred that one of the households in the dwelling refused the interview, was unable to respond, moved or the households have merged while at least one of the households in the dwelling was successfully interviewed. Since the calibration is performed at the dwelling level, these households get also non-zero weight. Nevertheless the number of successfully interviewed households is 9 675.

2.1.9 Substitutions

Substitutions were not used.

2.2 Sampling errors

This table is currently however still under construction.

2.3 Non-sampling errors

2.3.1 Sampling frame and coverage errors

Sampling frame covers existing buildings with the information on number of dwelling units in each building (see part on sampling units for description of the register of CEUs).

Out of the 4 250 newly sampled dwelling unit records (in the first wave), 186 were found to be ineligible for the survey (4.4 %). Fieldwork staff undertaking pre-fieldwork identification of sampled dwelling units and interviewers must declare clear confirmation of the fact, that the dwelling unit was not located.

2.3.2 Measurement and processing errors

Development of the questionnaires

Data collection had the form of an interview and interviewers filled in the answers into paper questionnaires (PAPI data collection).

The survey was conducted using paper questionnaires designed for OCR technology data capture (scanning). The first SILC questionnaires were developed in 2004. The inputs for designing the questionnaires were the questionnaires from Microcensus surveys (national income survey), the

harmonised description of EU-SILC target variables (technical document SILC 065) and the blueprint questionnaire in English used for previous SILC pilots in old Member States. Basic questionnaire structure follows the practice already well established in the Microcensus, with three main forms: dwelling unit questionnaire with household membership roster, household questionnaire and personal questionnaire. The questionnaires were first tested in pilot survey of 600 randomly sampled households (Spring 2004). The pilot project involved 14 future regional co-ordinators of the survey and small group of experienced interviewers (2-3 per region). After this fieldwork test, questionnaire was updated and partly re-designed, with active involvement of the regional staff and the participating interviewers. Together with the questionnaires, detailed interviewers guidelines were developed with binding instructions to all questions.

The content of the survey was divided into three questionnaires with different units of reference:

Questionnaire A (dwelling unit questionnaire): contained the roster with the list of all persons with usual residence in the selected dwelling, their basic demographic and social characteristics, information on sharing of expenses to determine household units and relationship of each person to the main user of the dwelling and to the head of household.

Questionnaire B (household questionnaire): filled in for each household, contained information on housing, childcare, financial situation of the household, consumer durables, inter-household transfers paid and received, consumption from household own production (i.e. small scale farming and similar activities), family social benefits, rental income and paid regular taxes on wealth (buildings and land).

Questionnaire C (personal questionnaire): filled in by each household member aged 16+ as of 31.12.2006 (i.e. persons born in 1990 and earlier). This questionnaire contained information on labour status and employment, personal income, participation in private pension plans, health, education and selected biographical information. The questionnaire C was supplemented with the EU-SILC Module 2007 (housing conditions).

Reference periods

- Age: 31.12.2006
- Other demographic variables: marital status, education: at the date of the interview
- Current employment variables (current employment status, occupation, ...): at the date of the interview
- Income data: calendar year 2006
- Housing, consumer durables, financial and social situation of household: at the date of the interview, unless the question specifically refers to some other reference period

Interviewers

The survey was performed by 777 interviewers (approximately almost 15 households per interviewer). The following table shows the successfulness of the interviewers by their basic characteristics (if there are more than one household in the dwelling, at least one interviewed household is considered as successfully surveyed).

Table 1 Response by interviewers' characteristics (%)

Interviewers' characteristics	Total	Wave 1	Wave 2	Wave 3
Age:				
Age ≤ 40	80.96	61.95	91.52	94.22
Age 41-60	82.95	64.15	92.40	93.45
Age > 60	86.16	68.74	93.73	95.96
Sex:				
Male	81.74	61.55	90.26	93.93
Female	83.86	65.87	93.42	94.34
Education:				
Primary	85.63	70.05	93.51	95.81
Lower secondary	87.48	71.56	92.65	95.23
Upper secondary	83.48	65.98	92.65	93.92
Tertiary education	78.32	54.22	91.77	94.17
Economic activity:				
Employed	81.06	61.18	92.32	93.38
Student	82.89	64.75	91.97	92.69
Retired	86.42	69.80	93.16	95.58
Unemployed	80.23	69.57	93.10	90.91
Other	81.26	63.10	89.62	95.42
Experience with surveys:				
SILC 2005 - yes	87.31	63.31	92.67	95.30
- no	80.46	65.20	92.51	91.76
SILC 2006 - yes	86.27	64.30	93.12	94.44
- no	73.83	65.16	89.35	92.40
Other	84.32	65.93	89.35	94.62
Different interviewer in 2006			88.13	90.92
Same interviewer as in 2006			94.20	95.06
Total	83.27	64.69	92.55	94.22

Data processing

Data were captured using OCR technology (scanning). After the data collection in the field, the regional fieldwork staff gathers the questionnaire material. While accepting the material from each interviewers, the initial check is performed – the way, how the questionnaires are filled, completeness of the questionnaires, basic consistence checks. Then, control sum of numerical values on each page is calculated and filled by the regional coding staff. Larger tables, with more numerical data, have their own control sums. At the same time, the coding staff coded some variables – occupation (ISCO), sector of employment (NACE) and country codes for country of birth and citizenship variables.

After this preparatory phase, questionnaires are scanned into raw data files. CZSO has three specialised scanning units with technical equipment and expertises in this data capture technology. This technology is also used extensively in business and agricultural surveys. Control sums are automatically checked during scanning. Whenever the sum of captured values does not match the control sum or when some number is not properly recognised, that position of the questionnaire appears as image on the screen of the operator for verification. Images of the scanned questionnaires are also stored with the captured data with unique filenames allowing linking of each data record with the image of the questionnaire, from which the data were captured.

The raw data files are then subject to initial centrally performed checks – checking the integrity of identification numbers, consistency with the sample, completeness of the questionnaire sets for all dwellings. Regional staff is responsible for further checking of the data for their respective region, using a special software application containing a set of logical controls, captured data and linked

images of the questionnaires. Three kinds of errors are distinguished: critical errors (must be corrected, limited to a small set of key consistency issues), errors to verify (must be commented, involving contacting the interviewer in charge of that household, if additional information is necessary) and informative flags (extraordinary or unusual situations, which should be looked at).

2.3.3 Non-response errors

2.3.3.1 Achieved sample size

4 250 new dwellings entered the survey (1st wave) and 7 676 dwellings were revisited – 7 458 at the last year's address and 218 were tracked to their new home. The fieldwork revealed that among the total of 11 926 dwellings in the sample there were 428 dwellings (4 %) unoccupied, unlocated or ineligible because the households had moved. Since there was no substitution for these ineligible units, the survey was conducted in 11 498 dwellings and 11 611 households. There were 113 additional interviewed households in these dwellings, since in 107 dwellings there are more households in one dwelling unit (household definition is based on sharing of expenses).

The overview of the survey response can be summarised by Table 2.

Table 2 Sample size – households

	Households				%			
	Total	1st wave	2nd wave	3rd wave	Total	1st wave	2nd wave	3rd wave
Total	11 611	4 091	3 616	3 904	100.0	100.0	100.0	100.0
- response	9 675	2 654	3 344	3 677	83.3	64.9	92.5	94.2
- non-response	1 936	1 437	272	227	16.7	35.1	7.5	5.8
From non-response:								
- refusals (unwillingness to give information)	1 515	1 138	211	166	78.3	79.2	77.6	73.1
- not contacted, temporarily absent	363	257	54	52	18.8	17.9	19.9	22.9
- unable to respond (health limitation)	47	31	7	9	2.4	2.2	2.6	4.0
- other reasons (linguistic etc.)	11	11	0	0	0.6	0.8	0.0	0.0

Refusals also include situations when the household did not refuse the survey as such, but did not accept to provide the information on income to the extent, which would qualify the household as successfully interviewed. The definition of successfully interviewed household allowed missing income data for only one person and the person must not be the head of the household. Non-contacts, temporarily absent category cover situations, when the interviewer did not establish contact with the selected household, despite the prescribed minimum number of three attempts of personal contact.

Table 3 Regional disparities in response

Region (NUTS3)	Total			1st wave			2nd and 3rd wave		
	HHs in survey	Response		HHs in survey	Response		HHs in survey	Response	
		Count	%		Count	%		Count	%
Praha	1 237	864	69.8	538	254	47.2	699	610	87.3
Stredocesky	1 207	1 006	83.3	462	326	70.6	745	680	91.3
Jihocesky	704	612	86.9	250	188	75.2	454	424	93.4
Plzensky	669	562	84.0	210	129	61.4	459	433	94.3
Karlovarsky	364	328	90.1	124	101	81.5	240	227	94.6
Ustecky	951	787	82.8	334	216	64.7	617	571	92.5
Liberecky	476	391	82.1	172	111	64.5	304	280	92.1
Kralovehradecky	611	513	84.0	209	134	64.1	402	379	94.3
Pardubicky	596	513	86.1	198	143	72.2	398	370	93.0
Vysocina	586	510	87.0	180	120	66.7	406	390	96.1
Jihomoravsky	1 176	948	80.6	433	252	58.2	743	696	93.7
Olomoucky	778	666	85.6	260	171	65.8	518	495	95.6
Zlinsky	657	576	87.7	218	163	74.8	439	413	94.1
Moravskoslezsky	1 599	1 399	87.5	503	346	68.8	1 096	1 053	96.1
CZ total	11 611	9 675	83.3	4 091	2 654	64.9	7 520	7 021	93.4

The lowest achieved response rate was in the City of Prague region, almost 70 percent. This result has its objective reasons, as in any other large city, the social environment and dwelling structure in this metropolitan region is the least favourable for conducting household surveys. On the other hand, Karlovarsky region (West Bohemia) is the region with exceptionally high response rate, above 90 percent. For the remaining regions, the differences between response rates are not large. As in other surveys, the highest response rates (above 87 percent) were achieved in the Eastern part of the country (Moravskoslezsky, Vysocina, Zlinsky regions). The other regions have response rates also above 80 percent.

Participation in the national EU-SILC survey is voluntary, there is no duty imposed on households to provide the required information, like it is for example in the population census. The household must be informed about the content of the survey and that its participation is voluntary and left to its decision. The main reasons for refusal reported from the field are privacy reasons (objections against giving personal information and fear of misuse of the personal data), unwillingness to report income, fear of contact with interviewers as strangers. There is a considerable group of persons, who, as a matter of principle, strictly refuse to give any information about them and their households.

SILC data files non-response characteristics, with the SILC harmonised response rates

Table 4 Accepted interviews by waves

	3rd wave	2nd wave	1st wave	Total
Accepted household interviews	3 677	3 344	2 654	9 675
Accepted personal interviews	7 408	6 646	5 330	19 384
Number of persons aged 16 years and older	7 408	6 646	5 330	19 384
Sample persons	7 332	6 758		14 090
Co-resident	129	43		172

Cross-sectional sample 2007

2.3.3.2 Unit non-response

New replication

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

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

Where

$$Ra = \frac{\text{Number of addresses successfully contacted}}{\text{Number of valid addresses selected}}$$
$$= \frac{\sum [DB120 = 11]}{\sum [DB120 = all] - \sum [DB120 = 23]} = \frac{4091}{4277 - 0} = 0.9565$$

$$Rh = \frac{\text{Number of household interviews completed and accepted for the database}}{\text{Number of eligible households at contacted addresses}}$$
$$= \frac{\sum [DB135 = 1]}{\sum [DB130 = all]} = \frac{2654}{4091} = 0.6487$$

$$NRh = (1 - 0.957 * 0.649) * 100 = 37.8907$$

The household non-response rate is about 37.89 %.

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

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

Where

$$Rp = \frac{\text{Number of personal interview completed}}{\text{Number of eligible individuals}} = \frac{5330}{5330} = 1.00$$

$$NRp = (1 - 1) * 100 = 0.00 \%$$

So, the individual non-response rate is 0.00 %.

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

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

$$*NRp = (1 - (0.957 * 0.649 * 1)) * 100 = 37.8907$$

The overall individual non-response rate is about 37.89 %.

Response rate for households (Longitudinal sample 2006, 2007)

Second wave

Table 5 2nd wave: Response rate for households

SAMPLE OUTCOME

	in wave 2	DB130=11		DB120=22	DB130=22	DB130=23	DB130=24	DB130=21	DB120=21	NC	DB110=10	DB120=23	Total
in wave 1		DB135=1	DB135=2										
DB130=11	DB135=1	3 255			48	7		200		56	3		3 569
	DB135=2												0

NEW HOUSEHOLD IN WAVE 2

DB110=8	34												34
DB110=9													0
Total	3 289	0	0	0	48	7	0	200	0	56	3	0	3 603

Response rate for households

Wave response rate	0.913
Refusal rate	0.056
No-contacted and others	0.030
Longitudinal follow up rate	0.927
Follow-up ratio	0.937
Achieved sample size ratio	0.922

Third wave

Table 6 3rd wave: Response rate for households

SAMPLE OUTCOME

	in wave 3	DB130=11		DB120=22	DB130=22	DB130=23	DB130=24	DB130=21	DB120=21	NC	DB110=10	DB120=23	Total
in wave 2		DB135=1	DB135=2										
DB130=11	DB135=1	3 549			24	9		133		69	4		3 788
	DB135=2												0
DB120=22													0
DB130=22		22											22
DB130=23													0
DB130=24													0

NEW HOUSEHOLD IN WAVE 3

DB110=8	41												41
DB110=9													0
Total	3 612	0	0	0	24	9	0	133	0	69	4	0	3 851

Response rate for households

Wave response rate	0.937
Refusal rate	0.035
No-contacted and others	0.025
Longitudinal follow up rate	0.946
Follow-up ratio	0.957
Achieved sample size ratio	0.943

Response rate for persons (Longitudinal sample 2006, 2007)

Second wave

Table 7 2nd wave: Response rate for persons

SAMPLE PERSONS FROM THE SAMPLE FORWARDED FROM LAST WAVE (2005)

	RB250=11-13	Not completed because of									Total	
		RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33	HHnc	Pn	PI		
RB110=1-2	6 324											6 324
RB110=6										46		46
RB120=2										3		3
RB120=3										7		7
RB120=4											12	12
DB135=2 or -1, or DB110=7, or DB120=21-23 or -1, or DB130=21-24 or -1									283			283
DB110=3-6								37				37

NEW SAMPLE PERSONS

Reached age 16	115											115
----------------	-----	--	--	--	--	--	--	--	--	--	--	-----

NON-SAMPLE PERSONS 16+

No in wave 1	57											57
Total	6 496							320	56	12		6 884

Response rate for persons

Wave response rate 0.998
 Longitudinal follow-up rate 0.998

Third wave

Table 8 3rd wave: Response rate for persons

SAMPLE PERSONS FROM THE SAMPLE FORWARDED FROM LAST WAVE (2005)

	RB250=11-13	Not completed because of									Total
		RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33	HHnc	Pn	PI	
RB110=1-2	6 969										6 969
RB110=6											47
RB120=2									4		4
RB120=3									7		7
RB120=4										11	11
DB135=2 or -1, or DB110=7, or DB120=21-23 or -1, or DB130=21-24 or -1								234			234
DB110=3-6								55			55

NEW SAMPLE PERSONS

Reached age 16	98										98
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NON-SAMPLE PERSONS 16+

No in wave 1	147										147
Total	7 214							289	58	11	7 572

Response rate for persons

Wave response rate 0.998
Longitudinal follow-up rate 0.998

Achieved sample size ratio for sample persons 1.098
Achieved sample size ratio for sample persons and co-residents 1.111

2.3.3.3 Distribution of households by 'household status' (DB110), by 'record of contact at address' (DB120), by 'household questionnaire result' (DB130) and by 'household interview acceptance' (DB135)

Table 9 Distribution of households by DB110, DB120, DB130 and DB135
HOUSEHOLD STATUS

	DB110										Total
	1	2	3	4	5	6	7	8	9	10	
2005									7 068		7 068
%									100.00		100.00
2006	4 205	69	5	7	35		26	57	5 802	4	10 210
%	41.19	0.68	0.05	0.07	0.34		0.25	0.56	56.83	0.04	100.00
2007	7 289	129	9	16	63	4	36	75		7	7 621
%	95.64	1.69	0.12	0.21	0.83	0.05	0.47	0.98		0.09	100.00

RECORD OF CONTACT AT ADDRESS

	DB120				Total
	11	21	22	23	
2005	6 715	5		348	7 068
%	95.01	0.07		4.92	100.00
2006	5 671	257			5 928
%	95.66	4.34			100.00
2007	203	1			204
%	99.51	0.49			100.00

HOUSEHOLD QUESTIONNAIRE RESULT

	DB130					Total
	11	21	22	23	24	
2005	4 351	1 784	464	96	20	6 715
%	64.80	26.57	6.91	1.43	0.30	100.00
2006	7 483	1 792	480	96	25	9 876
%	75.77	18.14	4.86	0.97	0.25	100.00
2007	7 012	362	102	16		7 492
%	93.59	4.83	1.36	0.21		100.00

HOUSEHOLD INTERVIEW ACCEPTANCE

	DB135=1	DB135=2	Total
2005	4 351		4 351
%	100.00		100.00
2006	7 483		7 483
%	100.00		100.00
2007	7 012		7 012
%	100.00		100.00

Longitudinal sample 2005, 2006, 2007

2.3.3.4 Distribution of persons for membership status (RB110)

Table 10 2nd wave: Distribution of persons for membership status (RB110)

	Current household members				No current household members			Total
	RB110=1	RB110=2	RB110=3	RB110=4	RB120=2 to 4	RB110=6	RB110=7	
2007	7 782	7	49	59	25	49		7 971
%	97.63	0.09	0.61	0.74	0.31	0.61		100.00

Longitudinal sample 2006, 2007 – second wave

Table 11 2nd wave: Distribution of persons moving out by variable RB120

RB110=5	RB120				Total
	1	2	3	4	
2007	56	6	7	12	81
%	69.14	7.41	8.64	14.81	100.00

Longitudinal sample 2006, 2007 – second wave

Table 12 3rd wave: Distribution of persons for membership status (RB110)

	Current household members				No current household members			Total
	RB110=1	RB110=2	RB110=3	RB110=4	RB120=2 to 4	RB110=6	RB110=7	
2006	8 297	51	86	62	3			8 499
%	97.62	0.60	1.01	0.73	0.04			100.00
2007	8 481	127	90	68	27	49	2	8 844
%	95.90	1.44	1.02	0.77	0.31	0.55	0.02	100.00

Longitudinal sample 2005 to 2007 – third wave

Table 13 3rd wave: Distribution of persons moving out by variable RB120

RB110=5	RB120				Total
	1	2	3	4	
2006		2		1	3
%		66.67		33.33	100.00
2007	66	4	7	16	93
%	70.97	4.30	7.53	17.20	100.00

Longitudinal sample 2005 to 2007 – third wave

2.3.3.5 Item non-response

In following table 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 14 Overview of the non-response for the income variables 2005 (first wave)

Item non-response (overview for different income components) ¹	% of households having received an amount	% of households with missing values (before imputation)	% of households with partial information (before imputation)
Total gross household income (HY010)	100.00	0.00	0.39
Total disposable household income (HY020)	100.00	0.00	0.39
Total disposable household income before social transfers except old-age and survivor's benefits (HY022)	98.14	0.00	0.39
Total disposable household income including social transfers except old-age and survivor's benefits (HY023)	83.66	0.00	0.39
Net income components at household level			
Income from rental of a property or land (HY040N)	4.11	0.00	0.00
Family related allowances (HY050N)	26.96	0.00	0.00
Social exclusion not elsewhere classified (HY060N)	3.88	0.00	0.00
Housing allowance (HY070N)	5.81	0.00	0.00
Regular inter-household cash transfer received (HY080N)	7.33	0.00	0.00
Income received by people aged < 16 (HY110N)	0.05	0.00	0.00
Regular taxes on wealth (HY120N)	44.84	0.00	0.00
Regular inter-household cash transfer paid (HY130N)	5.06	0.00	0.00
Tax on income and social contributions (HY140N)	68.17	0.00	0.00
Gross income components at household level			
Income from rental of a property or land (HY040G)	4.11	0.00	0.00
Family related allowances (HY050G)	26.96	0.00	0.00
Social exclusion not elsewhere classified (HY060G)	3.88	0.00	0.00
Housing allowance (HY070G)	5.81	0.00	0.00
Regular inter-household cash transfer received (HY080G)	7.33	0.00	0.00
Interests, dividends, etc. (HY090G)	16.82	0.00	0.00
Interest repayments on mortgage (HY100G)	7.70	0.00	0.00
Regular taxes on wealth (HY120G)	44.84	0.00	0.00
Regular inter-household cash transfer paid (HY130G)	5.06	0.00	0.00
Tax on income and social contributions (HY140G)	68.17	0.00	0.00

¹ For the more detailed definitions of the SILC income variables, please refer to the SILC UDB Documentation

	% of persons 16+ having received an amount	% of persons with missing values (before imputation)	% of persons with partial information (before imputation)
Net income components at personal level			
Employee cash or near cash income (PY010N)	47.90	0.12	0.00
Contributions to individual private pension plans (PY035N)	32.24	0.03	0.00
Value of goods produced by own-consumption (PY070N)	18.34	0.00	0.00
Pension from individual private plans (PY080N)	0.57	0.00	0.00
Unemployment benefits (PY090N)	4.03	0.00	0.00
Old age benefits (PY100N)	29.18	0.00	0.00
Survivor' benefits (PY110N)	8.50	0.00	0.00
Sickness benefits (PY120N)	6.34	0.00	0.00
Disability benefits (PY130N)	7.04	0.00	0.00
Education-related allowances (PY140N)	1.39	0.00	0.00
Gross income components at personal level			
Employee cash or near cash income (PY010G)	47.90	0.12	0.00
Non cash employee income (PY020G)	1.74	0.01	0.00
Contributions to individual private pension plans (PY035G)	32.24	0.03	0.00
Cash benefits or losses from self-employment (PY050G)	7.43	0.05	0.00
Value of goods produced by own-consumption (PY070G)	18.34	0.00	0.00
Pension from individual private plans (PY080G)	0.57	0.00	0.00
Unemployment benefits (PY090G)	4.03	0.03	0.00
Old age benefits (PY100G)	29.23	0.00	0.00
Survivor' benefits (PY110G)	8.50	0.00	0.00
Sickness benefits (PY120G)	6.34	0.00	0.00
Disability benefits (PY130G)	7.04	0.00	0.00
Education-related allowances (PY140G)	1.39	0.00	0.00

Table 15 Overview of the non-response for the income variables 2006 (second wave)

Item non-response (overview for different income components) ²	% of households having received an amount	% of households with missing values (before imputation)	% of households with partial information (before imputation)
Total gross household income (HY010)	100.00	0.00	0.18
Total disposable household income (HY020)	100.00	0.00	0.18
Total disposable household income before social transfers except old-age and survivor's benefits (HY022)	98.81	0.00	0.18
Total disposable household income including social transfers except old-age and survivor's benefits (HY023)	87.93	0.00	0.21
Net income components at household level			
Income from rental of a property or land (HY040N)	4.65	1.12	0.00
Family related allowances (HY050N)	26.95	0.00	0.00
Social exclusion not elsewhere classified (HY060N)	4.36	0.00	0.00
Housing allowance (HY070N)	5.45	0.00	0.00
Regular inter-household cash transfer received (HY080N)	7.40	0.00	0.00
Income received by people aged < 16 (HY110N)	0.05	0.00	0.00
Regular taxes on wealth (HY120N)	60.67	0.00	0.00
Regular inter-household cash transfer paid (HY130N)	4.57	0.00	0.00
Tax on income and social contributions (HY140N)	67.68	0.00	0.00
Gross income components at household level			
Income from rental of a property or land (HY040G)	4.65	1.12	0.00
Family related allowances (HY050G)	26.95	0.00	0.00
Social exclusion not elsewhere classified (HY060G)	4.36	0.00	0.00
Housing allowance (HY070G)	5.45	0.00	0.00
Regular inter-household cash transfer received (HY080G)	7.40	0.00	0.00
Interests, dividends, etc. (HY090G)	17.13	0.00	0.00
Interest repayments on mortgage (HY100G)	8.64	0.00	0.00
Regular taxes on wealth (HY120G)	60.67	0.00	0.00
Regular inter-household cash transfer paid (HY130G)	4.57	0.00	0.00
Tax on income and social contributions (HY140G)	67.68	0.00	0.00

² For the more detailed definitions of the SILC income variables, please refer to the SILC UDB Documentation

	% of persons 16+ having received an amount	% of persons with missing values (before imputation)	% of persons with partial information (before imputation)
Net income components at personal level			
Employee cash or near cash income (PY010N)	47.88	0.00	0.00
Contributions to individual private pension plans (PY035N)	35.12	0.00	0.00
Value of goods produced by own-consumption (PY070N)	20.38	4.07	0.00
Pension from individual private plans (PY080N)	0.58	0.00	0.00
Unemployment benefits (PY090N)	3.10	0.00	0.00
Old age benefits (PY100N)	29.83	0.00	0.00
Survivor' benefits (PY110N)	8.89	0.00	0.00
Sickness benefits (PY120N)	7.31	0.00	0.00
Disability benefits (PY130N)	7.57	0.00	0.00
Education-related allowances (PY140N)	0.67	0.00	0.00
Gross income components at personal level			
Employee cash or near cash income (PY010G)	47.88	0.00	0.00
Non cash employee income (PY020G)	1.57	0.00	0.00
Contributions to individual private pension plans (PY035G)	35.12	0.00	0.00
Cash benefits or losses from self-employment (PY050G)	7.58	3.59	0.00
Value of goods produced by own-consumption (PY070G)	20.38	4.07	0.00
Pension from individual private plans (PY080G)	0.58	0.00	0.00
Unemployment benefits (PY090G)	3.10	0.00	0.00
Old age benefits (PY100G)	29.90	0.00	0.00
Survivor' benefits (PY110G)	8.89	0.00	0.00
Sickness benefits (PY120G)	7.31	0.00	0.00
Disability benefits (PY130G)	7.57	0.00	0.00
Education-related allowances (PY140G)	0.67	0.00	0.00

Table 16 Overview of the non-response for the income variables 2007 (third wave)

Item non-response (overview for different income components) ³	% of households having received an amount	% of households with missing values (before imputation)	% of households with partial information (before imputation)
Total gross household income (HY010)	100.00	0.00	0.18
Total disposable household income (HY020)	100.00	0.00	0.18
Total disposable household income before social transfers except old-age and survivor's benefits (HY022)	98.81	0.00	0.18
Total disposable household income including social transfers except old-age and survivor's benefits (HY023)	87.93	0.00	0.21
Net income components at household level			
Income from rental of a property or land (HY040N)	4.65	1.12	0.00
Family related allowances (HY050N)	26.95	0.00	0.00
Social exclusion not elsewhere classified (HY060N)	4.36	0.00	0.00
Housing allowance (HY070N)	5.45	0.00	0.00
Regular inter-household cash transfer received (HY080N)	7.40	0.00	0.00
Income received by people aged < 16 (HY110N)	0.05	0.00	0.00
Regular taxes on wealth (HY120N)	60.67	0.00	0.00
Regular inter-household cash transfer paid (HY130N)	4.57	0.00	0.00
Tax on income and social contributions (HY140N)	67.68	0.00	0.00
Gross income components at household level			
Income from rental of a property or land (HY040G)	4.65	1.12	0.00
Family related allowances (HY050G)	26.95	0.00	0.00
Social exclusion not elsewhere classified (HY060G)	4.36	0.00	0.00
Housing allowance (HY070G)	5.45	0.00	0.00
Regular inter-household cash transfer received (HY080G)	7.40	0.00	0.00
Interests, dividends, etc. (HY090G)	17.13	0.00	0.00
Interest repayments on mortgage (HY100G)	8.64	0.00	0.00
Regular taxes on wealth (HY120G)	60.67	0.00	0.00
Regular inter-household cash transfer paid (HY130G)	4.57	0.00	0.00
Tax on income and social contributions (HY140G)	67.68	0.00	0.00

³ For the more detailed definitions of the SILC income variables, please refer to the SILC UDB Documentation

	% of persons 16+ having received an amount	% of persons with missing values (before imputation)	% of persons with partial information (before imputation)
Net income components at personal level			
Employee cash or near cash income (PY010N)	47.56	0.01	0.00
Contributions to individual private pension plans (PY035N)	36.15	0.02	0.00
Value of goods produced by own-consumption (PY070N)	20.03	3.06	0.00
Pension from individual private plans (PY080N)	0.56	0.00	0.00
Unemployment benefits (PY090N)	2.93	0.24	0.00
Old age benefits (PY100N)	30.44	0.00	0.00
Survivor' benefits (PY110N)	8.54	0.00	0.00
Sickness benefits (PY120N)	7.96	0.00	0.00
Disability benefits (PY130N)	7.73	0.00	0.00
Education-related allowances (PY140N)	0.75	0.00	0.00
Gross income components at personal level			
Employee cash or near cash income (PY010G)	47.56	0.01	0.00
Non cash employee income (PY020G)	26.78	0.00	0.00
Contributions to individual private pension plans (PY035G)	36.15	0.02	0.00
Cash benefits or losses from self-employment (PY050G)	7.51	2.66	0.00
Value of goods produced by own-consumption (PY070G)	20.03	3.06	0.00
Pension from individual private plans (PY080G)	0.56	0.00	0.00
Unemployment benefits (PY090G)	2.93	0.24	0.00
Old age benefits (PY100G)	30.56	0.00	0.00
Survivor' benefits (PY110G)	8.54	0.00	0.00
Sickness benefits (PY120G)	7.96	0.00	0.00
Disability benefits (PY130G)	7.73	0.00	0.00
Education-related allowances (PY140G)	0.75	0.00	0.00

Table 17 Overview of the non-response for the income variables 2007 (cross-sectional)

Item non-response (overview for different income components) ⁴	% of households having received an amount	% of households with missing values (before imputation)	% of households with partial information (before imputation)
Total gross household income (HY010)	99.99	0.00	0.07
Total disposable household income (HY020)	99.99	0.00	0.07
Total disposable household income before social transfers except old-age and survivor's benefits (HY022)	98.69	0.00	0.07
Total disposable household income including social transfers except old-age and survivor's benefits (HY023)	88.11	0.00	0.08
Net income components at household level			
Income from rental of a property or land (HY040N)	4.03	0.00	0.00
Family related allowances (HY050N)	26.83	0.00	0.00
Social exclusion not elsewhere classified (HY060N)	3.47	0.00	0.00
Housing allowance (HY070N)	3.99	0.00	0.00
Regular inter-household cash transfer received (HY080N)	7.50	0.00	0.00
Income received by people aged < 16 (HY110N)	0.00	0.00	0.00
Regular taxes on wealth (HY120N)	61.09	0.00	0.00
Regular inter-household cash transfer paid (HY130N)	7.02	0.00	0.00
Tax on income and social contributions (HY140N)	66.75	0.00	0.00
Gross income components at household level			
Income from rental of a property or land (HY040G)	4.03	0.00	0.00
Family related allowances (HY050G)	26.83	0.00	0.00
Social exclusion not elsewhere classified (HY060G)	3.47	0.00	0.00
Housing allowance (HY070G)	3.99	0.00	0.00
Regular inter-household cash transfer received (HY080G)	7.50	0.00	0.00
Interests, dividends, etc. (HY090G)	13.96	0.00	0.00
Interest repayments on mortgage (HY100G)	8.44	0.00	0.00
Regular taxes on wealth (HY120G)	61.09	0.00	0.00
Regular inter-household cash transfer paid (HY130G)	7.02	0.00	0.00
Tax on income and social contributions (HY140G)	66.75	0.00	0.00

⁴ For the more detailed definitions of the SILC income variables, please refer to the SILC UDB Documentation

	% of persons 16+ having received an amount	% of persons with missing values (before imputation)	% of persons with partial information (before imputation)
Net income components at personal level			
Employee cash or near cash income (PY010N)	47.89	0.06	0.00
Contributions to individual private pension plans (PY035N)	36.71	0.04	0.00
Value of goods produced by own-consumption (PY070N)	19.89	3.22	0.00
Pension from individual private plans (PY080N)	0.51	0.00	0.00
Unemployment benefits (PY090N)	2.89	0.18	0.00
Old age benefits (PY100N)	29.88	0.00	0.00
Survivor' benefits (PY110N)	8.25	0.00	0.00
Sickness benefits (PY120N)	8.32	0.06	0.00
Disability benefits (PY130N)	8.02	0.00	0.00
Education-related allowances (PY140N)	0.76	0.00	0.00
Gross income components at personal level			
Employee cash or near cash income (PY010G)	47.89	0.06	0.00
Non cash employee income (PY020G)	27.26	0.02	0.00
Contributions to individual private pension plans (PY035G)	36.71	0.04	0.00
Cash benefits or losses from self-employment (PY050G)	7.58	2.52	0.00
Value of goods produced by own-consumption (PY070G)	19.89	3.22	0.00
Pension from individual private plans (PY080G)	0.51	0.00	0.00
Unemployment benefits (PY090G)	2.89	0.18	0.00
Old age benefits (PY100G)	29.99	0.00	0.00
Survivor' benefits (PY110G)	8.25	0.00	0.00
Sickness benefits (PY120G)	8.32	0.06	0.00
Disability benefits (PY130G)	8.02	0.00	0.00
Education-related allowances (PY140G)	0.76	0.00	0.00

Cross-sectional sample 2007

2.4 Mode of data collection

Distribution of household members by data status (RB250)

Registers are not used at all. Due to strict definition of response, there are any "not completed interviews" at individual level or "not contacted individuals" (all such cases were filled as proxy or were self-administered by respondents).

Distribution of household members by type of interview (RB260)

The data collection method was PAPI (Paper Assistance Personal Interview). Most of the questionnaires were filled during fact-to-face interview with the interviewer. Some personal questionnaires were filled as proxy interviews – information for household member not present at the time of the interview was provided by another household member. In some case, where this was agreed with the household, interviewer left the personal questionnaire for some household member and collected it later (self-administered questionnaire).

Table 18 Distribution of household members by type of interview (RB260)

Method	Total		First wave		Second wave		Third wave	
	Count	%	Count	%	Count	%	Count	%
Face to face interview – PAPI	17 610	90.8	4 839	90.8	6 222	91.3	6 549	90.5
Face to face interview - CAPI	not used	-	not used	-	not used	-	not used	-
CATI, Telephone interview	not used	-	not used	-	not used	-	not used	-
Self-administered by respondent	56	0.3	14	0.3	15	0.2	27	0.4
Proxy interview	1 718	8.9	477	8.9	581	8.5	660	9.1
Total	19 384	100	5 330	100	6 818	100	7 236	100

Cross-sectional sample 2006

2.5 Imputation procedure

Situation of missing income data for one of the household members was rare (7 cases). For these persons, the income was imputed by the simple hot-deck method (using randomly chosen person with similar characteristics from another household). Access to administrative register information on individual level is not possible. We use our developed model for gross/net conversion, which was developed with regard to the Czech tax laws.

Deductive imputation took place within the frame of logical checks. Regional staff is responsible for checking of the data for their respective region, using a special software application containing a set of logical checks, captured data and linked images of the questionnaires. The comparison of original data with data after these checks showed differences within the range to 0.5% of all item cases.

The Item non-response of non-income-variables is rare, so model approach development is useless. We use hot-deck method for new households and information from last year for households in next waves of survey.

2.6 Imputed rent

The main problem, which makes the rent imputation difficult, is that there is too low share of households paying market rent in the Czech Republic. There are only 3.8% of tenants paying market rent in the EU-SILC sample. 19% of households included in the sample pay rent that is regulated by the Czech government, thus the market rent has to be estimated also in these cases.

We tested 3 methods (subjective method, stratification method, Heckman model) for computing rent and finally we decided for subjective method, because it seemed best in the Czech conditions. Respondents were asked to estimate the price for which their dwelling could be sold. Subsequently, the market rent is derived. The advantage of this method lies in its simplicity but this is substantially outweighed by its drawback - the fallibility of responded values due to lack of knowledge of housing market of the respondents. The values can be overestimated as well as underestimated, depending on how the household is informed about the current market prices.

We use external information about market rent from the Institute of Regional Information (IRI). IRI provides locally usual market rents and prices in 336 municipalities and their modification depending on several factors—the size of the flat, the location within the municipality and the status of the flat (new, old or reconstructed). Although it completely omits small villages and it does not deal with houses (it considers only rents in flats) it still represents the most reliable, and in fact the only source of external information.

We used the IRI information in order to gain the monthly market rent from the subjective price. Based on comparison of price and monthly market rent of “standard” flat, which is defined by IRI as an older flat of average area (68 m²) in average locality within the municipality, we determined the “rent-price” ratio. This ratio was estimated to 0.37%. So we computed monthly market rent as 0.37% subjective price of flat and this rent was the base for computing imputed rent.

2.7 Company cars

The lowest possible amount applicable for taxation in the tax law is added to the non-monetary income of the employee (CZK 1000/month)

3. Comparability

3.1 Basic concepts and definitions

- The reference period: no differences between the national and standard EU-SILC concept
- The private household definition: no differences (there can be more households in one dwelling eligible for the survey)
- The household membership: no differences
- The income reference period used: last calendar year
- The period for taxes and social contributions: taxes and social insurance contribution refer to the income received during the income reference period
- The reference period for taxes on wealth: income reference period
- The lag between the income reference period and current variables: three to four months
- The total duration of the data collection of the sample: 8 weeks
- Basic information on activity status during the income reference period: no differences

3.2 Components of income

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

The concepts and definitions used in the survey are those set in the EU-SILC documentation (definitions of target variables, as they are set in the EU-SILC regulations and technical document "Description of Target Variables – Doc. SILC 065). There is only one deliberate deviation from the used concepts:

Variable PY070 Value of goods produced by own-consumption, which is defined at the level of individual household members, is collected at the household level and later assigned to the head of household. This is due to the difficult attribution of this income in kind to individual household members (includes mainly small scale farming activities for own-consumption or own-consumption from family businesses).

3.2.2 The source or procedure used for collection of income variables

All the income variables are obtained by interview. The EU-SILC income target variables were divided to more subcomponents. The subcomponents were defined according to the Czech benefit system. These subcomponents were surveyed.

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

Table 19 Overview of the collection of income data (net/gross values)⁵

Income component	% collected net of taxes and social contributions	% collected gross ⁶
PY010G	26.0	74.0
PY010N	26.0	74.0
PY020G	0.0	100.0
PY020N	-	-
PY035G	100.0	0.0
PY035N	100.0	0.0
PY050G	18.9	81.1
PY050N	-	-
PY070G	0.0	100.0
PY070N	100.0	0.0
PY080G	100.0	0.0
PY080N	100.0	0.0
PY090G	0.0	100.0
PY090N	100.0	0.0
PY100G	0.0	100.0
PY100N	100.0	0.0 ⁷
PY110G	0.0	100.0
PY110N	100.0	0.0
PY120G	0.0	100.0
PY120N	100.0	0.0
PY130G	0.0	100.0
PY130N	100.0	0.0
PY140G	0.0	100.0
PY140N	100.0	0.0

Both alternatives (gross amounts, net amount – net of taxes and social insurance contributions) were available to respondents for income from employment and self-employment income. In addition, information on claimed tax deductions was collected from respondents. Algorithms based on detailed application of the national tax rules were then used to calculate the complementary net/gross amount. Social benefits are generally tax-exempt – therefore there is no difference between gross and net values – they can be collected as one value and assigned to both gross and net.

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

Situation of missing income data for one of the household members was rare (7 cases). For these persons, the income was imputed by the simple hot-deck method (using randomly chosen person with similar characteristics from another household).

⁵ For the definitions of the SILC database income variables, please refer to the SILC UDB Documentation.

⁶ Gross amount does not include social insurance contributions for the self-employed – where these are treated in our national system as part of the tax-deductible costs and not as part of the gross self-employment income.

⁷ In 22 cases variable of net series is not filled because variable of gross series is filled (Flag –5)

Another source of bias, which needs to be taken into account, stems from the interviewing. Data on income obtained during interviews with household members have the tendency to underestimate certain sources of income or data on some components is missing (item non-response).

Underestimation of income is a natural consequence of the fact, that respondents either tends to give lower than actual values or simply did not recall certain irregular or small incomes. It is, more or less, a non-sampling error, affected substantially by the incomes themselves and by their source. The possibilities to eliminate this underestimation of the survey data are limited. In the presented survey, only such adjustments were done, where there was sufficiently reliable external statistical source or which can be based on the legislation.

Data on gross income from employment were compared with corresponding data from wage statistics broken into sectors of activity (NACE). Different from the last year's survey and in accordance with experience from other income surveys, income from work was underestimated (roughly by 5.4 %). Primarily, this underestimation concerned those incomes that were recorded as yearly lump sums. Such incomes were moderately boosted so that the average monthly gross pay by sectors approached the data from wage statistics. There was no need for corrections with income from private enterprise.

In case of social benefits for which there is a legal entitlement (parental leave benefit, child birth benefit, death grant provided to families of the deceased, to some extent also maternity leave benefit), a check on their receiving by the eligible households was applied and amounts provided were corrected according to the amounts fixed by the legislation. Old age benefits (pension from the social security system) were not corrected, since their underestimation is quite low.

Amounts declared by the unemployed as unemployment benefits were overestimated. Unemployed respondents tend to report their income from social benefits as unemployment benefits and do not distinguish them from the minimum income support benefits (claimed on the basis of the legal minimum subsistence amounts). In cases where the duration of unemployment and the reported amounts did not match the rules of the unemployment benefits provision, the reported amounts were re-classified as minimum income support benefits.

It was not possible to correct the underestimation of the sickness benefits (where respondents tend to forget spells of short-term illness over the 12 months income reference period), means-tested social benefits whose claims depend on the previous income (prior to the income reference periods), capital income and non-monetary income generated by own-consumption.

The value of goods produced by own-consumption was an estimate of the household based on the amount of consumed food and other goods, own production and goods from own business during the year 2006 (for example food and animals from own small-scale non-commercial farming activity, value of meals from own restaurant, bread from own bakery and the like).

3.3 Tracing rules

No difference to common methodology.

4. Coherence

4.1 Comparison of income target variables and number of persons with external sources

The numbers of recipients of most of the incomes were used as calibration variables. The total gross income can be divided into four components: income of employees, income of self-employed, social income and other income. Any other sufficiently reliable source of household income is not available. The only part of income that can be reliably compared with the external source (administrative source) is the social income.

Table 20 Social income – comparison with administrative sources (Ministry of Labour and Social Affairs) – in million CZK

	EU-SILC 2006	Administrative source	Ratio*
Total social income	311 514	317 556	98.1
Sickness benefits	13 478	32 774	41.1
Pensions (all)	257 300	261 464	98.4
Unemployment benefits	5 719	7 308	78.3
Child benefits	11 123	11 033	100.8
Parental allowances	13 345	13 526	98.7
Housing allowances	2 182	2 287	95.4

* (EU-SILC/Administrative source)*100

The other income components except to social income can be only compared to national accounts for household sector. Comparison of the aggregated income from this survey with the household sector aggregates of the national accounts (even after their modification taking into account the items, which are not covered by household income surveys) is relatively difficult. Concerning its aggregated value the income obtained by direct questioning in the households will always be lower. The more important fact for evaluation of their credibility is that the trend in development of household income is in line with the trends in the national accounts. From this viewpoint, the presented results of SILC 2007 are in full agreement with data from the previous year and with related statistics from developed nations of the European Union.

Table 21 Income – comparison with national accounts – in million CZK

	EU-SILC 2006	National Accounts*	Ratio**
Income of employees	858 998	1 013 832	84.7
Income of self-employed	214 352	252 972	84.7
Total gross income	1 435 704	1 516 1147***	93.5
Total net income	1 203 297	1 441 284***	83.5

* Preliminary results

** (EU-SILC/National Accounts)*100

*** Excluding imputed rent