Central Statistical Bureau of Latvia

FINAL QUALITY REPORT RELATING TO EU-SILC OPERATIONS 2005–2008

Riga 2010

CONTENTS

Background

In Latvia the EU-SILC survey was launched in 2005. The Latvian EU-SILC survey is an annual survey with a four-year rotational panel and it is carried out as an independent survey, by single operation covering cross-sectional and longitudinal primary target variables as well as secondary target variables.

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

Table 1.1. **Indicators based on the longitudinal component of EU-SILC**

Indicator	Value	
At-risk-of-poverty threshold		
Single person (illustrative values)	LVL per year	EUR per year
2004 (EU-SILC 2005)	879.6	1 322.3
2005 (EU-SILC 2006)	1 058.4	1 520.3
2006 (EU-SILC 2007)	1 399.5	2 010.3
2007 (EU-SILC 2008)	2 029.7	2 899.1
Two adults with two children younger than 14 years (illustrative values)	LVL per year	EUR per year
2004 (EU-SILC 2005)	1 847.2	2 776.8
2005 (EU-SILC 2006)	2 222.6	3 192.5
2006 (EU-SILC 2007)	2 939.0	4 221.5
2007 (EU-SILC 2008)	4 262.3	6 088.1
Persistent at-risk-of-poverty rate in 2007 (EU-SILC 2008)		
Persistent at-risk-of-poverty rate: Total		12.6
Persistent at-risk-of-poverty rate: Males		10.7
Persistent at-risk-of-poverty rate: Females		14.2
Persistent at-risk-of-poverty rate: 0-17 total		12.1
Persistent at-risk-of-poverty rate: 0-17 males		11.4
Persistent at-risk-of-poverty rate: 0-17 females		12.8
Persistent at-risk-of-poverty rate: 18+ total		12.8
Persistent at-risk-of-poverty rate: 18+ males		10.6
Persistent at-risk-of-poverty rate: 18+ females		14.5
Persistent at-risk-of-poverty rate: 18-24 total		11.7
Persistent at-risk-of-poverty rate: 18-24 males		12.3
Persistent at-risk-of-poverty rate: 18-24 females		11.1
Persistent at-risk-of-poverty rate: 25-49 total		8.1
Persistent at-risk-of-poverty rate: 25-49 males		7.4
Persistent at-risk-of-poverty rate: 25-49 females		8.7
Persistent at-risk-of-poverty rate: 18-64 total		11.2
Persistent at-risk-of-poverty rate: 18-64 males		10.9
Persistent at-risk-of-poverty rate: 18-64 females		11.5
Persistent at-risk-of-poverty rate: 50-64 total		17.2
Persistent at-risk-of-poverty rate: 50-64 males		17.6
Persistent at-risk-of-poverty rate: 50-64 females		16.9
Persistent at-risk-of-poverty rate: 65+ total		19.4
Persistent at-risk-of-poverty rate: 65+ males		8.7
Persistent at-risk-of-poverty rate: 65+ females		24.0

2. ACCURACY

2.1. SAMPLE DESIGN

In Latvia a stratified two-stage sampling design was used for the EU-SILC survey. At the first stage a systematic sampling of the primary sampling units (Population Census counting areas) was carried out. At the second stage a simple random sampling was made to select secondary sampling units (addresses). The stratification was made depending on a degree of urbanization of the area. The code of administrative territories was used for stratifying.

2.1.1. Type of sampling

A stratified two-stage sampling was used for the EU-SILC survey in Latvia. A systematic sampling with inclusion probabilities proportional to the unit size was carried out at the first stage and a simple random sampling was carried out at the second stage.

2.1.2. Sampling units

The Population Census counting areas were used as primary sampling units (PSUs) at the first stage. In general, all territory of Latvia is covered in lists of population counting areas. PSUs were selected by a systematic sampling with inclusion probabilities proportional to the population size (number of households) of PSUs.

Addresses were used as secondary sampling units (SSUs). Simple random sampling was used to select SSUs from PSUs selected at the first sampling stage. In Latvia several households can be registered in one address. All households and individuals living in the selected address were included in the EU-SILC survey in urban areas, but in rural areas only those households, which were formed by persons enumerated in the Household List (see 2.3.2.). If none of persons enumerated in the Household List lived in the selected address, then it was possible:

- to go for an interview to a different address in the same local area (if an interviewer knew the correct address of the persons enumerated in the Household List);
- to interview all households and individuals living in the selected address (the same as in urban areas).

2.1.3. Stratification and sub-stratification criteria

The stratification was made depending on a degree of urbanization of the area. Riga (the capital city), six largest towns, other towns and rural areas form four strata. The code of administrative territories was used for stratification. The stratum is identified in the variable DB050.

2.1.4. Sample size and allocation criteria

According to Regulation (EC) No 1553/2005 of the European Parliament and of the Council of 7 September 2005 amending Regulation (EC) No 1177/2003 concerning Community statistics on income and living conditions (EU-SILC), Annex II in Latvia the minimum effective sample size is 3 750 households. The total gross sample size (number of households) was made according to the non-response rate and effective sample size for at-risk-of-poverty rate after social transfers. The non-response rate was estimated by using the results of the EU-SILC survey in the previous years. In 2005 there were 5 692 addresses selected. To compensate the non-response, it was decided to select 5 856 addresses in 2006, 6 550 in 2007 (a new rotational group was increased) and 6 897 in 2008.

2.1.5. Sample selections schemes

In the first stage Population Census counting areas (PSUs) were selected by a systematic sampling with inclusion probabilities proportional to their population size.

A simple random sampling without replacement was used to select addresses (SSUs) in sampled PSUs. A non-proportional allocation was used to select SSUs.

2.1.6. Sample distribution over time

A sample distribution over time was not used because the EU-SILC survey is organized on an annual basis. The number of households successfully interviewed in each month of fieldwork (2005-2008) is shown below in Table 2.1.

Table 2.1. **Number of successful interviews (households) by the date of interview**

Month	2005		2006		2007		2008		Total	
	number	%	number	%	number	%	number	%	number	%
February	-	-	-	-	14	0.4	-	-	14	0.1
March	-	-	47	1.8	398	10.7	-	-	445	4.0
April	-	-	359	13.9	190	5.1	353	10.7	902	8.1
May	522	35.2	422	16.4	294	7.9	1 066	32.2	2 304	20.8
June	607	40.9	533	20.7	192	5.2	1 087	32.9	2 419	21.8
July	110	7.4	514	19.9	669	18.0	780	23.6	2 073	18.7
August	70	4.7	34	1.3	704	19.0	20	0.6	828	7.5
September	176	11.9	457	17.7	802	21.6	-	-	1 435	13.0
October	-	-	206	8.0	261	7.0	-	-	467	4.2
November	-	-	-	-	26	0.7	-	-	26	0.2
Not specified	-	-	8	0.3	158	4.3	-	-	166	1.5
TOTAL	1 485	100	2 580	100	3 708	100	3 306	100	11 079	100

2.1.7. Renewal of sample: rotational groups

A rotational sampling design was used for the EU-SILC survey. Initially the sample (in 2005) consisted of four equal rotational groups (sub-samples). To provide a cross-sectional component it was foreseen to drop one group and add the new one in the next years of the survey. Unfortunately it was not possible to evaluate properly the gross sample size for all sub-samples. The calculated gross sample size for all groups was not sufficient to provide the minimum effective net sample size for the longitudinal component in the next years. Therefore, a part of successfully interviewed households of the sub-sample included only for the 1st year of the survey was included also into the sample in the following years.

2.1.8. Weightings

The longitudinal data sets contain information on individuals (and their households) traced from the original sample households in 2005, 2006, 2007 and 2008 (rotational groups 4, 1 and 2).

2.1.8.1. Design factor

Longitudinal weights were made from base weights RB060, which were calculated from design weights. The design weights (DB080) for addresses were calculated according to the sample design:

$$DB080 = \frac{1}{prob\_adr};$$

$$prob\_adr = \frac{\text{hhpsupop} \cdot psustrat \cdot adrpsus}{hhstrpop \cdot adrp\sup},$$

*where **prob_adr*** - inclusion probabilities of addresses;

   hhpsupop - a number of households in each strata's each PSU of all population;

   psustrat - a number of the PSUs in each strata of sample;

   adrpsus - a number of addresses in each strata's each PSU of sample;

   hhstrpop - a number of households in each strata of all population;

   adrpsup - a number of addresses in each strata's each PSU of population.

The inclusion probability of the household and the individual is equal to the inclusion probability of the address. The design weights were adjusted for outliers (extremely high design weights) at the address level.

2.1.8.2. Non-response adjustments

Base weights were corrected by non-response in the primary sampling units. The 2006, 2007 and 2008 data were adjusted for returnees. New household members with RB110 = 3 (moved into from outside sample) and former household members with RB110 = 5, 6 or 7 (moved out, died, not registered in the previous wave and did not live in household anymore) had RB060 = 0. The newly born (household members with RB110 = 4) received the weight of their mother. For each year, each rotational group with adjusted design weights was calibrated on the corresponding year's population.

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

For each year, each rotational group with adjusted design weights was calibrated on the corresponding year's population. Weights were calibrated (in the household level) on the basis of demographic data by breaking them down by a degree of urbanization (four groups - strata), 12 age groups (0-15; 16-20; 21-25; 26-30; 31-35; 36-40; 41-45; 46-50; 51-55; 56-60; 61-65; 66+), sex and 6 regions of Latvia (NUTS 3). GREG calibration was used.

2.1.8.4. Final longitudinal weights

Calibrated weights are base weights RB060. For each rotational group, for each wave, the sums of weights RB060 are equal to the size of the longitudinal population in the scope at each wave from the start of the panel.

The longitudinal part of 2005 is the fourth rotational group, for 2006 – the fourth and the first rotational groups, but for 2007 and 2008 – the fourth, the first and the second rotational groups. Only they were selected for longitudinal weighting. So weights have a formula RB062 = k * RB060, where k is calculated as a proportion - number of households in the

corresponding rotational group against the total number of households in all three longitudinal rotational groups.

2.1.8.5. Final household cross-sectional weight

The final cross-sectional weights DB090 were calculated as a product of the design factor, non-response adjustment factor and calibration factor:

$$DB090 = nonr\_w \cdot g \, ,$$

where **g** - g-weights of the regression estimator.

2.1.9. Substitutions

No substitution was used.

2.2. SAMPLING ERRORS

The following tables report the mean, the number of observations (before and after imputation) and the standard error for different income components.

Estimates and their standard errors were computed with cross-sectional weights DB090.

Table 2.2. **Mean, number of observations and standard errors of different income components, 2004 (EU-SILC 2005)**

	Income components	Mean, LVL per year [1]	Number of observations [2]		Standard error, LVL [1]
			Before imputation	After imputation	
HY020	Total disposable household income	3 055	1 474	1 478	93
HY022	Total disposable household income before social transfer other than old-age and survivor's benefits	2 910	1 451	1 458	93
HY023	Total disposable household income before social transfers including old-age and survivor's benefits	2 669	1 274	1 283	103
	Net income components at the household level				
HY040N	Income from rental of a property or land	281	20	20	44
HY050N	Family/Children related allowances	225	469	469	15
HY060N	Social exclusion not elsewhere classified	106	117	118	15
HY070N	Housing allowances	64	65	68	6
HY080N	Regular inter-household cash transfer received	570	175	188	62
HY090N	Interest, dividends, profit from capital investments in unincorporated business	1 333	34	36	950
HY110N	Income received by people aged under 16	146	17	17	50
HY120N	Regular taxes on wealth	21	639	726	2
HY130N	Regular inter-household cash transfer paid	466	144	148	57
HY145N	Repayments/receipts for tax adjustment	-38	169	170	7
	Net income components at the personal level				
PY010N	Employee cash or near cash income	1 854	1 490	1 516	55
PY021N	Company car	151	0	42	32
PY035N	Contributions to individual private pension plans	104	14	23	11
PY050N	Cash benefits or losses from self-employment	1 978	130	137	368
PY080N	Pension from individual private plans	0	0	0	0
PY090N	Unemployment benefits	419	76	79	71
PY100N	Old-age benefits	919	925	926	14
PY110N	Survivor` benefits	512	41	41	39
PY120N	Sickness benefits	127	151	152	20
PY130N	Disability benefits	715	98	98	29
PY140N	Education-related allowances	192	73	73	39

[1] Zeros are not included in calculations.
[2] For income components at the personal level only persons with PB050 > 0 taken into account.

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Table 2.3. **Mean, number of observations and standard errors of different income components, 2005 (EU-SILC 2006)**

	Income components	Mean, LVL per year [1]	Number of observations [2]		Standard error, LVL [1]
			Before imputation	After imputation	
HY020	Total disposable household income	4 022	2 554	2 564	109
HY022	Total disposable household income before social transfer other than old-age and survivor's benefits	3 821	2 528	2 538	104
HY023	Total disposable household income before social transfers including old-age and survivor's benefits	3 508	2 266	2 276	112
	Net income components at the household level				
HY040N	Income from rental of a property or land	696	32	32	224
HY050N	Family/Children related allowances	305	811	815	27
HY060N	Social exclusion not elsewhere classified	108	137	140	13
HY070N	Housing allowances	90	112	114	9
HY080N	Regular inter-household cash transfer received	757	283	287	75
HY090N	Interest, dividends, profit from capital investments in unincorporated business	2 208	48	55	723
HY110N	Income received by people aged under 16	110	38	38	44
HY120N	Regular taxes on wealth	25	1 260	1 305	2
HY130N	Regular inter-household cash transfer paid	520	280	286	66
HY145N	Repayments/receipts for tax adjustment	-49	288	293	7
	Net income components at the personal level				
PY010N	Employee cash or near cash income	2 324	2 632	2 684	37
PY021N	Company car	340	42	42	69
PY035N	Contributions to individual private pension plans	112	46	48	32
PY050N	Cash benefits or losses from self-employment	1 893	246	256	95
PY080N	Pension from individual private plans	0	0	0	0
PY090N	Unemployment benefits	653	94	106	111
PY100N	Old-age benefits	985	1 645	1 699	27
PY110N	Survivor` benefits	538	59	59	73
PY120N	Sickness benefits	225	227	238	49
PY130N	Disability benefits	743	186	188	20
PY140N	Education-related allowances	212	96	98	26

[1] Zeros are not included in calculations.
[2] For income components at the personal level only persons with PB050 > 0 taken into account.

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Table 2.4. **Mean, number of observations and standard errors of different income components, 2006 (EU-SILC 2007)**

	Income components	Mean, LVL per year [1]	Number of observations [2]		Standard errors, LVL [1]
			Before imputation	After imputation	
HY010	Total household gross income	6 116	3 365	3 680	150
HY020	Total disposable household income	4 973	3 452	3 691	115
HY022	Total disposable household income before social transfer other than old-age and survivor's benefits	4 673	3 397	3 663	115
HY023	Total disposable household income before social transfers including old-age and survivor's benefits	4 302	3 106	3 281	120
	Net income components at the household level				
HY030N	Imputed rent	531	0	3 508	16
HY040N	Income from rental of a property or land	816	43	45	284
HY050N	Family/Children related allowances	378	780	1 237	25
HY060N	Social exclusion not elsewhere classified	162	130	213	15
HY070N	Housing allowances	109	129	143	14
HY080N	Regular inter-household cash transfer received	359	406	440	17
HY090N	Interest, dividends, profit from capital investments in unincorporated business	1 235	24	36	465
HY100N	Interest repayments on mortgage	896	0	75	98
HY110N	Income received by people aged under 16	164	30	37	55
HY120N	Regular taxes on wealth	25	1 791	1 914	2
HY130N	Regular inter-household cash transfer paid	340	289	321	16
HY140N	Tax on income and social contributions	1 439	2 200	2 541	47
	Net income components at the personal level				
PY010N	Employee cash or near cash income	2 644	3 411	4 299	28
PY020N	Non-Cash employee income	362	147	273	45
PY021N	Company car	433	0	69	102
PY035N	Contributions to individual private pension plans	124	62	72	33
PY050N	Cash benefits or losses from self-employment	2 474	295	318	262
PY070N	Value of goods produced for own consumption	338	0	1 321	16
PY080N	Pension from individual private plans	162	5	5	103
PY090N	Unemployment benefits	364	63	395	61
PY100N	Old-age benefits	1 182	2 250	2 442	10
PY110N	Survivor` benefits	655	23	124	19
PY120N	Sickness benefits	242	89	594	28
PY130N	Disability benefits	758	200	331	17
PY140N	Education-related allowances	252	102	109	30

[1] Zeros are not included in calculations.
[2] For income components at the personal level only persons with PB050 > 0 taken into account.

	Income components	Mean, LVL per year [1]	Number of observations [2]		Standard error, LVL [1]
			Before imputation	After imputation	
	Gross income components at the household level				
HY030G	Imputed rent	677	0	3 508	21
HY040G	Income from rental of a property or land	816	43	45	284
HY050G	Family/Children related allowances	378	780	1 237	25
HY060G	Social exclusion not elsewhere classified	162	130	213	15
HY070G	Housing allowances	109	129	143	14
HY080G	Regular inter-household cash transfer received	359	406	440	17
HY090G	Interest, dividends, profit from capital investments in unincorporated business	1 235	24	36	465
HY100G	Interest repayments on mortgage	896	0	75	98
HY110G	Income received by people aged under 16	190	30	37	73
HY120G	Regular taxes on wealth	25	1 791	1 914	2
HY130G	Regular inter-household cash transfer paid	340	289	321	16
HY140G	Tax on income and social contributions	1 439	2 200	2 541	47
	Gross income components at the personal level				
PY010G	Employee cash or near cash income	3 389	2 588	4 299	46
PY020G	Non-Cash employee income	362	147	273	45
PY021G	Company car	433	0	69	102
PY030G	Employer's social insurance contribution	702	-	4 042	26
PY031G	Optional employer's social insurance contributions	173	-	635	5
PY035G	Contributions to individual private pension plans	124	62	72	33
PY050G	Cash benefits or losses from self-employment	2 788	262	318	264
PY070G	Value of goods produced for own consumption	338	0	1 321	16
PY080G	Pension from individual private plans	162	5	5	103
PY090G	Unemployment benefits	365	63	395	61
PY100G	Old-age benefits	1 195	1 469	2 442	9
PY110G	Survivor` benefits	655	23	124	19
PY120G	Sickness benefits	304	55	594	37
PY130G	Disability benefits	767	172	331	19
PY140G	Education-related allowances	252	102	109	30

[1] Zeros are not included in calculations.
[2] For income components at the personal level only persons with PB050 > 0 taken into account.

Table 2.5. **Mean, number of observations and standard errors of different income components, 2007 (EU-SILC 2008)**

	Income components	Mean, LVL per year [1]	Number of observations [2]		Standard errors, LVL [1]
			Before imputation	After imputation	
HY010	Total household gross income	8 611	2 512	3 290	245
HY020	Total disposable household income	7 008	2 919	3 297	203
HY022	Total disposable household income before social transfer other than old-age and survivor's benefits	6 626	2 834	3 274	202
HY023	Total disposable household income before social transfers including old-age and survivor's benefits	6 275	2 826	2 989	214
	Net income components at the household level				
HY030N	Imputed rent	613	0	3 110	18
HY040N	Income from rental of a property or land	428	41	42	99
HY050N	Family/Children related allowances	480	2	1 062	31
HY060N	Social exclusion not elsewhere classified	336	144	260	63
HY070N	Housing allowances	154	123	141	29
HY080N	Regular inter-household cash transfer received	911	299	341	123
HY090N	Interest, dividends, profit from capital investments in unincorporated business	3 832	77	117	2 767
HY100N	Interest repayments on mortgage	1 253	0	137	244
HY110N	Income received by people aged under 16	167	6	38	29
HY120N	Regular taxes on wealth	27	1 783	2 049	2
HY130N	Regular inter-household cash transfer paid	614	300	314	53
HY140N	Tax on income and social contributions	2 002	1 988	2 262	65
	Net income components at the personal level				
PY010N	Employee cash or near cash income	3 666	3 279	3 940	81
PY020N	Non-Cash employee income	481	148	347	43
PY021N	Company car	491	0	61	86
PY035N	Contributions to individual private pension plans	159	66	71	29
PY050N	Cash benefits or losses from self-employment	2 734	248	272	232
PY070N	Value of goods produced for own consumption	364	0	1 306	14
PY080N	Pension from individual private plans	0	0	0	0
PY090N	Unemployment benefits	435	20	355	36
PY100N	Old-age benefits	1 353	11	2 188	13
PY110N	Survivor` benefits	726	0	101	37
PY120N	Sickness benefits	232	103	664	17
PY130N	Disability benefits	940	0	312	41
PY140N	Education-related allowances	277	116	121	32

[1] Zeros are not included in calculations.

[2] For income components at the personal level only persons with PB050 > 0 taken into account.

	Income components	Mean, LVL per year [1]	Number of observations [2]		Standard error, LVL [1]
			Before imputation	After imputation	
	Gross income components at the household level				
HY030G	Imputed rent	613	0	3 110	18
HY040G	Income from rental of a property or land	428	41	42	99
HY050G	Family/Children related allowances	480	2	1 062	31
HY060G	Social exclusion not elsewhere classified	336	144	260	63
HY070G	Housing allowances	154	123	141	29
HY080G	Regular inter-household cash transfer received	911	299	341	123
HY090G	Interest, dividends, profit from capital investments in unincorporated business	3 862	77	117	2 766
HY100G	Interest repayments on mortgage	1 253	0	137	244
HY110G	Income received by people aged under 16	192	6	38	32
HY120G	Regular taxes on wealth	27	1 783	2 049	2
HY130G	Regular inter-household cash transfer paid	614	300	314	53
HY140G	Tax on income and social contributions	2 002	1 988	2 262	65
	Gross income components at the personal level				
PY010G	Employee cash or near cash income	4 649	3 279	3 941	107
PY020G	Non-Cash employee income	481	148	347	43
PY021G	Company car	491	0	61	86
PY030G	Employer's social insurance contribution	963	-	3 670	24
PY031G	Optional employer's social insurance contributions	186	-	786	7
PY035G	Contributions to individual private pension plans	159	66	71	29
PY050G	Cash benefits or losses from self-employment	3 216	234	272	299
PY070G	Value of goods produced for own consumption	364	0	1 306	14
PY080G	Pension from individual private plans	0	0	0	0
PY090G	Unemployment benefits	438	12	355	36
PY100G	Old-age benefits	1 362	10	2 188	14
PY110G	Survivor` benefits	726	0	101	37
PY120G	Sickness benefits	283	103	664	22
PY130G	Disability benefits	952	0	312	45
PY140G	Education-related allowances	275	116	121	32

[1] Zeros are not included in calculations.
[2] For income components at the personal level only persons with PB050 > 0 taken into account.

Table 2.6. **Mean, number of observations (before and after imputations) and standard errors of the equivalised disposable income 2004 (EU-SILC 2005), weighted**

Equivalised disposable income	Mean, LVL per year per household member	Number of observations		Standard error, LVL
		Before imputation	After imputation	
By household size				
1 household member	1 729	504	507	107
2 household members	2 174	1 210	1 212	95
3 household members	2 092	738	738	126
4 and more household members	1 913	535	535	103
By age groups				
<25	1 950	489	491	87
25-34	2 357	344	344	110
35-44	2 571	495	497	168
45-54	1 956	510	511	89
55-64	1 943	410	410	95
65+	1 519	739	739	67
By sex				
Male	2 099	1 285	1 289	73
Female	1 975	1 702	1 703	54

Table 2.7. **Mean, number of observations (before and after imputations) and standard errors of the equivalised disposable income 2005 (EU-SILC 2006), weighted**

Equivalised disposable income	Mean, LVL per year per household member	Number of observations		Standard error, LVL
		Before imputation	After imputation	
By household size				
1 household member	1 862	780	783	87
2 household members	2 714	2 200	2 212	70
3 household members	2 627	1 305	1 305	74
4 and more household members	2 466	1 087	1 091	189
By age groups				
<25	2 547	850	855	200
25-34	3 368	645	646	162
35-44	2 801	822	825	159
45-54	2 542	871	873	141
55-64	2 280	808	811	115
65+	1 809	1 376	1 381	55
By sex				
Male	2 634	2 259	2 269	68
Female	2 440	3 113	3 122	56

Table 2.8. **Mean, number of observations (before and after imputations) and the standard errors of the equivalised disposable income 2006 (EU-SILC 2007), weighted**

Equivalised disposable income	Mean, LVL per year per household member	Number of observations		Standard error, LVL
		Before imputation	After imputation	
By household size				
1 household member	2 335	1 135	1 236	146
2 household members	3 420	2 830	3 000	57
3 household members	3 240	1 746	1 875	110
4 and more household members	3 240	1 490	1 534	170
By age groups				
<25	3 122	1 118	1 173	231
25-34	4 204	809	877	83
35-44	3 518	1 103	1 155	158
45-54	3 206	1 174	1 235	119
55-64	2 901	1 074	1 149	57
65+	2 333	1 923	2 056	45
By sex				
Male	3 335	3 061	3 241	52
Female	3 051	4 140	4 404	39

Table 2.9. **Mean, number of observations (before and after imputations) and the standard errors of the equivalised disposable income 2007 (EU-SILC 2008), weighted**

Equivalised disposable income	Mean, LVL per year per household member	Number of observations		Standard error, LVL
		Before imputation	After imputation	
By household size				
1 household member	3 255	843	1 076	463
2 household members	4 813	2 414	2 656	158
3 household members	4 698	1 644	1 695	194
4 and more household members	4 435	1 461	1 489	183
By age groups				
<25	4 314	1 039	1 066	141
25-34	5 832	734	754	237
35-44	4 939	975	1 003	190
45-54	4 618	1 125	1 158	168
55-64	4 479	954	1 019	494
65+	2 986	1 535	1 916	99
By sex				
Male	4 721	2 737	2 926	184
Female	4 269	3 625	3 990	94

2.3. NON-SAMPLING ERRORS

2.3.1. Sampling frame and coverage errors

Two sampling frames were built for each sampling stage. At the first stage counting areas from the list of the Population Census 2000 were used as a sampling frame. All territory of Latvia was

divided in small areas (smaller than NUTS4) during the Population Census 2000. The list contained information about the number of households in each counting area.

At the second stage sampling frame was built from the Population Register, statistical register of dwellings and statistical register of households.

The second stage sampling frame was built by using a copy of the Population Register. Both statistical registers of dwellings and households were updated by using the Population Register.

2.3.2. Measurement and processing errors

The measurement errors can arise from the questionnaire (effects of the design, content and wording), from the data collection method (effects of the modes of interviewing), from interviewers (effects of the interviewer on the response to a question) and from respondents (effects of the respondent on the interpretation of items). As it was impossible to avoid such errors completely, several steps were taken by the CSB to reduce them as much as possible.

Like as in the EU-SILC 2005 operation 3 types of questionnaires were developed for the EU-SILC 2006, 2007 and 2008 operations: the Household Register (to collect demographic information about all household members), the Household Questionnaire (to collect all information related to household – dwelling costs, housing conditions, income components received at the household level etc.), the Personal Questionnaire (to collect all needed information for each household member aged 16 and over in the previous calendar year) and the Household List (an additional document to record all the necessary information about household members for tracing purposes and for linkage with data from administrative registers). The household members' first, second names, contact addresses, phone numbers (fixed and mobile phone numbers) and personal identification codes were recorded in Household List. The Blaise CAPI and CATI (for the first time in 2008) applications (since 2006) as well as the paper questionnaires of the EU-SILC survey were available in Latvian and in Russian (the language of the largest ethnic minority in Latvia). Only households that were participating in the EU-SILC survey for the second, third or fourth time and had have specified phone numbers in the previous waves, were used for CATI. Not all, but the majority of households with phone numbers were used for CATI. It was possible for a household to refuse from CATI, and then CAPI was used. CAPI was used also in those cases when a telephone interview was not possible (the phone number was wrong, the phone line damaged, the phone line busy, etc.).

The CSB interviewers carried out the fieldwork of the EU-SILC survey. For the field staff was organised an intensive training session. The aims of the training were to introduce the fieldwork

stuff with methodology of the EU-SILC survey, to instruct interviewers for accurate fieldwork execution of the survey. In 2006 a special emphasis was put on training to work with laptop computers and using Blaise data entry application. Several tests (including a practical interview to fill the EU-SILC questionnaires) were developed to check interviewers' knowledge after the training session.

To increase response rates several steps were made to introduce Latvian residents with the EU-SILC survey before starting the fieldwork. A press release was prepared; several publications were made in national and regional newspapers to provide publicity of the EU-SILC survey. An introduction letter with a EU-SILC booklet were sent to selected addresses to establish the first contact with a household before the interview.

Measurement errors were detected by analysing Interviewer's reports, by organizing discussions with interviewers after the fieldwork execution and by logical checks and verification of the received data.

From 2006 the processing system of the EU-SILC data became less time consuming as it had been in 2005. It was related with the introduction of CAPI by using BLAISE software. It has to be noted that the year of 2006 was the first year when laptops were used in social surveys of the CSB and the EU-SILC was one of the first surveys where the CAPI system was used for carrying out the survey. Overall, the interviewers adopted computer skills very fast but in several cases they needed additional explanations about marking answers by using CAPI. Although laptops were given to all interviewers, a part of them made interviews by using paper questionnaires. This is still true also in 2008 - a part of interviews is done by using paper questionnaires. Paper questionnaires were used when the laptop could not be used (for example, for security considerations, discharged battery, etc.). Completed paper questionnaires later were entered into laptop by the same interviewer, who had done the interview, and then transmitted to the CSB.

A remarkable number of logical checks as well as a part of personal data from the previous year of the survey were introduced into the program. Nevertheless, it has to be noted that the program had one defect in 2006: time registration was not considered completely in cases when household data were corrected, revised or supplemented for several times and in cases when the interview was made by using PAPI. This problem was solved in 2007.

There were several factors, which might give the negative impact to the quality of the EU-SILC 2007 data:

- the EU-SILC 2007 Questionnaires contain the largest number of questions than ever before. Questions about net income and about gross income were asked to respondents. It was done in that way because a possibility to use administrative data for making cross-sectional database of the EU-SILC 2007 before the fieldwork was unclear.

- interviewers had a high workload;

- the interviewers' stuff was changing very frequently, there were problems to train newcomers;

- there was a chronic lack of interviewers, especially in Riga and neighboured areas;

- interviewers were hesitating to use the opportunity to agree on the meeting time by phone;

- the training of interviewers lost its effectiveness if the fieldwork lasted till autumn (in 2007 the training was carried out in the middle of February).

The interviewers complained also about the length of the questionnaire covering too much information. Several advantages of using laptops were mentioned: easier interviewing, many mistakes were avoided, laptops increased the respect among respondents, interviewing with laptops was more prestige and also more convenient. Disadvantages of laptop usage were: recharging during the interviews was very difficult (respondents were not willing to allow recharging PC); it was heavy to carry laptops all the time.

The quantity of personal data from the previous year of the survey introduced into the program in 2008 had increased compared with 2007. For the first time information about respondent's name, surname, personal identification code, date of birth and sex were prefilled in the BLAISE data entry programme for the new rotational group if the respondent actually lived in the same address as specified in the Population Register.

Data were transformed from BLAISE to MS ACCESS (a modified version of application of the previous year), where the initial database had been analysed and corrected. Data were compared with data from the previous EU-SILC operations, when it was possible. Compliance of the longitudinal data files with Eurostat requirements was checked with the SAS program.

2.3.3. Non-response errors

2.3.3.1. Achieved sample size

Table 2.10. **Sample size and accepted interviews**

	Total	DB075 = 4	DB075 = 1	DB075 = 2
2005				
Accepted household interviews	**1 485**	1 485	-	-
Personal interview accepted:				
Number of persons 16 years and older	**2 992**	2 992	-	-
Sample persons	**2 992**	2 992	-	-
Co-residents	**0**	0	-	-
2006				
Accepted household interviews	**2 580**	1 151	1 429	-
Personal interview accepted:				
Number of persons 16 years and older	**5 393**	2 415	2 978	-
Sample persons	**5 318**	2 340	2 978	-
Co-residents	**75**	75	0	-
2007				
Accepted household interviews	**3 708**	965	1 166	1 577
Personal interview accepted:				
Number of persons 16 years and older	**7 647**	2 026	2 414	3 207
Sample persons	**7 527**	1 954	2 366	3 207
Co-residents	**120**	72	48	0
2008				
Accepted household interviews	**3 306**	886	1 070	1 350
Personal interview accepted:				
Number of persons 16 years and older	**6 916**	1 883	2 228	2 805
Sample persons	**6 675**	1 752	2 165	2 758
Co-residents	**241**	131	63	47

2.3.3.2. Unit non-response

Table 2.11. **Household response rate: Comparison of result codes between wave 2 and wave 1 (rotational group 4)**

		Sample outcome in wave 2 – *2006*												Total
		DB130=11												
		DB135=1	DB135=2	DB120=22	DB130=22	DB130=23	DB130=24	DB130=21	DB120=21	NC	DB110=10	DB120=23		
Sample outcome in wave 1 - *2005*	DB130=11 DB135=1	1 138	2	1	45	3	8	102	0	180	0	5		1 484
	DB135=2	1	0	0	0	0	0	0	0	0	0	0		1
	DB120=21													0
	DB120=22													0
	DB120=23													0
	DB130=21													0
	DB130=22													0
	DB130=23													0
	DB130=24													0
	Total	1 139	2	1	45	3	8	102	0	180	0	5		1 485
New households in wave 2 - *2006*	DB110=8	12	0	0	0	0	0	0	0	NA	NA	0		12
	DB110=9	0	0	0	0	0	0	0	0	NA	NA	0		0
Total		1 151	2	1	45	3	8	102	0	180	0	5		1 497

Wave response rate = 0.771

Refusal rate = 0.068

Non-contact and others = 0.158

Longitudinal follow-up rate = 0.770

Follow-up ratio = 0.778

Achieved sample size ratio = 0.776

Table 2.12. **Household response rate: Comparison of result codes between wave 3 and wave 2 (rotational groups 4 and 1)**

		DB130=11											Total
		DB135=1	DB135=2	DB120=22	DB130=22	DB130=23	DB130=24	DB130=21	DB120=21	NC	DB110=10	DB120=23	
Sample outcome in wave 2 - 2006	DB130=11 / DB135=1	2 115	2	0	99	12	15	113	3	150	0	3	2 512
	DB135=2	2	0	0	0	0	0	0	0	0	0	0	2
	DB120=21	0	0	0	0	0	0	0	0	0	0	0	0
	DB120=22	0	0	0	0	0	0	0	0	0	0	0	0
	DB120=23	0	0	0	0	0	0	0	0	0	0	0	0
	DB130=21	0	0	0	0	0	0	0	0	0	0	0	0
	DB130=22	0	0	0	0	0	0	0	0	0	0	0	0
	DB130=23	0	0	0	0	0	0	0	0	0	0	0	0
	DB130=24	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2 117	2	0	99	12	15	113	3	150	0	3	2 514
New households in wave 3 - 2007	DB110=8	14	0	0	0	1	0	2	0	NA	NA	1	18
	DB110=9	0	0	0	0	0	0	0	0	NA	NA	0	0
Total		2 131	2	0	99	13	15	115	3	150	0	4	2 532

Wave response rate = 0.843

Refusal rate = 0.045

Non-contact and others = 0.106

Longitudinal follow-up rate = 0.843

Follow-up ratio = 0.849

Achieved sample size ratio = 0.848

Table 2.13. **Household response rate: Comparison of result codes between wave 4 and wave 3 (rotational groups 4, 1 and 2)**

		Sample outcome in wave 4 - *2008*											Total
		DB130=11											
		DB135=1	DB135=2	DB120=22	DB130=22	DB130=23	DB130=24	DB130=21	DB120=21	NC	DB110=10	DB120=23	
Sample outcome in wave 3 - *2007*	DB130=11 DB135=1	3 208	4	1	68	23	23	213	5	126	1	5	3 677
	DB135=2	4	0	0	0	0	0	0	0	0	0	0	4
	DB120=21	0	0	0	0	0	0	0	0	0	0	0	0
	DB120=22	0	0	0	0	0	0	0	0	0	0	0	0
	DB120=23	0	0	0	0	0	0	0	0	0	0	0	0
	DB130=21	0	0	0	0	0	0	0	0	0	0	0	0
	DB130=22	70	0	0	16	0	2	6	1	3	0	0	98
	DB130=23	7	0	0	0	3	0	1	0	1	0	0	12
	DB130=24	7	0	0	1	1	1	2	0	2	0	0	14
	Total	3 296	4	1	85	27	26	222	6	132	1	5	3 805
New households in wave 4 - *2008*	DB110=8	10	1	0	5	0	1	1	0	NA	NA	0	18
	DB110=9	0	0	0	0	0	0	0	0	NA	NA	0	0
Total		3 306	5	1	90	27	27	223	6	132	1	5	3 823

Wave response rate = 0.866

Refusal rate = 0.058

Non-contact and others = 0.069

Longitudinal follow-up rate = 0.899

Follow-up ratio = 0.903

Achieved sample size ratio = 0.899

Table 2.14. **Personal Interview outcome in wave 2 – 2006 (rotational group 4)**

	2006										Total
RB250 = 11, 12, 13	Not completed because of										
	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33	HHnc	Pn	PI	

Sample persons forwarded from last wave

[1] RB110 = 1-2	2 338	0	0	12	23	2	0				2 375
[2] RB110 = 6											0
[3] RB110 = -1											0
[4] RB120 = 2											0
[5] RB120 = 3											0
[6] RB120 = 4											0
[7] DB135 = 2 or -1, or DB120 = 21-23 or -1, or DB130 = 21-24 or –1											0
[8] DB110 = 3-6											0

New sample persons

[9] Reached age 16	58	0	0	0	1	0	0	0	0	0	59
[10] Sample additions	0	0	0	0	0	0	0				0

Non-sample persons 16+

[11] 2006 from 2005	0	0	0	0	0	0	0	0	0	0	0
Sample persons not forwarded from last wave (excluded died or not eligible according to tracing rules)											
[13] From 2005											0
SUM OF ROWS:											
1+3+6+7+9+10	2 396	0	0	12	24	2	0	0	0	0	2 434
1+3+6+7+9+10+13	2 396	0	0	12	24	2	0	0	0	0	2 434
1+3+6+7+9+10+11	2 396	0	0	12	24	2	0	0	0	0	2 434

Wave response rate of sample persons = 0.984
Wave response rate of co-residents = -
Longitudinal follow-up rate = 0.984
Rate ($_{RB250=21}$) = -
Rate ($_{RB250=22}$) = -
Rate ($_{RB250=23}$) = 0.005
Rate ($_{RB250=31}$) = 0.009
Rate ($_{RB250=32}$) = 0.001
Rate ($_{RB250=33}$) = -

Achieved sample size ratio for sample persons = -

Achieved sample size ratio for sample persons and co-residents = -

Achieved sample size for co-residents selected the first wave = -

Response rate for non-sample persons = -

Table 2.15. **Personal Interview outcome in wave 3 – 2007 (rotational group 4 and 1)**

	2007										Total
RB250 = 11, 12, 13	Not completed because of							HHnc	Pn	PI	
	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33					

Sample persons forwarded from last wave

[1] RB110 = 1-2	4 311	1	0	29	31	16	0				4 388
[2] RB110 = 6											23
[3] RB110 = -1											0
[4] RB120 = 2											2
[5] RB120 = 3											29
[6] RB120 = 4											28
[7] DB135 = 2 or -1, or DB120 = 21-23 or -1, or DB130 = 21-24 or –1											3
[8] DB110 = 3-6											0

New sample persons

[9] Reached age 16	103	0	0	1	0	4	0	9	0	0	117
[10] Sample additions	0	0	0	0	0	0	0				0

Non-sample persons 16+

[11] 2007 from 2006	52	0	0	0	2	1	0	7	9	0	71

Sample persons not forwarded from last wave (excluded died or not eligible according to tracing rules)

[13] From 2006											0

SUM OF ROWS:

1+3+6+7+9+10	4 414	1	0	30	31	20	0	9	0	0	4 536
1+3+6+7+9+10+13	4 414	1	0	30	31	20	0	9	0	0	4 536
1+3+6+7+9+10+11	4 466	1	0	30	33	21	0	16	9	0	4 607

Wave response rate of sample persons = 0.975
Wave response rate of co-residents = 0.743
Longitudinal follow-up rate = 0.975
Rate $(_{RB250=21})$ = 0.000
Rate $(_{RB250=22})$ = -
Rate $(_{RB250=23})$ = 0.006
Rate $(_{RB250=31})$ = 0.007
Rate $(_{RB250=32})$ = 0.004
Rate $(_{RB250=33})$ = -

Achieved sample size ratio for sample persons = 1.842

Achieved sample size ratio for sample persons and co-residents = 1.864

Achieved sample size for co-residents selected the first wave = -

Response rate for non-sample persons = 0.945

Table 2.16. **Personal Interview outcome in wave 4 – 2008 (rotational groups 4, 1 and 2)**

	2008										Total
RB250 = 11, 12, 13	Not completed because of						HHnc	Pn	PI		
	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33					

Sample persons forwarded from last wave

	RB250 = 11, 12, 13	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33	HHnc	Pn	PI	Total
[1] RB110 = 1-2	6 484	5	0	27	50	4	3				6 573
[2] RB110 = 6											51
[3] RB110 = -1											0
[4] RB120 = 2											4
[5] RB120 = 3											33
[6] RB120 = 4											67
[7] DB135 = 2 or -1, or DB120 = 21-23 or -1, or DB130 = 21-24 or –1											205
[8] DB110 = 3-6											0

New sample persons

	RB250 = 11, 12, 13	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33	HHnc	Pn	PI	Total
[9] Reached age 16	134	0	0	0	0	0	0	6	0	0	140
[10] Sample additions	0	0	0	0	0	0	0				0

Non-sample persons 16+

	RB250 = 11, 12, 13	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33	HHnc	Pn	PI	Total
[11] 2008 from 2007	47	1	0	0	0	0	0	9	7	0	64
2008 from 2006	79	0	0	0	0	0	0	12	3	0	94

Sample persons not forwarded from last wave (excluded died or not eligible according to tracing rules)

	RB250 = 11, 12, 13	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33	HHnc	Pn	PI	Total
[13] From 2007											0
SUM OF ROWS:											
1+3+6+7+9+10	6 618	5	0	27	50	4	3	6	0	0	6 985
1+3+6+7+9+10+13	6 618	5	0	27	50	4	3	6	0	0	6 985
1+3+6+7+9+10+11	6 744	6	0	27	50	4	3	27	10	0	7 143

Wave response rate of sample persons = 0.948
Wave response rate of co-residents = 0.829
Longitudinal follow-up rate = 0.948
Rate $(_{RB250=21})$ = 0.001
Rate $(_{RB250=22})$ = -
Rate $(_{RB250=23})$ = 0.004
Rate $(_{RB250=31})$ = 0.007
Rate $(_{RB250=32})$ = 0.001
Rate $(_{RB250=33})$ = 0.000

Achieved sample size ratio for sample persons = 1.499

Achieved sample size ratio for sample persons and co-residents = 1.510

Achieved sample size for co-residents selected the first wave = 2.423

Response rate for non-sample persons = 0.992

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

Table 2.17. **Distribution of households by DB110**

		Total	DB110										
			1	2	3	4	5	6	7	8	9	10	11
2005	Total	**1 999**	0	0	0	0	0	0	0	0	1 999	0	0
	%	**100**	0	0	0	0	0	0	0	0	100.0	0	0
2006	Total	**3 863**	1 258	48	2	12	13	0	153	12	2 365	0	0
	%	**100**	32.6	1.2	0.1	0.3	0.3	0	4.0	0.3	61.2	0	0
2007	Total	**5 762**	2 320	46	8	6	18	1	117	24	3156	0	66
	%	**100**	40.3	0.8	0.1	0.1	0.3	0.0	2.0	0.4	54.8	0	1.1
2008	Total	**3 876**	3605	73	5	6	18	5	98	39	0	1	26
	%	**100**	93.0	1.9	0.1	0.2	0.5	0.1	2.5	1.0	0	0.0	0.7

Table 2.18. **Distribution of households by DB120**

		Total	DB120				
			11	21	22	23	Missing (-1)
2005	Total	**1 999**	1 844	12	50	83	10
	%	**100**	92.2	0.6	2.5	4.2	0.5
2006	Total	**2 425**	2 081	12	57	165	110
	%	**100**	85.8	0.5	2.4	6.8	4.5
2007	Total	**3 226**	2 427	17	131	201	450
	%	**100**	75.2	0.5	4.1	6.2	13.9
2008	Total	**112**	75	6	1	5	25
	%	**100**	67.0	5.4	0.9	4.5	22.3

Table 2.19. **Distribution of households by DB130**

		Total	DB130					
			11	21	22	23	24	Missing (-1)
2005	Total	**1 844**	1 486	149	185	12	12	0
	%	**100**	80.6	8.1	10.0	0.7	0.7	0
2006	Total	**3 339**	2 582	380	309	24	42	2
	%	**100**	77.3	11.4	9.3	0.7	1.3	0.1
2007	Total	**4 747**	3 712	521	392	34	88	0
	%	**100**	78.2	11.0	8.3	0.7	1.9	0
2008	Total	**3 680**	3 311	223	90	27	27	2
	%	**100**	90.0	6.1	2.4	0.7	0.7	0.1

Table 2.20. **Distribution of households by DB135**

		Total	DB135		
			1	2	Missing (-1)
2005	Total	**1 486**	1 485	1	0
	%	**100**	99.9	0.1	0
2006	Total	**2 582**	2 580	2	0
	%	**100**	99.9	0.1	0
2007	Total	**3 712**	3 708	4	0
	%	**100**	99.9	0.1	0
2008	Total	**3 311**	3 306	5	0
	%	**100**	99.8	0.2	0

2.3.3.4. Distribution of persons by membership status (RB110)

Table 2.21. **Distribution of persons by membership status (RB110)**

		Total	Current household members				No current household members			Missing (-1)
			RB110				RB120 = 2 to 4	RB100		
			1	2	3	4		6	7	
2005	Total	**3 671**	3 671	0	0	0	0	0	0	0
	%	**100**	100.0	0	0	0	0	0	0	0
2006	Total	**6 642**	6 422	15	99	20	59	23	4	0
	%	**100**	96.7	0.2	1.5	0.3	0.9	0.3	0.1	0
2007	Total	**9 439**	9 142	20	88	34	104	51	0	0
	%	**100**	96.9	0.2	0.9	0.4	1.1	0.5	0	0
2008	Total	**8 545**	8 046	21	154	52	177	93	2	0
	%	**100**	94.2	0.2	1.8	0.6	2.1	1.1	0.0	0

Table 2.22. **Distribution of persons moving out by RB120**

		Total	RB110 = 5				
			RB120 = 1		RB120 = 2	RB120 = 3	RB120 = 4
			This person is a current household member of the household in this wave	This person is not a current household member			
2006	Total	**74**	15	0	2	29	28
	%	**100**	20.3	0	2.7	39.2	37.8
2007	Total	**137**	20	13	4	33	67
	%	**100**	14.6	9.5	2.9	24.1	48.9
2008	Total	**244**	19	48	10	44	123
	%	**100**	7.8	19.7	4.1	18.0	50.4

2.3.3.5. Item non-response

The following tables provide an overview of non-response on the household and individual level. For every income component the total number of households/persons having received the component and the breakdown with regard to the completeness of information are given.

Table 2.23. **Information on item non-response on the household level in 2004 (EU-SILC 2005)**

		Households having received an amount		Full information		Partial information		Missing information	
		Total	%	Total	%	Total	%	Total	%
HY020	Total disposable household income	1 478	99.5	1 303	88.2	171	11.6	4	0.3
HY022	Total disposable household income before social transfers other than old-age and survivor's benefits	1 458	98.2	1 290	88.5	161	11.0	7	0.5
HY023	Total disposable household income before social transfers including old-age and survivor's benefits	1 283	86.4	1 116	87.0	158	12.3	9	0.7
HY040N	Income from rental of a property or land	20	1.3	20	100.0	0	0	0	0
HY050N	Family/Children related allowances	469	31.6	469	100.0	0	0	0	0
HY060N	Social exclusion not elsewhere classified	118	7.9	117	99.2	0	0	1	0.8
HY070N	Housing allowances	68	4.6	65	95.6	0	0	3	4.4
HY080N	Regular inter-household cash transfer received	188	12.7	175	93.1	0	0	13	6.9
HY090N	Interest, dividends, profit from capital investments in unincorporated business	36	2.4	34	94.4	0	0	2	5.6
HY110N	Income received by people aged under 16	17	1.1	17	100.0	0	0	0	0
HY120N	Regular taxes on wealth	726	48.9	639	88.0	0	0	87	12.0
HY130N	Regular inter-household cash transfer paid	148	10.0	144	97.3	0	0	4	2.7
HY145N	Repayments/receipts for tax adjustment	170	11.4	169	99.4	0	0	1	0.6

Table 2.24. **Information on item non-response on the household level in 2005 (EU-SILC 2006)**

		Households having received an amount		Full information		Partial information		Missing information	
		Total	%	Total	%	Total	%	Total	%
HY020	Total disposable household income	2 564	99.4	1 220	47.6	1 334	52.0	10	0.4
HY022	Total disposable household income before social transfers other than old-age and survivor's benefits	2 538	98.4	1 202	47.4	1 326	52.2	10	0.4
HY023	Total disposable household income before social transfers including old-age and survivor's benefits	2 276	88.2	1 524	67.0	742	32.6	10	0.4
HY040N	Income from rental of a property or land	32	1.2	32	100.0	0	0	0	0
HY050N	Family/Children related allowances	815	31.6	811	99.5	0	0	4	0.5
HY060N	Social exclusion not elsewhere classified	140	5.4	137	97.9	0	0	3	2.1
HY070N	Housing allowances	114	4.4	112	98.2	0	0	2	1.8
HY080N	Regular inter-household cash transfer received	287	11.1	283	98.6	0	0	4	1.4
HY090N	Interest, dividends, profit from capital investments in unincorporated business	55	2.1	48	87.3	0	0	7	12.7
HY110N	Income received by people aged under 16	38	1.5	38	100.0	0	0	0	0
HY120N	Regular taxes on wealth	1305	50.6	1260	96.6	0	0	45	3.4
HY130N	Regular inter-household cash transfer paid	286	11.1	280	97.9	0	0	6	2.1
HY145N	Repayments/receipts for tax adjustment	293	11.4	288	98.3	0	0	5	1.7

Table 2.25. **Information on item non-response on the household level in 2006 (EU-SILC 2007)**

		Households having received an amount		Full information		Partial information		Missing information	
		Total	%	Total	%	Total	%	Total	%
HY010	Total household gross income	3 680	99.2	69	1.9	3 296	89.6	315	8.6
HY020	Total disposable household income	3 691	99.5	80	2.2	3 372	91.4	239	6.5
HY022	Total disposable household income before social transfers other than old-age and survivor's benefits	3 663	98.8	1	0.0	3 396	92.7	266	7.3
HY023	Total disposable household income before social transfers including old-age and survivor's benefits	3 281	88.5	1	0.0	3 105	94.6	175	5.3
HY030G	Imputed rent	3 508	94.6	-	-	-	-	-	-
HY030N	Imputed rent	3 508	94.6	-	-	-	-	-	-
HY040G	Income from rental of a property or land	45	1.2	43	95.6	0	0	2	4.4
HY040N	Income from rental of a property or land	45	1.2	43	95.6	0	0	2	4.4
HY050G	Family/Children related allowances	1237	33.4	580	46.9	200	16.2	457	36.9
HY050N	Family/Children related allowances	1237	33.4	580	46.9	200	16.2	457	36.9
HY060G	Social exclusion not elsewhere classified	213	5.7	111	52.1	19	8.9	83	39.0
HY060N	Social exclusion not elsewhere classified	213	5.7	111	52.1	19	8.9	83	39.0
HY070G	Housing allowances	143	3.9	129	90.2	0	0	14	9.8
HY070N	Housing allowances	143	3.9	129	90.2	0	0	14	9.8
HY080G	Regular inter-household cash transfer received	440	11.9	406	92.3	0	0	34	7.7
HY080N	Regular inter-household cash transfer received	440	11.9	406	92.3	0	0	34	7.7
HY090G	Interest, dividends, profit from capital investments in unincorporated business	36	1.0	24	66.7	0	0	12	33.3
HY090N	Interest, dividends, profit from capital investments in unincorporated business	36	1.0	24	66.7	0	0	12	33.3
HY100G	Interest repayments on mortgage	75	2.0	0	0	0	0	75	100.0
HY100N	Interest repayments on mortgage	75	2.0	0	0	0	0	75	100.0
HY110G	Income received by people aged under 16	37	1.0	30	81.1	0	0	7	18.9
HY110N	Income received by people aged under 16	37	1.0	30	81.1	0	0	7	18.9
HY120G	Regular taxes on wealth	1 914	51.6	1 791	93.6	0	0	123	6.4
HY120N	Regular taxes on wealth	1 914	51.6	1 791	93.6	0	0	123	6.4
HY130G	Regular inter-household cash transfer paid	321	8.7	289	90.0	0	0	32	10.0
HY130N	Regular inter-household cash transfer paid	321	8.7	289	90.0	0	0	32	10.0
HY140G	Tax on income and social contributions	2 541	68.5	46	1.8	2 154	84.8	341	13.4
HY140N	Tax on income and social contributions	2 541	68.5	46	1.8	2 154	84.8	341	13.4

Table 2.26. **Information on item non-response on the household level in 2007 (EU-SILC 2008)**

		Households having received an amount		Full information		Partial information		Missing information	
		Total	%	Total	%	Total	%	Total	%
HY010	Total household gross income	3 290	99.5	48	1.5	2 464	74.9	778	23.6
HY020	Total disposable household income	3 297	99.7	26	0.8	2 893	87.7	378	11.5
HY022	Total disposable household income before social transfers other than old-age and survivor's benefits	3 274	99.0	37	1.1	2 797	85.4	440	13.4
HY023	Total disposable household income before social transfers including old-age and survivor's benefits	2 989	90.4	64	2.1	2 762	92.4	163	5.5
HY030G	Imputed rent	3 110	94.1	-	-	-	-	-	-
HY030N	Imputed rent	3 110	94.1	-	-	-	-	-	-
HY040G	Income from rental of a property or land	42	1.3	41	97.6	0	0	1	2.4
HY040N	Income from rental of a property or land	42	1.3	41	97.6	0	0	1	2.4
HY050G	Family/Children related allowances	1062	32.1	2	0.2	0	0	1060	99.8
HY050N	Family/Children related allowances	1062	32.1	2	0.2	0	0	1060	99.8
HY060G	Social exclusion not elsewhere classified	260	7.9	144	55.4	0	0	116	44.6
HY060N	Social exclusion not elsewhere classified	260	7.9	144	55.4	0	0	116	44.6
HY070G	Housing allowances	141	4.3	123	87.2	0	0	18	12.8
HY070N	Housing allowances	141	4.3	123	87.2	0	0	18	12.8
HY080G	Regular inter-household cash transfer received	341	10.3	299	87.7	0	0	42	12.3
HY080N	Regular inter-household cash transfer received	341	10.3	299	87.7	0	0	42	12.3
HY090G	Interest, dividends, profit from capital investments in unincorporated business	117	3.5	77	65.8	0	0	40	34.2
HY090N	Interest, dividends, profit from capital investments in unincorporated business	117	3.5	84	71.8	0	0	33	28.2
HY100G	Interest repayments on mortgage	137	4.1	0	0	0	0	137	100.0
HY100N	Interest repayments on mortgage	137	4.1	0	0	0	0	137	100.0
HY110G	Income received by people aged under 16	38	1.1	6	15.8	0	0	32	84.2
HY110N	Income received by people aged under 16	38	1.1	18	47.4	0	0	20	52.6
HY120G	Regular taxes on wealth	2 049	62.0	1 783	87.0	0	0	266	13.0
HY120N	Regular taxes on wealth	2 049	62.0	1 783	87.0	0	0	266	13.0
HY130G	Regular inter-household cash transfer paid	314	9.5	300	95.5	0	0	14	4.5
HY130N	Regular inter-household cash transfer paid	314	9.5	300	95.5	0	0	14	4.5
HY140G	Tax on income and social contributions	2 262	68.4	16	0.7	1 972	87.2	274	12.1
HY140N	Tax on income and social contributions	2 262	68.4	16	0.7	1 972	87.2	274	12.1

Table 2.27. **Information on item non-response on the individual level 2004 (EU-SILC 2005)**

		Persons having received an amount		Full information		Partial information		Missing information	
		Total	%	Total	%	Total	%	Total	%
PY010N	Employee cash or near cash income	1 516	50.7	1 490	98.3	0	0	26	1.7
PY021N	Company car	42	1.4	0	0	0	0	42	100.0
PY035N	Contributions to individual private pension plans	23	0.8	14	60.9	0	0	9	39.1
PY050N	Cash benefits or losses from self-employment	137	4.6	130	94.9	0	0	7	5.1
PY080N	Pension from individual private plans	0	0	0	0	0	0	0	0
PY090N	Unemployment benefits	79	2.6	76	96.2	0	0	3	3.8
PY100N	Old-age benefits	926	30.9	923	99.7	2	0.2	1	0.1
PY110N	Survivor's benefits	41	1.4	41	100.0	0	0	0	0
PY120N	Sickness benefits	152	5.1	151	99.3	0	0	1	0.7
PY130N	Disability benefits	98	3.3	98	100.0	0	0	0	0
PY140N	Education-related allowances	73	2.4	73	100.0	0	0	0	0

Table 2.28. **Information on item non-response on the individual level 2005 (EU-SILC 2006)**

		Persons having received an amount		Full information		Partial information		Missing information	
		Total	%	Total	%	Total	%	Total	%
PY010N	Employee cash or near cash income	2 739	50.8	2 686	98.1	0	0	53	1.9
PY021N	Company car	43	0.8	0	0	0	0	43	100.0
PY035N	Contributions to individual private pension plans	48	0.9	46	95.8	0	0	2	4.2
PY050N	Cash benefits or losses from self-employment	257	4.8	247	96.1	0	0	10	3.9
PY080N	Pension from individual private plans	0	0	0	0	0	0	0	0
PY090N	Unemployment benefits	108	2.0	96	88.9	0	0	12	11.1
PY100N	Old-age benefits	1 710	31.7	132	7.7	1 524	89.1	54	3.2
PY110N	Survivor's benefits	60	1.1	60	100.0	0	0	0	0
PY120N	Sickness benefits	241	4.5	230	95.4	0	0	11	4.6
PY130N	Disability benefits	189	3.5	187	98.9	0	0	2	1.1
PY140N	Education-related allowances	101	1.9	99.0	98.0	0	0	2	2.0

Table 2.29. **Information on item non-response on the individual level 2006 (EU-SILC 2007)**

		Persons having received an amount		Full information		Partial information		Missing information	
		Total	%	Total	%	Total	%	Total	%
PY010G	Employee cash or near cash income	4 378	57.3	1 178	26.9	1452	33.2	1 748	39.9
PY010N	Employee cash or near cash income	4 378	57.3	3 471	79.3	0	0	907	20.7
PY020G	Non-Cash employee income	275	3.6	147	53.5	0	0	128	46.5
PY020N	Non-Cash employee income	275	3.6	147	53.5	0	0	128	46.5
PY021G	Company car	70	0.9	0	0	0	0	70	100.0
PY021N	Company car	70	0.9	0	0	0	0	70	100.0
PY030G	Employer's social insurance contribution	4 101	53.6	-	-	-	-	-	-
PY031G	Optional employer's social insurance contributions	640	8.4	-	-	-	-	-	-
PY035G	Contributions to individual private pension plans	72	0.9	62	86.1	0	0	10	13.9
PY035N	Contributions to individual private pension plans	72	0.9	62	86.1	0	0	10	13.9
PY050G	Cash benefits or losses from self-employment	321	4.2	264	82.2	0	0	57	17.8
PY050N	Cash benefits or losses from self-employment	321	4.2	298	92.8	0	0	23	7.2
PY070G	Value of goods produced for own consumption	1 330	17.4	0	0	0	0	1 330	100.0
PY070N	Value of goods produced for own consumption	1 330	17.4	0	0	0	0	1 330	100.0
PY080G	Pension from individual private plans	5	0.1	5	100.0	0	0	0	0
PY080N	Pension from individual private plans	5	0.1	5	100.0	0	0	0	0
PY090G	Unemployment benefits	398	5.2	49	12.3	15	3.8	334	83.9
PY090N	Unemployment benefits	398	5.2	49	12.3	15	3.8	334	83.9
PY100G	Old-age benefits	2 464	32.2	633	25.7	847	34.4	984	39.9
PY100N	Old-age benefits	2 464	32.2	29	1.2	2 242	91.0	193	7.8
PY110G	Survivor's benefits	128	1.7	22	17.2	2	1.6	104	81.3
PY110N	Survivor's benefits	128	1.7	22	17.2	2	1.6	104	81.3
PY120G	Sickness benefits	601	7.9	40	6.7	16	2.7	545	90.7
PY120N	Sickness benefits	601	7.9	62	10.3	28	4.7	511	85.0
PY130G	Disability benefits	335	4.4	84	25.1	90	26.9	161	48.1
PY130N	Disability benefits	335	4.4	98	29.3	104	31.0	133	39.7
PY140G	Education-related allowances	110	1.4	103	93.6	0	0	7	6.4
PY140N	Education-related allowances	110	1.4	103	93.6	0	0	7	6.4

Table 2.30. **Information on item non-response on the individual level 2007 (EU-SILC 2008)**

		Persons having received an amount		Full information		Partial information		Missing information	
		Total	%	Total	%	Total	%	Total	%
PY010G	Employee cash or near cash income	4 083	59.0	324	7.9	3 077	75.4	682	16.7
PY010N	Employee cash or near cash income	4 082	59.0	1 965	48.1	1 436	35.2	681	16.7
PY020G	Non-Cash employee income	351	5.1	151	43.0	0	0	200	57.0
PY020N	Non-Cash employee income	351	5.1	151	43.0	0	0	200	57.0
PY021G	Company car	61	0.9	0	0	0	0	61	100.0
PY021N	Company car	61	0.9	0	0	0	0	61	100.0
PY030G	Employer's social insurance contribution	3 798	54.9	-	-	-	-	-	-
PY031G	Optional employer's social insurance contributions	805	11.6	-	-	-	-	-	-
PY035G	Contributions to individual private pension plans	76	1.1	71	93.4	0	0	5	6.6
PY035N	Contributions to individual private pension plans	76	1.1	71	93.4	0	0	5	6.6
PY050G	Cash benefits or losses from self-employment	279	4.0	239	85.7	0	0	40	14.3
PY050N	Cash benefits or losses from self-employment	279	4.0	253	90.7	1	0.4	25	9.0
PY070G	Value of goods produced for own consumption	1 320	19.1	0	0	0	0	1 320	100.0
PY070N	Value of goods produced for own consumption	1 320	19.1	0	0	0	0	1 320	100.0
PY080G	Pension from individual private plans	0	0	0	0	0	0	0	0
PY080N	Pension from individual private plans	0	0	0	0	0	0	0	0
PY090G	Unemployment benefits	367	5.3	13	3.5	0	0	354	96.5
PY090N	Unemployment benefits	367	5.3	22	6.0	0	0	345	94.0
PY100G	Old-age benefits	2 232	32.3	12	0.5	0	0	2 220	99.5
PY100N	Old-age benefits	2 232	32.3	13	0.6	0	0	2 219	99.4
PY110G	Survivor's benefits	105	1.5	0	0	0	0	105	100.0
PY110N	Survivor's benefits	105	1.5	0	0	0	0	105	100.0
PY120G	Sickness benefits	681	9.8	103	15.1	0	0	578	84.9
PY120N	Sickness benefits	681	9.8	103	15.1	0	0	578	84.9
PY130G	Disability benefits	314	4.5	0	0	0	0	314	100.0
PY130N	Disability benefits	314	4.5	0	0	0	0	314	100.0
PY140G	Education-related allowances	125	1.8	120	96.0	0	0	5	4.0
PY140N	Education-related allowances	125	1.8	120	96.0	0	0	5	4.0

2.4. MODE OF DATA COLLECTION

In Latvia all persons aged 16 and over at the end of the income reference period were selected for a personal interview.

Table 2.31. **Distribution of household members by RB250**
HOUSEHOLD MEMBERS 16+ (RB245 = 1 to 3)

		Total	RB250=11	RB250=12	RB250=13	RB250=14	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33
2005	Total	**3 062**	2 992	0	0	0	7	0	21	41	1	0
	%	**100**	97.7	0	0	0	0.2	0	0.7	1.3	0.0	0
2006	Total	**5 473**	4 521	0	872	0	0	0	25	47	8	0
	%	**100**	82.6	0	15.9	0	0	0	0.5	0.9	0.1	0
2007	Total	**7 798**	0	0	7 647	0	3	0	60	61	26	1
	%	**100**	0	0	98.1	0	0.0	0	0.8	0.8	0.3	0.0
2008	Total	**7 024**	0	0	6 916	0	6	0	34	61	4	3
	%	**100**	0	0	98.5	0	0.1	0	0.5	0.9	0.1	0.0

Table 2.32. **Distribution of household members by RB250**
SAMPLE PERSONS 16+ (RB245 = 1 to 3 and RB100 = 1)

		Total	RB250=11	RB250=12	RB250=13	RB250=14	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33
2005	Total	**3 062**	2 992	0	0	0	7	0	21	41	1	0
	%	**100**	97.7	0	0	0	0.2	0	0.7	1.3	0.0	0
2006	Total	**5 396**	4 446	0	872	0	0	0	24	47	7	0
	%	**100**	82.4	0	16.2	0	0	0	0.4	0.9	0.1	0
2007	Total	**7 672**	0	0	7 527	0	3	0	59	58	24	1
	%	**100**	0	0	98.1	0	0.0	0	0.8	0.8	0.3	0.0
2008	Total	**6 776**	0	0	6 675	0	5	0	33	56	4	3
	%	**100**	0	0	98.5	0	0.1	0	0.5	0.8	0.1	0.0

Table 2.33. **Distribution of household members by RB250**

CO-RESIDENTS 16+ (RB245 = 1 to 3 and RB100 = 2)

		Total	RB250=11	RB250=12	RB250=13	RB250=14	RB250=21	RB250=22	RB250=23	RB250=31	RB250=32	RB250=33
2005	Total	**0**	0	0	0	0	0	0	0	0	0	0
	%	**0**	0	0	0	0	0	0	0	0	0	0
2006	Total	**77**	75	0	0	0	0	0	1	0	1	0
	%	**100**	97.4	0	0	0	0	0	1.3	0	1.3	0
2007	Total	**126**	0	0	120	0	0	0	1	3	2	0
	%	**100**	0	0	95.2	0	0	0	0.8	2.4	1.6	0
2008	Total	**248**	0	0	241	0	1	0	1	5	0	0
	%	**100**	0	0	97.2	0	0.4	0	0.4	2.0	0	0

Table 2.34. **Distribution of household members by RB260**

HOUSEHOLD MEMBERS 16+ (RB245 = 1 to 3) and RB250 = 11 or 13

		Total	Rb260=1	RB260=2	RB260=3	RB260=4	RB260=5	Missing (-1)
2005	Total	**2 992**	2 794	0	0	24	174	0
	%	**100**	93.4	0	0	0.8	5.8	0
2006	Total	**5 393**	651	4 197	191	7	344	3
	%	**100**	12.1	77.8	3.5	0.1	6.4	0.1
2007	Total	**7 647**	899	5 840	496	5	397	10
	%	**100**	11.8	76.4	6.5	0.1	5.2	0.1
2008	Total	**6 916**	382	3 564	1 530	6	1 434	0
	%	**100**	5.5	51.5	22.1	0.1	20.7	0

Table 2.35. **Distribution of household members by RB260**

SAMPLE PERSONS 16+ (RB245 = 1 to 3 and RB100 = 1) and RB250 = 11 or 13

		Total	RB260=1	RB260=2	RB260=3	RB260=4	RB260=5	Missing (-1)
2005	Total	**2 992**	2 794	0	0	24	174	0
	%	**100**	93.4	0	0	0.8	5.8	0
2006	Total	**5 318**	635	4 148	191	7	334	3
	%	**100**	11.9	78.0	3.6	0.1	6.3	0.1
2007	Total	**7 527**	892	5 744	487	4	390	10
	%	**100**	11.9	76.3	6.5	0.1	5.2	0.1
2008	Total	**6 675**	371	3 455	1 511	6	1 332	0
	%	**100**	5.6	51.8	22.6	0.1	20.0	0

Table 2.36. **Distribution of household members by RB260**

CO-RESIDENTS 16+ (RB245 = 1 to 3 and RB100 = 2) and RB250 = 11 or 13

		Total	RB260=1	RB260=2	RB260=3	RB260=4	RB260=5	Missing (-1)
2005	Total	**0**	0	0	0	0	0	0
	%	**0**	0	0	0	0	0	0
2006	Total	**75**	16	49	0	0	10	0
	%	**100**	21.3	65.3	0	0	13.3	0
2007	Total	**120**	7	96	9	1	7	0
	%	**100**	5.8	80.0	7.5	0.8	5.8	0
2008	Total	**241**	11	109	19	0	102	0
	%	**100**	4.6	45.2	7.9	0	42.3	0

2.5. IMPUTATION PROCEDURE

Data were imputed on the household and personal level. A hot-deck method was used for both imputations. The main principle of the hot deck method is to use the current data (donors) to provide imputed values for records with missing values. Homogenous groups for households and persons were made. Households and items on the personal level were imputed as a random unit of filled units from the group.

Households were grouped by the type of dwelling, year of construction of the building and the number of rooms available to the household.

Grouping on the individual level for the 2005 and 2007 surveys was by the following variables: sex, marital status, main activity status during the income reference period; for the 2006 survey: sex, living district. Grouping for 2008 was by district, NACE, occupation and sex.

2.6. IMPUTED RENT

Imputed rent (HY030G/HY030N) for 2005 and 2006 was not calculated as it was mandatory only from 2007.

Using the experience gained from the calculation of imputed rent for the Household Budget Survey (HBS) it was decided to use a log-linear regression model for the calculation of imputed rent also for the EU-SILC. The following variables were used for the calculation of imputed rent:

- tenure discount;

- urban / rural area;

- region;

- area of dwelling in square metres.

Using the log-linear regression model the equivalent market rent is estimated. In the case where the accommodation is rented at a lower price than the market price, the rent actually paid is deducted from the equivalent market rent. Then from the HBS the amount of minor repairs or/and refurbishment expenditure is calculated (as average percentage from the equivalent market rent) and deducted from the estimated equivalent market rent thus obtaining final value of imputed rent (HY030G/HY030N).

2.7. COMPANY CARS

According to the Latvian situation a method based on a system analysis model was chosen for the calculation of income from the use company car for personal purposes. Components for calculating monetary value of this non-cash employee income were included in the questionnaires and collected directly from respondents: the class of car, the year of the car make, the total amount of kilometres driven by the company car in the previous calendar year, the annual amount of kilometres driven by the vehicle for private use, the occupation of the company car user, coverage of the car related costs made by the employer: fuel, technical inspection of the car, tire purchase (i.e. whether the employer disbursed bills for fuel purchasing, car's technical inspection, tire purchase), restrictions of the use of the company car (i.e. whether the employer created restrictions to employees for the use of the company car for personal purposes).

3. COMPARABILITY

3.1. BASIC CONCEPTS AND DEFINITIONS

Overall, there are no differences between national interpretations of the EU-SILC basic definitions and concepts and common standards set up in Commission regulations and doc. EU-SILC 065. There were no changes in basic concepts and definitions from the first wave.

3.2. COMPONENTS OF INCOME

Classification of income components in national EU-SILC survey was made according to the description of doc. EU-SILC 065 with the exception of income from self-employment (see 3.2.6). As Latvia had a derogation to collect gross income components from 2007, only net income components were collected in 2005 and 2006.

3.2.1. Differences between the national definitions and standard EU-SILC definitions, and an assessment of the differences mentioned

3.2.1.1. Total household gross income

As Latvia had a derogation to collect gross income components from 2007, the total household gross income was not recorded in 2005 and 2006. There were no divergences from common standards from 2007 onwards.

3.2.1.2. Total disposable household income

There were no divergences from common standards.

3.2.1.3. Total disposable household income, before social transfers other than old-age and survivor's benefits

There were no divergences from common standards, but, as old age pensions above certain amount were taxable income in 2007 and 2008, the total disposable household income, before social transfers other than old-age and survivor's benefits was calculated from variable HY020 using only net income components (as it was done before 2007).

3.2.1.4. Total disposable household income, before social transfers including old age and survivor's benefits

There were no divergences from common standards, but, as old age pensions above certain amount were taxable income in 2007 and 2008, the total disposable household income, before social

transfers including old age and survivor's benefits was calculated from variable HY020 using only net income components (as it was done before 2007).

3.2.1.5. Imputed rent

Imputed rent (HY030G/HY030N) for 2005 and 2006 was not calculated as it was mandatory only from 2007.

Using the experience gained from the calculation of imputed rent for the HBS it was decided to use a log-linear regression model for the calculation of imputed rent also for the EU-SILC. The following variables were used for the calculation of imputed rent:

- tenure discount;

- urban / rural area;

- region;

- area of dwelling in square metres.

Using the log-linear regression model the equivalent market rent is estimated. In the case where the accommodation is rented at a lower price than the market price, the rent actually paid is deducted from the equivalent market rent. Then from the HBS the amount of minor repairs or/and refurbishment expenditure is calculated (as average percentage from the equivalent market rent) and deducted from the estimated equivalent market rent thus obtaining final value of imputed rent (HY030G/HY030N).

3.2.1.6. Income from rental property and land
 There were no divergences from common standards.

3.2.1.7. Family/children-related allowances
 There were no divergences from common standards.

3.2.1.8. Social exclusion payments not elsewhere classified
 There were no divergences from common standards.

3.2.1.9. Housing allowances
 There were no divergences from common standards.

3.2.1.10. Regular inter-household cash transfers received
 There were no divergences from common standards.

3.2.1.11. Interest, dividends, profit from capital investments in unincorporated business

There were no divergences from common standards.

3.2.1.12. Interest paid on mortgages

Interest paid on mortgages for 2005 and 2006 was not calculated as it was mandatory only from 2007.

There were no divergences from common standards. Interest paid on mortgages was not asked directly to the household respondent, but it was calculated from the answers to the questions about:

- the average payment per month;
- the average mortgage interest rate;
- the year, when the dwelling was purchased;
- duration of mortgage loan.

3.2.1.13. Income received by people aged under 16

There were no divergences from common standards. Basically there were included wages and salaries received during holidays or out of school time.

3.2.1.14. Regular taxes on wealth

There were no divergences from common standards. Taxes on land and real estate were included in this variable.

3.2.1.15. Regular inter-household transfers paid

There were no divergences from common standards.

3.2.1.16. Tax on income and social contributions

There were no divergences from common standards.

3.2.1.17. Repayments/receipts for tax adjustments

There were no divergences from common standards. From 2007 onwards repayments/receipts for tax adjustments were included in variable HY140.

3.2.1.18. Cash or near-cash employee income

There were no divergences from common standards.

3.2.1.19. Non-cash employee income

There were no divergences from common standards.

Only non-cash employee income from the use of the company car for personal purposes was collected in 2005 and 2006. According to the Latvian situation a method based on a system analysis model was chosen for the calculation of employee non-cash income from the use of the company car for personal purposes. Components for calculating monetary value of this non-cash employee income were included in the questionnaires and collected directly from respondents: the class of the car, the year of the car make, the total amount of kilometres driven by the company car in the previous calendar year, the annual amount of kilometres driven by the vehicle for private use, the occupation of the company car user, coverage of the car related costs made by the employer: fuel, technical inspection of the car, tire purchase (i.e. whether the employer paid bills for fuel purchasing, technical inspection of the car, tire purchase), restrictions of the use of the company car (i.e. whether the employer created restrictions to employees for the use of the company car for personal purposes).

3.2.1.20. Employers' social contributions

The value was not recorded for 2005 and 2006, as it was mandatory to collect this variable only from 2007. There were no divergences from common standards from 2007 onwards.

3.2.1.21. Cash profits or losses from self-employment (including royalties)

For **2005** income (or losses) from self-employment were collected in 2 components: 1) income from agricultural production and 2) income from the rest self-employment (except income from agricultural production).

Income from agricultural self-employment was collected in the same way as in the HBS. A household member responsible for agricultural production was asked to calculate all income components and expenditures the household had had during the income reference period. Thus, all self-employment income from agricultural production was counted to the responsible household member and the amount of self-employment income was agricultural profit minus expenditures related to the production. There were cases when expenditures had been greater than the profit and this resulted in minus values.

The second income component (from the rest self-employment except agricultural production) was asked to each household member aged 16 years and more in the Personal Questionnaire.

Respondents were asked to tell the amount of income they had gained from self-employment for their own use during the income reference period.

For **2006** the net income and losses from self-employment were collected in 2 components: 1) net income or losses from agricultural production and 2) net income or losses from the rest self-employment activities (except income from agricultural production). Both net income components were asked to each household member in the age of 16 years and over (in the income reference period) in the Personal Questionnaire. Respondents were asked to tell the net amount of self-employment income they had had for personal use (including making private savings) or losses from self-employment activities during the income reference period. There were additional questions about the net self-employment income from agricultural production included in the Household Questionnaire. In the Household Questionnaire income from agricultural self-employment was collected in the same way as in the HBS. A household member responsible for agricultural production was asked to calculate all income components and expenditures related to agricultural production the household had had during the income reference period. Thus, all self-employment income from agricultural production was counted to the responsible household member and the amount of self-employment income was agricultural profit minus expenditures related to the production.

Comparison results of the collected agricultural self-employment income values in the Personal Questionnaires from all household members eligible for a personal interview and values collected in the Household Questionnaire from the household respondent responsible for the agricultural production did not show significant differences. As the income values collected in the Personal Questionnaires corresponded to the common EU-SILC methodology then it was decided to use values collected in the Personal Questionnaires.

Only net income components were collected in 2005 and 2006. The gross value was not collected, as it was mandatory to collect this variable from 2007.

For **2007** and **2008** the net income and losses from self-employment were collected in 2 components: 1) net income or losses from agricultural production and 2) net income or losses from the rest self-employment activities (except income from agricultural production). Both net income components were asked to each household member in the age of 16 years and over (in the income reference period) in the Personal Questionnaire. Respondents were asked to tell the net amount of self-employment income they had had for personal use (including making private savings) or losses

from self-employment activities during the income reference period. There were also questions about the paid taxes to evaluate the gross income.

3.2.1.22. Value of goods produced for own consumption

The value was not recorded in 2005 and 2006. This component was mandatory from 2007.

The value of goods produced for own consumption for 2007 and 2008 was calculated using the information from the HBS. A household member responsible for agricultural production was asked to pick from the list of products (obtained from HBS) those, which the household had produced for own consumption during the income reference period. This question was asked only to those households, which had used land for certain types of agricultural activities. Depending on the size of the household and consumed products, the value of goods produced for own consumption was calculated. The value of goods produced for own consumption by the household as a whole was recorded to the responsible household member.

3.2.1.23. Unemployment benefits

There were no divergences from common standards. Only the net income component was collected in 2005 and 2006.

3.2.1.24. Old-age benefits

There were no divergences from common standards. Only the net old-age benefit components were collected in 2005 and 2006.

3.2.1.25. Survivors' benefits

There were no divergences from common standards. Only net survivors' benefits were collected in 2005 and 2006.

3.2.1.26. Sickness benefits

There were no divergences from common standards. Only net sickness benefits were collected in 2005 and 2006.

3.2.1.27. Disability benefits

There were no divergences from common standards. Only net disability benefits were collected in 2005 and 2006.

3.2.1.28. Education related benefits

There were no divergences from common standards. Only net education related benefits were collected in 2005 and 2006.

3.2.2. The source of collecting income variables

Interviews were used for collecting income variables. The EU-SILC income target variables were split into more differentiated sub-components. The sub-components were defined according to the Latvian regulations and benefit system. These components were surveyed in the questionnaire.

Household income variables (such as imputed rent, income from rental property and land, family/ children related allowances, housing allowances etc.) were collected from a household respondent, which was responsible for issues related to dwelling and the whole household. An exception was income from interest, dividends/ profit from capital investment. This variable together with all personal income variables (such as employee income, self-employment income, education related allowances, unemployment benefits etc.) were collected from each household member eligible for a personal interview.

Since 2006 Latvia started to use administrative records from the State Social Insurance Agency (SSIA) in the EU-SILC survey. These data were used for old-age benefits. Initially old-age benefits were collected from personal interviews. After the fieldwork the CSB received data from the SSIA. Both data sources (data from respondents and data from the SSIA) were checked and validated. In the result it was decided to use data from the SSIA in the EU-SILC 2006.

After the EU-SILC 2007 fieldwork the CSB of Latvia received the data from the SSIA and data from the State Revenue Service (SRS) were also available. Both data sources (data from respondents and data from the SSIA and the SRS) were checked and validated. In the result it was decided to use data from the SSIA and to some extent from the SRS in the EU-SILC. It was decided to substitute pensions and state social benefits collected during the EU-SILC 2007 (both net and gross income components were collected) with data from the SSIA, but there had been still some minor benefits administrated by local municipalities or pensions paid by other countries and service pensions, which were not administrated by the SSIA, etc. Thus imputation factor to a large extent shows the difference between the collected data and data from the administrative registers (recorded value in the data files).

The exception was net employee cash or near cash income (PY010N), which was available from the SRS as well, but it was decided to use information from the questionnaires. Gross employee cash or near cash income (PY010G) was obtained by counting up the net employee cash or near cash

income from the questionnaires with paid taxes on income and social contribution from the SRS. The obtained gross employee cash or near cash income was compared with the gross employee cash or near cash income from the questionnaires, thus obtaining an imputation factor, which was recorded in PY010G_F.

As regards EU-SILC 2008 operation according to the signed agreement between CSB and SSIA micro-data files regarding pensions and state social benefits paid to EU-SILC 2008 respondents (during 2007) were used to prepare income variables. Only information about some minor benefits, which are administrated by local municipalities, or pensions paid by other countries and service pensions, which are not administrated by SSIA, is asked in questionnaires from 2008 onwards. Net employee cash or near cash income (PY010N) is still asked in the questionnaire. Information from SRS is also used for imputation purposes if amount of net employee cash or near cash income is missing in questionnaire and in those cases when SRS information shows higher income than reported in questionnaire.

3.2.3. The form in which income target variables at component level were obtained

Only net income amounts (after deducting income taxes and social insurance contributions) were collected in 2005 and 2006.

Both (net and gross) income components were collected in 2007.

Only information about some minor benefits, which are administrated by local municipalities, or pensions paid by other countries and service pensions, which are not administrated by SSIA, is asked in questionnaires from 2008 onwards. Only net employee cash or near cash income (PY010N) is still asked in the questionnaire.

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

See 3.2.2.

3.3. TRACING RULES

For the second, third and the fourth waves tracing rules were applied for a longitudinal component according to the description of the document EU-SILC 065. To identify the residence of a person moving from one address to another address, the information from the Household List (an additional document to record personal data about the household member for tracing purposes) of the previous wave and the Population Register was used.

There were no divergences from common standards.

4. COHERENCE

In this section will be compared the EU-SILC data with various external data sources: the Household Budget Survey (HBS), the Labour Force Survey (LFS), wage statistics and social protection statistics.

The HBS is a continuous survey of households, which has been carried out since 1995 (comparable data since 2002). The annual net sample size is approximately 4 thousand households. The HBS is designed to collect information on consumption expenditure of households (information on income is collected to divide households in quintile groups). The HBS was the source of Laeken indicators until introduction of the EU-SILC (in 2005).

The LFS is a continuous survey, which has been carried out according to a common EU methodology since 1995. The annual sample size is about 30 thousand person aged 15 - 74. The LFS is the main source for labour market information.

4.1. COMPARISON OF INCOME TARGET VARIABLES AND THE NUMBER OF PERSONS WHO RECEIVE INCOME FROM EACH 'INCOME COMPONENT' WITH EXTERNAL SOURCES

In the EU-SILC the average monthly employee cash or near cash income (PY010) in 2007 was 375 LVL (in 2006 – 260 LVL, in 2005 – 214 LVL, in 2004 – 169 LVL). In wage statistics this figure was lower – 286 LVL (in 2006 – 216 LVL, in 2005 – 176 LVL, in 2004 – 150 LVL). Data of the EU-SILC survey were calculated for a respondent, who had received employee cash or near cash income (PY010) and who had been working as an employee at least one month during the income reference period (PL210), using cross-sectional data files of the corresponding year. The acquired results show that the EU-SILC data by 31 % exceeded enterprise statistical data on the average labour income amount in 2007 (by 20% in 2006, by 22% in 2005, by 13% in 2004). The higher estimates from the EU-SILC are due to the fact that in the EU-SILC average wages and salaries are calculated for persons receiving income, whereas in wage statistics the unit of enumeration is the job. Thus, in the EU-SILC all employee's income is counted into one variable (income from the main job, second, third etc.), whereas in wage statistics, wages from the second, third etc. job are counted separately. It should be also taken into account that wage statistics is based on information provided by employers and in certain cases it corresponds to a part of wages from which have been deducted taxes (information about informal employee income might be left behind).

Tables 4.1.-4.4. present the number of persons receiving income components in the EU-SILC (calculated using cross-sectional data files of the corresponding year), the HBS and in additional external sources. It should be taken into account that in the HBS a part of income components are obtained only at the household level and for this reason comparisons are made only among those income components, which are obtained in the same way as in the EU-SILC. Besides, definitions of income components can vary between sources and for that reason only the components for which sufficiently comparable definitions are presented in the tables below.

Table 4.1. **Number of persons receiving several income components in 2004 (in thousands)**

EU-SILC target variable	EU-SILC	HBS	Other sources
Employee cash or near cash income (PY010)	991.8	939.0	877.8[1]
Old-age benefits (PY100)	508.6	492.7	481.7[2]
Survivor's benefits (PY110)	21.1	23.4	28.8[2]
Disability benefits (PY130)	64.1	-	74.6[2]

[1] Wage statistics
[2] At the end of year. Social protection statistics (the State Social Insurance Agency) data

Table 4.2. **Number of persons receiving several income components in 2005 (in thousands)**

EU-SILC target variable	EU-SILC	HBS	Other sources
Employee cash or near cash income (PY010)	1 045.7	969.3	906.6[1]
Old-age benefits (PY100)	513.4	492.8	475.6[2]
Survivor's benefits (PY110)	16.3	19.6	27.6[2]
Disability benefits (PY130)	64.7	66.7	73.6[2]

[1] Wage statistics
[2] At the end of year. Social protection statistics (the State Social Insurance Agency) data

Table 4.3. **Number of persons receiving several income components in 2006 (in thousands)**

EU-SILC target variable	EU-SILC	HBS	Other sources
Employee cash or near cash income (PY010)	1 176.3	995.0	949.0[1]
Old-age benefits (PY100)	495.5	478.1	472.1[2]
Survivor's benefits (PY110)	24.8	21.6	25.9[2]
Disability benefits (PY130)	71.3	62.4	66.7[2]

[1] Wage statistics
[2] At the end of year. Social protection statistics (the State Social Insurance Agency) data

Table 4.4. **Number of persons receiving several income components in 2007 (in thousands)**

EU-SILC target variable	EU-SILC	HBS	Other sources
Employee cash or near cash income (PY010)	1 211.3	966.6	1 030.4[1]
Old-age benefits (PY100)	447.5	469.7	467.2[2]
Survivor's benefits (PY110)	21.0	11.9	24.3[2]
Disability benefits (PY130)	86.6	56.5	66.0[2]

[1] Labour Force Survey
[2] At the end of year. Social protection statistics (the State Social Insurance Agency) data

In the EU-SILC the number of people receiving employee income is higher than in wage statistics.

It is not unexpected that unofficial work relationships are not included in wage statistics.