

Central Statistical Bureau of Latvia



**INTERMEDIATE QUALITY REPORT
EU-SILC 2011 OPERATION
IN LATVIA**

Riga 2012

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Background

2011 was the seventh year, when EU-SILC was carried out in Latvia. The Latvian EU-SILC survey is an annual survey with a four-year rotational panel and it is carried out as an independent survey, covering both cross-sectional and longitudinal primary target variables and also secondary target variables by single operation.

1. Common cross-sectional European Union indicators

Table 1.1. Streamlined Social Inclusion portfolio indicators

| Indicator | Value |
|---|-------|
| Primary indicators | |
| At-risk-of-poverty rate after social transfers: Total | 19.3 |
| At-risk-of-poverty rate after social transfers: Males | 20.0 |
| At-risk-of-poverty rate after social transfers: Females | 18.7 |
| At-risk-of-poverty rate after social transfers: 0-17 total | 24.8 |
| At-risk-of-poverty rate after social transfers: 0-64 total | 21.2 |
| At-risk-of-poverty rate after social transfers: 0-64 males | 21.8 |
| At-risk-of-poverty rate after social transfers: 0-64 females | 20.7 |
| At-risk-of-poverty rate after social transfers: 18+ total | 18.1 |
| At-risk-of-poverty rate after social transfers: 18+ males | 18.3 |
| At-risk-of-poverty rate after social transfers: 18+ females | 17.9 |
| At-risk-of-poverty rate after social transfers: 18-24 total | 22.4 |
| At-risk-of-poverty rate after social transfers: 18-24 males | 20.6 |
| At-risk-of-poverty rate after social transfers: 18-24 females | 24.3 |
| At-risk-of-poverty rate after social transfers: 18-64 total | 20.2 |
| At-risk-of-poverty rate after social transfers: 18-64 males | 20.3 |
| At-risk-of-poverty rate after social transfers: 18-64 females | 20.2 |
| At-risk-of-poverty rate after social transfers: 25-49 total | 19.2 |
| At-risk-of-poverty rate after social transfers: 25-49 males | 18.9 |
| At-risk-of-poverty rate after social transfers: 25-49 females | 19.5 |
| At-risk-of-poverty rate after social transfers: 50-64 total | 21.0 |
| At-risk-of-poverty rate after social transfers: 50-64 males | 23.2 |
| At-risk-of-poverty rate after social transfers: 50-64 females | 19.3 |
| At-risk-of-poverty rate after social transfers: 65+ total | 9.5 |
| At-risk-of-poverty rate after social transfers: 65+ males | 6.4 |
| At-risk-of-poverty rate after social transfers: 65+ females | 11.0 |
| At-risk-of-poverty rate after social transfers: 18+, at work total | 9.3 |
| At-risk-of-poverty rate after social transfers: 18+, at work males | 8.3 |
| At-risk-of-poverty rate after social transfers: 18+, at work females | 10.3 |
| At-risk-of-poverty rate after social transfers: 18+, not at work total | 25.6 |
| At-risk-of-poverty rate after social transfers: 18+, not at work males | 28.8 |
| At-risk-of-poverty rate after social transfers: 18+, not at work females | 23.4 |
| At-risk-of-poverty rate after social transfers: 18+, unemployed total | 49.8 |
| At-risk-of-poverty rate after social transfers: 18+, unemployed males | 50.3 |
| At-risk-of-poverty rate after social transfers: 18+, unemployed females | 49.1 |
| At-risk-of-poverty rate after social transfers: 18+, retired total | 11.3 |
| At-risk-of-poverty rate after social transfers: 18+, retired males | 9.4 |
| At-risk-of-poverty rate after social transfers: 18+, retired females | 12.2 |
| At-risk-of-poverty rate after social transfers: 18+, other inactive total | 27.8 |
| At-risk-of-poverty rate after social transfers: 18+, other inactive males | 27.1 |
| At-risk-of-poverty rate after social transfers: 18+, other inactive females | 28.2 |

| Indicator | Value |
|--|--------------|
| At-risk-of-poverty rate after social transfers: No dependent children | 17.0 |
| At-risk-of-poverty rate after social transfers: Single total | 21.2 |
| At-risk-of-poverty rate after social transfers: Single males | 34.0 |
| At-risk-of-poverty rate after social transfers: Single females | 14.9 |
| At-risk-of-poverty rate after social transfers: Single <65 years | 33.5 |
| At-risk-of-poverty rate after social transfers: Single 65+ | 8.9 |
| At-risk-of-poverty rate after social transfers: 2 adults no children, <65 years | 20.3 |
| At-risk-of-poverty rate after social transfers: 2 adults no children, 65+ | 12.0 |
| At-risk-of-poverty rate after social transfers: All households with dependent children | 21.3 |
| At-risk-of-poverty rate after social transfers: Single parent | 38.8 |
| At-risk-of-poverty rate after social transfers: 2 adults 1 dependent child | 17.9 |
| At-risk-of-poverty rate after social transfers: 2 adults 2 dependent children | 18.9 |
| At-risk-of-poverty rate after social transfers: 2 adults 3+ dependent children | 37.4 |
| At-risk-of-poverty rate after social transfers: Owner or rent-free | 17.4 |
| At-risk-of-poverty rate after social transfers: Tenant | 32.2 |
| At-risk-of-poverty threshold (illustrative values, LVL per year): Single person | 1 783 |
| At-risk-of-poverty threshold (illustrative values, LVL per year): Two adults with two children younger than 14 years | 3 745 |
| Inequality of income distribution S80/S20 income quintile share ratio | 6.6 |
| Relative median at-risk-of-poverty gap: Total | 31.7 |
| Relative median at-risk-of-poverty gap: Males | 33.7 |
| Relative median at-risk-of-poverty gap: Females | 28.1 |
| Relative median at-risk-of-poverty gap: 0-17 | 33.4 |
| Relative median at-risk-of-poverty gap: 18+ total | 30.3 |
| Relative median at-risk-of-poverty gap: 18+ males | 33.1 |
| Relative median at-risk-of-poverty gap: 18+ females | 27.8 |
| Relative median at-risk-of-poverty gap: 18-64 total | 32.7 |
| Relative median at-risk-of-poverty gap: 18-64 males | 34.3 |
| Relative median at-risk-of-poverty gap: 18-64 females | 32.0 |
| Relative median at-risk-of-poverty gap: 65+ total | 16.3 |
| Relative median at-risk-of-poverty gap: 65+ males | 23.4 |
| Relative median at-risk-of-poverty gap: 65+ females | 14.9 |
| Secondary indicators | |
| Dispersion around the risk-of-poverty threshold: 40% of median equalized income, total | 9.1 |
| Dispersion around the risk-of-poverty threshold: 40% of median equalized income, males | 10.1 |
| Dispersion around the risk-of-poverty threshold: 40% of median equalized income, females | 8.2 |
| Dispersion around the risk-of-poverty threshold: 50% of median equalized income, total | 13.5 |
| Dispersion around the risk-of-poverty threshold: 50% of median equalized income, males | 14.7 |
| Dispersion around the risk-of-poverty threshold: 50% of median equalized income, females | 12.5 |
| Dispersion around the risk-of-poverty threshold: 70% of median equalized income, total | 27.0 |
| Dispersion around the risk-of-poverty threshold: 70% of median equalized income, males | 26.8 |
| Dispersion around the risk-of-poverty threshold: 70% of median equalized income, females | 27.1 |
| At-risk-of-poverty rate anchored at a fixed moment in time (2005): Total | 10.2 |
| At-risk-of-poverty rate anchored at a fixed moment in time (2005): Males | 11.3 |
| At-risk-of-poverty rate anchored at a fixed moment in time (2005): Females | 9.2 |
| At-risk-of-poverty rate before all transfers: Total | 45.7 |
| At-risk-of-poverty rate before all transfers: Males | 43.7 |
| At-risk-of-poverty rate before all transfers: Females | 47.4 |
| At-risk-of-poverty rate before transfers including old-age and survivors` benefits: Total | 27.3 |
| At-risk-of-poverty rate before transfers including old-age and survivors` benefits: Males | 28.3 |
| At-risk-of-poverty rate before transfers including old-age and survivors` benefits: Females | 26.5 |
| Gini coefficient | 35.2 |
| Other indicators | |
| Mean equivalised disposable income (LVL per year) | 3 638 |

The calculation of gender pay gap is based on other sources than EU-SILC. Wage statistics is used for calculating gender pay gap.

2. Accuracy

2.1. Sampling 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 2000 counting areas) was made. At the second stage a simple random sampling was made to select secondary sampling units (dwellings). The stratification was made depending on a degree of urbanization of the area. The Classification of Administrative Territories and Territorial Units (CATTU) of Latvia was used for stratification.

Table 2.1. Sampling design information

| Stratum | 1st stage | 2nd stage | |
|------------|-------------|-------------|-------------|
| | PSU's | SSU's | Households |
| 1 | 417 | 2777 | 2826 |
| 2 | 246 | 1594 | 1626 |
| 3 | 231 | 1567 | 1602 |
| 4 | 305 | 2307 | 2409 |
| All | 1199 | 8245 | 8463 |

2.1.1. Type of sample design

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, the entire territory of Latvia is covered in lists of Population Census counting areas. PSUs were selected by a systematic sampling with inclusion probabilities proportional to the population size (number of households) of PSUs.

Dwellings were used as secondary sampling units (SSUs). A simple random sampling was used to select SSUs from the PSUs selected at the first sampling stage. In Latvia several households can be registered in one dwelling. All households and individuals living in the selected dwelling 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 2.3.2.1). If none of persons enumerated in the Household List lived in the selected dwelling, then it was possible:

- to go for an interview to another dwelling in the same local area (if an interviewer knew the correct dwelling of the persons enumerated in the Household List);

- to interview all households and individuals living in the selected dwelling (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), largest towns, other towns and rural areas form four strata. The CATTU 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 defined 3 750 households. The total gross sample size (number of households) was made analysing non-response rates and design effects of the previous EU-SILC surveys. To compensate the non-response and taking into account the design effect it was decided to select 8 245 dwellings. In Latvia more than one household can live in one dwelling. Therefore, there were 8 463 households living in the selected dwellings. In case if it was not possible to contact the selected dwelling (the dwelling cannot be located, it was not possible to contact any person living in the dwelling or the dwelling was inaccessible, etc.) it was assumed that one household lived in the selected dwelling.

The response rates differ very much in each stratum. For this reason dwellings were not included with probabilities proportional to stratum size, but the initial sample size was proportional to population size of each stratum. The initial sample size was adjusted according to response rates in each stratum to get the final sample size in each stratum. R_h is the number of persons aged 16 and over living in stratum h as at the beginning of 2011. n_h is number of respondents (aged 16 and over) of the stratum h and n_h / R_h is the sampling fraction in the corresponding stratum.

Table 2.2. Sampling fractions in the corresponding stratum

| Stratum | R_h | n_h | n_h / R_h |
|----------------|------------------|---------------|---------------|
| 1 | 551 991 | 4 026 | 0.0073 |
| 2 | 345 916 | 2 356 | 0.0068 |
| 3 | 284 153 | 2 555 | 0.0090 |
| 4 | 535 092 | 4 566 | 0.0085 |
| Total | 1 717 153 | 13 503 | 0.0077 |

2.1.5. Sample selection schemes

In the first stage 1199 Population Census counting areas (PSUs) were selected by systematic sampling with inclusion probabilities proportional to their population size.

A simple random sampling without replacement was used to select 8 245 dwellings (SSUs) in the 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 is shown below in Table 2.3.

Table 2.3. Sample distribution over time

| Month | Number of households | % of surveyed households | Cumulative % of surveyed households |
|--------|----------------------|--------------------------|-------------------------------------|
| March | 191 | 2.9 | 2.9 |
| April | 1 573 | 23.8 | 26.7 |
| May | 2 183 | 33.1 | 59.8 |
| June | 1 664 | 25.2 | 85.0 |
| July | 986 | 14.9 | 99.9 |
| August | 2 | 0 | 100 |

2.1.7. Renewal of sample: rotational groups

Latvia applies a rotational panel where the sample is divided into four sub-samples. Each of them represents the whole population. Every year one rotation group rotates out (is dropped) and a new one is added to the sample.

2.1.8. Weightings**2.1.8.1. Design factor**

The design weights (DB080) for dwellings were calculated according to the sample design:

$$DB080 = \frac{1}{prob_dw};$$

$$prob_dw = \frac{hhpsupop \cdot psustrat \cdot dwpsus}{hhstrpop \cdot dwpsup},$$

where **prob_dw** - inclusion probabilities of dwellings;

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

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

dwpsus - a number of dwellings in each strata's each PSU of sample;

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

dwpsup - a number of dwellings 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 dwelling. The design weights were adjusted for outliers (extremely high design weights) at the dwelling level.

2.1.8.2. *Non-response adjustments*

The design weights adjusted for outliers *desig1_w* were adjusted for non-response (in the household level) in each primary non-response group (NR-group) with correction coefficients *k2_k3* and *k4*. Non-response groups were defined as a set of variables – 4 rotational groups (DB075), 6 regions and 4 strata.

$$k2_k3 = \frac{samplpsu \cdot cov_sum}{restppsu \cdot resp};$$

$$nonrespw = k2_k3 \cdot desig1_w;$$

$$k4 = \frac{m1}{m2};$$

$$nonr_w = nonrespw \cdot k4,$$

where ***samplpsu*** – a number of households in each NR-group of sample;

cov_sum – a number of households useful for survey in each NR-group of sample;

restppsu – a number of households in each NR-group of sample, which belong to target population;

resp – a number of responded households in each NR-group of sample;

m1 – a number of dwellings in sample, which have at least one responded household;

m2 – a number of responded households in sample.

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

Cross-sectional weights were calibrated on a basis of demographic data by breaking them down by a degree of urbanization (three groups — Riga (the capital city), large towns and others), 11 age groups (16-20; 21-25; 26-30; 31-35; 36-40; 41-45; 46-50; 51-55; 56-60; 61-65; 66+) and sex. Another variable was demographic data by 6 statistical regions of Latvia. The final household weights were used both for households and for individuals.

2.1.8.4. Final cross-sectional weights

The final cross-sectional weights DB090 were calculated as the 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

2.2.1. Standard error and effective sample size

- **At-risk-of poverty rate and mean equivalised disposable income**

It was assumed that at-risk-of poverty rate is similar to ratio of two totals (ignoring that the threshold is an estimate from the sample). Standard error and design effect for at-risk-of poverty rate were estimated as standard error and design effect for ratio. The standard error was estimated by using the Taylor linearization method. The correction of finite population at the PSU level was applied for the variance estimate in each stratum. The same methodology was used for estimating the standard error and design effect for the mean equivalised disposable income.

- **Gini coefficient**

Linearization was applied for *Gini* coefficient. A standard error for *Gini* coefficient was estimated as a standard error for the total of linearized variable. The correction of finite population at the PSU level was applied to the variance estimate in each stratum.

- **Design effect**

The design effect was calculated as a ratio of the variance for the sampling design used in the EU-SILC and the variance for the simple random sampling of households.

- **Software**

The variance estimates and design effect were computed using software SUDAAN and SPSS.

Table 2.4. Estimates, the standard error and design effect for common cross-sectional EU indicators

| Indicator | Value | Achieved sample size | Standard error | Design effect | Effective sample size |
|--|-------|----------------------|----------------|---------------|-----------------------|
| At-risk-of-poverty rate after social transfers | 19.3 | 6 599 | 0.58 | 1.06 | 6 236 |
| At-risk-of-poverty rate before all transfers including old-age and survivor's benefits | 27.3 | 6 599 | 0.66 | 1.07 | 6 169 |
| At-risk-of-poverty rate before all transfers | 45.7 | 6 599 | 0.73 | 1.08 | 6 092 |
| Gini coefficient | 35.2 | 6 599 | 0.66 | - | - |
| Mean equalized disposable income | 3638 | 6 599 | 205.77 | 1.29 | 5 099 |

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 territories (smaller than LAU 2) during the Population Census 2000. The list contained information about the number of households in each counting area.

At the second stage a 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 given in November 2010. Both statistical registers of dwellings and households were updated by using the Population Register. Thus the time lag between the last update of registers and the moment of the actual EU-SILC survey sampling was around 4 months.

The over-coverage relates either to misclassified units that are in fact out of scope, or to units that do not exist in practice (i.e. the address does not exist or it is a non-residential address or is unoccupied or not a principal residence (DB120 = 23)). In total the over-coverage rate of the total amount of dwellings included in the EU-SILC survey 3.9% (327 from 8 463 dwellings).

Table 2.5. Distribution of over-coverage

| Type of over-coverage | Number of addresses | Proportion of over-coverage by type, (%) |
|--|---------------------|--|
| Address does not exist (DB120 = 231) | 20 | 8.2 |
| Non - residential address (DB120 = 232) | 156 | 63.7 |
| Address is unoccupied (DB120 = 233) | 12 | 4.9 |
| Address is not principal residence (DB120 = 234) | 57 | 23.3 |
| Total | 245 | 100 |

In addition there were 82 dwellings, which were not identified by the over-coverage reason; those were dwellings of households, which had been surveyed in the previous year.

The level of under-coverage is not estimated.

2.3.2. Measurement and processing errors

2.3.2.1. Measurement errors

In SILC 2011 operation 4 types of questionnaires were utilized (3 types of questionnaires are the same as in the previous SILC operations and 1 separate type of questionnaire to collect secondary variables): 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.), Personal Questionnaire (to collect all needed information for each household member aged 16 and over in previous calendar year), Questionnaire for secondary variables and the Household List (additional document to record all 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 the Household List.

The Blaise CAPI and CATI applications as well as the paper questionnaires (to be applied in specific circumstances) 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 repudiate 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 interviewer's service carried out the fieldwork of the EU-SILC survey. For the field staff was organised a 1 or 2 (for inexperienced interviewers) days intensive training session. The aims of the training were to introduce the fieldwork staff with methodology of the EU-SILC survey, to instruct interviewers for accurate fieldwork execution of the survey and give them information to motivate respondents for participation in the survey. Several tests 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, an introduction letter with a EU-SILC leaflet were sent to selected addresses to establish the first contact with a household before the interview.

Measurement errors were detected by logical checks and verification of received data.

2.3.2.2. *Processing errors*

2011 was the sixth year when the BLAISE based data entry application was applied. Compared with 2010, the data entry program was not significantly changed in comparison with 2011.

Still 3.6% of personal interviews were completed 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.

The quantity of personal data from the previous year of the survey introduced into the program had remained the same compared with 2010.

Data were transformed from BLAISE to MS ACCESS (a modified version of application of 2010), where the initial database had been scrutinized and corrected. Data from the EU-SILC 2011 operation were compared with data from the previous EU-SILC operations, when it was possible. Compliance of the database with Eurostat requirements was checked with the SAS data checking program.

2.3.3. *Non-response errors*

2.3.3.1. *Achieved sample size*

6 599 households' interviews were accepted for the database and used for analysis.

There were 13 503 persons aged 16 years and older who were members of households for which the interview is accepted for the database, and that completed a personal interview.

2.3.3.2. *Unit non-response*

For the total sample (four rotational groups)

The final response rates were calculated according to formulas given by Eurostat:

- Household non-response rate $NRh = 18.9$
- Individual non-response rate $NRp = 0.8$
- Overall non-response rate $*NRp = 19.6$

For the new households (rotational group 2)

The final response rates were calculated according to formulas given by Eurostat:

- Household non-response rate $NRh = 33.7$
- Individual non-response rate $NRp = 1.0$
- Overall non-response rate $*NRp = 34.4$

2.3.3.3. *Distribution of households (original units) by 'record of contact at address' (DB120), by 'household questionnaire result' (DB130) and by 'household interview acceptance' (DB135)*

Table 2.6. Distribution of households by 'record of contact at address' (DB120) for each rotational group

| | Rotational group 1 | | Rotational group 2 | | Rotational group 3 | | Rotational group 4 | | Total | |
|---|-----------------------|------------|-----------------------|------------|-----------------------|------------|-----------------------|------------|--------------|-------------|
| | N | % | N | % | N | % | N | % | N | % |
| Total (DB120 = 11 to 23) | 1 998 | 100 | 3 206 | 100 | 1 528 | 100 | 1 731 | 100 | 8 463 | 100 |
| Address contacted (DB120 = 11) | 1 949 | 97.5 | 2 841 | 88.6 | 1 487 | 97.3 | 1 673 | 96.6 | 7 950 | 93.9 |
| Address non-contacted (DB120 = 21 to 23) | 49 | 2.5 | 365 | 11.4 | 41 | 2.7 | 58 | 3.4 | 513 | 6.1 |
| Total address non-contacted (DB120 = 21 to 23) | 49 | 100 | 365 | 100 | 41 | 100 | 58 | 100 | 513 | 100 |
| Address cannot be located (DB120 = 21) | 11 | 22.4 | 8 | 2.2 | 1 | 2.4 | 3 | 5.2 | 23 | 4.5 |
| Address unable to access (DB120 = 22) | 12 | 24.5 | 121 | 33.2 | 14 | 34.1 | 16 | 27.6 | 163 | 31.8 |
| Address does not exist or is non-residential address or is unoccupied or not principal residence (DB120 = 23) | 26 | 53.1 | 236 | 64.7 | 26 | 63.4 | 39 | 67.2 | 327 | 63.7 |

Table 2.7. Distribution of addresses contacted by 'household questionnaire result' and by 'household interview acceptance' for each rotational group

| | Rotational group 1 | | Rotational group 2 | | Rotational group 3 | | Rotational group 4 | | Total | |
|--|-----------------------|------------|-----------------------|------------|-----------------------|------------|-----------------------|------------|--------------|--------------|
| | N | % | N | % | N | % | N | % | N | % |
| Total (DB130 = 11 to 24) | 1 949 | 100 | 2 841 | 100 | 1 487 | 100 | 1 673 | 100 | 7 950 | 100 |
| Household questionnaire completed (DB130 = 11) | 1 743 | 89.4 | 1 969 | 69.3 | 1 385 | 93.1 | 1 504 | 89.9 | 6 601 | 83.0 |
| Interview not completed (DB130 = 21 to 24) | 206 | 10.6 | 872 | 30.7 | 102 | 6.9 | 169 | 10.1 | 1 349 | 17.0 |
| Total interview not completed (DB130 = 21 to 24) | 206 | 100 | 872 | 100 | 102 | 100 | 169 | 100 | 1 349 | 100 |
| Refusal to co-operate (DB130 = 21) | 126 | 61.2 | 496 | 56.9 | 52 | 51.0 | 84 | 49.7 | 758 | 56.2 |
| Entire household temporarily away for duration of fieldwork (DB130 = 22) | 43 | 20.9 | 335 | 38.4 | 32 | 31.4 | 56 | 33.1 | 466 | 34.5 |
| Household unable to respond (illness, incapacity, etc) (DB130 = 23) | 10 | 4.9 | 29 | 3.3 | 2 | 2.0 | 7 | 4.1 | 48 | 3.6 |
| Other (DB130 = 24) | 27 | 13.1 | 12 | 1.4 | 16 | 15.7 | 22 | 13.0 | 77 | 5.7 |
| Household questionnaire completed (DB135 = 1 to 2) | 1 743 | 100 | 1 969 | 100 | 1 385 | 100 | 1 504 | 100 | 6 601 | 100 |
| Interview accepted to database (DB135 = 1) | 1 743 | 100 | 1 969 | 100 | 1 383 | 99.9 | 1 504 | 100 | 6 599 | 100.0 |
| Interview rejected (DB135 = 2) | 0 | 0 | 0 | 0 | 2 | 0.1 | 0 | 0 | 2 | 0.0 |

2.3.3.4. Distribution of substituted units

Substitution was not used.

2.3.3.5. Item non-response

The tables below show the amount following information on each income component at the personal and at the household level:

- percentage of persons/households having received an amount of income (other than 0);
- percentage of persons/households having received income but no information about the amount of the received income have been obtained from the questionnaire (missing value);
- percentage of persons/households providing partial information about the income variable in the questionnaire (responding part of questions related to income amounts).

Table 2.8. Distribution of item non-response for income variables collected at household level

| Income variable | % of households having received an amount | % of households with missing values (before imputation) | % of households with partial information (before imputation) |
|--|--|--|---|
| Total household gross income (HY010) | 99.4 | 27 | 70.3 |
| Total disposable household income (HY020) | 99.7 | 7.8 | 89.2 |
| Total disposable household income before social transfers other than old-age and survivor's benefits (HY022) | 98.5 | 8.8 | 87.1 |
| Total disposable household income before social transfers including old-age and survivor's benefits (HY023) | 92.1 | 2.9 | 91.4 |
| Net income components at household level | | | |
| Imputed rent (HY030N) | 92.3 | 100.0 | 0 |
| Income from rental of a property or land (HY040N) | 0.8 | 6.0 | 2.0 |
| Interest, dividends, profit from capital investments in unincorporated business (HY090N) | 2.5 | 30.2 | 2.5 |
| Family/Children related allowances (HY050N) | 28.0 | 91.4 | 8.1 |
| Social exclusion not elsewhere classified (HY060N) | 6.9 | 24.2 | 3.9 |
| Housing allowances (HY070N) | 8.3 | 4.0 | 0 |
| Regular inter-household cash transfer received (HY080N) | 11.5 | 6.8 | 0 |
| Interest repayments on mortgage (HY100N) | 5.8 | 100.0 | 0 |
| Income received by people aged under 16 (HY110N) | 0.2 | 0 | 0 |
| Regular taxes on wealth (HY120N) | 75.6 | 6.7 | 0 |
| Regular inter-household cash transfer paid (HY130N) | 10.5 | 3.6 | 0 |
| Tax on income and social contributions (HY140N) | 70.4 | 22.1 | 77.5 |
| Value of goods produced by own-consumption (HY170N) | 42.0 | 100.0 | 0 |

| Income variable | % of households having received an amount | % of households with missing values (before imputation) | % of households with partial information (before imputation) |
|--|---|---|--|
| Gross income components at household level | | | |
| Imputed rent (HY030G) | 92.3 | 100.0 | 0 |
| Income from rental of a property or land (HY040G) | 0.8 | 6.0 | 2.0 |
| Interest, dividends, profit from capital investments in unincorporated business (HY090G) | 2.5 | 72.8 | 4.3 |
| Family/Children related allowances (HY050G) | 28.0 | 91.4 | 8.1 |
| Social exclusion not elsewhere classified (HY060G) | 6.9 | 24.2 | 3.9 |
| Housing allowances (HY070G) | 8.3 | 4.0 | 0 |
| Regular inter-household cash transfer received (HY080G) | 11.5 | 6.8 | 0 |
| Interest repayments on mortgage (HY100G) | 5.8 | 100.0 | 0 |
| Income received by people aged under 16 (HY110G) | 0.2 | 12.5 | 0 |
| Regular taxes on wealth (HY120G) | 75.6 | 6.7 | 0 |
| Regular inter-household cash transfer paid (HY130G) | 10.5 | 3.6 | 0 |
| Tax on income and social contributions (HY140G) | 70.4 | 22.1 | 77.5 |
| Value of goods produced by own-consumption (HY170G) | 42.0 | 100.0 | 0 |

Table 2.9. Distribution of item non-response for income variables collected at personal level

| Income variable | % of persons 16+ having received an amount | % of persons 16+ with missing values (before imputation) | % of persons 16+ with partial information (before imputation) |
|--|--|--|---|
| Net income components at personal level | | | |
| Employee cash or near cash income (PY010N) | 51.0 | 16.1 | 40.9 |
| Non-cash employee income (PY020N) | 3.5 | 47.2 | 9.5 |
| Company car (PY021N) | 0.5 | 100.0 | 0 |
| Contributions to individual private pension plans (PY035N) | 1.4 | 9.1 | 0 |
| Cash benefits or losses from self-employment (PY050N) | 4.3 | 11.7 | 0 |
| Pension from individual private plans (PY080N) | 0 | 100.0 | 0 |
| Unemployment benefits (PY090N) | 8.6 | 79.6 | 11.3 |
| Old-age benefits (PY100N) | 31.9 | 98.7 | 1.0 |
| Survivor's benefits (PY110N) | 1.6 | 100.0 | 0 |
| Sickness benefits (PY120N) | 8.6 | 88.2 | 0.5 |
| Disability benefits (PY130N) | 5.4 | 100.0 | 0 |
| Education-related benefits (PY140N) | 1.7 | 7.3 | 0 |

| Income variable | % of persons 16+ having received an amount | % of persons 16+ with missing values (before imputation) | % of persons 16+ with partial information (before imputation) |
|--|--|--|---|
| Gross income components at personal level | | | |
| Employee cash or near cash income (PY010G) | 51.0 | 16.1 | 75.0 |
| Non-cash employee income (PY020G) | 3.5 | 47.2 | 9.5 |
| Company car (PY021G) | 0.5 | 100.0 | 0 |
| Contributions to individual private pension plans (PY035G) | 1.4 | 9.1 | 0 |
| Cash benefits or losses from self-employment (PY050G) | 4.3 | 11.7 | 10.1 |
| Pension from individual private plans (PY080G) | 0 | 100.0 | 0 |
| Unemployment benefits (PY090G) | 8.6 | 85.3 | 8.1 |
| Old-age benefits (PY100G) | 31.9 | 98.7 | 0.9 |
| Survivor's benefits (PY110G) | 1.6 | 100.0 | 0 |
| Sickness benefits (PY120G) | 8.6 | 88.2 | 0.5 |
| Disability benefits (PY130G) | 5.4 | 100.0 | 0 |
| Education-related benefits (PY140G) | 1.7 | 7.3 | 0.9 |

Missing values of income components were filled using Hot Deck imputation method. The main principle of the Hot Deck method is to use the current data (donors) to provide imputed values for records with missing values. Imputation was done within homogeneity group.

Households were divided in homogeneity groups by HS050 (capacity to afford a meal with meat, chicken, fish (or vegetarian equivalent) every second day), HS110 (do you have a car?), HS060 (capacity to face unexpected financial expenses) and region. Individuals were divided in similar groups by district, NACE, occupation and sex.

According to the interagency agreement signed between the CSB and the State Social Insurance Agency (SSIA) micro-data files regarding pensions and state social benefits paid to the EU-SILC 2011 respondents (during 2010) were received from the SSIA and used to prepare income variables. Only information about some minor benefits administrated by local municipalities or pensions paid by foreign countries and service pensions, which were not administrated by SSIA, was collected via questionnaires. Thus the imputation factor to a large extent shows the percentage of collected value (minor income components) from the recorded value in data files (mainly from administrative registers).

2.4. Mode of data collection

Table 2.10. Distribution of household members aged 16 and over by data status (RB250) and rotational group
HOUSEHOLD MEMBERS AGED 16 AND OVER (RB245 = 1)

| | Total | RB250 = 11 | RB250 = 12 | RB250 = 13 | RB250 = 14 | RB250 = 21 | RB250 = 22 | RB250 = 23 | RB250 = 31 | RB250 = 32 | RB250 = 33 |
|---------------------------|---------------|------------|------------|---------------|------------|------------|------------|------------|------------|------------|------------|
| Total | 13 495 | 0 | 0 | 13 382 | 113 | 0 | 0 | 0 | 0 | 0 | 0 |
| % | 100 | 0 | 0 | 99.2 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rotational group 1 | 3 544 | 0 | 0 | 3 514 | 30 | 0 | 0 | 0 | 0 | 0 | 0 |
| % | 100 | 0 | 0 | 99.2 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rotational group 2 | 3 998 | 0 | 0 | 3 957 | 41 | 0 | 0 | 0 | 0 | 0 | 0 |
| % | 100 | 0 | 0 | 99.0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rotational group 3 | 2 907 | 0 | 0 | 2 887 | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| % | 100 | 0 | 0 | 99.3 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rotational group 4 | 3 046 | 0 | 0 | 3 024 | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
| % | 100 | 0 | 0 | 99.3 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 2.11. Distribution of household members aged 16 and over by type of interview (RB260) and rotational group
HOUSEHOLD MEMBERS AGED 16 AND OVER ((RB245 = 1) and (RB250 = 11 or 13))

| | Total | RB260 = 1 | RB260 = 2 | RB260 = 3 | RB260 = 4 | RB260 = 5 |
|---------------------------|---------------|--------------|--------------|--------------|------------|--------------|
| Total | 13 376 | 482.0 | 7 650 | 2 706 | 2 | 2 536 |
| % | 100 | 3.6 | 57.2 | 20.2 | 0.0 | 19.0 |
| Rotational group 1 | 3 510 | 82 | 1762 | 1056 | 0 | 610 |
| % | 100 | 2.3 | 50.2 | 30.1 | 0.0 | 17.4 |
| Rotational group 2 | 3 956 | 243 | 3068 | 164 | 1 | 480 |
| % | 100 | 6.1 | 77.6 | 4.1 | 0.0 | 12.1 |
| Rotational group 3 | 2 887 | 78 | 1 248 | 843 | 0 | 718 |
| % | 100 | 2.7 | 43.2 | 29.2 | 0.0 | 24.9 |
| Rotational group 4 | 3 023 | 79 | 1 572 | 643 | 1 | 728 |
| % | 100 | 2.6 | 52.0 | 21.3 | 0.0 | 24.1 |

It should be noticed, that there is no information about 3 persons

2.5. Interview duration

Mean duration of a household interview: 10 minutes and 59 seconds

Mean interview duration per household: 26 minutes and 57 seconds

Thus, average interview duration per household is below the one-hour limit set in Regulation No 1177/2003.

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 (2011 operation).

3.1.1. The reference population

There were no divergences from the common definition. Persons living in private households within national territory were the reference population of the EU-SILC survey.

3.1.2. The private household definition

There were no divergences from the common definition.

3.1.3. The household membership

There were no divergences from the common definition. Due to the complexity of household membership several practical and comprehensive explanations based on specific cases (examples) were given to interviewers.

3.1.4. The income reference period

There were no divergences from the common definition. In Latvia the income reference period is the previous calendar year (2010).

3.1.5. The period of taxes on income and social insurance contributions

In Latvia taxes and social insurance contributions refer to the income received during the income reference period (2010). The only exception is repayments or receipts for tax adjustment. These are taxes and social insurance contributions, which have been received/paid during the income reference period, but may refer to previous years. Those repayments/receipts are included in variable HY140 (tax on income and social contributions).

3.1.6. The reference period for taxes on wealth

In Latvia the reference period for taxes on wealth refer to the income reference period (2010).

3.1.7. *The lag between the income reference period and current variables*

The lag between the end of the income reference period and current variables is from 3 to 7 months.

3.1.8. *The total duration of the data collection of the sample*

Fieldwork (data collection) started in the middle of March 2011 and lasted till the beginning of August 2011.

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

There were no divergences from the common definitions.

3.2. *Components of income*

Classification of net and gross income components in national EU-SILC survey was made according to the description of doc. EU-SILC 065 (2011 operation).

3.2.1.1 *Total household gross income*

There were no divergences from common standards.

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 we had provided income components of gross and net series, the total disposable household income, before social transfers other than old-age and survivor's benefits had been calculated from variable HY020 using only net income components (as it was done before 2007), because old age pensions and disability benefits above the certain amount was taxable income and thus the real total disposable household income before all social transfers would have been wrongly decreased by paid taxes from old age pension and disability benefits.

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 we had provided income components of gross and net series, the total disposable household income, before social transfers including old-age and survivor's benefits had been calculated from variable HY020 using only net income

components (as it was done before 2007), because old age pensions and disability benefits above the certain amount was taxable income and thus the real total disposable household income before all social transfers would have been wrongly decreased by paid taxes from old age pension and disability benefits.

3.2.1.5. Imputed rent

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;
- dwelling's area in square metres.

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

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;
- year, when dwelling had been 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 are no divergences from common standards.

3.2.1.17. Repayments/receipts for tax adjustments

There were no divergences from common standards. 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.

A special method was used to evaluate the non-cash employee income from the use of a company car for personal purposes. According to the Latvian situation the method based on a system analysis model was chosen for calculating the employee non-cash income from the use of a company car for personal purposes. Components for calculating the monetary value of this, a non-cash employee income, was included in the questionnaire and collected directly from respondents: the class of the car, the year of its production, the total number of kilometres driven by the company car in the previous calendar year (2010), the annual number 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, the purchase of tires (i.e., did the employer pay bills for the purchase of fuel, technical inspection of the car, the purchase of tires), restrictions of the use of the company car (i.e. if employer created restrictions to the employee for the use of the company care for personal purposes). It was assumed that the employer covered all costs related to the use of the company car for the employee's personal use.

3.2.1.20. Employers' social contributions

There were no divergences from common standards.

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

The net (and gross) income and losses from self-employment were asked to each household member aged 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 the personal use (incl. 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 of goods produced for own consumption was calculated using information from the HBS. Household members responsible for agricultural production were asked to pick the products, which the household produced for own consumption during the income reference period, from the list (obtained from the HBS). This question was asked only to those households, which had used land for certain types of agricultural activity. Depending on the size of household and consumed products, the value of goods produced for own consumption was calculated. The value of goods produced for own consumption was attributed to responsible household member.

3.2.1.23. Unemployment benefits

There were no divergences from common standards.

3.2.1.24. Old-age benefits

There were no divergences from common standards.

3.2.1.25. Survivors' benefits

There were no divergences from common standards.

3.2.1.26. Sickness benefits

There were no divergences from common standards.

3.2.1.27. Disability benefits

There were no divergences from common standards.

3.2.1.28. Education related allowances

There are no divergences from common standards.

3.2.1.29. Gross monthly earnings for employees

Value was not recorded as Latvia uses wage statistics for calculating the gender pay gap.

3.2.2. The source of collecting income variables

According to the agreement signed between the CSB and the SSIA micro-data files regarding pensions and state social benefits paid to the EU-SILC 2011 respondents (during 2010) were received from the SSIA and used to prepare corresponding income variables. Only information about some minor benefits, which had been administrated by local municipalities, or pensions paid by foreign countries and service pensions, which had not been administrated by the SSIA, was asked in questionnaires. The exception was the net employee cash or near cash income (PY010N), which also was available from the State Revenue Service (SRS), but it was decided to use information from questionnaires. The gross employee cash or near cash income (PY010G) was obtained counting up the net employee cash or near cash income from questionnaires with paid taxes from the SRS. Information from the SRS is also used for imputation purposes if the amount of the net employee cash or near cash income was missing in the questionnaire and in those cases when the SRS information showed higher income than reported in the questionnaire.

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

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

See 3.2.2.

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

See 3.2.2.

4. Coherence

The aim of the chapter on coherence is to validate the data of EU-SILC 2011 (income reference year - 2010) with other data sources.

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

In this section will be compared the EU-SILC data with various external data sources as 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 (fully 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.

In the EU-SILC the average monthly employee net cash or near cash income (PY010N) in 2010 (income reference year) was 350 LVL. In wage statistics this figure is lower – 316 LVL. Data of the EU-SILC survey is calculated for a respondent, who had received the employee cash or near cash income (PY010N) and who had been working as an employee (full-time) at least one month during the income reference period (PL073 > 0). The acquired results show that the EU-SILC data by 11% exceeded enterprise statistical data on average labour income in 2010 (by 13 % in 2009). 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 employees' income is counted into one variable (income from the main job, second, third etc.), whereas in wage statistics, the 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 wages, from which have been deducted taxes (information about informal employee income might be left behind).

Table 4.1 presents the number of persons receiving income components in the EU-SILC, 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 have been 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 table below.

Table 4.1. Number of persons receiving several income components in 2010 (in thousands)

| EU-SILC target variable | EU-SILC | HBS | Other sources |
|--|---------|-------|--------------------|
| Employee cash or near cash income (PY010N) | 1038.5 | 799.6 | 830.2 ¹ |
| Old-age benefits (PY100N) | 464.0 | 464.9 | 475.9 ² |
| Survivor's benefits (PY110N) | 29.6 | 14.3 | 22.9 ² |
| Disability benefits (PY130N) | 101.7 | 83.1 | 69.3 ² |

¹ Labour Force Survey, persons aged 15-74 years with wages and salaries

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 was by 208.3 thousand higher than in the Labour Force Survey and by 238.9 thousand higher than in the HBS.

Comparing data on employees' net wage (table 4.2.) we can see that the EU-SILC data slightly better represent employees with comparatively higher wages and salaries (above LVL 300 per month).

Table 4.2. Employees' in the age between 16 and 74 years monthly net wages in 2010

| | EU-SILC | LFS ¹ |
|----------------------------------|------------|------------------|
| Employees | 100 | 100 |
| Of which by wage (in LVL): | | |
| under 200.01 | 32.2 | 42.0 |
| 200.01-300.00 | 24.7 | 25.5 |
| 300.01-500.00 | 26.9 | 19.7 |
| 500.01-1000.00 | 13.3 | 6.2 |
| 1000.01 and more | 2.9 | 0.9 |
| Wage was not calculated | x | 3.5 |
| Wage was calculated but not paid | x | 0.1 |
| Unspecified | x | 2.1 |

Main job, in the age of 15-74

Table 4.3. Occupation (PL051) in employment according to EU-SILC and LFS, employed persons aged 16-64 (15-64 in LFS) in 2011, %

| | EU-SILC | LFS |
|--|---------------|---------------------------|
| PL051 Occupation | | |
| (11-14) Managers | 9.1 | 10.1 |
| (21-26) Professionals | 17.9 | 16.4 |
| (31-35) Technicians and associate professionals | 12.8 | 12.1 |
| (41-44) Clerical support workers | 5.8 | 5.6 |
| (51-54) Service and sales workers | 14.7 | 15.0 |
| (61-63) Skilled agricultural and fishery workers | 2.9 | 3.6 |
| (71-75) Craft and related trades workers | 12.6 | 12.8 |
| (81-83) Plant and machine operators and assemblers | 10.1 | 9.6 |
| (91-96) Elementary occupations | 13.8 | 14.4 |
| (01-03) Armed forces occupations | 0.2 | |
| Total ¹ | 100 | 100 |
| Number of persons | 877688 | 949300¹ |

Remark: LFS data for 2011 are **not** recalculated according to results of the Population and Housing Census 2011.

¹ The total number in this and next table includes army forces and persons with unspecified occupation

Table 4.4. NACE (Rev. 2; PL111) in employment. Employed persons of aged 16-64 (EU-SILC: selected respondents; LFS persons aged 15-64) in 2011, %

| | EU-SILC | LFS |
|--|------------|------------------------|
| PL111 NACE | | |
| A Agriculture, forestry and fishing | 7.3 | 9.3 |
| B Mining and quarrying | 0.4 | 0.3 |
| C Manufacturing | 13.9 | 13.7 |
| D Electricity, gas, steam and air conditioning supply | 1.3 | 1.4 |
| E Water supply; sewerage, waste management and remediation activities | 0.9 | 0.9 |
| F Construction | 6.6 | 7.4 |
| G Wholesale and retail trade; repair of motor vehicles and motorcycles | 14.9 | 15.8 |
| H Transportation and storage | 9.2 | 8.8 |
| I Accommodation and food service activities | 2.7 | 3.0 |
| J Information and communication | 2.6 | 3.0 |
| K Financial and insurance activities | 2.4 | 2.1 |
| L Real estate activities | 1.9 | 1.9 |
| M Professional, scientific and technical activities | 3.6 | 2.7 |
| N Administrative and support service activities | 3.3 | 3.7 |
| O Public administration and defense; compulsory social security | 8.6 | 6.4 |
| P Education | 10.1 | 10.2 |
| Q Human health and social work activities | 6.1 | 4.8 |
| R Arts, entertainment and recreation | 2.2 | 1.9 |
| S Other service activities | 1.8 | 2.1 |
| T Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use | 0.2 | 0.2 |
| U Activities of extraterritorial organisations and bodies | 0.1 | ... |
| Total | 100 | 100¹ |

4.3. Comparison of other target variables with external sources

An important background indicator is a mean size of household. Official statistics in this area is based on the Population Census 2000 data. For the periods between the censuses it is based on calculations. According to these calculations, in 2011 the mean household size was 2.48 persons. Data on the mean size of households are given in Table 4.5.

Table 4.5. Mean size of household in 2011

| | Population statistics | EU-SILC | HBS |
|---------------------------------|-----------------------|---------|------|
| Mean size of household, persons | 2.48 | 2.51 | 2.43 |

A comparison of data shows that such survey as the EU-SILC probably under-represents households with a small number of persons. The risk of failing to make contacts with these households is much higher.

A comparison of the breakdown of households by the number of persons in the household (Table 4.6), by age of household members (Table 4.7) and by the demographical type of the household (Table 4.8) is shown below.

Table 4.6. Distribution of households by size in 2011

| | EU-SILC | | HBS | |
|--------------------------------|------------|------------------------------------|------------|------------------------------------|
| | % | number of households, in thousands | % | number of households, in thousands |
| All households | 100 | 879.2 | 100 | 839.6 |
| of which by number of members: | | | | |
| 1 person | 29.2 | 256.3 | 27.3 | 229.3 |
| 2 persons | 28.1 | 247.3 | 32.9 | 276.2 |
| 3 persons | 20.7 | 181.7 | 20.8 | 174.6 |
| 4 persons | 13.3 | 117.0 | 11.3 | 95.1 |
| 5 persons and more | 8.7 | 76.9 | 7.7 | 64.4 |

Table 4.7. Distribution of household members by age (in per cent) in 2011

| | EU-SILC | HBS |
|------------------------------|------------|------------|
| All household members | 100 | 100 |
| of which by age brackets | | |
| 0-15 | 15.8 | 15.4 |
| 16-24 | 13.1 | 11.9 |
| 25-49 | 35.9 | 34.6 |
| 50-64 | 18.7 | 19.8 |
| 65+ | 16.6 | 18.3 |

Table 4.8. Distribution of households by demographical type (in per cent) in 2011

| | EU-SILC | HBS |
|-----------------------------------|------------|------------|
| All households | 100 | 100 |
| of which: | | |
| One person | 29.2 | 27.3 |
| of which: | | |
| below the age of 65 | 14.6 | 12.1 |
| over the age of 65 | 14.5 | 15.2 |
| Couple without children | 15.7 | 22.1 |
| One adult with children | 4.1 | 3.4 |
| Couple with 1 child | 7.4 | 8.9 |
| Couple with 2 children | 4.9 | 4.5 |
| Couple with 3 and more children | 1.3 | 2.0 |
| Other households with children | 12.4 | 9.3 |
| Other households without children | 25.1 | 22.6 |

Table 4.9 presents the distribution of population by ISCED level in the EU-SILC and in the LFS. As it can be seen, there are differences in overall distribution, but they are not substantial.

Table 4.9. Distribution of population in the age between 16 and 74 years by the ISCED level in 2011

| | EU-SILC | | LFS ¹ | |
|--------------------------|---------------------|--------------|---------------------|------------|
| | thousand of persons | % | thousand of persons | % |
| ISCED 0 | 3.0 | 0.2 | 2.4 | 0.1 |
| ISCED 1 | 24.7 | 1.5 | 43.5 | 2.5 |
| ISCED 2 | 362.4 | 21.4 | 322.6 | 18.4 |
| ISCED 3 | 781.9 | 46.2 | 864.2 | 49.3 |
| ISCED 4 | 114.5 | 6.8 | 122.2 | 7.0 |
| ISCED 5 | 379.7 | 22.4 | 392.0 | 22.3 |
| ISCED 6 | 4.3 | 0.3 | 5.0 | 0.3 |
| Total² | 1691.7 | 100.0 | 1 754.3 | 100 |

¹ In the age of 15-74² The total number includes persons with unspecified level of education and persons without formal education

Tables 4.10– 4.11 represent the socio-economic status of the household member and those, who are in employment. There are no significant differences between the EU-SILC and data of other surveys. Emerging differences are probably related to the fact that the main activity status is entirely self-defined in the EU-SILC at the time of interview, whereas in the LFS the self-defined activity status refers to the last three months.

Table 4.10. Distribution of population in the age between 16 and 74 years by self-defined economic status in 2011

| | EU-SILC | | LFS | |
|----------------------|----------------------|------------|----------------------|------------|
| | thousands of persons | % | thousands of persons | % |
| Working | 878.7 | 51.9 | 950.9 | 54.8 |
| Unemployed | 234.4 | 13.9 | 196.9 | 11.4 |
| Pupil, student | 154.7 | 9.1 | 160.7 | 9.3 |
| In retirement | 289.0 | 17.1 | 271.9 | 15.7 |
| Permanently disabled | 60.9 | 3.6 | 49.2 | 2.8 |
| Domestic task | 50.6 | 3.0 | 74.1 | 4.3 |
| Other inactive | 23.2 | 1.4 | 30.1 | 1.7 |
| Total | 1691.4 | 100 | 1 733.8 | 100 |

Table 4.11. Status of the employed population in the main job in 2011

| Age | EU-SILC | LFS |
|--|-------------|------------|
| | 16+ | 15-74 |
| All employed | 100 | 100 |
| Employees (workers) | 93.9 | 88.6 |
| Employers (owners) | 1.9 | 3.7 |
| Self-employed | 3.8 | 6.6 |
| Unpaid person who helps another member of the family in enterprise or private practice, craft or farm work | 0.3 | 1.1 |

Table 4.12 presents the share of households by the type of dwelling. The differences between the two data sources are small.

Table 4.12. Distribution of households by the type of dwelling in 2011

| | EU-SILC | HBS |
|---------------------------------------|---------|------|
| Detached house | 26.3 | 24.7 |
| Semi-detached house or terraced house | 3.6 | 3.7 |
| Apartment or flat | 69.9 | 71.3 |
| Other kind of accommodation | 0.3 | 0.2 |
| Total | 100 | 100 |