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

Country: Switzerland 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.

The Employement Statistics (ES) are mainly compiled from the Swiss Labour Force Survey (SLFS). Other data is provided from the Cross-border Commuter Statistics (CCS), the central information system on migration (SYMIC), the job statistics (JOBSTAT) and other sources. The number of persons in employment according to the SLFS is used as a basis for the calculation to which is added the number of employed persons according to other sources who are not part of the permanent resident population. Thanks to JOBSTAT, figures can be broken down by NOGA economic section.

In 2017, the weighting of the SLFS data has been revised for the period from 2010 to 2016. This revision generates a break in series for some of the findings between 2009 and 2010. For the ES, an adaptation of the series for the period from 2nd quarter 1991 to 4th quarter 2009 was made.

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.

**Source:** Employment Statistics (ES) mainly compiled from the Swiss Labour Force Survey (SLFS, see 1.1). The ES were created in 1977. General figures go back as far as 1948. Other, more detailed figures as far as 1960. As of the second quarter of 1991, all persons who work at least 1 hour per week are considered to be employed persons. For the years before, the minimum working time was 6 hours per week.

**Coverage**: Persons in employement (domestic concept; economic activity as defined by the national accounts for at least one hour per week) in first, secondary and tertiary economic sectors (including persons working for a private household).

Availability: Quarterly data are published between 45 and 50 days after the reference date.

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)?

Arithmetic average of quarterly ES data

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 relevant

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.

Adjustment of SLFS data are made by including non-residents working units for jobs in private households provided from the Cross-border Commuter Statistics (CCS), the central information system on migration (SYMIC) and other marginal sources, and by excluding directly from SLFS data residents working outside the country.

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.)?

None

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.)?

None

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 relevant

#### 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.

Hours worked are calculated for first and possible second jobs of employed persons based on SLFS. The actual hours are calculated by adding overtime to the normal hours worked and deducting absences.

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?

The Swiss Labour Force Survey (SLFS) is the main source used to compile actual hours worked. SLFS, which reflects the ILO definition of hours worked, is a sample-based household survey covering the permanent resident population. In order to calculate the hours worked according to the domestic concept, information is drawn from other sources such as the Central Information Service on Migration (CISM). Finally, in order to get adequate estimates for certain types of absences, adjustments are made based on other sources (see question 2.3).

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.

Actual hours worked by non-permanent resident workers are estimated based on the hypothesis that their average normal work hours, absences and overtime correspond to those of the permanent resident population.

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 none (information from original source)
- Accounting for sickness leave none (information from original source)
- Accounting for strikes and temporary lay-offs data compiled from administrative sources
- Accounting for paid but unreported overtime none (information from original source)
- Accounting for unpaid overtime none (information from original source)

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.

None

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?

None

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

None

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 relevant

### 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.

Employment and hours worked are mainly based on the SLFS which have a strict adherence to international definitions. With a coefficient of variation of 0.3% for all employed persons, SLSF is an accurate tools. External sources used to correct the coverage of economic territory are mainly administrative data with low or no variations.

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 relevant.

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

### 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?

No flash estimates are computed. Due to the lack of national needs, no production in a near future is planned.

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

Not relevant

#### 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.)?

Until 2017, Switzerland benefited from derogations. These are gradually going to fall from 2018 and the plans are manly to compute and disseminate results in adherence to European national account concept (time-adjusted series, distinction employees-self employed with economics A10 section breakdown, A21 section breakdown, quarterly data until 1995, NUTS3 level data).

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.

Quarterly figures for full-time equivalent employed persons by gender and nationality are available as of 2010.

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.

None

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

See question 5.1.