



**The Statistical Office of the Slovak Republic**

**FINAL QUALITY REPORT  
STATISTICS ON INCOME AND LIVING CONDITIONS  
(EU SILC 2005-2008)**

**the Slovak Republic**

**October 2010**

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

## ***At persistent-risk-of-poverty rate by gender (60% median)***

*The share of persons with an equivalised total net income below the risk-of-poverty threshold in the current year and in at least two of the proceeding three years. Gender, age groups breakdown and total.*

**Table 1. At-persistent-risk-of-poverty rate by gender and age groups (60% median)**

Age groups	Total	Male	Female
Total	5.1	4.7	5.4
0-17 years	9.6	10.6	8.4
18-64 years	4.1	3.8	4.4
65+ years	4.8	1.6	6.7

## ***At persistent-risk-of-poverty rate by gender (50%median)***

*The share of person with an equivalised total net income below the 50% median equivalised income in the current year and in at least two of the preceding three years. Gender, age groups breakdown and total.*

**Table 2. At-persistent-risk-of-poverty rate by gender and age groups (50% median)**

Age groups	Total	Male	Female
Total	2.2	2.2	2.1
0-17 years	4.7	4.2	5.4
18-64 years	1.8	2.1	1.4
65+ years	1.4	-	2.3

## 2. ACCURACY

### 2.1. Sample design

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

One - stage stratified sampling was used in EU SILC 2005-2008. The proportional number of households was selected by simple random sampling in individual strata. In the first year of survey, households were selected in to the 4 rotational group on the fact that in each subsequent year of survey one rotational group was excluded and new one was added.

Sub-samples	2005	2006	2007	2008
1	1. time			
2	1. time	2. time		
3	1. time	2. time	3. time	
4	1. time	2. time	3. time	4. time
5		1. time	2. time	3. time
6			1. time	2. time
7				1. time

Stratified sampling was used for selection of households and in individual strata proportional number of households was selected by simple random sampling.

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

Households sharing of expenditures are the sampling units. Households sharing of expenditures are private households comprised of persons in dwelling who live and manage together, including sharing in ensuring living needs. As manage together we considered: share in covering the basic household costs (catering, housing cost, costs of electricity, gas etc.). The overall list of households sharing of expenditures and permanently occupied dwellings and houses is available on the base of data from the 2001 Population and Housing Census (acronym - SODB). Changes in the number of permanently occupied dwellings and houses within the period 2001-2004 and 2004-2007 were updated. The information on the number of allocation and reduction of dwellings and the announcement in regions of the Slovak Republic were used.

### **2.1.3 Stratification and substratification criteria**

In EU SILC 2005-2008 there were used two criteria of area stratification in the sampling design:

- geographical stratification (8 standard administrative regions corresponding to the European NUTS 3 level.)
- degree of urbanization: 7 groups according to population size of municipalities (number of inhabitants in municipalities).

Using these two stratification criteria there was created 48 strata (variable DB050).

From each stratum there were selected households sharing of expenditures through simple random sampling.

### **2.1.4 Sample size and allocation criteria**

Minimum effective sample size recommended by EUROSTAT for the Slovak Republic was 4 250 households for cross-sectional component.

Survey was carried out in 6016 households in the year 2005, in 6 025 households in the year 2006, in 5 840 households in the year 2007 and in 5 879 households in the year 2008.

**Table 3. Numbers of selected households sharing of expenditures in longitudinal component 2005-008**

NUTS 2		Drawn				Accepted (DB135=1)			
		2005	2006	2007	2008	2005	2006	2007	2008
SK01	Bratislavsky kraj	195	338	452	396	177	288	396	374
SK02	Zapadne Slovensko	526	1 034	1 510	1 349	480	893	1 349	1 312
SK03	Stredne Slovensko	374	731	1 095	1 007	343	664	1 007	981
SK04	Vychodne Slovensko	393	795	1 184	1 061	357	727	1 058	1 019
SK	Slovak Republic	1 488	2 898	4 241	3 813	1 357	2 572	3 810	3 686

### 2.1.5 Sample selection scheme

The information on population, which was obtained from sampling frame, the information and the rules for proportional stratified sampling was used in creating of sample selection scheme for the year 2005.

Households were selected into new rotational group for the year 2006, 2007 as well as for the year 2008 by analogy as in the year 2005.

### 2.1.6 Sample distribution over time

Survey for the year 2005 was carried out from the 16-th May to 16-th June 2005.

Survey for the year 2006 was carried out from the 3-rd April to 28-th April 2006.

Survey for the year 2007 was carried out from the 2-nd April to 30-th April 2007.

Survey for the year 2008 was carried out from the 1-st April to 30-th April 2008.

### 2.1.7 Renewal of sample: rotational groups

In the first year of survey (EU SILC 2005) sample was divided into four rotational groups. There were approximately 1 500 households in each sub-group.

In the year 2006 households from the 1-st rotational group were replaced by new one, in the year 2007 it were households from the 2-nd rotational group and in the year 2008 it were households from the 3-rd rotational group.

Sample size for longitudinal component for the Slovak Republic was 3 250 households, or 8 250 persons aged 16+ in accordance with recommendation of Eurostat.

As input data for creation of longitudinal component were households in 4-th rotational group for the year 2005 - 2008, households of 1-st rotational group for the year 2006- 2008 and households of 2-nd rotational group for the year 2007- 2008.

**Table 4. Renewal of sample in longitudinal component 2005-2008**

DB075	Drawn				Accepted (DB135=1)			
	2005	2006	2007	2008	2005	2006	2007	2008
<b>Total</b>	<b>1 488</b>	<b>2 898</b>	<b>4 241</b>	<b>3 813</b>	<b>1 357</b>	<b>2 572</b>	<b>3 810</b>	<b>3 686</b>
<b>4</b>	1 488	1 379	1 298	1 161	1 357	1 265	1 159	1 085
<b>1</b>		1 519	1 516	1 239		1 307	1 239	1 190
<b>2</b>			1 427	1 413			1 412	1 411

## **2.1.8 Weightings**

### **2.1.8.1 Design factor**

The longitudinal component of EU-SILC started with the sample of the EU-SILC 2005 survey, where one - stage stratified sampling was used. The proportional number of households was selected by simple random sampling in individual strata. Each household had the same inclusion probability and the design weight is given by the total number of households in the sampling frame divided by the number of selected households.

### **2.1.8.2 Non-response adjustments**

The reduction of weight deviation caused by households that had been contacted (DB120=11); however refused the interview (DB135=2), was solved by the correction of weights in relation to the response rate, i.e. multiplying the weights by inverse value of response rate. The probability of response of each household is not known. We used dividing households into strata (region and rotational group) and we resulted from assumption that each household in stratum has the same probability of response. Then the empirical value of the response rate within the stratum gives the estimate of the probability of response for each household in the stratum.

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

- was realized by using method of simple calibration of household weights to get calibration variables, i.e. numbers of households sharing of expenditures in regions by number of household members
- in case of persons there were adjustments realized by using method of simple calibration of weights of household members to get calibration variables, i.e. number of persons in regions by age groups and by sex.

### **2.1.8.4 Final longitudinal weight**

#### **General description of construction of longitudinal weights**

Longitudinal data were created from household data, or persons of sampling network for cross-sectional data files. Sampling network for cross-sectional data files was constructed by rotational system. It was created by four rotational groups, where each rotational group was representative for whole population of SR.

Panel for longitudinal data file with two-years-duration was created by data on households or persons per three rotational groups of cross-sectional component, which in both years were equal.

Panel for longitudinal data file with three-years-duration was created by data on households or persons per two rotational groups of cross-sectional component, which in three years were equal.

Panel for longitudinal data file with four-years-duration was created by data on households or persons per one rotational groups of cross-sectional component, which in all four years was equal.

On the base of mentioned above results, that foundation for calculation of weights for longitudinal data files are weights estimated in cross-sectional data files. Calculation of cross-sectional weights was realised in accordance with recommendation of Eurostat and it was also the part of intermediate quality report.

Calculation of longitudinal weights for which as a foundation were cross-sectional weights per individual years was realised in accordance with recommendation of Eurostat too.

Fact that each rotational group is representative for whole population of SR allows following procedure of calculation of longitudinal weights.

- Cross-sectional weights per individual years were multiplied by 4 (then each one provides representative outputs for SR)
- Cross-sectional weights of each rotational group were adjusted by number of persons, who were removed from population by reason of death, migration out of country, moving out of private household to collective household or they had to be excluded from target population by other reasons. (Adjustment was carried out not only the base of implied inputs in cross-sectional survey, but also under external estimations of individual events for SR)
- Such mentioned weights were adjusted under total non-response and were calibrated to number of households in relevant years, calibration variables were numbers of households by number of household members in individual regions
- Weights of individual persons were adjusted in accordance with value of variable RB110 (Membership status)
- Weights were recalculated according to duration of longitudinal data files (taking into account that each rotational group represents population of SR:
  - if there is two-years-duration (data file comprises of three rotational groups), so weights are divided by 3
  - if there is three-years-duration (data file comprises of two rotational groups), so weights are divided by 2
  - if there is four-years-duration (data file comprises of one rotational groups), so weights are divided by 1

#### Detailed description of weights calculation

Calculation of the household design weights DB080 was based on probability of sampling of households sharing of expenditures and correction of weights was carried out by response rate of questionnaires.

**DB090<sub>k0</sub>** in longitudinal component are calculated by calibration of cross-sectional **DB090<sub>k0</sub>** by using calibration variables: numbers of households sharing of expenditures by number of persons in regions.

**RB060** - for each person defined in data file, there was personal base weight in wave t=1 defined as:

$$\omega_1^{(RB)} = RB060 = RB050$$

In the next wave between 2007 and 2008 there were dropped out persons from basic file by reason of death, moving out of republic, moving from private household into collective household or by other reasons. On the next step we had to take into account persons, that fell out and they had influence on total non-response (it was impossible to find them).

For this reason arrangement of basic weights was adjusted by status of person and there were taken into account external estimations of numbers following events in SR:

- birth of children, if their mother is sample person, they obtained weight of their mother
- persons, that moved into selected household from other non-selected household - they were co-resident and RB060=0

**RB062** is weight for longitudinal file of two-years duration, involving annual data from the years 2007-2008 (rotational group 4, 1 and 2)

In condition of the Slovak Republic rotational groups have the same size - decrease is minimal, RB062 was calculated from RB060 divided **3** (arrangement of weights was realized on weights, which were representative for each rotational group for whole population of SR), or **4/3** (in the case, if initial weights are not calculated on whole population of SR during arrangements).

**RB063** is weight for longitudinal file of three-years duration, involving annual data from the years 2006, 2007 and 2008 (rotational group 4 and 1). RB063 was calculated from RB060 divided **2** (arrangement of weights was realized on weights, which were representative for each rotational group for whole population of SR), or **4/2** (In the case, if initial weights are not calculated on whole population of SR during arrangements).

**RB064** is weight for longitudinal file of four-years duration, involving annual data from the years 2005, 2006, 2007 and 2008 (rotational group 4). RB064 was calculated from RB060 divided **1** (arrangement of weights was realized on weights, which were representative for each rotational group for whole population of SR), or **4/1** (in the case, if initial weights are not calculated on whole population of SR during arrangements).

**PB050 = RB060**, however concerning only population aged 16 and over (16+).

For rotational group 4 (years 2005, 2006, 2007 and 2008) sum of weights is equal of longitudinal population size of adults in the years 2005, 2006, 2007 and 2008.

For rotational group 4 and 1 (years 2006, 2007 and 2008) sum of weights is equal of longitudinal population size of adults in the years 2006, 2007 and 2008.

For rotational group 2 (year 2007 and 2008) sum of weights is equal of longitudinal population size of adults in the years 2007 and 2008.

#### 2.1.8.5 Non-response adjustments for longitudinal component

Non-response adjustments for longitudinal component was realized in relation to 4-th wave of the survey, i.e. year 2008 in following way:

- for rotational groups 4 and 1, 2 for the year 2008 we adjusted weights from previous year 2007 by number of persons, who moved in or moved out these households during year, which preceded actual year of the 2007 survey.

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

Weights of each rotational group (4 and 1, 2) in each wave (years 2005- 2008) were calibrated to total number of households in the Slovak Republic. Absolute numbers of households by number of household members in regions were calibration variables. (External information are accomplished estimate by expert in Demography area in Slovakia.)

#### 2.1.8.7 Final longitudinal weight

- see part 2.1.8.4

#### 2.1.8.8 Final household cross-sectional weight

Calculation of cross-sectional weights was realized in accordance with recommendation of Eurostat:

- calculation of the household design weights – target variable DB080 was based on probability of sampling of households sharing of expenditures,
- correction of weights was carried out by response rate of questionnaires
- weights of the households sharing of expenditures has been calibrated to external numbers of households by number of membership in administration regions, i.e. there were calculated initial household cross-sectional weights  $DB090_{k0}$ ,
- personal cross – sectional weights has been calibrated to external numbers of persons by age (5 yearly aged groups) and by sex in the administration regions i.e. calculation of the personal cross-sectional weights  $RB050_{ki0}$ ,
- integration of initial household and personal cross-sectional weights  $DB090_{k0}$  a  $RB050_{ki0}$  was made for each household k:

$$DB090_k = RB050_{ki} , \text{ where } k = \text{number of household}$$

i = member ordinal number of the household of k

$$\sum_k \sum_i RB050_{ki} = \text{total Slovak population}$$

- personal cross - sectional weights for all households members aged 16 and over, PB040 has been calibrated to the same total as cross sectional weights for all households members, so:

**PB040=RB050**

- cross - sectional weights for child care RL070 has been calibrated to the same total as cross sectional weights for all households members, so:

**RL070=RB050**

#### 2.1.9 Substitutions

N/A

## 2.2. Sampling errors

**Table 5. Mean, total number of observations (before and after imputation) and standard error for income components (households & persons, weighted mean) - cross-sectional component EU SILC 2008**

Income components	Mean	Number of observations		Standard error
		before imputation	after imputation	
HY010	379 696	5 448	5 448	3 712
HY020	323 891	5 449	5 449	2 900
HY022	303 798	5 424	5 424	2 884
HY023	239 896	5 314	5 314	3 248
Gross income components at household level				
HY030G	42 644	0	4 561	358
HY040G	16 906	221	229	2 131
HY050G	18 732	2 291	2 291	492
HY060G	41 335	183	221	2 450
HY070G	13 338	15	25	3 210
HY080G	30 350	285	293	1 833
HY081G	29 189	0	217	1 831
HY090G	3 697	457	457	421
HY100G	40 343	269	269	2 595
HY110G	10 696	18	18	6 063
HY120G	720	4 695	4 734	11
HY130G	20 999	167	170	2 011
Net income components at personal level				
PY010G	193 315	7 498	7 548	1 478
PY020G	10 773	5 239	5 686	100
PY021G	76 802	100	100	7 366
PY030G	66 223	0	7 242	411
PY035G	7 298	1 358	1 358	225
PY050G	238 995	746	749	8 521
PY070G	4 397	1 924	1 924	179
PY080G	18 507	33	33	5 767
PY090G	39 594	180	197	3 328
PY100G	103 138	3 303	3 303	609
PY110G	37 372	828	878	740
PY120G	17 369	316	316	1 211
PY130G	62 161	869	880	1 411
PY140G	27 307	114	114	2 460

**Table 6. Mean, total number of observations (before and after imputation) and standard error for income components (households & persons weighted mean) - longitudinal component - wave1 (2005)**

Income components	Mean	Number of observations		Standard error
		before imputation	after imputation	
HY010	273 091	547	1 357	6 327
HY020	229 163	549	1 357	4 659
HY022	210 394	557	1 343	4 707
HY023	171 324	481	1 249	5 296
<b>Gross income components at household level</b>				
HY040G	17 902	15	38	5 932
HY050G	17 581	560	560	745
HY060G	24 023	137	142	2 394
HY070G	8 272	2	3	2 811
HY080G	7 587	30	30	1 999
HY090G	5 102	18	47	1 451
HY100G	11 247	29	38	2 283
HY110G	4 070	4	4	1 289
HY120G	659	822	924	30
HY130G	11 800	37	39	2 594
<b>Net income components at personal level</b>				
PY010G	162 706	519	1 584	2 894
PY021G	6 551	0	17	2 186
PY035G	6 131	257	274	346
PY050G	146 129	86	107	37 823
PY070G	4 872	440	440	355
PY080G	11 546	20	20	3 409
PY090G	20 717	123	130	1 398
PY100G	81 680	757	773	1 618
PY110G	32 713	203	213	1 530
PY120G	10 932	113	130	1 096
PY130G	50 416	223	227	2 450
PY140G	1 000	1	1	0

**Table 7. Mean, total number of observations (before and after imputation) and standard error for income components (households & persons, weighted mean) - longitudinal component - wave2 (2006)**

Income components	Mean	Number of observations		Standard error
		before imputation	after imputation	
HY010	318 225	2 269	2 572	10 003
HY020	271 900	2 259	2 572	7 342
HY022	253 773	2 311	2 549	7 384
HY023	206 165	2 228	2 380	7 803
<b>Gross income components at household level</b>				
HY040G	9 342	78	95	3 965
HY050G	17 420	1 085	1 085	620
HY060G	31 986	124	173	2 516
HY070G	95 675	5	5	74 164
HY080G	23 228	114	124	2 404
HY090G	3 109	30	59	874
HY100G	16 214	65	65	1 754
HY110G	2 649	6	6	468
HY120G	696	1 761	1 772	19
HY130G	13 644	64	65	1 779
<b>Net income components at personal level</b>				
PY010G	167 097	3 247	3 312	7 016
PY021G	75 124	0	53	9 562
PY035G	7 666	613	650	1 271
PY050G	184 023	312	312	18 109
PY070G	3 774	937	966	141
PY080G	12 527	23	23	2 167
PY090G	29 152	183	196	3 059
PY100G	92 431	1 518	1 562	3 141
PY110G	33 607	399	459	1 163
PY120G	15 509	154	177	1 775
PY130G	51 944	388	393	1 766
PY140G	11 997	42	42	1 042

**Table 8. Mean, total number of observations (before and after imputation) and standard error for income components (households & persons, weighted mean) - longitudinal component - wave3 (2007)**

Income components	Mean	Number of observations		Standard error
		before imputation	after imputation	
HY010	344 024	3 760	3 807	3 925
HY020	295 574	3 744	3 810	3 096
HY022	276 477	3 740	3 785	3 091
HY023	218 734	3 625	3 670	3 484
<b>Gross income components at household level</b>				
HY030G	36 047	0	3 444	502
HY040G	20 297	155	163	4 852
HY050G	18 104	1 619	1 619	514
HY060G	31 436	188	209	2 104
HY070G	2 720	10	11	998
HY080G	23 728	201	211	1 502
HY090G	5 213	267	267	1 344
HY100G	33 309	145	145	3 040
HY110G	5 259	17	17	1 457
HY120G	705	3 153	3 161	16
HY130G	18 501	111	122	1 881
<b>Net income components at personal level</b>				
PY010G	176 399	4 704	5 091	1 642
PY020G	11 771	3 384	3 667	279
PY021G	74 089	73	81	7 614
PY030G	59 369	0	4 866	467
PY035G	7 519	1 023	1 023	299
PY050G	209 879	483	483	9 283
PY070G	4 645	1 351	1 376	287
PY080G	11 713	29	31	2 399
PY090G	29 135	168	181	2 421
PY100G	96 993	2 234	2 283	785
PY110G	36 357	600	663	999
PY120G	15 772	212	237	1 608
PY130G	58 554	630	639	1 931
PY140G	20 550	61	61	1 810

**Table 9. Mean, total number of observations (before and after imputation) and standard error for income components (households & persons, weighted mean) - longitudinal component - wave2 (2006)**

Income components	Mean	Number of observations		Standard error
		before imputation	after imputation	
HY010	384 976	3 686	3 686	4 543
HY020	327 336	3 686	3 686	3 559
HY022	306 979	3 672	3 672	3 542
HY023	243 294	3 592	3 592	3 976
<b>Gross income components at household level</b>				
HY030G	78 121	0	3 172	811
HY040G	16 377	144	150	2 637
HY050G	18 262	1 514	1 514	529
HY060G	39 516	128	157	2 801
HY070G	13 543	7	15	4 575
HY080G	31 011	197	200	2 394
HY081G	30 914	148	148	2 603
HY090G	4 001	283	283	651
HY100G	36 526	149	149	2 708
HY110G	11 746	12	12	7 870
HY120G	727	3 201	3 226	13
HY130G	18 495	123	126	1 785
<b>Net income components at personal level</b>				
PY010G	194 033	5 035	5 035	1 733
PY020G	10 734	3 787	3 787	90
PY021G	68 475	68	68	6 862
PY030G	66 538	0	4 824	505
PY035G	7 549	922	922	303
PY050G	227 733	493	493	9 934
PY070G	4 449	1 324	1 324	226
PY080G	11 215	20	20	1 693
PY090G	42 216	115	115	5 063
PY100G	103 733	2 284	2 284	706
PY110G	37 229	620	620	891
PY120G	15 876	206	206	1 351
PY130G	62 091	616	616	1 803
PY140G	27 056	76	76	2 966

**Table 10. Mean, total number of observations (before and after imputation) and standard error for the equivalised disposable income cross-sectional component EU SILC 2008**

Equivalised disposable income	Mean	Number of observations		Standard error
		before imputation	after imputation	
<b>By household size</b>				
1 household member	139 444	1 140	1 140	3 468
2 household members	172 887	1 217	1 217	2 502
3 household members	192 169	1 022	1 022	2 704
4 and more household members	178 002	2 070	2 070	1 765
<b>By age groups</b>				
< 25	167 890	5 564	5 564	1 075
25 - 34	196 434	2 022	2 022	1 917
35 - 44	175 407	2 117	2 117	2 410
45 - 54	191 426	2 675	2 675	1 767
55 - 64	184 175	1 980	1 980	1 950
65 +	143 800	2 185	2 185	1 149
<b>By sex</b>				
Male	179 163	7 834	7 834	1 017
Female	171 178	8 709	8 709	896

**Table 11. Mean, total number of observations (before and after imputation) and standard error for the equivalised disposable income longitudinal component - wave1 (2005)**

Equivalised disposable income	Mean	Number of observations		Standard error
		before imputation	after imputation	
<b>By household size</b>				
1 household member	105 969	228	322	5 551
2 household members	123 967	182	311	4 194
3 household members	146 016	55	253	6 057
4 and more household members	121 304	84	471	2 773
<b>By age groups</b>				
< 25	116 619	271	1 322	1 560
25 - 34	152 662	90	424	5 755
35 - 44	119 033	106	532	3 064
45 - 54	132 859	115	654	2 556
55 - 64	134 267	221	455	4 468
65 +	107 356	335	488	2 345
<b>By sex</b>				
Male	127 044	496	1 830	1 816
Female	122 285	642	2 045	1 599

**Table 12. Mean, total number of observations (before and after imputation) and standard error for the equivalised disposable income longitudinal component - wave2 (2006)**

Equivalised disposable income	Mean	Number of observations		Standard error
		before imputation	after imputation	
<b>By household size</b>				
1 household member	117 308	501	563	3 245
2 household members	147 146	532	587	6 110
3 household members	164 492	412	485	5 429
4 and more household members	147 763	814	937	7 551
<b>By age groups</b>				
< 25	142 734	2 210	2 553	4 833
25 - 34	157 608	709	835	2 956
35 - 44	144 052	921	1 054	6 965
45 - 54	156 588	1 066	1 217	2 767
55 - 64	161 996	793	921	5 656
65 +	121 202	864	968	1 805
<b>By sex</b>				
Male	146 703	3 081	3 559	2 475
Female	146 100	3 482	3 989	3 347

**Table 13. Mean, total number of observations (before and after imputation) and standard error for the equivalised disposable income longitudinal component - wave3 (2007)**

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Equivalised disposable income	Mean	Number of observations		Standard error
		before imputation	after imputation	
<b>By household size</b>				
1 household member	128 549	784	799	2 929
2 household members	155 351	856	865	2 429
3 household members	182 083	703	721	3 411
4 and more household members	159 308	1 401	1 425	1 938
<b>By age groups</b>				
< 25	151 778	3 744	3 827	1 196
25 - 34	182 225	1 291	1 309	2 441
35 - 44	157 991	1 506	1 518	2 151
45 - 54	170 774	1 861	1 908	1 793
55 - 64	167 796	1 353	1 378	2 244
65 +	132 456	1 442	1 458	1 406
<b>By sex</b>				
Male	161 882	5 284	5 380	1 068
Female	155 936	5 913	6 018	1 004

**Table 14. Mean, total number of observations (before and after imputation) and standard error for the equivalised disposable income longitudinal component - wave4 (2008)**

Equivalised disposable income	Mean	Number of observations		Standard error
		before imputation	after imputation	
<b>By household size</b>				
1 household member	138 251	797	797	3 623
2 household members	169 215	832	832	2 840
3 household members	195 804	706	706	3 220
4 and more household members	180 494	1 351	1 351	2 298
<b>By age groups</b>				
< 25	171 064	3 513	3 513	1 414
25 - 34	200 210	1 306	1 306	2 499
35 - 44	176 665	1 385	1 385	2 423
45 - 54	192 892	1 849	1 849	2 178
55 - 64	185 007	1 389	1 389	2 441
65 +	141 679	1 494	1 494	1 335
<b>By sex</b>				
Male	181 557	5 144	5 144	1 216
Female	172 425	5 792	5 792	1 121

## 2.3. Non-sampling errors

### 2.3.1 Sampling frame and coverage errors

Initial data of sampling frame are data from 2001 Population and Housing Census. Changes in numbers of households sharing of expenditures are known only from expert estimates. We do not have any information for their identification to sampling.

Exact information about change in the fund of permanently occupied dwellings and houses exists and this information was used in sampling of households sharing of expenditures.

Information on status change in the fund of permanently occupied dwellings and houses from 2001 to 2004 and from 2004 to 2007 was used to update sampling frame for selection of households for new rotation group.

### 2.3.2 Measurement and processing errors

On the base of experience from EU SILC carried out in previous year there were several sources of errors, which could also occurred in EU SILC 2007 survey.

We focused on following sources of errors:

- the way of compiling the questionnaires, structure of questionnaires, ordering of questions in questionnaire, using of detailed structure of primary target variables,
- quality of interviewers' training, individual skills of interviewer,
- interview in the case of households from previous wave or previous waves and contacted again in next year of the survey,
- searching of addresses of households or persons who moved to another residence compared to previous year of the survey,
- logical checks of questionnaires received from interviewers.

#### 2.3.2.1 Measurement errors

Many sources, which occurred in the period of data collection, had influence on measurement errors:

- 1/ questionnaire
- 2/ interviewers
- 3/ respondents
- 4/ data collection

#### **1/ Questionnaires**

At the primary compiling of questionnaires they had been based on proposal of questionnaire from bilateral meeting of Eurostat and SO SR in July 2002. They were consequently verified in the Slovak conditions through three pilot projects.

In compiling of individual questionnaires for EU SILC we resulted from until now proposed and applied questionnaires for the previous years (EU SILC 2005 - 2007), where there were used and taken into account concrete knowledge from survey fieldwork and also changes made in some variables in accordance with Doc.065 for 2008 operation.

The questions were grouped into particular modules in order to ensure better understanding, lucidity and simple orientation of interviewers in questionnaires.

Questions in compiling of questionnaires were proposed in a way to cover all required variables.

After marking up of national users the final version of four questionnaires for EU SILC 2005, 2006 and 2007 was created:

- SILC 1-01/A - Household structure
- SILC 1-01/B - Household sharing of expenditures data
- SILC 1-01/C - Personal data
- SILC 1-01/D - Social condition of family (EU SILC 2005)
- SILC 1-01/D - Social participation (EU SILC 2006)
- SILC 1-01/D - Housing conditions (EU SILC 2007)

EU SILC 2008 was the 1-st year which we used only 3 type of questionnaires, where modul 2008 on over-indebtedness and financial exclusion was the part of household questionnaire

SILC 1-01/A - Household structure

SILC 1-01/B - Household sharing of expenditures data (including module 2008)

SILC 1-01/C - Personal data

Individual questionnaires were printed in different colours shades again, using them was helpful for interviewers during the fieldwork. Also usage of guidance symbols had contribution to better and faster orientation in questionnaires.

In EU SILC 2008 there were not made substantial changes in structure and individual modules of questions in questionnaires in comparison with questionnaires, which were used for EU SILC 2007. Compared to previous year of the survey we only took into account requirements and directions proposed in Doc 065 (2008 operation) and also changes related to legislative on national level (e.g. in social benefits - taking into account some new benefit - bonus to child birth contribution).

In module **8. Income** there were remained income intervals related to gross annual earnings from main and secondary job, or gross profit/loss in the case if respondent did not know to give annual amount exactly or there was not available relevant document for giving this amount.

Elimination of rough estimation from the side of respondents as well as interviewers and also taking into account national requirements, were the main reasons for remaining income intervals.

Part **8.4 Tax on income** (questionnaire SILC 1-01/C - Personal data), which was created in EU SILC 2006 and used in EU SILC 2007 by reason of calculation of tax on income, where we collected information on components needed for decrease of tax assessment base, tax-bonus and repayments/receipts for tax adjustment, remained the same also for EU SILC 2008.

In questionnaire for EU SILC 2008 variables related to arrears on selected items we used those version of variables with adjusted response categories compared to previous year of survey (HH011 Arrears on mortgage or rent payments, HS021 Arrears on utility bills, HS031 Arrears on hire purchase instalments or other loan payments). These questions were collected within household questionnaire in the part, which was related to module 2008 questions.

Also in this survey (EU SILC 2008) there instruction for interviewer remained in questionnaire SILC 1-01/B, which in the case of households contacted again, with no changes in questions related to housing (number of rooms, total floor area, equipment of dwelling by bath, bath shower, indoor flushing toilet and year since which the household started living in dwelling), allowed jump to other questions in questionnaire. This missing data was recorded to these households from data on the base of EU SILC 2007. This adjustment has been certified in previous survey already, especially in a such way that burden on respondents in filling this information decreased.

On the base of co-operation with the Ministry of Labour, Social Affairs and Family of the SR, B questionnaires were again completed by some questions in module financial situation of households related to national aspects of poverty proposed by Ministry. Data will serve only for their internal purposes.

## **2/ Interviewers**

The external individually trained interviewers carried out the fieldwork. Mostly they were persons, who ensured interview in EU SILC 2007, possibly in previous years of the survey or persons who approved in previous national surveys realized in households (Population and Housing Census, Microcensus, etc.). Situation was more difficult, because communication with households became slightly worse compared to previous year. Much bigger problems occurred mostly in the case of households contacted again in this wave. Many households refused cooperation and they were afraid of taking advantage of data and distrust in terms of anonymity of the survey data. In most of cases it was necessary to repeat visit more times and to convince household to cooperate. Contact with households was easily made by interviewers in villages, because in most cases they have known each either with interviewer

Also in the year 2008, the organisation of the survey in individual regions was ensured by regional coordinators of SO SR. On each Regional Office there was coordinator – expert responsible for methodology who ensured personal contact (or contact by phone) with interviewers and solved occurred methodological unclearness on the base of consultation with experts from SO SR. Training of interviewers succeeded 2 days training of regional coordinators aimed at explanation of objectives, form, content of survey as well as methods and methodology. At the same time they were drew attention to mistakes occurred during centralized data processing. By reason of numbers of mistakes it was impossible to draw attention to mistakes to concrete interviewer, thus summary of mistakes by individual regions was made.

The Regional Offices of the SOSR in co-operation with the SOSR performed the training of interviewers with participation of experts. Nearly all trainings carried out one week before survey fieldwork and all methodological documents needed for fieldwork were available during this training.

In the case of the first wave of the survey, 451 interviewers were trained, what represents participation of 30-40 interviewers in one training and 13-15 households fell per one interviewer.

For EU SILC 2006 there were trained 425 interviewers in total. Approximately 25-35 interviewers participated in one training and 12-15 households fell per one interviewer.

For EU SILC 2007 there were trained 435 interviewers and for EU SILC 2008 414 interviewers. On the base of experience from previous surveys it was certified by Regional Offices to carry out separate training for new interviewers and separate for interviewers who realized interview in previous year. Approximately 25-30 interviewers participated in one training and 12-15 households fell per one interviewer.

Several interviewers contributed by their opinions and experience to elaboration of detailed regional evaluation reports.

### **3/ Respondents**

Interviewers gave promotion material - pen and leaflet to visiting households, in which there were presented selected indicators from former years of surveys with effort to motivate household to cooperate.

As in previous surveys, respondents had also problems to give amount of income variables - incomes from employment and from self-employment, taxes, employer's social insurance contribution and housing costs of households. Reaction of respondents was the same as in previous waves of the survey - if they did not know to mention the accurate amount, they were not willing to provide information from relevant documents (e.g. payrolls, statements of rental) from which the required values could have been obtained and by this reason in the majority of cases, they gave only approximate estimates. They had a problem with estimation of amount of goods produced by own consumption too.

The fact that respondents have been frightened before abuse of information for other than statistical purposes and due to distrust in terms of anonymity of the survey, this all permanently plays certain role. Households consider required information as private and by this reason certain data is not provided or if it was provided but only as estimated values.

Module 2008 on over-indebtedness and financial exclusion was considered by respondents as the most complicated of all modules, which had been used within EU SILC survey in previous years of the survey. This module required also inclusion of more detailed directions and explanation in Manual for interviewers and the content of observed variables seemed to be enough sensitive. As well as preparation of questionnaire's questions and Manual for interviewers involved closer dealing with specific field and some consultations with experts in this area - bank system, credit, loans and hire purchases.

### **4/ Data collection**

Fieldwork within EU SILC was carried out in the first half of year. Choice of this period for realization of data collection in households has shown as convenient, especially concerning period for tax liability and liability for service of respondents (in terms of obtaining information on tax adjustment).

The EU SILC survey is a panel survey, in which longitudinal component – households included into survey and contacted again during consecutive waves - plays important role. Just in the case of these households, contacted again, was necessary to aim at data quality and comparability of collected information between individual waves of EU SILC, as well as to focus on obtaining data on households or persons, who moved out from their initial address from last wave of the survey.

“Manual for tracing of households” was worked out and was used as a guideline by Regional Offices of the SO SR.

System of searching of households or persons was based on the same principle as in previous year, i.e. if household or persons included into EU SILC 2007 survey changed address of their residence, data was recorded into registers created in common server of the SO SR, with limited access for each Regional Office. As regards the fact that it was working with personal and confidential data, access to registers had only authorized persons.

Two registers existed:

- register A - it was intended as gathering station for all coordinators of individual Regional Offices and for SO SR. Data on whole households and persons who moved out from initial residence were recorded here, independently of the place of their new address (move out to another region, municipality).
- register B - into which coordinator of SO SR sent information after completing of needed data. There was recorded information on households/persons who moved in area of relevant Regional Office, and was completed by other data necessary for interviewers processing by coordinator of SO SR.

Interviewers were directed by "Manual for interviewer" in searching of moved out households/persons. They had forms SILC06 R\_D and SILC06 R\_O at disposal, which included information on basic identification data for all households and persons from the 2-nd wave, which had to be contacted again. All this basic data had to be filled in questionnaire SILC/A 1-01 by interviewer before interview of selected household.

In the case that household/person moved out from initial address, interviewer searched its new address and he told this change to relevant regional coordinator. Then coordinator of the Regional Office put the information for household through registers on server either directly to interviewer or through other coordinator of SO SR to other Regional Office.

Municipal offices (register of population), neighbours, postman or in the case of split-off households also original households, these all were evident help in searching of moved out households or persons.

#### 2.3.2.2 Processing errors

Data processing was realized on two levels:

1. The following actions has been realized on the decentralized level:
  - a) taking questionnaires from interviewers, formal checking, preparation of questionnaires for data recording,
  - b) data recording and data checking. The special software DCSILC2000 has been used for data recording, in which these types of controls were used: checks on the data integrity, identification of duplicity, frequency checks, checks to the permissible values, the logic checks within a questionnaire and between questionnaires, special conditions for data recording and non-responses. All the defined checks are included in the technical project for data processing EU SILC. The checks were divided

into two types: informative checks and necessary checks. System of the checks also comprised of certain chosen checks from the checking software of Eurostat.

- c) on this level, also the errors caused by data recording have been eliminated. There were mainly errors created by a shift in editing codes yes/no/don't know and by not realizing a visual check sufficiently. By monitoring errors in the phase of data recording, the errors were analyzed and subsequently the situation was improved.

2. On the centralized level a final database was created. Logic controls, corrections, overweighting and imputations were realized using SW of system SAS.

### 2.3.3 Non-response errors

#### 2.3.3.1 Achieved sample size

**Table 15. Achieved sample size – household level**

	EU SILC 2005	EU SILC 2006	EU SILC 2007	EU SILC 2008	Total
DB135=1	1 357	2 572	3 810	3 686	11 425

**Table 16. Achieved sample size - personal level**

RB250=11 to 13	EU SILC 2005	EU SILC 2006	EU SILC 2007	EU SILC 2008	Total
RB100=1	3 265	6 320	9 595	9 278	28 458
RB100=2	0	45	58	55	158

#### 2.3.3.2 Unit non-response

**Table 17. Unit non-response - first wave (2005)**

EU SILC 2005	Total
DB120=11	1 403
DB120=all	1 488
DB120=23	0
<b>Ra</b>	<b>0.9429</b>

<b>EU SILC 2005</b>	<b>Total</b>
DB135=1	1 357
DB130= all	1 403
<b>Rh</b>	<b>0.9672</b>
<b>NRh</b>	<b>8.80</b>
RB250 = 11+12+13	3 265
RB245 = 1+2+3	3 270
<b>Rp</b>	<b>0.9985</b>
<b>NRp</b>	<b>0.1529</b>
<b>*NRp</b>	<b>8.94</b>

**Table 18. Household response rates: Comparison of results codes between wave 2 and wave 1**

**Sample outcome in wave 2 (2006)**

DB130=11											TOTAL
DB135=1	DB135=2	DB120=22	DB130=22	DB130=23	DB130=24	DB130=21	DB120=21	NC	DB110=10	DB130=23	

**Sample outcome in wave 1 (2005)**

DB130=11	DB135=1	1 255	1	2	3	4	2	41	1	21	0	4	<b>1 334</b>
	DB135=2	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
DB120=21													
DB120=22													
DB120=23													
DB130=21													
DB130=22													
DB130=23													
DB130=24													
<b>TOTAL</b>		<b>1 255</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>41</b>	<b>1</b>	<b>21</b>	<b>0</b>	<b>4</b>	<b>1 334</b>

**New households in wave 2 (2006)**

DB110=8	10	0	0	0	0	0	0	0	0	0	0	0	10
DB110=9	0	0	0	0	0	0	0	0	0	0	0	0	0

<b>TOTAL</b>	<b>1 265</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>41</b>	<b>1</b>	<b>21</b>	<b>0</b>	<b>4</b>	<b>1 344</b>
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	A	B	C	D	E	F	G	H	I	J	K	T
<b>Wave response rate</b>		0.944										
<b>Refusal rate</b>		0.031										
<b>No-contacted and others</b>		0.022										
<b>Longitudinal follow-up rate</b>		0.950										
<b>Follow-up ratio</b>		0.957										
<b>Achieved sample size ratio</b>		0.948										

**Table 19. Household response rates: Comparison of results codes between wave 3 and wave 2**

**Sample outcome in wave 3 (2007)**

DB130=11											TOTAL
DB135=1	DB135=2	DB120=22	DB130=22	DB130=23	DB130=24	DB130=21	DB120=21	NC	DB110=10	DB130=23	

**Sample outcome in wave 2 (2006)**

DB130=11	DB135=1	2 398	1	2	17	0	4	54	3	18	0	0	<b>2 497</b>
	DB135=2	0	0	0	2	0	0	184	0	0	0	0	<b>186</b>
DB120=22	NH												
	No NH	0	0	0	1	0	0	0	0	0	0	0	<b>1</b>
DB130=22	NH												
	No NH	0	0	0	0	0	0	1	0	1	0	0	<b>2</b>
DB130=23	NH												
	No NH	0	0	0	1	0	0	3	0	0	0	0	<b>4</b>
DB130=24	NH												
	No NH	0	0	0	1	0	0	1	0	0	0	0	<b>2</b>
DB130=21													
DB120=21													
NC													
DB110=10													
DB130=23													
<b>TOTAL</b>		<b>2 398</b>	<b>1</b>	<b>2</b>	<b>22</b>	<b>0</b>	<b>4</b>	<b>243</b>	<b>3</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>2 692</b>

**New households in wave 3 (2007)**

DB110=8	0	0	2	1	0	3	34	0	0	0	0	40
DB110=9	0	0	0	0	0	0	0	0	0	0	0	0

<b>TOTAL</b>	<b>2 398</b>	<b>1</b>	<b>4</b>	<b>23</b>	<b>0</b>	<b>7</b>	<b>277</b>	<b>3</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>2 723</b>
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A B C D E F G H I J K T

<b>Wave response rate</b>	0.881
<b>Refusal rate</b>	0.102
<b>No-contacted and others</b>	0.021
<b>Longitudinal follow-up rate</b>	0.900
<b>Follow-up ratio</b>	0.902
<b>Achieved sample size ratio</b>	0.960

**Table 20. Household response rates: Comparison of results codes between wave 4 and wave 3**

**Sample outcome in wave 4 (2008)**

DB130=11											TOTAL
DB135=1	DB135=2	DB120=22	DB130=22	DB130=23	DB130=24	DB130=21	DB120=21	NC	DB110=10	DB130=23	

**Sample outcome in wave 3 (2007)**

DB130=11	DB135=1	3 686	5	0	0	81	19	19	0	0	0	81	<b>3 891</b>
	DB135=2	0	0	0	0	0	0	2	0	0	0	0	<b>2</b>
DB120=22	NH												
	No NH	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
DB130=22	NH												
	No NH	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
DB130=23	NH												
	No NH	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
DB130=24	NH												
	No NH	0	0	0	0	0	1	0	0	0	0	0	<b>1</b>
DB130=21													
DB120=21													
NC													
DB110=10													
DB130=23													
<b>TOTAL</b>		<b>3 686</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>81</b>	<b>20</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>81</b>	<b>3 894</b>

**New households in wave 4 (2008)**

DB110=8	0	0	0	0	0	0	0	0	0	0	0	0
DB110=9	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>3 686</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>81</b>	<b>20</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>81</b>	<b>3 893</b>
	A	B	C	D	E	F	G	H	I	J	K	T

<b>Wave response rate</b>	0.967
<b>Refusal rate</b>	0.006
<b>No-contacted and others</b>	0.007
<b>Longitudinal follow-up rate</b>	0.974
<b>Follow-up ratio</b>	0.974
<b>Achieved sample size ratio</b>	0.947

**Table 21. Personal Interview outcome in wave 2 (2006)**

**Personal interview outcome in wave 2 (2006)**

RB250=11 to 13	Not completed because of									TOTAL
	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33	HH nc	Pn	PI	

**Sample persons (RB100=1 and RB245=1 to 3) from the sample forwarded from last wave (2005)**

RB110=1,2	3 072	0	0	2	3	1	0				<b>3 078</b>
RB110=6											
RB110=-1											
RB120=2											
RB120=3											
RB120=4											
DB135=2,-1 or DB110=7 or DB120=21 to 23 or DB120=-1 or DB130=21 to 24 or DB130=-1											
DB110=3 to 6											

**New sample persons**

Reached age 16	3 248	0	0	0	0	0	2	0	0	0	<b>3 250</b>
Sample additions	0	0	0	0	0	0	0				<b>0</b>

**Non-sample persons 16+**

This wave	From wave 1	0	0	0	0	0	0	0	0	0	<b>0</b>
	No in wave 1	45	0	0	0	0	0	0	0	0	<b>45</b>
Earlier wave	From wave 1										
	No in wave 1										

**Sample persons from sample not forwarded from last wave (2005)**

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<b>TOTAL1</b>	<b>6 320</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6 328</b>
<b>TOTAL2</b>	<b>6 320</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6 328</b>
<b>TOTAL2</b>	<b>6 365</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6 373</b>

A B C D E F G H J K T

<b>Wave response rate of sample persons</b>	0.999
<b>Wave response rate of co-residents</b>	0.000
<b>Longitudinal follow-up rate</b>	0.999
<b>R(RB250=21)</b>	0.000
<b>R(RB250=22)</b>	0.000
<b>R(RB250=23)</b>	0.000
<b>R(RB250=31)</b>	0.000
<b>R(RB250=32)</b>	0.000
<b>R(RB250=33)</b>	0.000

<b>Achieved sample size ratio for sample persons</b>	0.946
<b>Achieved sample size ratio for sample persons and co-residents</b>	0.946
<b>Achieved sample size ratio for co-residents in first wave</b>	0.000
<b>Response rate for non-sample persons</b>	0.000

**Table 22. Personal Interview outcome in wave 3 (2007)**

**Personal interview outcome in wave 3 (2007)**

RB250=11 to 13	Not completed because of									TOTAL
	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33	HH nc	Pn	PI	

**Sample persons (RB100=1 and RB245=1 to 3) from the sample forwarded from last wave (2006)**

RB110=1,2	5 905	0	0	6	1	5	1				<b>5 918</b>
RB110=6											
RB110=-1											
RB120=2											
RB120=3											
RB120=4											
DB135=2,-1 or DB110=7 or DB120=21 to 23 or DB120=-1 or DB130=21 to 24 or DB130=-1											
DB110=3 to 6											

**New sample persons**

Reached age 16	3 698	0	0	3	0	0	0	0	0	0	<b>3 701</b>
Sample additions	0	0	0	0	0	0	0				<b>0</b>

**Non-sample persons 16+**

This wave	From wave 1	0	0	0	0	0	0	0	0	0	<b>0</b>
	No in wave 1	58	0	0	0	0	0	0	0	0	<b>58</b>
Earlier wave	From wave 1										
	No in wave 1										

**Sample persons from sample not forwarded from last wave (2006)**

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<b>TOTAL1</b>	<b>9 603</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9 619</b>
<b>TOTAL2</b>	<b>9 603</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9 619</b>
<b>TOTAL2</b>	<b>9 661</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9 677</b>

A B C D E F G H J K T

<b>Wave response rate of sample persons</b>	0.998
<b>Wave response rate of co-residents</b>	0.000
<b>Longitudinal follow-up rate</b>	0.998
<b>R(RB250=21)</b>	0.000
<b>R(RB250=22)</b>	0.000
<b>R(RB250=23)</b>	0.001
<b>R(RB250=31)</b>	0.000
<b>R(RB250=32)</b>	0.001
<b>R(RB250=33)</b>	0.000

<b>Achieved sample size ratio for sample persons</b>	0.934
<b>Achieved sample size ratio for sample persons and co-residents</b>	0.934
<b>Achieved sample size ratio for co-residents in first wave</b>	0.000
<b>Response rate for non-sample persons</b>	0.000

**Table 23. Personal Interview outcome in wave 4 (2008)**

**Personal interview outcome in wave 4 (2008)**

RB250=11 to 13	Not completed because of									TOTAL
	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33	HH nc	Pn	PI	

**Sample persons (RB100=1 and RB245=1 to 3) from the sample forwarded from last wave (2007)**

RB110=1,2	9 274	0	0	66	0	0	1				<b>9 341</b>
RB110=6											
RB110=-1											
RB120=2											
RB120=3											
RB120=4											
DB135=2,-1 or DB110=7 or DB120=21 to 23 or DB120=-1 or DB130=21 to 24 or DB130=-1											
DB110=3 to 6											

**New sample persons**

Reached age 16	4	0	0	1	0	0	0	0	0	0	<b>5</b>
Sample additions	0	0	0	0	0	0	0				<b>0</b>

**Non-sample persons 16+**

This wave	From wave 1	0	0	0	42	0	0	0	0	0	<b>42</b>
	No in wave 1	55	0	0	2	0	0	0	0	0	<b>57</b>
Earlier wave	From wave 1										
	No in wave 1										

**Sample persons from sample not forwarded from last wave (2007)**

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TOTAL1	9 278	0	0	67	0	0	1	0	0	0	9 346
TOTAL2	9 278	0	0	67	0	0	1	0	0	0	9 346
TOTAL2	9 333	0	0	111	0	0	1	0	0	0	9 445

A B C D E F G H J K T

Wave response rate of sample persons	0.993
Wave response rate of co-residents	0.000
Longitudinal follow-up rate	0.993
R(RB250=21)	0.000
R(RB250=22)	0.000
R(RB250=23)	0.007
R(RB250=31)	0.000
R(RB250=32)	0.000
R(RB250=33)	0.000

Achieved sample size ratio for sample persons	0.966
Achieved sample size ratio for sample persons and co-residents	0.966
Achieved sample size ratio for co-residents in first wave	0.000
Response rate for non-sample persons	0.000

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 24. Distribution of households by household status (DB110)**

DB110		Total	1	2	3	4	5	6	7	8	9	10
EU SILC 2005	Total	1 488	0	0	0	0	0	0	0	0	1 488	0
	%	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
EU SILC 2006	Total	2 898	1 332	16	2	0	8	1	10	10	1 519	0
	%	100.0	46.0	0.6	0.1	0.0	0.3	0.0	0.3	0.3	52.4	0.0
EU SILC 2007	Total	4 241	2 729	26	3	2	9	1	4	40	1 427	0
	%	100.0	64.3	0.6	0.1	0.0	0.2	0.0	0.1	0.9	33.6	0.0
EU SILC 2008	Total	3 813	3 793	20	0	0	0	0	0	0	0	0
	%	100.0	99.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Table 25. Distribution of households by contact at address (DB120)**

DB120		Total	11	21	22	23	Missing
EU SILC 2006	Total (DB110=2,8,10)	26	22	1	2	1	0
	%	100.0	84.6	3.8	7.7	3.8	0.0
EU SILC 2007	Total (DB110=2,8,10)	66	59	3	4	0	0
	%	100.0	89.4	4.5	6.1	0.0	0.0
EU SILC 2008	Total (DB110=2,8,10)	20	20	0	0	0	0
	%	100.0	100.0	0.0	0.0	0.0	0.0

**Table 26. Distribution of households by household questionnaire result (DB130)**

DB130		Total	11	21	22	23	24	Missing
EU SILC 2005	Total (DB120=11 or DB110=1)	1 441	1 369	20	14	0	0	38
	%	100.0	95.0	1.4	1.0	0.0	0.0	2.6
EU SILC 2006	Total (DB120=11 or DB110=1)	2 917	2 785	41	3	4	2	82
	%	100.0	95.5	1.4	0.1	0.1	0.1	2.8
EU SILC 2007	Total (DB120=11 or DB110=1)	4 133	3 812	279	29	0	13	0
	%	100.0	92.2	6.8	0.7	0.0	0.3	0.0
EU SILC 2008	Total (DB120=11 or DB110=1)	3 813	3 691	21	0	81	20	0

	%	100.0	96.8	0.6	0.0	2.1	0.5	0.0
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**Table 27. Distribution of households by household interview acceptance (DB135)**

DB135		Total	11	21	Missing
EU SILC 2005	Total (DB130=11)	1 369	1 357	12	0
	%	100.0	99.1	0.9	0.0
EU SILC 2006	Total (DB130=11)	2 785	2 572	213	0
	%	100.0	92.4	7.6	0.0
EU SILC 2007	Total (DB130=11)	3 812	3 810	2	0
	%	100.0	99.9	0.1	0.0
EU SILC 2008	Total (DB130=11)	3 691	3 686	5	0
	%	100.0	99.9	0.1	0.0

2.3.3.4 *Distribution of persons for membership status (RB110)*

**Table 28. Distribution of persons for membership status (RB110)**

RB110		Total	Current household members				No current households members			Missing
			RB110=1	RB110=2	RB110=3	RB110=4	RB120=2 to 4	RB110=6	RB110=7	
EU SILC 2006	Total	7 536	7 431	13	47	14	14	17	0	0
	%	100.0	98.6	0.2	0.6	0.2	0.2	0.2	0.0	0.0
EU SILC 2007	Total	11 335	11 225	3	23	13	28	43	0	0
	%	100.0	99.0	0.0	0.2	0.1	0.2	0.4	0.0	0.0
EU SILC 2008	Total	10 898	10 825	0	8	1	25	39	0	0
	%	100.0	99.3	0.0	0.1	0.0	0.2	0.4	0.0	0.0

**Table 29. Distribution of persons moving out by variable RB120**

RB120		Total	RB110=5				
			RB120=1		RB120=2	RB120=3	RB120=4
			This person is a current household member of a household this wave	This person is not a current household member			
EU SILC 2006	Total	26	10	2	0	0	14
	%	100.0	38.5	7.7	0.0	0.0	53.8
EU SILC 2007	Total	91	25	38	2	22	4
	%	100.0	27.5	41.8	2.2	24.2	4.4
EU SILC 2008	Total	63	15	23	1	17	7
	%	100.0	23.8	36.5	1.6	27.0	11.1

### 2.3.3.5 *Item non-response*

**Table 30. Item non-response for longitudinal component - wave1 (2005)**

Income components	Income ne 0		All of information (IF=1)		All of imputation (IF=0)		Partial imputation	
	count	%	count	%	count	%	count	%
HY010	1 357	100.0	547	40.3	0	0.0	810	59.7
HY020	1 357	100.0	549	40.5	0	0.0	808	59.5
HY022	1 343	99.0	557	41.5	8	0.6	778	57.9
HY023	1 249	92.0	481	38.5	29	2.3	739	59.2
<b>Gross income components at household level</b>								
HY040G	38	2.8	15	39.5	9	23.7	14	36.8
HY050G	560	41.3	560	100.0	0	0.0	0	0.0
HY060G	142	10.5	137	96.5	0	0.0	5	3.5
HY070G	3	0.2	2	66.7	1	33.3	0	0.0
HY080G	30	2.2	30	100.0	0	0.0	0	0.0
HY090G	47	3.5	18	38.3	18	38.3	11	23.4
HY100G	38	2.8	29	76.3	9	23.7	0	0.0
HY110G	4	0.3	4	100.0	0	0.0	0	0.0
HY120G	924	68.1	822	89.0	102	11.0	0	0.0
HY130G	39	2.9	37	94.9	2	5.1	0	0.0
<b>Net income components at personal level</b>								
PY010G	1 584	100.0	519	32.8	114	7.2	951	60.0
PY021G	17	1.1	0	0.0	17	100.0	0	0.0
PY035G	274	17.3	257	93.8	17	6.2	0	0.0
PY050G	107	6.8	86	80.4	18	16.8	3	2.8
PY070G	440	27.8	440	100.0	0	0.0	0	0.0
PY080G	20	1.3	20	100.0	0	0.0	0	0.0
PY090G	130	8.2	123	94.6	7	5.4	0	0.0
PY100G	773	48.8	757	97.9	0	0.0	16	2.1
PY110G	213	13.4	203	95.3	10	4.7	0	0.0
PY120G	130	8.2	113	86.9	17	13.1	0	0.0
PY130G	227	14.3	223	98.2	2	0.9	2	0.9
PY140G	1	0.1	1	100.0	0	0.0	0	0.0

**Table 31. Item non-response for longitudinal component - wave2 (2006)**

Income components	Income ne 0		All of information (IF=1)		All of imputation (IF=0)		Partial imputation	
	count	%	count	%	count	%	count	%
HY010	2 572	100.0	2 269	88.2	8	0.3	295	11.5
HY020	2 572	100.0	2 259	87.8	3	0.1	310	12.1
HY022	2 549	99.1	2 311	90.7	4	0.2	234	9.2
HY023	2 380	92.5	2 228	93.6	5	0.2	147	6.2
<b>Gross income components at household level</b>								
HY040G	95	3.7	78	82.1	17	17.9	0	0.0
HY050G	1 085	42.2	1 085	100.0	0	0.0	0	0.0
HY060G	173	6.7	124	71.7	36	20.8	13	7.5
HY070G	5	0.2	5	100.0	0	0.0	0	0.0
HY080G	124	4.8	114	91.9	10	8.1	0	0.0
HY090G	59	2.3	30	50.8	29	49.2	0	0.0
HY100G	65	2.5	65	100.0	0	0.0	0	0.0
HY110G	6	0.2	6	100.0	0	0.0	0	0.0
HY120G	1 772	68.9	1 761	99.4	11	0.6	0	0.0
HY130G	65	2.5	64	98.5	1	1.5	0	0.0
<b>Net income components at personal level</b>								
PY010G	3 312	100.0	3 247	98.0	40	1.2	25	0.8
PY021G	53	1.6	0	0.0	53	100.0	0	0.0
PY035G	650	19.6	613	94.3	37	5.7	0	0.0
PY050G	312	9.4	312	100.0	0	0.0	0	0.0
PY070G	966	29.2	937	97.0	29	3.0	0	0.0
PY080G	23	0.7	23	100.0	0	0.0	0	0.0
PY090G	196	5.9	183	93.4	13	6.6	0	0.0
PY100G	1 562	47.2	1 518	97.2	29	1.9	15	1.0
PY110G	459	13.9	399	86.9	59	12.9	1	0.2
PY120G	177	5.3	154	87.0	23	13.0	0	0.0
PY130G	393	11.9	388	98.7	4	1.0	1	0.3
PY140G	42	1.3	42	100.0	0	0.0	0	0.0

**Table 32. Item non-response for longitudinal component - wave3 (2007)**

Income components	Income ne 0		All of information (IF=1)		All of imputation (IF=0)		Partial imputation	
	count	%	count	%	count	%	count	%
HY010	3 807	100.0	3 760	98.8	21	0.6	26	0.7
HY020	3 810	100.1	3 744	98.3	20	0.5	46	1.2
HY022	3 785	99.4	3 740	98.8	10	0.3	35	0.9
HY023	3 670	96.4	3 625	98.8	10	0.3	35	1.0
<b>Gross income components at household level</b>								
HY030G	3 444	90.5	0	0.0	3 444	100.0	0	0.0
HY040G	163	4.3	155	95.1	8	4.9	0	0.0
HY050G	1 619	42.5	1 619	100.0	0	0.0	0	0.0
HY060G	209	5.5	188	90.0	20	9.6	1	0.5
HY070G	11	0.3	10	90.9	1	9.1	0	0.0
HY080G	211	5.5	201	95.3	9	4.3	1	0.5
HY090G	267	7.0	267	100.0	0	0.0	0	0.0
HY100G	145	3.8	145	100.0	0	0.0	0	0.0
HY110G	17	0.4	17	100.0	0	0.0	0	0.0
HY120G	3 161	83.0	3 153	99.7	8	0.3	0	0.0
HY130G	122	3.2	111	91.0	11	9.0	0	0.0
HY131G	3 810	100.1	0	0.0	0	0.0	0	0.0
<b>Net income components at personal level</b>								
PY010G	5 091	100.0	4 704	92.4	185	3.6	202	4.0
PY020G	3 667	72.0	3 384	92.3	283	7.7	0	0.0
PY021G	81	1.6	73	90.1	8	9.9	0	0.0
PY030G	4 866	95.6	0	0.0	4 866	100.0	0	0.0
PY035G	1 023	20.1	1 023	100.0	0	0.0	0	0.0
PY050G	483	9.5	483	100.0	0	0.0	0	0.0
PY070G	1 376	27.0	1 351	98.2	25	1.8	0	0.0
PY080G	31	0.6	29	93.5	2	6.5	0	0.0
PY090G	181	3.6	168	92.8	13	7.2	0	0.0
PY100G	2 283	44.8	2 234	97.9	34	1.5	15	0.7
PY110G	663	13.0	600	90.5	60	9.0	3	0.5
PY120G	237	4.7	212	89.5	25	10.5	0	0.0
PY130G	639	12.6	630	98.6	7	1.1	2	0.3
PY140G	61	1.2	61	100.0	0	0.0	0	0.0

**Table 33. Item non-response for longitudinal component - wave4 (2008)**

Income components	Income ne 0		All of information (IF=1)		All of imputation (IF=0)		Partial imputation	
	count	%	count	%	count	%	count	%
HY010	3 686	100.0	3 686	100.0	0	0.0	0	0.0
HY020	3 686	100.0	3 686	100.0	0	0.0	0	0.0
HY022	3 672	99.6	3 672	100.0	0	0.0	0	0.0
HY023	3 592	97.4	3 592	100.0	0	0.0	0	0.0
<b>Gross income components at household level</b>								
HY030G	3 172	86.1	0	0.0	3 172	100.0	0	0.0
HY040G	150	4.1	144	96.0	6	4.0	0	0.0
HY050G	1 514	41.1	1 514	100.0	0	0.0	0	0.0
HY060G	157	4.3	128	81.5	29	18.5	0	0.0
HY070G	15	0.4	7	46.7	8	53.3	0	0.0
HY080G	200	5.4	197	98.5	3	1.5	0	0.0
HY081G	148	4.0	148	100.0	0	0.0	0	0.0
HY090G	283	7.7	283	100.0	0	0.0	0	0.0
HY100G	149	4.0	149	100.0	0	0.0	0	0.0
HY110G	12	0.3	12	100.0	0	0.0	0	0.0
HY120G	3 226	87.5	3 201	99.2	25	0.8	0	0.0
HY130G	126	3.4	123	97.6	3	2.4	0	0.0
HY131G	56	1.5	56	100.0	0	0.0	0	0.0
<b>Net income components at personal level</b>								
PY010G	5 035	100.0	5 035	100.0	0	0.0	0	0.0
PY020G	3 787	75.2	3 787	100.0	0	0.0	0	0.0
PY021G	68	1.4	68	100.0	0	0.0	0	0.0
PY030G	4 824	95.8	0	0.0	4 824	100.0	0	0.0
PY035G	922	18.3	922	100.0	0	0.0	0	0.0
PY050G	493	9.8	493	100.0	0	0.0	0	0.0
PY070G	1 324	26.3	1 324	100.0	0	0.0	0	0.0
PY080G	20	0.4	20	100.0	0	0.0	0	0.0
PY090G	115	2.3	115	100.0	0	0.0	0	0.0
PY100G	2 284	45.4	2 284	100.0	0	0.0	0	0.0
PY110G	620	12.3	620	100.0	0	0.0	0	0.0
PY120G	206	4.1	206	100.0	0	0.0	0	0.0
PY130G	616	12.2	616	100.0	0	0.0	0	0.0
PY140G	76	1.5	76	100.0	0	0.0	0	0.0

## 2.4. Mode of data collection

Table 34. Distribution of household members by RB250

	Total	RB250=11	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33	
<b>household members 16+ (RB245=1 to 3)</b>									
EU SILC 2005	Total	3 270	3 265	0	0	2	2	1	0
	%	100.0	99.8	0.0	0.0	0.1	0.1	0.0	0.0
EU SILC 2006	Total	6 373	6 365	0	0	2	3	1	2
	%	100.0	99.9	0.0	0.0	0.0	0.0	0.0	0.0
EU SILC 2007	Total	9 668	9 653	0	0	9	1	4	1
	%	100.0	99.8	0.0	0.0	0.1	0.0	0.0	0.0
EU SILC 2008	Total	9 448	9 333	0	0	114	0	0	1
	%	100.0	98.8	0.0	0.0	1.2	0.0	0.0	0.0
<b>sample persons 16+ (RB245=1 to 3 and RB100=1)</b>									
EU SILC 2005	Total	3 270	3 265	0	0	2	2	1	0
	%	100.0	99.8	0.0	0.0	0.1	0.1	0.0	0.0
EU SILC 2006	Total	6 328	6 320	0	0	2	3	1	2
	%	100.0	99.9	0.0	0.0	0.0	0.0	0.0	0.0
EU SILC 2007	Total	9 610	9 595	0	0	9	1	4	1
	%	100.0	99.8	0.0	0.0	0.1	0.0	0.0	0.0
EU SILC 2008	Total	9 349	9 278	0	0	70	0	0	1
	%	100.0	99.2	0.0	0.0	0.7	0.0	0.0	0.0
<b>co-residents 16+ (RB245=1 to 3 and RB100=2)</b>									
EU SILC 2005	Total	0	0	0	0	0	0	0	0
	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EU SILC 2006	Total	45	45	0	0	0	0	0	0
	%	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
EU SILC 2007	Total	58	58	0	0	0	0	0	0
	%	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
EU SILC 2008	Total	99	55	0	0	44	0	0	0
	%	100.0	55.6	0.0	0.0	44.4	0.0	0.0	0.0

**Table 35. Distribution of household members by RB260**

		Total	RB260=1	RB260=2	RB260=3	RB260=4	RB260=5	Missing
<b>household members 16+ (RB245=1 to 3) and (RB250=11 or 13)</b>								
<b>EU SILC 2005</b>	<b>Total</b>	<b>3 265</b>	3 070	0	0	15	180	0
	<b>%</b>	<b>100.0</b>	94.0	0.0	0.0	0.5	5.5	0.0
<b>EU SILC 2006</b>								
<b>EU SILC 2006</b>	<b>Total</b>	<b>6 365</b>	5 967	0	0	38	360	0
	<b>%</b>	<b>100.0</b>	93.7	0.0	0.0	0.6	5.7	0.0
<b>EU SILC 2007</b>								
<b>EU SILC 2007</b>	<b>Total</b>	<b>9 653</b>	8 954	0	0	58	641	0
	<b>%</b>	<b>100.0</b>	92.8	0.0	0.0	0.6	6.6	0.0
<b>EU SILC 2008</b>								
<b>EU SILC 2008</b>	<b>Total</b>	<b>9 333</b>	8 894	0	0	49	390	0
	<b>%</b>	<b>100.0</b>	95.3	0.0	0.0	0.5	4.2	0.0
<b>sample persons 16+ (RB245=1 to 3 and RB100=1) and (RB250=11 or 13)</b>								
<b>EU SILC 2005</b>	<b>Total</b>	<b>3 265</b>	3 070	0	0	15	180	0
	<b>%</b>	<b>100.0</b>	94.0	0.0	0.0	0.5	5.5	0.0
<b>EU SILC 2006</b>								
<b>EU SILC 2006</b>	<b>Total</b>	<b>6 320</b>	5 925	0	0	38	357	0
	<b>%</b>	<b>100.0</b>	93.8	0.0	0.0	0.6	5.6	0.0
<b>EU SILC 2007</b>								
<b>EU SILC 2007</b>	<b>Total</b>	<b>9 595</b>	8 903	0	0	58	634	0
	<b>%</b>	<b>100.0</b>	92.8	0.0	0.0	0.6	6.6	0.0
<b>EU SILC 2008</b>								
<b>EU SILC 2008</b>	<b>Total</b>	<b>9 278</b>	8 845	0	0	49	384	0
	<b>%</b>	<b>100.0</b>	95.3	0.0	0.0	0.5	4.1	0.0
<b>co-residents 16+ (RB245=1 to 3 and RB100=2) and (RB250=11 or 13)</b>								
<b>EU SILC 2005</b>	<b>Total</b>	<b>0</b>	0	0	0	0	0	0
	<b>%</b>	<b>0.0</b>	0.0	0.0	0.0	0.0	0.0	0.0
<b>EU SILC 2006</b>								
<b>EU SILC 2006</b>	<b>Total</b>	<b>45</b>	42	0	0	0	3	0
	<b>%</b>	<b>100.0</b>	93.3	0.0	0.0	0.0	6.7	0.0
<b>EU SILC 2007</b>								
<b>EU SILC 2007</b>	<b>Total</b>	<b>58</b>	51	0	0	0	7	0
	<b>%</b>	<b>100.0</b>	87.9	0.0	0.0	0.0	12.1	0.0
<b>EU SILC 2008</b>								
<b>EU SILC 2008</b>	<b>Total</b>	<b>55</b>	49	0	0	0	6	0
	<b>%</b>	<b>100.0</b>	89.1	0.0	0.0	0.0	10.9	0.0

## 2.5. Imputation procedure

From many methods (deductive, deterministic, stochastic), which were recommended for imputation of income variables, we used method of regression deterministic imputation.

Imputation procedure, which was used for solution of item non-response was following:

For imputation of income variables in household data file there were created following groups:

Region (NUTS 3)

HH030 (number of rooms)

POCL (number of households members)

For imputation of income variables in personal data file there were created following groups:

Region (NUTS)

Age

Sex

In this way created groups gave us the most differentiated average values. Imputation was implemented in three steps:

In case of imputation for income variables of the H-file :

1. Region x HH030 x POCL
2. Region x POCL
3. Region

In case of imputation for income variables of the P-file :

1. DB050 x Age x PB150
2. DB050
3. Region

Imputation was carry out in connection with housing cost too (variable HH060 *Current rent related to occupied dwelling*).

Data was imputed on the base of group averages according to following criteria: region, number of rooms in dwelling and tenure status.

## 2.6 Imputed rent

This variable was not compulsory in EU SILC 2005 and 2006 .

Calculation of income variable was realized only in order to test and ensure coherence on national level. Item was not included into variable HY010.

In calculation of imputed rent we resulted from elaborated study „Testing of Methods of Imputed Rent Estimation for EU-SILC in the Slovak Republic” in EU SILC 2005-2008.

Results of researches, but also Population and Housing Census 2001 show that the share of the privately-owned dwellings and houses rented at the market price represents about 3 % of the total number of dwellings in the Slovak Republic.

By this reason there was used user-cost method for estimation of imputed rent in the Slovak conditions. In estimation of imputed rent by user-cost method there was computed net operating surplus from the imputed rent, which is estimated from the average net stock of the value of dwellings.

In estimating the net stock of the value of dwellings, we used following approach:

1. The quantitative data on owner-occupied dwellings stratified by region, location (rural/urban area), dwelling type (own house/own dwelling), age (individual categories of age), and dwelling size (dwelling with one room, two rooms, ...five rooms) are drawn.

Quantitative data was corrected on the basis of actual quantitative data from 2001 Census (data from Census 2001 - numbers of privately-owned houses and dwellings are updated according to the statistics of finished houses and dwellings)

2. To these data there were found out prices of dwelling/houses from administrative sources and there was determined price of dwelling/houses. Net operating surplus was determined through applying relevant percentage (2,5 %), which was used from data of National Accounts.

## **2.7 Company cars**

Benefit from using company car for personal purposes was estimated on the basis of depreciated price of company car for actual year and other cash benefits, which were provided by employer in connection with car for personal purposes – benefit paid for petrol, benefit related to compulsory car insurance and repair and maintenance benefits. As input components for estimation of depreciated price of car for the actual year was market price of new car, period of amortisation established by law (4 years) and age of car (on the basis of year of production). Market price of car for relevant year was updated according to available external sources.

$\frac{1}{4}$  of price of new car is depreciated from price of new car every year. Theoretically depreciated price of 5-year car would equal 0. Practically older cars are used too and their actual depreciated price does not equal 0. Depreciated price of cars older than 4 years was calculated in such a way that  $\frac{1}{4}$  of price of new car was divided by age of car overlapping 3 years (because for the period of 4 years, there is assigned  $\frac{1}{4}$  of the price).

Total benefit from using company car represents the sum of estimated depreciated price of company car, benefit paid for petrol, benefit related to compulsory car insurance and repair and maintenance benefits.

In comparison of data from EU SILC 2005 and 2006 more considerable differences in values within variable PY021G occurred, because more rigorous amortization in individual types of cars was taken into account.

In surveys EU SILC 2007 and 2008 there was used the same rigorous method for amortization of individual types of cars as in EU SILC 2006.

### **3 COMPARABILITY**

#### **3.1 Basic concepts and definitions**

##### **The reference population**

For EU SILC 2005, 2006, 2007 and 2008 the *reference population* was equally defined in accordance with document EU SILC 065 for relevant year of the survey.

##### **The private household definition**

For EU SILC 2005, 2006, 2007 and 2008 there was used equal definition of *private household* in accordance with document EU SILC 065 for relevant year of the survey.

As the basic survey unit is considered private household sharing of expenditures comprised of persons in dwelling who live and manage together, including sharing in ensuring of the living needs. As manage together is considered: joint share in covering the basic household costs (catering, housing cost, costs of electricity, gas, etc).

In one dwelling there can be situated one or more households sharing of expenditures. Dwelling household is created by all persons living in dwelling.

##### **The household membership**

For EU SILC 2005, 2006, 2007 and 2008 the household membership was equally defined in accordance with document EU SILC 065 for relevant year of the survey.

As household member was considered:

- a) usually resident - present in household,
- b) usually resident - absent for a short term, e.g. by reason of employment, education, vacation and etc.,
- c) usually resident - absent for a long term by reason of employment, children absent for a long term by reason of education (education abroad),
- d) usually resident - absent for a long term by reason of hospitalization in hospital, stay at school, boarding school and other institution. if his/her actual or intended duration of absence is more than three months,
- e) lodger, tenant, stranger, if his/her actual or intended duration of stay in household is six or more months,
- f) visitor - guest if his/her actual or intended duration of stay in household is six or more months.

Each person who is considered as household member is person sharing in joint expenditures of this household. If there is person within dwelling household, who does not share in expenditures together with other persons living in one and the same dwelling, is considered as separate household sharing of own expenditures. Persons living in one dwelling can create one or more households sharing of expenditures.

Lodger, if it is one or more persons who manage together, creates/create separate household sharing of expenditures.

Residents, usually residents but temporarily absent by reason of business trip, education and etc., lodgers, tenants, they are household members if actually do not have private address elsewhere and they meet conditions related to their stay in household on the base of the document EU SILC 065 for relevant year of the survey.

Servant (including au-pairs) is not considered as household member in national conditions.

In the case of visitor (guest) as household member we consider person sharing in joint expenditures of household, if his/her actual or intended duration of stay in household is six months and more, although he/she has other private address elsewhere.

#### **The income reference period(s) used**

- calendar year 2004 (EU SILC 2005),
- calendar year 2005 (EU SILC 2006),
- calendar year 2006 (EU SILC 2007),
- calendar year 2007 (EU SILC 2008).

#### **The period for tax on income and social insurance contributions**

The period for taxes on income and social insurance contributions is calendar year, which precedes the year, in which was realized personal interviewer – for EU SILC 2005 it was calendar year 2004, for EU SILC 2006 calendar year 2005, for EU SILC 2007 calendar year 2006 and for EU SILC 2008 calendar year 2007.

The tax liability and liability for service for the relevant calendar year was performed at the beginning of the calendar year (to 31-st March of relevant year) succeeding to year, for which the tax liability and liability for service is related to.

The tax liability and liability for service for the year 2004 was performed in the year 2005 (EU SILC 2005), for the calendar year 2005 in the year 2006 (EU SILC 2006), for the calendar year 2006 in the year 2007 (EU SILC 2007) and for calendar year 2007 in the year 2008 (EU SILC 2008).

Concerning the period of data collection within fieldwork (May – June 2005 and April 2006, 2007 and 2008) the tax adjustment was taken into account in surveys EU SILC.

#### **The reference period for taxes on wealth**

- the same as in the case of tax on income and social insurance contributions.

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

The Statistics on income and living conditions EU SILC 2005 was carried out in the period from 16-th May to 16-th June 2005, so the lag represented 4,5 – 5,5 months.

The Statistics on income and living conditions EU SILC 2006, 2007 and 2008 was carried out in April (from 3-rd April to 28-th April 2006, from 2-nd April to 30-th April 2007 and from the 1-st April to 30-th April 2008), the lag represented 4 months.

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

Total duration of data collection in the case of surveys EU SILC 2005, 2006, 2007 and 2008 represented the period of 4 weeks.

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

Variables PL060 and PL070-PL090 were for EU SILC 2005, 2006, 2007 and 2008 survey equally defined in accordance with document EU SILC 065 for relevant year of the survey.

Variable **PL060** was collected in questionnaire on personal level and included in module related to basic labour information. This module was within EU SILC 2006 moved behind questions related to health, information on activity status and history and calendar of activities. Also it was expressly distinguished to questions related to current and last main employment.

#### **Variable PL060 Number of hours usually worked per week in main job:**

Question related to variable PL060 was placed in questionnaire in a such a way to meet conditions mentioned in document EU SILC 065 for relevant year of the survey on national level (in connection with variables PL030 and PL035 in personal questionnaire. Variable data PL035 were mentioned only on national level. On EU level the variable is recorded as PL035\_F = -2). By this reason persons, who had only occasional job on the base of work performance agreement or agreement on temporary job of students and they did not have any employment, which could have been considered as the main job, they did not answer the question related to PL060. In the case if respondent did not know exactly number of hours worked in the main job per week, he/she gave weekly average number of hours worked during the last previous 4 weeks.

## **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**

#### **HY010 – Total household gross income**

Definition of total household income was done in accordance with harmonized methodology – Doc. 065 for relevant year of the survey.

In calculation of variable HY010 for all years of EU SILC 2005 – 2008 there was taken into account only income variable – Company car (PY021G) of all non-cash employee income.

Variables compulsory from 2007 were provided only at level of relevant income variables and were not be included in variable HY010: other non-cash employee income with the exception of company car (PY020G), Employer's social insurance

contribution (PY030G), Value of goods produced by own consumption (PY070G), Imputed rent (HY030G) and Interest payments on mortgage (HY100G). In variable HY010 income from Pension from individual private plans (PY080G) was not taken into account as well.

#### **HY020 – Total disposable household income**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

#### **HY022 – Total disposable household income, before social transfers other than old-age and survivors' benefits**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

#### **HY023 – Total disposable household income, before social transfers including old-age and survivors' benefits**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

#### **HY025 – Within-household non-response inflation factor**

HY025 is value through which it is possible to estimate income of that person in household aged 16 and over, who did not provide information on income.

In the year 2005 for calculation of variable HY025 we proceeded in a such way that we calculated average income of persons over 16 per individual groups according to variable PL030 and these incomes were compared with disposable household incomes with missing response. But this procedure did not take into account the fact that person have could shared also in household income.

Calculation of variable HY025 was within EU SILC 2006 - 2008 based on assumption that incomes of non-respondents aged 16 and over in relevant household have the level comparable with incomes of other persons aged 16 and over in the same household. In calculation of variable HY025 we used method of the total personal income on the basis of a regression model of personal income by household type and age groups.

In household on the base of RFILE there is R\_16 persons aged 16 and over. According to PFILE data on incomes was provided for P\_16 persons.

Inflation factor on the base of assumption equals ratio of persons aged 16 and over living in household and persons, who provided information on income:

$$HY025 = R_{16} / P_{16}.$$

#### **HY030G– Imputed rent**

This variable was observed as voluntary in EU SILC 2005 and 2006 .

Calculation of income variable was done only in order to test and ensure coherence on national level. Item was not included into variable HY010.

In calculation of imputed rent we resulted from elaborated study „Testing of Methods of Imputed Rent Estimation for EU-SILC in the Slovak Republic” in EU SILC 2005-2008 surveys.

As results of realized researches in elaborated feasibility study, but also Population and Housing Census 2001 show that the share of the privately-owned dwellings and houses rented at the market price represents about 3 % of the total number of dwellings in Slovak Republic, the conclusion recommended was to use user-cost method for estimation of imputed rent under Slovak conditions.

In estimating the imputed rent by user-cost method there was computed net operating surplus from the imputed rent, which is estimated from the average net stock of the value of dwellings.

In estimating the net stock of the value of dwellings, there was used following approach:

2. The quantitative data on owner-occupied dwellings stratified by region, location (rural/urban area), dwelling type (own house/own dwelling), age (individual categories of age), and dwelling size (dwelling with one room, two rooms, ...five rooms) are drawn.

Quantitative data was corrected on the basis of actual quantitative data from 2001 Census (data from Census 2001 - numbers of privately-owned houses and dwellings are updated according to the statistics of completed houses and dwellings)

2. To these data there were found out prices of dwellings/houses from administrative sources and there was determined price of dwelling/houses. Net operating surplus was determined through applying relevant percentage (2,5 %), which was used from data of National Accounts.

#### **HY040G– Income from rental of property or land**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

For the first year of the survey EU SILC 2005, respondents had possibility to give an amount of income from rental of property of land in form of gross or net annual sum. Within EU SILC 2006 – 2008 surveys there was a question concerning variable HY040G adjusted to give an amount only as gross annual sum.

Question allowed to use income intervals in the case, if respondent did not know exactly to give the sum obtained as income from rental of property or land. Result variable in the case of values obtained through income intervals was calculated as average value within used interval.

#### **HY050G– Family/children-related allowances**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

The variable Family/children-related allowances is considered as an income at the household level. In connection with the national legislation, where one member of the household sharing of expenditures can receive more allowances in connection with

care of child, the variable was collected on personal level. The total household income from component family allowances has represented the sum of family allowances provided to all entitled persons in household in the income reference period.

Within the variable HY050G, these components were followed:

- child allowance, parental allowance, subsistence contribution (with validity expired from 2007), maternity allowance, lump-sum and regular foster care benefits, equalising contribution, other cash benefits (contribution to the parents of triplets (or more children born simultaneously) or to the parents of sets of twins born within a two year period), child-birth contribution, bonus to child-birth contribution (with effect from 2007).

### **HY060G – Social exclusion payments not elsewhere classified**

Within this variable, generally there were collected and calculated these components for EU SILC 2005 - 2008:

- material need assistance (*benefit for material need assistance* including benefits paid together in form of joint sum with mentioned benefit – *activation benefit, housing allowance, health-care allowance including allowance to health care for a child up to the age of one year with effect from 2008*) and *protection benefit*),
  - scholarship (merit and social scholarship),
  - other cash benefits (lump-sum or regular cash benefits provided to household by municipality or by other entity).

Component *scholarship* within EU SILC 2006 - 2008 was in order to ensure better lucidity and data comparability between individual waves of EU SILC observed in more detailed structure, i.e. as two separate items:

- a) scholarship for students of elementary schools (including special elementary schools),
- b) scholarship for students of secondary schools, special schools, vocational schools and training centres,

In 2005 within variable HY060G there were also collected social scholarships for university students. For their inclusion in this variable we resulted from legislative act, in terms of which income of student (and other persons qualified together with that person) is considered as determining factor for assessment of social scholarship. However as amount of providing social scholarship for university students depends on income falling on household member and so in connection with this fact, title to this scholarship can have not only persons situated in material need, the consequence was that from EU SILC 2006 we decided to collect social scholarships for university students within variable PY140G Education-related allowances.

Based on mentioned above, for EU SILC 2006 - 2008 there were collected and taken into account only those scholarships for elementary a secondary school students, which were provided in order to reduce and help social situation of households situated in material need.

### **HY070 G – Housing allowance**

On national level this housing allowance exists as social benefit, which however could be observed only as inseparable part of material need assistance. By this reason this housing allowance was taken into account in variable HY060G for EU SILC 2005 - 2008.

In EU SILC 2005 - 2008 within this variable we collected only non-refundable contribution from the State Housing Development Fund due to fact mentioned above. Non-refundable contribution is provided to applicant, if he/she ensures dwelling for disability person in order to compensation of higher costs in comparison with barrier building.

### **HY080G – Regular inter-household transfers received**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

For EU SILC 2005 in household questionnaire there was question to obtain total sum of financial assistance, which was received by household from other households or persons during year 2004 as alimony, voluntary child support, regular cash support from persons other than household members and from households abroad.

In EU SILC 2006 - 2008 regular cash inter-household transfers received were collected in detailed structure as:

- compulsory alimony and child support (including subsidiary alimony),
- voluntary alimony and child support,
- regular cash support from persons other than household members (e.g. cash support from the side of grand parents),
- regular cash support from households abroad (e.g. from relatives living abroad).

Within variable HY080G in EU SILC 2006 - 2008 there was collected and taken into account subsidiary alimony. Entitled person, to whom the person compulsory to pay alimony for child on the base of legal lex judicialis does not pay this alimony at least three consecutive months, can ask for payment of subsidiary alimony. Providing subsidiary alimony compulsory person has to return it to state.

Data for individual income components mentioned above was calculated for the purpose of Eurostat in order to create final variable HY080G.

### **HY081G – Alimonies received (compulsory + voluntary)**

Variable HY081G is applied from EU SILC 2008. It was defined in accordance with Doc. EU SILC 065 (2008 operation) and includes both components of alimony received on compulsory and voluntary basis:

- compulsory alimony and child support (including subsidiary alimony),
- voluntary alimony and child support.

### **HY090G – Interest, dividends and profit from capital investments in unincorporated business**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

Within EU SILC 2005 individual items of this variable were collected as total sum of interest, dividends and profit from capital investment, which could have been given by respondent in form of gross or net amount.

In EU SILC 2006 – 2008 surveys there were collected separately information on income components, which are not taxed (dividends, share of profits of sleeping partner) and those ones, which are liable to tax on income (interest, profits from capital investments).

In the case of all waves of the survey EU SILC, if respondent did not know exactly to give the sum received from interest, dividends and profits from capital investments, the value could have been estimated using proposed intervals.

Range of intervals has been remained unchanged since 2006.

In the case of values received through intervals, the result variable was calculated as average value within used interval.

### **HY100G – Interest paid on mortgage**

In accordance with valid methodological document EU SILC 065 for relevant years of the survey variable HY100G was not taken into account into HY010 and data was provided only on level of relevant income variable.

On the base of evaluation and analyses of results of variable HY100G from EU SILC 2005, where the values of interest paid on mortgage were collected by direct question in household questionnaire, we decided for the year 2006 to calculate result variable through procedure, which is in accordance with document EU SILC 105/02. Into formula for calculation of variable HY100G we took into account subsidiary variables in household questionnaire: year where the mortgage stated, total mortgage instalment (including principal and interest), initial amount of mortgage (amount of principal), number of years of mortgage payment, interest rate. The same solution of variable HY100G was carried out in subsequent years EU SILC 2007 and 2008.

### **HY110G – Income received by people aged under 16**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

### **HY120G – Regular taxes on wealth**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

### **HY130G – Regular inter-household transfers paid**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

For EU SILC 2005 in household questionnaire we used question to obtain total sum of financial assistance, which was provided by household to other households or persons during year 2004 as alimony, voluntary child support, regular cash support to persons other than household members and to households abroad.

Within EU SILC 2006 - 2008 there were regular cash inter-households transfers paid collected in detailed structures as:

- compulsory alimony and child support,
- voluntary alimony and child support,
- regular cash support to persons other than household members (e.g. cash support from the side of grand parents, children and etc.),
- regular cash support to households abroad (e.g. to relatives living abroad).

Data for individual income components mentioned above was calculated for the purpose of Eurostat in order to create final variable HY130G.

### **HY131G – Alimonies paid (compulsory + voluntary)**

Variable HY131G is applied from EU SILC 2008. It was defined in accordance with Doc. EU SILC 065 (2008 operation) and includes both components of alimony paid on compulsory and voluntary basis:

- compulsory alimony and child support,
- voluntary alimony and child support.

### **HY140G – Tax on income and social insurance contributions**

They are taxes on income and social insurance contributions for the calendar year, which precedes the year, in which was realized personal interview – for EU SILC 2005 it was calendar year 2004, for EU SILC 2006 calendar year 2005, for EU SILC 2007 calendar year 2006 and for EU SILC 2008 calendar year 2007.

The tax liability and liability for service for the relevant calendar year was performed at the beginning of the calendar year (to 31-st March of relevant year) succeeding to year, for which the tax liability and liability for service is related to.

The tax liability and liability for service for the year 2004 was performed in the year 2005 (EU SILC 2005), for the calendar year 2005 in the year 2006 (EU SILC 2006), for the calendar year 2006 in the year 2007 (EU SILC 2007) and for calendar year 2007 in the year 2008 (EU SILC 2008).

Concerning the period of data collection within fieldwork (May – June 2005 and April 2006, 2007 and 2008) the tax adjustment was taken into account in EU SILC survey.

Within EU SILC 2005 taxes on income were collected directly from respondents and in questionnaire they were listed together at individual taxed income components.

On the base of non-response rate and quality of provided data we decided from the year 2006 to whole calculation of taxes on income from dependant activity, incomes from self-employment, incomes from rental of property or land, incomes from capital investments and other incomes, e.g. incomes from occasional activities). The same procedure was used in subsequent years EU SILC 2007 and 2008. There was used unitary tax 19 %.

We calculated also social insurance contributions in the case of employees on the base of premium rates valid according to Act No. 595/2003 on tax on income. In the case of income from self-employment, social insurance contributions were collected by direct question in questionnaire.

In order to data calculation, in questionnaire on personal level there was created separate block of questions aimed at collection of those items needed for calculation

of taxes on income. Here we collected information on non-taxable parts of tax assessment base for tax payer, for spouse/husband of tax payer and others non-taxable parts of tax assessment base (paid contributions to supplementary pension saving and financial resources paid for specific saving), which could be deducted from tax assessment base. For calculation of this variable, the tax-bonus was taken into account too.

Tax-bonus is allowance, which is paid on the base of Act No.595/2003 on taxes on income and it serves in order to decrease taxes on income in case of employee and entrepreneur (self-employed person). Entitlement to receive tax bonus has taxpayer (only one of working parents), to each dependant child, who lives with that parent in common household.

In connection with the fact that the amount of tax-bonus is deducted from taxes on income to decrease them, within the EU SILC 2005 - 2008 surveys this income component was taken into account in variable HY140G Tax on income and social insurance contributions.

#### **HY145N – Repayments/receipts for tax adjustments**

Data from EU SILC 2005 - 2008 is taken into account within variable HY140G and they are not provided as separate relevant income component .

#### **PY010G – Cash or near-cash employee income**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

In solution of variable PY010G the most significant changes were made within EU SILC 2006 survey. Questions related to employee income were distinguished more digestedly by separate section of questions and in order to calculation of taxes on income and social insurance contributions we collected more detailed structure of employee income. There were also distinguished more digestedly occasional incomes, income on the base of work performance agreement and income earned abroad.

Since 2006 we have started to give an amount using income interval. Range of income intervals was adjusted on the base of analyses of gross annual sum within PY010G from EU SILC 2005. In the case of values obtained through income intervals, the result variable was calculated as average value within used interval. Intervals for estimation of annual amount of wage were applied in subsequent years EU SILC 2007 and 2008 as well.

Within EU SILC 2005 there were income components *severance pay and retirement benefits* collected in accordance with document 065/04 as part of social benefits - *severance pay* in variable PY090G (Unemployment benefits) and *retirement benefits* in variable PY100G (Old-age benefits).

However under relevant national legal enactment – Labour Code – there is payment as *severance pay and retirement benefits* paid by employer as a part of gross wage.

That is why in following years EU SILC 2006 - 2008 both income components were collected in questionnaire within questions related to variable PY010G (Cash or near-cash employee income).

In order to ensure data comparability with data of other member states in accordance with document EU SILC 065 for relevant years of the survey, in the case of EU SILC 2005 - 2008 these income items were added to as following:

- *severance pay* to variable PY090G (Unemployment benefits),
- *retirement benefits* in variable PY100G (Old-age benefits).

Within EU SILC 2008 cash housing allowances paid by employer, i.e. cash form provided by employer in order to compensate housing costs, were collected in this variable. Accommodation provided free or at reduced rent by employer to employee as the main residence was not included here. This kind of accommodation provided like non-cash employee income by employer was taken into account in variable PY020G.

### **PY020G – Non-cash employee income**

By reason of implementation of new separate variable PY021G (Company car) from 2007 and in order to ensure comparability of data among relevant years, information on company car from EU SILC 2005 and EU SILC 2006 is recorded in variable PY021G. Variable PY020G was not applied within EU SILC 2005 and 2006 (PY020G\_F=-2), because other non-cash employee income components are compulsory from 2007.

For the year 2005 and 2006 we collected in questionnaire several components of non-cash employee income, however we provided only data on company car as a non-cash employee income (recorded in PY021G).

For EU SILC 2007 and 2008 surveys the other components of non-cash employee income, compulsory from 2007, including benefit from using company car were taken into account in this variable PY020G. Information on company car for these years of the survey is provided in variable PY021G.

For EU SILC 2005 - 2008 there were collected these non-cash income components:

- luncheon vouchers including contribution to meals consumed at canteen
- reimbursement of gas, electricity, water,
- reimbursement of telephone, mobile
- other non-cash benefits (e.g. benefit for sport, language courses, discount for company goods or services, providing vouchers for purchase of goods and others.),
- accommodation provided free or at reduced rent by the employer as the main residence (with effect from EU SILC 2008).

### **PY021G – Company car**

In order to ensure data comparability of variable “benefit from using company car” there was in 2007 created new variable PY021G.

For individual years of EU SILC survey benefit from using company car for personal purposes was estimated on the basis of depreciated price of company car for actual year and other cash benefits, which were provided by employer in connection with car for personal purposes – benefit paid for petrol, benefit related to compulsory car

insurance and repair and maintenance benefits. As input components for estimation of depreciated price of car for the actual year was market price of new car, period of amortisation established by law (4 years) and age of car (on the basis of year of production). Market price of car for relevant year was updated according to available external sources.

$\frac{1}{4}$  of price of new car is depreciated from price of new car every year. Theoretically depreciated price of 5-year car would equal 0. Practically older cars are used too and their actual depreciated price does not equal 0. Depreciated price of cars older than 4 years was calculated in such a way that  $\frac{1}{4}$  of price of new car was divided by age of car overlapping 3 years (because for the period of 4 years, there is assigned  $\frac{1}{4}$  of the price).

Total benefit from using company car represents the sum of estimated depreciated price of company car, benefit paid for petrol, benefit related to compulsory car insurance and repair and maintenance benefits.

In comparison of data from EU SILC 2005 and 2006 more considerable differences in values within variable PY021G occurred, because more rigorous amortization in individual types of cars was taken into account.

In EU SILC 2007 and 2008 there was used the same rigorous method for amortization of individual types of cars as in EU SILC 2006, so the differences within variable PY021G between EU SILC 2006 and 2007 were eliminated in large extent.

### **PY030G – Employers' social insurance contributions**

As variable PY030G is compulsory from 2007, data are provided on level of relevant income component only for years 2007 and 2008.

Employers' social insurance contributions were calculated on the base of elaborated study „EU SILC: Feasibility study to variable Employers' social insurance contributions“. Variable comprises only of compulsory employers' social insurance contributions.

### **PY050G – Cash profits or losses from self-employment (including royalties)**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

For EU SILC 2005 data on variable PY050G was collected by direct question about amount of profit/loss of their self-employment for the period of the calendar year 2004.

In EU SILC 2006 - 2008 two approaches for obtaining information on variable PY050G were used:

1. The first approach data was collected directly from respondents by asking about profit/loss of their self-employment for the period of the last calendar year. If respondents had profit, they could have give this annual amount as gross or net profit.

If respondent did not know to give the sum of obtained income exactly (gross profit/loss), for statement of the amount of gross profit/loss he/she had option to made estimation by using income intervals.

Income intervals range has not been changed for EU SILC 2007 and 2008 and remained the same as there was proposed for EU SILC 2006.

In the case of values received through income intervals the output variable was calculated as average value within used interval.

2. information on variable PY050G (second approach) is also obtained through question about amount of lump-sum and regular cash resources from self-employment used for personal purposes.

In the case if respondent used for giving his/her profit/loss only one of approaches mentioned above, output variable PY050G was stated on the base of either direct statement of annual sum of profit/loss, used interval or on the base of annual sum of lump-sum and regular cash resources.

In the case that respondents used all questions (all approaches) related to expression of information on profit/loss (through direct statement of annual sum of profit/loss, but also giving annual sum of lump-sum and regular cash resources used for private purposes), output variable PY050G was stated on the base of higher annual amount recorded.

In data processing some cases of negative income have occurred in all years of EU SILC survey.

#### **PY070G – Value of goods produced for own consumption**

Within variable there was collected annual amount (value) of goods produced and intended for own consumption of household. Value was calculated on the base of basic market price of these products after deducting direct costs, which were paid in order to their production.

Variable was collected on household level. It is difficult to obtain given information on individual level without elimination of duplicity. However according to EU SILC definition, this variable should be provided on individual level, data was assigned to head of the household.

#### **PY090G – Unemployment benefits**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

This variable was collected for individual years of EU SILC survey in detailed structure and it included these items:

- unemployment benefit,
- other periodical cash allowances and benefits (subsidy on pursuance of graduates' practise, grant on services for family with children to the job applicant, contribution related to commutation, contribution for extended employment of policeman or professional soldiers). Since 2008 there has been collected new approved benefit – benefit for reimbursement of travelling

expenses in the case of job procurement relating to attendance at job interview at employer's company.

- other lump-sum cash payments (self-employment activity benefit, severance pay and redundancy payment (financial amount paid in case of lay off, not due to own infliction by employer, who stops or decreases his activities), remuneration of wage in the case of invalid dismissal).

Income variable *severance pay* was collected for EU SILC 2006 - 2008 in questionnaire within questions related to variable PY010G (Cash or near-cash employee income). Under national legal enactment - Labour Code - severance pay is paid by employer to employee as part of gross wage in the case of termination of employment through resignation by reason of cancel of relocation of employer or part of his corporation, by reason of redundancy of employee in the case of reorganization changes within employer's company or long-term bad health condition of employee, for which he/she is not able to continue present working activity. However in accordance with valid EU SILC methodology severance pay is taken into account within variable PY090G for all years of EU SILC 2005 - 2008 survey.

### **PY100G – Old-age benefits**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

This variable was collected in detailed structure and it included these items:

- old-age pension,
- early retirement pension,
- pension for extended employment,
- other periodical cash old-age benefits (extra payment to the pension of judge and lay judge, prosecutor, employee of the fire department, extra payment for civil service, remuneration of loss related to pension for extended employment in the case of policeman and soldier, other periodical allowances provided to respondent by the municipality, non-profit organizations or by other entities in the case of emergency and unfavourable social situation),
- other lump-sum old age benefits and allowances (retirement benefits, lump-sum benefit from municipality, non-profit organization or other entity, Christmas contribution).

Income variable *retirement benefits* was collected for EU SILC 2006 and 2007 in questionnaire within questions related to variable PY010G (Cash or near-cash employee income). Under national legal enactment – Labour Code – retirement benefit is paid by employer to employee as part of gross wage in the case of the first determination of employment after gaining of pension right, disability pension or pension for extended employment. However in accordance with valid EU SILC methodology, there is retirement benefit taken into account within variable PY100G for all years of EU SILC 2005 - 2008 survey.

### **PY110G – Survivors' benefits**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

The variable was collected in detailed structure and it included these items:

- widow's and widower's pension,
- orphan's pension,
- other periodical cash benefits (survivors' accident annuity, compensation of living costs of survivors),
- funeral allowance,
- other lump-sum cash benefits (lump-sum reparation for survivors of policeman or soldier, remuneration of costs in purpose of covering of cost of treatment).

### **PY120G – Sickness benefits**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

This variable was collected in detailed structure and it included these following items:

- sickness benefit,
- allowance for care of family member,
- other cash benefit (accidental allowances – periodical and lump-sum, extra payment to sickness and nursing allowances, compensation for loss in the service salary of policeman or the service income of the professional soldier, lump sum special reimbursement).

Sickness benefit is provided on the base of sickness insurance of the employee from the 11-th day of his/her temporary working disability. For the first 10 days of working disability the employer provides compensation of income to employee in the case of temporary working disability. The compensation of income in the case of temporary working disability is followed within the variable PY010G.

In order to ensure more easily checking of data quality and comparability with external sources, we collected also information on number of months for which was relevant benefit received in items of variable PY120G within EU SILC 2006 – 2008 surveys.

### **PY130G – Disability benefits**

Variable was defined in accordance with document EU SILC 065 for relevant year of the survey.

This variable was collected in detailed structure and it included following items:

- disability pension,
- cash disabled person's allowance  
(on diet catering, increased costs related to hygiene or the wear-out of clothes, underclothes, footwear, operation of the private motor car, care of dog with special training),
- periodical financial contributions for compensation  
(transport allowance and the allowance on personal assistance),

- other periodical cash benefits  
(contribution for personal assistant of self-employed person, who is disabled), other periodical monetary allowances provided by the municipality or by other entity),
- nursing allowance,
- lump-sum financial contributions for compensation  
(contribution for the purchase of special aids, for the repair of special aids, for the purchase of a motor vehicle, for modifying an apartment, family house, garage)
- other lump-sum cash benefits  
(Christmas allowance, subsidy to a disabled person for the operation or performance of self-employment activities and lump-sum benefits provided by the municipality or by other entity).

Data for income variables mentioned above was calculated for the purpose of Eurostat in order to create final variable PY130G.

### **PY140G – Education-related allowances**

Education-related allowances included grants, scholarships (e.g. paid from own sources of university) and other support of education received by students.

Within this variable we also collected social scholarships for university students, which are paid as merit scholarship or special scholarship from the year 2006 ( in EU SILC 2005 were part of HY060G). The aim of providing scholarship is to help students situated in unfavourable economical situation, but also as appreciation and support of significant results and activities in education, scientific and art area and representation of university on the field of culture and sport.

The amount of social scholarship depends on income falling on household member and is granted to students on the base of excellent educational results or extraordinary results in scientific, art or sport activities. Title to scholarship has not only citizen situated in position of material need.

Scholarships and similar benefits which are paid in terms of income of persons situated in material need are included into variable HY 060G.

### **PY200G – Gross monthly earnings for employees**

On national level this variable was collected, but due to EU SILC survey is not a source for calculation of unadjusted gender pay gap, this variable was recorded only on national level for individual years of EU SILC 2005 - 2008.

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

Within EU SILC 2005, 2006 and 2007 total gross income and disposable household income was calculated according to document 065/04 and for EU SILC 2007 also in accordance with decision of Eurostat about calculation of variables HY010, HY020, HY022 and HY023, which are compulsory from the year 2007. Within EU SILC 2008 calculation of total gross household income was applied in accordance with Doc. EU SILC 065 (2008 operation).

**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)**

Within EU SILC EU SILC 2005 - 2008 income variables on component level were collected on the base of interview.

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

In the case of all years of EU SILC survey all income data was recorded as gross on component level.

### **3.3 Tracing rules**

**Procedure of tracing of households and persons:**

1. If whole household moved out, interviewer had to find out its new address by all available sources. This information could be obtained from neighbours or relatives, municipal/communal office and others. Interviewer provide new address of household, name and surname of the head of the household in relevant form and also filled ID number of household and this form gave to coordinator of the Regional Office in period at least 3 days. Consequently coordinator decided on another procedure to continue in this circumstance.
2. Similarly interviewer proceeded in the case of one or more selected persons moved out. Basic source of information on place of moving of selected person/persons was information received from other household members. For each person moved out interviewer completed relevant form, where was listed new address of this person again, his/her name and surname, household ID and personal ID.
3. In the case if interviewer was entrusted to collect data for household or person moved out, needed information was received from coordinator of the relevant Regional Office.

## 4 COHERENCE

### 4.1 Comparison of income target variables and number of persons who receive income from each 'income component' with administration sources

In EU SILC survey, achieved values were compared with information from administration sources:

- a) other surveys of the SO SR: LFS, HBS, Census 2001, Movement of the Population of the SO SR, Structure of Earnings Survey (SES),
- b) administration sources (Social Insurance Agency, Ministry of Finance, Ministry of Labour Social Affairs and Family)

Within EU SILC (year 2005-2008) there were incomes collected in detailed structure (especially concerning social benefits) and it was in order to ensure simpler comparability of data with external sources and imputation of income components in the case of non-response.

In comparison of data in general we could say that there is good coherence of data with external sources in the case of regular received benefits, but in the case of lump-sum benefits there occurred more evident differences.

#### 1. Comparison of some target variables from EU SILC 2005 - 2008 surveys with HBS 2005 - 2008 surveys:

**Table 36**  
Equipment of the household by selected durables

Selected durables	Year 2005		Year 2006		Year 2007		Year 2008	
	EU SILC	HBS						
Telephone	94.8	95.0	94.7	96.0	95.7	97.4	94.7	97.4
Colour TV	97.9	97.9	98.0	99.2	98.3	99.6	98.7	99.7
Computer	35.8	35.4	43.1	40.3	45.7	45.5	50.9	52.8
Washing machine	96.5	86.8	96.4	88.3	96.6	91.2	96.8	92.5
Car	45.6	48.3	51.8	51.5	49.5	51.3	52.1	54.8

**Table 37**  
Comparison of households structure by household type EU SILC 2008 with HBS 2008:

Household type	EU SILC 2008		HBS 2008	
	number	%	number	%
Single	456 975	24.2	437 322	22.6
2 adults - both < 65 years rokov	193 574	10.2	247 957	12.8
2 adults - at least one 65+ years	199 939	10.6	180 863	9.4
Other households without dependent children	278 094	14.7	199 337	10.3

Single parent, at least 1 dependent child	51 968	2.8	47 280	2.4
2 adults, 1 dependent child	175 952	9.3	225 180	11.6
2 adults, 2 dependent children	223 108	11.8	283 075	14.6
2 adults, 3 dependent children	67 623	3.6	97 018	5.0
Other households	244 664	12.9	219 599	11.3
<b>TOTAL</b>	<b>1 891 897</b>	<b>100.0</b>	<b>1 937 631</b>	<b>100.0</b>

**Table 38**  
**Comparison of population structure by age EU SILC 2008 with HBS 2008**

Age structure	EU SILC 2008	HBS 2008
	v %	
<b>TOTAL</b>	100.0	100.0
<b>0 - 14</b>	13.3	16.3
<b>15 - 24</b>	16.9	16.0
<b>25 - 54</b>	43.4	43.4
<b>55 - 64</b>	12.4	12.7
<b>65 +</b>	14.0	11.6

## 2. Comparison of some target variables from EU SILC 2005-2008 surveys:

**Table 39**  
**PE040 Highest ISCED level attained**

	EU SILC 05	EU SILC 06	EU SILC 07	EU SILC 08
1 - primary education	0.4	1.4	1.0	1.0
2 - lower secondary education	18.5	16.9	17.0	15.7
3 - upper secondary education	67.0	67.0	66.8	66.6
4 - post-secondary non tertiary education	0.0	0.0	0.0	1.8
5 - first stage of tertiary education	13.3	14.1	14.4	13.9
6 - second stage of tertiary education	0.5	0.5	0.5	0.5
missing	0.3	0.1	0.3	0.5

**Table 40**  
**PL030 Self-defined current economic status**

	EU SILC 05		EU SILC 06		EU SILC 07		EU SILC 08	
	%	total	%	total	%	total	%	total
<b>Employed (PL030 = 1,2)</b>	52.5	2 349 185	53.5	2 383 009	53.4	2 442 538	54.8	2 510 460
<b>Unemployed (PL030 = 3)</b>	7.8	349 476	6.9	306 884	5.2	236 846	4.4	203 628
<b>Economically inactive (PL030=4,5,6,7,8,9)</b>	39.7	1 776 647	39.6	1 760 241	41.4	1 889 962	40.7	1 863 759

**Table 41**  
**PL040 Status in employment**  
(PL030=1,2)

	EU SILC 05		EU SILC 06		EU SILC 07		EU SILC 08	
	%	total	%	total	%	total	%	total
<b>Employed (PL030 = 1.2)</b>	100.0	2 349 185	100.0	2 383 009	100.0	2 442 538	100.0	2 510 460
- employees	90.0	2 113 224	90.0	2 144 081	90.4	2 208 249	90.1	2 263 077
- self-employed without employees	6.9	162 839	7.1	169 053	7.4	180 407	7.4	186 708
- self-employed with employees	3.1	72 349	2.8	65 672	2.2	53 565	2.4	59 626
- family worker	0.0	772	0.0	312	0.0	0	0.0	662
- missing	0.0	0	0.2	3 891	0.0	317	0.0	387

**Table 42**  
**PL050 Employed by Classification of Occupation – ISCO-88 (COM)**  
(PL030=1,2)

	EU SILC 05	EU SILC 06	EU SILC 07	EU SILC 08
	%	%	%	%
<b>Employed (PL030 = 1.2)</b>	100.0	100.0	100.0	100.0
- Legislators, senior officials and managers	6.7	5.1	5.5	5.2
- Scientists and brain workers	14.3	11.3	11.6	13.1
- Technical, medical, pedagogical and related fields professionals	17.4	18.8	18.8	21.6
- Administrative workers (officials)	8.5	9.0	8.4	8.8
- Workers in services and trade	13.0	12.7	12.9	12.8
- Qualified workers in agriculture, forestry and related fields	1.0	1.7	1.4	0.8
- Craftsmen and qualified producers, repairmen	17.6	17.5	17.5	17.9
- Plant and machine operators	13.3	12.2	12.6	12.4
- Supporting and non-qualified staff	7.6	11.8	11.3	7.1
- missing	0.7	-	-	0.3

**Table 43**  
**PL110 Employed by economic activity – NACE**  
(PL030=1,2)

	EU SILC 05	EU SILC 06	EU SILC 07	EU SILC 08
	%	%	%	%
<b>Employed (PL030 = 1.2)</b>	100.0	100.0	100.0	100.0
- Agriculture, hunting and forestry; fishing	3.3	3.5	3.2	2.8
- Mining and quarrying	0.9	0.6	0.4	0.4
- Manufacturing	23.3	23.9	23.7	24.7
- Electricity, gas and water supply	2.1	2.0	2.1	2.0
- Construction	8.1	8.4	8.9	8.5
- Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	10.7	11.5	11.7	12.8
- Hotels and restaurants	3.6	3.5	4.0	3.6
- Transport, storage and communications	7.2	6.9	6.9	7.2
- Financial intermediation	2.2	2.4	2.4	2.5

	<b>EU SILC 05</b>	<b>EU SILC 06</b>	<b>EU SILC 07</b>	<b>EU SILC 08</b>
	%	%	%	%
- Real estate, renting and business activities	5.3	5.9	5.5	5.9
- Public administration and defence; compulsory social security	11.1	12.4	12.4	11.5
- Education	8.7	8.0	8.0	7.9
- Health and social work	6.2	6.4	5.9	5.6
- Other community, social and personal service activities	6.1	4.5	4.7	3.9
- Activities of households	0.2	0.2	0.2	0.1
- Extra-territorial organizations and bodies	0.1	0.0	0.0	0.0
- Missing	0.9		-	0.3

**Table 39 Comparison of selected income components from EU SILC to administrative source**

Income components		EU SILC				External data for			
		2005	2006	2007	2008	EU SILC 2005	EU SILC 2006	EU SILC 2007	EU SILC 2008
		Total amount (in SKK)				Total amount (in SKK)			
SPY0101	Gross wage from main occupation	349 353 218 075	373 699 575 998	416 225 586 257	458 832 398 862				
<b>PY090G</b>	<b>Unemployment benefits</b>	<b>3 833 602 393</b>	<b>3 477 602 388</b>	<b>2 422 613 686</b>	<b>2 555 792 596</b>				
of which									
SPY0901	Unemployment benefit	3 467 024 640	1 972 368 437	1 273 189 178	1 238 299 911	3 972 119 284	2 439 762 000	1 927 514 000	1 797 127 838
<b>PY100G</b>	<b>Old – age benefits</b>	<b>82 005 164 345</b>	<b>102 240 920 226</b>	<b>110 517 206 621</b>	<b>116 903 034 768</b>				
of which									
SPY1001	Old – age pension	77 393 004 220	96 801 164 235	102 368 112 908	106 242 133 922	68 650 897 224	77 907 148 000	84 068 637 000	91 274 234 000
SPY1003	Early old-age pension	625 048 750	1 509 509 643	2 448 712 746	2 426 245 704	1 120 357 920	1 394 019 000	3 612 964 000	4 873 556 000
<b>PY110G</b>	<b>Survivor´s benefits</b>	<b>9 165 646 079</b>	<b>11 462 708 364</b>	<b>11 786 539 272</b>	<b>11 905 364 997</b>				
of which									
SPY1103	Orphans´ pension	860 530 630	983 106 175	942 860 496	943 133 138	829 510 056	879 704 000	992 937 000	1 228 707 000
SPY1101	Widow´s and widower´s pension	8 194 655 226	10 374 576 327	10 740 167 712	10 157 053 169	17 194 182 384	11 711 949 000	12 585 334 000	13 762 735 000
<b>PY120G</b>	<b>Sickness benefits</b>	<b>1 706 058 709</b>	<b>1 606 595 506</b>	<b>1 894 991 847</b>	<b>1 848 052 363</b>				
of which									
SPY1201	Sickness benefit	1 626 694 957	1 430 203 637	1 784 656 920	1 544 137 943	3 521 874 600	3 430 745 000	3 909 040 000	4 448 166 626
<b>PY130G</b>	<b>Disability benefits</b>	<b>14 772 444 695</b>	<b>14 774 089 253</b>	<b>17 638 974 285</b>	<b>17 926 459 248</b>				
of which									
SPY1301	Disability pension	12 196 446 379	12 171 796 179	14 273 101 455	14 440 512 608	19 474 069 056	12 708 418 000	13 873 178 000	15 379 797 000

Administrative source: Social Insurance Agency, Ministry of Finance, Ministry of Labour, Social Affairs and Family  
**EU SILC 2005** UDB rev1 version 13/02/2009, **EU SILC 2006** UDB rev2 version 13/02/2009, **EU SILC 2007** UDB version 28/04/2009, **EU SILC 2008** UDB version 10/09/2009

