



STATISTIKOS DEPARTAMENTAS  
STATISTICS LITHUANIA

**FINAL QUALITY REPORT EU-SILC 2005 OPERATION**

**Vilnius 2007**

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## Preface

2005 was the initial year of the EU-SILC survey as comprising a longitudinal sample. According to article 16 of the EC regulation No 1177/2003 of the European Parliament and of the Council of 16th June 2003 concerning community statistics on income and living conditions (EU-SILC), this year's report only cover the cross-sectional component.

## 1. Common cross-sectional European Union indicators

Table 1. Laeken indicators and other indicators

<b>Indicator</b>	<b>Value</b>
<i>Primary Laeken indicators of social cohesion</i>	
At-risk-of-poverty rate after social transfers - total	<b>20.5</b>
At-risk-of-poverty rate after social transfers - men total	<b>19.6</b>
At-risk-of-poverty rate after social transfers - women total	<b>21.3</b>
At-risk-of-poverty rate after social transfers - 0-15 years	<b>27.3</b>
At-risk-of-poverty rate after social transfers - 16-24 years	<b>22.5</b>
At-risk-of-poverty rate after social transfers - 25-49 years	<b>19.0</b>
At-risk-of-poverty rate after social transfers - 50-64 years	<b>17.9</b>
At-risk-of-poverty rate after social transfers - 65+ years	<b>17.0</b>
At-risk-of-poverty rate after social transfers - 16+ years	<b>19.0</b>
At-risk-of-poverty rate after social transfers - 16-64 years	<b>19.5</b>
At-risk-of-poverty rate after social transfers - 0-64 years	<b>21.2</b>
At-risk-of-poverty rate after social transfers - men 16-24 years	<b>21.5</b>
At-risk-of-poverty rate after social transfers - men 25-49 years	<b>19.1</b>
At-risk-of-poverty rate after social transfers - men 50-64 years	<b>21.3</b>
At-risk-of-poverty rate after social transfers - men 65+ years	<b>6.4</b>
At-risk-of-poverty rate after social transfers - men 16+ years	<b>18.2</b>
At-risk-of-poverty rate after social transfers - men 16-64 years	<b>20.1</b>
At-risk-of-poverty rate after social transfers - men 0-64 years	<b>21.3</b>
At-risk-of-poverty rate after social transfers - women 16-24 years	<b>23.6</b>
At-risk-of-poverty rate after social transfers - women 25-49 years	<b>18.9</b>
At-risk-of-poverty rate after social transfers - women 50-64 years	<b>15.3</b>
At-risk-of-poverty rate after social transfers - women 65+ years	<b>22.5</b>
At-risk-of-poverty rate after social transfers - women 16+ years	<b>19.7</b>
At-risk-of-poverty rate after social transfers - women 16-64 years	<b>18.9</b>
At-risk-of-poverty rate after social transfers - women 0-64 years	<b>21.1</b>
At-risk-of-poverty rate after social transfers - employed	<b>10.0</b>
At-risk-of-poverty rate after social transfers - unemployed	<b>61.7</b>
At-risk-of-poverty rate after social transfers - retired	<b>17.4</b>
At-risk-of-poverty rate after social transfers - other inactive	<b>28.0</b>
At-risk-of-poverty rate after social transfers - men, employed	<b>10.2</b>
At-risk-of-poverty rate after social transfers - men, unemployed	<b>64.9</b>
At-risk-of-poverty rate after social transfers - men, retired	<b>8.7</b>
At-risk-of-poverty rate after social transfers - men, other inactive	<b>26.7</b>
At-risk-of-poverty rate after social transfers - women, employed	<b>9.9</b>
At-risk-of-poverty rate after social transfers - women, unemployed	<b>57.6</b>
At-risk-of-poverty rate after social transfers - women, retired	<b>21.5</b>

At-risk-of-poverty rate after social transfers - women, other inactive	<b>29.0</b>
At-risk-of-poverty rate after social transfers - single, < 65 years	<b>30.5</b>
At-risk-of-poverty rate after social transfers - single, 65+ years	<b>33.0</b>
At-risk-of-poverty rate after social transfers - single, male	<b>35.1</b>
At-risk-of-poverty rate after social transfers - single, female	<b>29.8</b>
At-risk-of-poverty rate after social transfers - single, total	<b>31.6</b>
At-risk-of-poverty rate after social transfers - 2 adults, no children, both < 65	<b>17.2</b>
At-risk-of-poverty rate after social transfers - 2 adults, no children, at least one 65+	<b>9.4</b>
At-risk-of-poverty rate after social transfers - other households without children	<b>9.2</b>
At-risk-of-poverty rate after social transfers - single parent, at least one child	<b>47.9</b>
At-risk-of-poverty rate after social transfers - 2 adults, 1 child	<b>15.7</b>
At-risk-of-poverty rate after social transfers - 2 adults, 2 children	<b>18.0</b>
At-risk-of-poverty rate after social transfers - 2 adults, 3+ children	<b>45.0</b>
At-risk-of-poverty rate after social transfers - other households with children	<b>14.3</b>
At-risk-of-poverty rate after social transfers - households without children	<b>17.6</b>
At-risk-of-poverty rate after social transfers - households with children	<b>22.6</b>
At-risk-of-poverty rate after social transfers - owner or rent-free	<b>20.2</b>
At-risk-of-poverty rate after social transfers - tenant	<b>32.8</b>
At-risk-of-poverty rate after social transfers - households without children, w = 0	<b>40.2</b>
At-risk-of-poverty rate after social transfers - households without children, 0 < w < 1	<b>14.8</b>
At-risk-of-poverty rate after social transfers - households without children, w = 1	<b>5.1</b>
At-risk-of-poverty rate after social transfers - households with children, w = 0	<b>81.6</b>
At-risk-of-poverty rate after social transfers - households with children, 0 < w < 0.5	<b>64.0</b>
At-risk-of-poverty rate after social transfers - households with children, 0.5 <= w < 1	<b>22.1</b>
At-risk-of-poverty rate after social transfers - households with children, w = 1	<b>11.8</b>
Median of the equivalised disposable household income	<b>7106.1</b>
At-risk-of-poverty threshold - single	<b>4263.7</b>
At-risk-of-poverty threshold - 2 adults, 2 children	<b>8953.7</b>
Inequality of income distribution S80/S20 income quintile share ratio	<b>6.9</b>
Relative median at-risk-of-poverty gap - total	<b>28.4</b>
Relative median at-risk-of-poverty gap - men total	<b>31.1</b>
Relative median at-risk-of-poverty gap - women total	<b>26.3</b>
Relative median at-risk-of-poverty gap - 0-15 years	<b>29.6</b>
Relative median at-risk-of-poverty gap - 16-64 years	<b>31.7</b>
Relative median at-risk-of-poverty gap - 65+ years	<b>12.8</b>
Relative median at-risk-of-poverty gap - 16+ years	<b>27.7</b>
Relative median at-risk-of-poverty gap - men, 16-64 years	<b>33.0</b>
Relative median at-risk-of-poverty gap - men, 65+ years	<b>11.3</b>
Relative median at-risk-of-poverty gap - men, 16+ years	<b>31.8</b>
Relative median at-risk-of-poverty gap - women, 16-64 years	<b>29.9</b>
Relative median at-risk-of-poverty gap - women, 65+ years	<b>12.8</b>
Relative median at-risk-of-poverty gap - women, 16+ years	<b>24.8</b>

<i>Secondary Laeken indicators of social cohesion</i>	
Dispersion around the risk-of-poverty threshold - 40%	<b>8.7</b>
Dispersion around the risk-of-poverty threshold - 50%	<b>14.3</b>
Dispersion around the risk-of-poverty threshold - 70%	<b>28.0</b>
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Before social transfers except old-age and survivors' benefits	
At-risk-of-poverty rate before social transfers - total	<b>26.1</b>
At-risk-of-poverty rate before social transfers - men total	<b>25.3</b>
At-risk-of-poverty rate before social transfers - women total	<b>26.8</b>
At-risk-of-poverty rate before social transfers - 0-15 years	<b>34.1</b>
At-risk-of-poverty rate before social transfers - 16-64 years	<b>25.3</b>
At-risk-of-poverty rate before social transfers - 65+ years	<b>19.7</b>
At-risk-of-poverty rate before social transfers - 16+ years	<b>24.3</b>
At-risk-of-poverty rate before social transfers - men, 16-64 years	<b>25.8</b>
At-risk-of-poverty rate before social transfers - men, 65+ years	<b>7.7</b>
At-risk-of-poverty rate before social transfers - men, 16+ years	<b>23.3</b>
At-risk-of-poverty rate before social transfers - women, 16-64 years	<b>24.8</b>
At-risk-of-poverty rate before social transfers - women, 65+ years	<b>25.9</b>
At-risk-of-poverty rate before social transfers - women, 16+ years	<b>25.1</b>
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Before social transfers including old-age and survivors' benefits	
At-risk-of-poverty rate before social transfers - total	<b>42.1</b>
At-risk-of-poverty rate before social transfers - men total	<b>39.6</b>
At-risk-of-poverty rate before social transfers - women total	<b>44.2</b>
At-risk-of-poverty rate before social transfers - 0-15 years	<b>38.2</b>
At-risk-of-poverty rate before social transfers - 16-64 years	<b>33.3</b>
At-risk-of-poverty rate before social transfers - 65+ years	<b>86.3</b>
At-risk-of-poverty rate before social transfers - 16+ years	<b>43.0</b>
At-risk-of-poverty rate before social transfers - men, 16-64 years	<b>32.9</b>
At-risk-of-poverty rate before social transfers - men, 65+ years	<b>84.8</b>
At-risk-of-poverty rate before social transfers - men, 16+ years	<b>40.1</b>
At-risk-of-poverty rate before social transfers - women, 16-64 years	<b>33.6</b>
At-risk-of-poverty rate before social transfers - women, 65+ years	<b>87.1</b>
At-risk-of-poverty rate before social transfers - women, 16+ years	<b>45.4</b>
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Gini coefficient	<b>36.3</b>
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<i>Other indicators</i>	
Mean equivalised disposable income	<b>8819.6</b>
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## 2. Accuracy

### 2.1. Sample design

#### 2.1.1 Type of sampling design

One stage stratified sample design was used. Population register was used as a sampling frame. Simple random sample of persons was used in each stratum.

#### 2.1.2 Sampling units

The sampling units are private households.

#### 2.1.3 Stratification criteria

There were 7 strata: 5 largest cities, other cities and rural area. Simple random sample of non-institutional persons aged 16 and over was selected from the Population Register in each stratum. Household which lives in the selected persons address was surveyed.

#### 2.1.4 Sample size and allocation criteria

The minimum effective sample size of households for Lithuania was fixed to 4000 households. To compensate the non-response it was selected 6450 households. The non-response rate was estimated using the results of EU-SILC pilot survey and Household Budget Survey.

#### 2.1.5 Sample selection schemes

Within each of 7 strata simple random sample was used to select the person's address.

#### 2.1.6. Sample distribution over time

Fixed income reference period was used and therefore the sample was not principally divided into months or weeks. Fieldwork period was from the beginning of May 2005 till the middle of July.

Table 2. Distribution of households by month of interview (HB050)

<b>Month</b>	<b>Per cent</b>
May	39.5
June	50.1
July	10.4

#### 2.1.7. Renewal of sample: Rotational groups

The sample was randomly divided into 4 equally sized rotational groups.

### 2.1.8. Weightings

#### **Sampling weights**

Let us denote by  $U = \{1, \dots, N\}$  the survey population.

Inclusion probability of a household in each stratum is equal:

$$\pi_{hk} = \frac{n_h m_{hk}}{N_h},$$

here  $m_{hk}$  – the number of persons in  $k$ th household aged 16 and over in  $h$ th stratum in Population Register;  $n_h$  – the number of households in  $h$ th stratum;  $N_h$  – the number of persons aged 16 and older in  $h$ th stratum.

Sample design weights are:

$$d_{hk} = \frac{1}{\pi_{hk}}.$$

Response probability:

$$p_h = \frac{a_h}{n_h},$$

here  $a_h$  – the number of responding households in  $h$ th stratum,  $n_h$  – the number of households in  $h$ th stratum.

The weight of the household  $k$  after correction for the non-response level is

$$d'_{hk} = d_{hk} \times 1/p_h = \frac{N_h}{n_h} \frac{n_h}{a_h} = \frac{N_h}{a_h m_{hk}}.$$

Then we have corrected weights for responding households:

#### **Treatment of non response at the individual level (for weights PB040)**

Response homogeneity group approach is used.

Each stratum is divided into a number of response homogeneity groups with (assumed) equal response probabilities within groups.

Stratum  $h$  is divided into  $L_h$  response homogeneity groups. The unit in a given group are assumed to respond independently and with the same probability, let  $r_{gh}$  be the set of responding sampling units in group  $g$ , stratum  $h$ . Simple random sample is used in each stratum. The population size is assumed to be unknown in each group.

In stratum  $h$  we know:

$N_h$  – the number of population units in stratum  $h$ ;

$n_h$  – the number of sampling units in stratum  $h$ .

In response homogeneity group  $hg$ ,  $g = 1, 2, \dots, L_h$  we know:

$n_{hg}$  – the number of sampling units in group  $hg$ ,  $\sum_g n_{hg} = n_h$   $m_{hg}$  – the number of responding sampling units in  $r_{hg}$ . The total  $t_y$  of variable  $y$  is estimated by,

$$\hat{t} = \sum_{h=1}^H \frac{N_h}{n_h} \sum_{g=1}^{L_h} \frac{n_{hg}}{m_{hg}} \sum_{r_{hg}} y_k.$$

SAS program CLAN was used for treatment non response at the individual level.

We use the same calibration variables at the individual level as at the household level.

### Calibration

Let's have a vector of  $L$  auxiliary variables:  $X = (x_1, x_2, \dots, x_L)$  with the population values  $x_1 = (x_{11}, x_{12}, \dots, x_{1N}), \dots, x_L = (x_{L1}, x_{L2}, \dots, x_{LN})$ , which sums are known from the Demographical data:

$$t_{x1} = \sum_{i=1}^N x_{1i}, t_{x2} = \sum_{i=1}^N x_{2i}, \dots, t_{xL} = \sum_{i=1}^N x_{Li}.$$

Let's construct the new weights  $w_k$ , which satisfy

- 1) new weights are as close as possible to the design weights:  $\sum_{i=1}^n \frac{(w_i - d_i)^2}{d_i} \rightarrow \min$ ;
- 2) and satisfy the calibration equations:  $\sum_{i=1}^n w_k x_{1i} = t_{x1}, \sum_{i=1}^n w_k x_{2i} = t_{x2}, \dots, \sum_{i=1}^n w_k x_{Li} = t_{xL}$ .

Auxiliary information vector  $X = (x_1, x_2, \dots, x_L)$  is used for calibration weights. Auxiliary information components are:

#### 2.1.9. Substitutions

No substitution was used.

#### 2.2. Sampling errors

Income values are imputed for all missing income components. Number of observations before and after imputation has equal value in cases of non missing observations of income component. Number of observations not included cases when net income variables were collected and net-gross conversion was done. For an income component, the mean refers to the sum of that income component over all of households/persons multiply by its respectively household/person cross-sectional weight (db090, pb040) as well as by within-household non-response inflation factor and divided by the sum of the households/persons cross-sectional weights. Households/persons with missing within-household non-response inflation factor HY025 are not taken into account. We have not been in a position to calculate standard errors on the data as yet.

Table 3. Mean and total number of observations (before and after imputation)

Income components	Mean (in national currency)	Number of observations	
		Before imputation	After imputation
Total household gross income	17913.8	4425	4441
Total disposable household income	14729.3	4425	4441
Total disposable household income before social transfers other than old-age and survivors' benefits	13830.6	4428	4441
Total disposable household income including old-age and survivors' benefits	11250.1	4428	4441

Income components	Mean (in national currency)	Number of observations	
		Before imputation	After imputation
<b>Gross income component at household level</b>			
Income from rental of a property or land	37.9	123	123
Family/child related allowances	285.9	633	634
Social exclusion not elsewhere classified	40.2	118	118
Housing allowances	21.4	216	216
Regular inter-household cash transfer received	266.4	361	361
Interest, dividends, etc.	32.5	86	87
Income received by people aged under 16	0.5	11	11
Regular taxes on wealth	12.6	1069	1069
Regular inter-household cash transfer paid	205.8	461	461
Tax on Income and Social Contributions	2966.2	2645	2819
<b>Gross income components at personal level</b>			
Employee cash or near cash income	6239.2	4492	4511
Contributions to individual private pension plans	9.3	123	123
Cash benefits or losses from self-employment	618.5	792	805
Pension from individual private plans	0	0	0
Unemployment benefits	24.6	172	172
Old-age benefits	1228.9	2627	2627
Survivor's benefits	34.3	187	187
Disability benefits	225.0	629	631
Education-related allowances	39.3	321	321

### **2.3. Non-sampling errors**

#### *2.3.1. Sampling frame and coverage errors*

As stated above, the sampling frame of EU-SILC 2005 was the Population Register. Population Register is updated regularly. However, not all movements of population within country are reflected, whereas not all population reports about changing of address to the migration office. Consequently, the households, living in selected person's address, were surveyed. The sample was extracted 2 weeks before the fieldwork.

Percentage of addresses does not exist or is non-residential address or is unoccupied (DB120=23) out of total selected addresses – 2.6.

#### *2.3.2. Measurement and processing errors*

##### *2.3.2.1. Measurement errors*

The questionnaires for EU-SILC 2005 were developed according to the EU-SILC regulations and EU-SILC doc 65/04. The questionnaires were tested during the first wave of pilot survey conducted in 2004. The pilot survey questionnaires were used as a base for 2005 year

operation. Designing questionnaires for main operation errors and interviewers feedbacks from the pilot survey were considered. Household questionnaire was almost unchanged, just small modifications were applied. Personal questionnaire required more modifications due to new version of Description of Target variables were produced by Eurostat. New mandatory for cross-sectional component variables were added to the questionnaire (PL160, PL170, PL180, PL190, PL200, PL210A – PL210L). Because of these new variables there were made some structure and design corrections of the questionnaire. Within the second wave of pilot longitudinal variables relating to P-file were not tested.

The interviewers training were organized in each territorial statistics office in the period between April 28 and May 6. Interviewers manual presented instructions on filling in the questionnaires and detailed explanation all income components, particularly benefits, were prepared. Methodical explanations were combining with practical tests. Interviewers filled in questionnaires, our specialists checked and then mistakes were discussed. Fieldwork has started immediately after interviewers training.

Fieldwork was carried out by Households' interviewers who usually work for the other household surveys carried out by Statistics Lithuania with additionally hired temporary interviewers. Temporary staff was selected from current or former employees in regional statistical offices, or persons, formerly employed as enumerators in the Population Census or Agricultural Census. In total 158 interviewers were involved into 2005 year operation. One interviewer had an average 40 selected addresses.

### 2.3.2.2. Processing errors

Living Standard Statistics Division of the Statistics Lithuania checked the completed questionnaires. Necessary call-backs were made. Data were entered centrally by Statistics Lithuania. For data entry Blaise software was used. The computer programme included the possible logical checks between questions and questionnaires, also a package of alerts (warning and error ones) related to ranges of admissible values and logical connections between questions. Coding controls were implemented in post-data-collection. After the data entry was finished the data were checked for consistency.

### 2.3.3. Non-response errors

#### 2.3.3.1. Achieved sample size

Achieved sample size: 4441 households, 12117 persons and 9929 persons aged 16 or older.

Table 4. Accepted interviews

Rotational group	Number of households for which an interview is accepted for the database (DB135 = 1)	Number of persons aged 16 or older who are members of the households for which the interview is accepted for the database (DB135 = 1) and who completed personal interview (RB205 = 11 to 13)
<b>Total</b>	<b>4441</b>	<b>9929</b>
1	1099	2500
2	1130	2520
3	1122	2526
4	1090	2383

### 2.3.3.2. Unit non-response

Address contact rate:

$$Ra = \frac{6211}{6450 - 167} \approx 0.99$$

The proportion of completed household interviews accepted for the database:

$$Rh = \frac{4441}{6211} \approx 0.72$$

Household non-response rates:

$$NRh = (1 - (Ra * Rh)) * 100 = (1 - (0.99 * 0.72)) * 100 = 28.72$$

The proportion of completed personal interviews within the households accepted for the database:

$$Rp = \frac{9929}{10015} \approx 0.99$$

Individual non-response rate:

$$NRp = (1 - (Rp)) * 100 = (1 - 0.99) * 100 = 1$$

Overall individual non-response rate:

$$* NRp = (1 - (Ra * Rh * Rp)) * 100 = (1 - (0.99 * 0.72 * 0.99)) * 100 \approx 29.43$$

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

Table 5. Distribution of households by ‘record of contact at address’

	Rotational group 1		Rotational group 2		Rotational group 3		Rotational group 4		Total	
	N	%	N	%	N	%	N	%	N	%
<b>Total (DB120=11 to 23)</b>	<b>1613</b>	<b>100</b>	<b>1612</b>	<b>100</b>	<b>1613</b>	<b>100</b>	<b>1612</b>	<b>100</b>	<b>6450</b>	<b>100</b>
Address contacted (DB120=11)	1555	96.4	1550	96.2	1545	95.8	1561	96.8	6211	96.3
Address non-contacted (DB120=21 to 23)	58	3.6	62	3.8	68	4.2	51	3.2	239	3.7
<b>Total address non-contacted (DB120=21 to 23)</b>	<b>58</b>	<b>100</b>	<b>62</b>	<b>100</b>	<b>68</b>	<b>100</b>	<b>51</b>	<b>100</b>	<b>239</b>	<b>100</b>
Address cannot be located (DB120=21)	18	31	17	27.4	23	33.8	13	25.5	71	29.7
Address unable to access (DB120=22)	1	1.7	0	0	0	0	0	0	1	0.4
Address does not exist or is non-residential address or is unoccupied or not principal residence (DB120=23)	39	67.2	45	72.6	45	66.2	38	74.5	167	69.9

Table 6. Distribution of address contacted by ‘household questionnaire result‘ and by ‘household interview acceptance‘

	Rotational group 1		Rotational group 2		Rotational group 3		Rotational group 4		Total	
	N	%	N	%	N	%	N	%	N	%
<b>Total (DB130=11 to 24)</b>	<b>1555</b>	<b>100</b>	<b>1550</b>	<b>100</b>	<b>1545</b>	<b>100</b>	<b>1561</b>	<b>100</b>	<b>6211</b>	<b>100</b>
Household questionnaire completed (DB130=11)	1099	70.7	1130	72.9	1122	72.6	1090	69.8	4441	71.5
Interview not completed (DB130=21 to 24)	456	29.3	420	27.1	423	27.4	471	30.2	1770	28.5
<b>Total interview not completed (DB130=21 to 24)</b>	<b>456</b>	<b>100</b>	<b>420</b>	<b>100</b>	<b>423</b>	<b>100</b>	<b>471</b>	<b>100</b>	<b>1770</b>	<b>100</b>
Refusal to co-operate (DB130=21)	346	75.9	312	74.3	317	74.9	359	76.2	1334	75.4
Entire household temporarily away for duration of fieldwork (DB130=22)	100	21.9	100	23.8	96	22.7	100	21.2	396	22.4
Household unable to respond (illness, incapacity, etc) (DB130=23)	7	1.5	6	1.4	7	1.7	12	2.6	32	1.8
Other (DB130=24)	3	0.7	2	0.5	3	0.7	0	0	8	0.5
<b>Household questionnaire completed (DB135=1 to 2)</b>	<b>1099</b>	<b>100</b>	<b>1130</b>	<b>100</b>	<b>1122</b>	<b>100</b>	<b>1090</b>	<b>100</b>	<b>4441</b>	<b>100</b>
Interview accepted to database (DB135=1)	1099	100	1130	100	1122	100	1090	100	4441	100
Interview rejected (DB135=2)	0	0	0	0	0	0	0	0	0	0

#### 2.3.3.4. Item non-response

The following tables show the amount of item non-response for income variables on household and individual level.

Table 7. Distribution of item non-response, household-level variables

<b>Income variable</b>	<b>% of households having received an amount</b>	<b>% of households with missing values (before imputation)</b>	<b>% of households with partial* information (before imputation)</b>
Total household gross income	99.3	0.004	1.9
Total disposable household income	99.3	0.004	1.9
Total disposable household income before social transfers except old-age and survivor's benefits	96.7	0.004	1.9
Total disposable household income before social transfers including old-age and survivor's benefits	75.1	0.01	2.5
<b><i>Gross income components at household level</i></b>			
Income from rental of a property or land	2.8	0	0
Family/child related allowances	14.3	0	0.002
Social exclusion not elsewhere classified	2.7	0	0
Housing allowances	4.9	0	0
Regular inter-household cash transfer received	8.1	0	0
Interest, dividends, etc.	2	1.1	0
Income received by people aged under 16	0.2	0	0
Regular inter-household cash transfer paid	10.4	0	0

\*We excluded cases when net income variables were collected and net-gross conversion was done

Table 8. Distribution of item non-response, person-level variables

Income variable	% of persons 16+ having received an amount	% of persons with missing values (before imputation)
<i>Gross income components at personal level</i>		
Employee cash or near cash income	45.4	1.8
Non-cash employee income	1.0	0
Contributions to individual private pension plans	1.2	0
Cash benefits or losses from self-employment	8.1	1.9
Value of goods produced for own consumption	11.7	0
Pension from individual private plans	0	0
Unemployment benefits	1.7	0
Old-age benefits	26.5	0
Survivor's benefits	1.9	0
Disability benefits	6.4	0.3
Education-related allowances	3.2	0

#### 2.4. Mode of data collection

The method for data collection was paper assisted personal interview (PAPI). If necessary, telephone interviews were allowed. Proxy interview was allowed for persons temporarily away or in incapacity. To avoid non-response within household proxy interview as an exception was allowed when it was no possibility to make personal interview and another member of household could provide the information. Some data collected by proxy interview were specified by telephone, but method of data collection was not changed in the microdata.

Table 9. Distribution of household members aged 16 and over by 'data status' (RB250) and rotational group  
HOUSEHOLD MEMBERS 16+ (RB245=1 to 3)

	Total	RB250=11	=12	=13	=21	=22	=23	=31	=32	=33
<b>Total</b>	10015	9929	0	0	1	0	35	47	3	0
<b>%</b>	100	99.1	0	0	0	0	0.3	0.5	0	0
<b>Rotation 1</b>	2511	2500	0	0	0	0	4	7	0	0
<b>%</b>	100	99.6	0	0	0	0	0.2	0.3	0	0
<b>Rotation 2</b>	2545	2520	0	0	0	0	15	9	1	0
<b>%</b>	100	99	0	0	0	0	0.6	0.4	0	0
<b>Rotation 3</b>	2552	2526	0	0	1	0	7	17	1	0
<b>%</b>	100	99	0	0	0	0	0.3	0.7	0	0
<b>Rotation 4</b>	2407	2383	0	0	0	0	9	14	1	0
<b>%</b>	100	99	0	0	0	0	0.4	0.6	0	0

Table 10. Distribution of household members aged 16 and over by 'Type of Interview' (RB260) and rotational group

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

	Total	RB260=1	RB260=2	RB260=3	RB260=4	RB260=5	Missing
<b>Total</b>	9929	8299	0	98	143	1389	0
<b>%</b>	100	83.6	0	1	1.4	14	0
<b>Rotation 1</b>	2500	2075	0	31	37	357	0
<b>%</b>	100	83	0	1.2	1.5	14.3	0
<b>Rotation 2</b>	2520	2075	0	27	41	377	0
<b>%</b>	100	82.3	0	1.1	1.6	15	0
<b>Rotation 3</b>	2526	2107	0	15	44	360	0
<b>%</b>	100	83.4	0	0.6	1.7	14.3	0
<b>Rotation 4</b>	2383	2042	0	25	21	295	0
<b>%</b>	100	85.7	0	1	0.9	12.4	0

### 2.5. Imputation procedure

Item non-response is mostly related employee cash or near cash income (PY010), cash benefits or losses from self-employment (PY050) and tax on Income and Social Contributions (HY140). Also few cases are related disability benefits (PY130), family/child related allowances (HY050) and interest, dividends, etc (HY090).

*Deterministic methods* were used for PY010G, PY050G (mean/median imputation); PY0130G, HY090G (distance matching).

*Deductive methods* were used for HY050G, HY140G (deductive imputation).

### 2.6. Imputed rent

For 2005 Statistics Lithuania has not calculated imputed rent.

## 3. Comparability

### 3.1. Basic concepts and definition

#### *The reference population*

No difference to the common definition. The target population of EU-SILC is all persons living in private households within national territory of Lithuania at the time of data collection. Collective households and institutions are excluded from the target population.

#### *The private household definition*

No difference to the common definition. The private household is defined as a person living alone or a group of people, who live together in the same private dwelling and share expenditures, including the joint provision of the essentials of living.

#### *The household membership*

No difference to the common definition.

### *The income reference period used*

No difference to the common definition. The income reference period was a fixed twelve-month period, namely the last calendar year. In the 2005 operation income data were collected for the reference year 2004.

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

No difference to the common definition. Taxes on income and social insurance contributions, as well as tax repayments and receipts refer to the income reference period (year 2004).

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

No difference to the common definition. Taxes on wealth paid during the income reference period (year 2004) were recorded.

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

The lag between the end of the income reference period and current variables ranges from 4 to 7 months.

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

The fieldwork period started on 1<sup>st</sup> of May 2005 and ended on the 15<sup>th</sup> of July. Almost 90% of households were interviewed during the first 2 months and only 10.4% were interviewed in July.

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

This information was collected with the questionnaire by an activity calendar covering each month of the income reference period.

## **3.2. Components of income**

### *3.2.1. Differences between the national definitions and standard EU-SILC definitions*

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

Sickness benefits (PY120) could not be separated from cash or near cash employee income and recorded under this variable.

#### *No-cash employee income*

All components of this variable were collected, including components which will be mandatory from 2007. Only the value related to company car were recorded under variable PY020 and were added to the calculation variables HY010, HY020, HY022 and HY023.

### *Cash benefits or losses from self-employment*

The self-employment income was collected as the amount of money drawn out of the business for household, personal use. Income from agriculture, included in this variable, was calculated as difference of total revenue from agriculture and total expenditure on it.

### *Value of goods produced by own-consumption*

Variable was collected and recorded to microdata file, but was not added to the calculation variables HY010, HY020, HY022 and HY023.

Quantities (kg, l) of food and beverages produced and also consumed within the same household and expenses incurred in the production of these food and beverages were collected during interview. In EU-SILC survey we used the same list of food and beverages used for nourishment as in the Household Budget Survey. Value of household services, any production made up for sale and others products do not used for nourishment was not collected.

On purpose to estimate the value of goods produced for own consumption the market prices of goods from the HBS 2004 were used (EU-SILC income reference period was year 2004). The value of goods produced for own consumption was estimated by multiplying quantity by market prices of goods deducting expenses incurred in the production.

### *Gross monthly earnings for employees*

Variable was not collected because EU-SILC is not used to calculated gender pay gap.

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

Where applicable the EU-SILC income target variables were split into sub-components. The sub-components were defined according to the Lithuanian regulations and benefit system. All data related to income variables were collected from interviews.

Administrative data were used for making the survey income data more accurate or for supplementing them. The State Social Insurance Fund Board data have been linked to sample data and used for checking cash or near-cash employee income (PY010) and social insurance contributions (component of HY140).

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

Employee cash and near-cash income (PY010), self-employment income (PY050), unemployment benefits (PY090), family/children related allowances (HY050) were collected in gross and/or net. The remaining variables were collected only in gross.

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

The gross-net/net-gross conversion was used for either gross or net was collected. Conversion algorithms were created on the bases of country tax system. All income variables that are subjected to taxation and/or social insurance contribution were recorded gross and net in to the microdata files (except for variable PY120 which included into variable PY010). Other income variables were recorded only gross.

## 4. Coherence

This section will compare the EU-SILC data to Household Budget Survey (HBS), wage statistics and administrative data.

The HBS is continuous survey. The survey conducted in line with the current methodology has been carried out since 1996. The HBS uses two data collection methods combined into one: the interview conducted by an interviewer and self-registration of particular household indicators. Social and economic information on household members, their living conditions and income are collected during the interview. HBS was the source of Laeken indicators until started EU-SILC survey.

### 4.1. Comparison of income target variables and number of persons who received income from each 'income component', with external source

There are differences between EU-SILC and HBS income components definitions. Only comparable income components are presented in Table 12.

*Table 11.* Comparison of income target variables and number of persons/households who received income components

Income component	EU-SILC 2005	HBS 2004	Other sources*
	Average annual number of people, thousand		
Cash or near cash employee income (PY010N)	1,323.2	1,243	1,159.7
Old-age benefits (PY100)	689.6	693.7	602.5
Survivors benefits (PY110)	54.9	41.3	
	Average annual number of households, thousand		
Housing allowances (HY070)	86.2	69.8	

\* Wage statistics in the case of PY010 and administrative source in the case of PY100

The number of people receiving employee income is higher in SILC than in the HBS and wage statistics. In HBS, the yearly income figures are derived from monthly data. People who were employed, but did not receive income during the survey month (being on vacation, started job and so on) were not included in this category. In case of wage statistics, this figure is lower whereas the illegal work has not been taken into account.

The estimate of number of people receiving old-age benefits is higher in SILC than in administrative source. This is due to old-age pensions from foreign countries and disability benefits paid after the standard retirement age being included in SILC variable that have not been taken into account in the case of administrative source. The differences between SILC and HBS are not substantial.

The estimate of number of people receiving survivor's benefits is higher in SILC than in HBS. The reason of the difference is in assignment of survivor benefits value for eligible person. In SILC values of benefit are recorded to each person 16 years and older who receive

this benefits. Whereas in HBS, values of benefit received by persons younger than 18 years old are recorded to the older persons in that household.

The number of households receiving housing allowances is lower in the HBS. This difference is related to the survey design of HBS and the seasonal aspect of housing allowances. As was noted above, the yearly income figures are derived from monthly data in HBS. The compensations to cover expenditure of the heating of dwelling are the most part of housing allowances and are paid in winter time. So, the number of households receiving them is lower in HBS data.

#### 4.2. Comparison of other target variables with external source

Table 12. Distribution of households by type of dwelling

<b>Dwelling type</b>	<b>EU-SILC 2005</b>	<b>HBS 2005</b>
	%	%
Detached house	30.6	29.2
Semi-detached or terraced house	9.6	12.7
Apartment or flat	59.5	57.9
Some other kind of accommodation	0.3	0
Total	100	100

Table 13. Distribution of households by amenities in the dwellings

<b>Amenities in the dwellings</b>	<b>EU-SILC 2005</b>	<b>HBS 2005</b>
	%	%
Bath or shower	74.9	73.1
Indoor flushing toilet	73.2	71.5

The estimates of the number of household by household type and amenities in the dwellings are almost the same in SILC and HBS.

Finally, in Table 14 there are reported data for the distribution of population by self-defined economic status. This variable is not absolutely the same in the SILC and HBS. The main activity status is self-defined in EU-SILC. So, in opposition to HBS, there are no strict criteria for people who consider themselves ‘unemployed’.

*Table 14.* Distribution of population aged 16 and over by self-defined activity status

<b>Activity status</b>	<b>EU-SILC</b>	<b>HBS 2005</b>
	%	%
At work	51.7	54.4
Unemployed	7.6	6.6
Pupil, student	10.4	9.0
In retirement	22.8	22.8
Permanently disabled	4.4	4.0
Other inactive person	3.2	3.2
Total	100	100

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