

Eurostat/OECD 2018 questionnaire on the methodology underlying labour input data in national accounts

Country: Estonia
Date: March 2018

Part I: Methods

1. Employment in persons

Question 1.1: Please describe the architecture of your estimation method for employment in persons. Please include details of differences in methods and data sources that may exist at different points in the time series (e.g. a break in the series) or due to the timing of the estimate (e.g. flash estimate, regular estimate or annual data). Please also provide links to articles that may be relevant.

All data come from the Estonian Labour Force Survey (ELFS). The first ELFS was conducted in 1995, which collected retrospective data of 1989-1994. Data for 1995-1999 were obtained with surveys in 1997-1999 which were conducted in the 2nd quarter. From 2000 ELFS is a continuous survey.

The main differences between the employment definitions of ELFS and National Accounts (NA) are the following:

- according to NA conscripts are employees while ELFS defines them as economically inactive population;
- according to NA employment includes also non-residents (foreigners staying less than one year in Estonia) working for resident producer units while ELFS does not include them;
- according to NA employment does not include residents who are working abroad or in the extra-territorial organisations in Estonia while ELFS does;
- according to NA employment includes voluntary employees if their volunteer activities result in goods (e.g. the construction of a dwelling, church or other building) while ELFS does not.

The ELFS data is adjusted as much as possible to NA definition i.e. conscripts are included to employment and residents working outside the economic territory (abroad or in the extra-territorial organisations in Estonia) are excluded from employment. This means that ELFS data used by NA deviate from the NA definitions only by not including the foreign workers staying less than one year in Estonia and volunteers (these groups are not measured in the ELFS).

Question 1.2: What is the main original source for employment in the national accounts (e.g. administrative source, labour force survey, business survey, other)? Briefly describe this source, its coverage (including over time, range of businesses/households covered, etc.), its availability and whether it is in terms of jobs and/or persons.

Please specify the sources used for different parts of employment (in particular if sources differ between employees and self-employed, and/or between industries, firms of different size, etc.). If sources differ, please provide a clear distinction when answering the questions that follow.

ELFS employed persons adjusted to NA concepts (NA employed persons) are used for all industries, for employees and self-employed, for annual and quarterly data. ELFS data are available in terms of persons and in terms of jobs.

Question 1.3: Please describe how estimates of annual figures based on higher frequency data (e.g. weekly, monthly, quarterly) are derived. Please also specify, if relevant, how annual figures are derived if survey information is less periodic (e.g. every 5 years)?

Annual average data is the arithmetic average of quarterly data (sum of quarterly data divided to four).

Question 1.4: Please describe the adjustments made to pass from jobs to the concept of persons (if the original source is in terms of jobs).

Not applicable.

Question 1.5: Please describe the adjustments made to correct for coverage of the economic territory (see ESA §11.17-11.19)? This refers specifically to residents working for non-resident units abroad non-residents working in resident units. If relevant, please also describe adjustments for military (including conscripts, where applicable) and other collective households not covered by your main source.

NA employed persons (domestic concept) = ELFS employed persons + ELFS conscripts – ELFS residents working outside the economic territory (abroad or in the extra-territorial organisations in Estonia)

Question 1.6: Which adjustments are made for the unobserved economy (e.g. producers that deliberately do not register, individuals providing their labour that are not required to register, illegal workers, etc.)?

Not applicable.

Question 1.7: Which, if any, other adjustments are made (e.g. inclusion of resident workers below the age threshold, prisoners, adjustments made to account for statistical deficiencies in the source data, etc.)?

Not applicable.

Question 1.8: In cases where Labour Force Survey data have not been used as the main source (even if only for some activities or groups of workers), please explain why. Are LFS data used for adjustments or cross-checking? Are differences monitored?

Not applicable.

2. Hours worked

Question 2.1: Please describe the architecture of your estimation method for hours worked. Please include details of differences in methods and data sources that may exist at different points in the time series (e.g. a break in the series). Please also provide links to articles that may be relevant.

All data come from ELFS and refers to actual hours worked. ELFS gathers weekly hours which are multiplied with 13 to get the quarterly data. Annual data is the sum of quarterly figures.

Hours worked by NA employed persons (NA hours worked) are in accordance with NA definition.

NA hours worked (domestic concept) = ELFS hours worked + ELFS hours worked by conscripts – ELFS hours worked by residents working outside the economic territory (abroad or in the extra-territorial organisations in Estonia)

Question 2.2: What is the main original source for hours worked in the national accounts (e.g. administrative source, Labour Force Survey, Business survey)? Briefly describe this source, its coverage and its ability to reflect the definition of hours worked (see ESA §11.27-11.31). In particular, does it capture a ‘usual’ hours, ‘actual’ hours, or some other concept?

Please specify the sources used for different parts of the employed population (in particular if sources differ between employees and self-employed, and/or between industries, firms of different size, etc.). If sources differ, please provide a clear distinction when answering the questions that follow.

Same as for employment in persons, namely ELFS. ELFS hours actually worked by NA employed persons are used for all industries, for employees and self-employed, for annual and quarterly data.

Question 2.3: Please describe the adjustments made to transform the original source to adapt it to the concept of working hours as defined in national accounts? Please, describe each adjustment separately. These adjustments might include:

- Accounting for holidays and annual leave
- Accounting for sickness leave
- Accounting for strikes and temporary lay-offs
- Accounting for paid but unreported overtime
- Accounting for unpaid overtime

Not applicable.

Question 2.4: Is a specific adjustment made to account for under- or over-reporting in the source data? Please specify if these adjustments are made for employees and/or self-employed workers.

Not applicable.

Question 2.5: If an adjustment is made for the number of persons employed in relation to the unobserved economy, what assumption is made regarding the hours worked by these persons?

Not applicable.

Question 2.6: Which other adjustments, if any, are made?

Not applicable.

Question 2.7: If necessary, please describe any additional calculations needed to derive total hours worked and average hours worked from the sources and adjustments specified above. This includes, but is not limited to, adjustments made to align the coverage of hours worked with that of employment in persons (i.e. the coverage produced by the process followed in section 1).

Not applicable.

Part II: Other work in this area

3. Differences between national accounts and Labour Force Survey estimates

Question 3.1: To what extent do you consider your Labour Force Survey an accurate tool for the measurement of employment and hours worked? Please describe any issues or shortcomings of which you may be aware.

ELFS is accurate tool for the measurement of employment and hours worked according to NA definitions but the results are not reliable for detailed industries.

Therefore 3-years average ELFS data are used in table 303 for A*64 breakdown of employed persons, employees and self-employed and corresponding A*21 breakdown of hours actually worked. This doesn't solve entire problem with unreliable estimates (especially for self-employed persons), but the amount of unreliable estimates is smaller.

Question 3.2: If the Labour Force Survey is not the primary source of data used to derive your estimates of employment in persons hours worked: Are you able to quantify, even approximately, what the difference would be between your current national accounts estimates and those you would obtain if you did use the Labour Force Survey data as your primary source?

Not applicable.

Question 3.2.1: Where differences between these estimates exist, can you provide a brief assessment of the source of these differences?

Not applicable.

4. Flash estimates of employment in persons

***Question 4.1:* Are you currently producing flash estimates of employment (t+30 or t+45)? If so, please describe briefly the methodology, coverage and sources. If you are not producing a flash estimate, do you have plans to start doing so in the future?**

Statistics Estonia do not produce employment flash estimates, but national employment data based on the ELFS are published at t+45 days and NA employment data are available at t+45 days.

Question 4.2: Please provide information on the quality of the estimates (e.g. revision analysis).

Data are final at t+45, no revision.

5. Other data produced (Optional)

***Question 5.1:* Do you have plans in the near future to improve or expand the content of national accounts labour input data (e.g. improved alignment with national accounts concepts, extension of the time series, increased industry detail, etc.)?**

***Question 5.2:* Do you produce labour input data other than that already discussed, for example quality adjusted labour input or labour input in terms of full-time equivalents? If so, please provide details and/or links to these data.**

***Question 5.3:* Do you produce productivity statistics (e.g. labour productivity for the total economy, further breakdowns of labour productivity, capital productivity, multi-factor productivity, etc.)? If so, please provide details and/or links with regards to these data.**

***Question 5.4:* If there is any other work that you produce currently, or are looking to produce in the future, in the areas of labour input or productivity, please use the space below to inform us about this work.**