

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

Country: Romania

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.

In national accounts, employment covers all persons – both employees and self-employed – engaged in some productive activity that falls within the production boundary of the system.

Employees are defined as all persons who, by agreement, work for another resident institutional unit and receive remuneration.

The relationship of employer to employee exists when there is an agreement, which may be formal or informal, between an enterprise and a person, normally entered into voluntarily by both parties, whereby the person works for the enterprise in return for remuneration in cash or in kind. The following categories are included:

- persons (manual and non-manual workers, management personnel, domestic staff, people carrying out remunerated productive activity under employment programs) engaged by an employer under a contract of employment;
- civil servants and other government employees whose terms and conditions of employment are laid down by public law;
- the armed forces, consisting of those who have enlisted for both long and short engagements and also conscripts (including conscripts working for civil purposes);
- ministers of religion, if they are paid directly by general government or a non-profit institution;
- owners of corporations and quasi-corporations if they work in these enterprises;
- students who have a formal commitment whereby they contribute some of their own labour as an input into an enterprise process of production in return for remuneration and education services;
- outworkers if there is an explicit agreement that the outworker is remunerated on the basis of the work done that is, the amount of labour which is contributed as an input into some process of production;
- disabled workers, provided the formal or informal relationship of employer to employee exists;
- persons employed by temporary employment agencies, who are to be included in the industry of the agency which employs them, and not in the industry of the enterprise for which they actually work.

Persons temporarily not at work, are also considered as employees if they have a formal job attachment. This formal attachment should be determined according to the following criteria:

- the continued receipt of wage or salary;
- an assurance of return to work following the end of the contingency, or an agreement as to the date of return;

- the elapsed duration of absence from the job which, wherever relevant, may be that duration for which workers can receive compensation benefits without obligations to accept other jobs.

Usually, this covers persons temporarily not at work because of illness or injury, holiday or vacation, strike or lock-out, educational or training leave, maternity or parental leave, reduction in economic activity, etc.

Self-employed persons are persons who are the sole owners, or joint owners, of the unincorporated enterprises in which they work, excluding those unincorporated enterprises that are classified as quasi-corporations. The compensation for self-employment is mixed income. Self-employed persons also include the following categories:

- unpaid family workers, including those working in unincorporated enterprises engaged wholly or partly in market production;

- outworkers whose income is a function of the value of the outputs from some process of production for which they are responsible, however much or little work was put in;

- workers engaged in production undertaken entirely for their own final consumption or own capital formation, either individually or collectively.

There is no labour input into the production of the services of owner-occupied dwellings; they are not considered, as such, as self-employed persons.

For Romanian case, results are supplied by total employment, by industries, by gender, according to the professional status and by age groups. The professional status breakdowns employment into two groups:

- employees,

- self-employed;

According to the age groups, employment is split in three categories:

- under 25 years;

- 25-64 years;

- 65 years and over.

A job is an explicit or implicit contract between a person and a resident institutional unit to perform work (any activity which contributes to the production of goods or services within the production boundary) in return for compensation (including mixed income of self-employed persons) for a defined period until further notice. In this definition, both employee and self employment jobs are covered.

The differences between jobs and employment consist of the following:

- Jobs include all activities (the principal, the second, the third, etc. job) of the same person;

- From jobs are excluded persons temporarily not at work but who have a “formal attachment to their job” as “an assurance of return to work or an agreement as to the date of return”.

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.

The main statistical data source used in national accounts regarding employment is the Labour Force Survey (LFS). Also, we use administrative data sources concerning maternity leave, labour migration, and diplomatic service (Ministry of Labor and Social Justice, National Agency for Employment, Labour Inspection, General Inspectorate for Immigration, Ministry of Foreign Affairs).

Labour Force Survey in Households (LFS)

1. Objectives of the survey

The Labour Force Survey in Households is a method used in statistical research of labour market in Romania, its main objectives being to measure the evolution of phenomena of employment, unemployment and non-economically activity.

National Institute of Statistics by its statistical divisions at the county level organizes and conducts this survey. Conceived as important source of intercensus information on labour force, the survey provides, in a coherent manner, essential data about all the population segments, with several possibilities of correlation and structuring by various demographic, social and economic characteristics, under the conditions of international comparability.

Starting with 1996, the household labour force survey is quarterly carried out, as a continuous research, thus allowing to get short-term data on the size and structure of labour force supply and to point out seasonal phenomena taking place on the labour market.

The last regulations of the European Commission have changed the definition of employment and unemployment coverage. For total harmonization with the European Union principles and methodologies in the field of employment and unemployment statistics, the questionnaires of LFS have been redesigned in 2002.

2. Coverage of the survey

The survey covered persons with usual residence in Romania, for a period of at least 12 month, members of the households from the selected dwellings.

Household means the group of two or several persons who usually live together, being generally relatives and managing the house in common, entirely or partly taking part in the income getting and spending. The person who does not belong to a household and who declares to live alone and manages the house by himself is considered as a single person household.

There are also considered as members of the household those persons leaving the locality for a longer period of time (over 6 months), if they keep in touch with that family household, namely: persons under military services, pupils and students left for study, persons left to work, convicts and prisoners, hospitalized persons or those temporarily found in the sanatoria for treatment or recovery.

Persons permanently living in collective units (elderly, handicapped, workers hostels, sanatoria etc.) have not been included in this survey.

3. Registration method

The information have been registered in the questionnaire of the survey, interviewing the persons aged 15 years and over, at the domicile of the households from the surveyed dwellings.

4. Sampling plan

The survey has been carried out on a random sample of dwellings, representative at national level, using a two-level sampling plan. The representativeness refers both to the household's structure, and to the population distribution by areas, sex and age groups. The structure differences, occurring because of the situation in the field at the moment of the survey carrying out, are cancelled applying some adjustment proceedings according to the non-response rate by residence areas and depending on the population distribution by areas, sex and age groups, these distributions being obtained from exhaustive sources of demographic research.

The sampling plan relied on the building up, **in the first level**, of Multifunctional Sample of Territorial Areas ("master" EMZOT sample) comprising 792 research centres (primary sampling units), broken down in all the counties and sectors of Bucharest municipality. EMZOT was carried out based on the data from the Population and Housing Census of March 2011 and will be periodically updated.

In order to size the sample **in the second level** (28512 dwellings/quarter with all the component households), it has been taken into account to get some estimations of the main surveyed characteristics affected by errors in the 3% limit and guaranteed with a 97% probability.

The sample is built up based on the dwellings rotation proceeding (“rotational scheme 2-2-2”), having as basic principle the following technique: a dwelling is surveyed for two successive quarters, it is temporarily taken out from the survey in the next two quarters, it is introduced again in the survey in the next two quarters, then it is taken out for good from the survey. Therefore, a dwelling is administered for 6 quarters.

5. Basic concepts

Employment comprise all the persons aged 15 years and over who have carried out an economic activity producing goods or services of at least one hour (for self-employed and contributing family workers from agriculture, the minimum duration is 15 hours) in the reference period (one week), in order to get income as salary, payment in kind or other benefits.

Employment was grouped by economic activity of which the job belongs to, professional status and job according to Classification of the Activities in the National Economy (NACE Rev.2).

Status in employment represents the situation of a person when getting income in the activity carried out, namely:

- **Employee** – is considered that person who carries out his activity based on a labour contract within an economic or social unit – irrespectively of its ownership type – or for private persons, getting a remuneration as salary, in cash or in kind, as commission etc. Here are including persons on military service until 2007. Employees have been broken down by the **working regime**, being considered as **permanent** employee that person with labour contract on an indefinite period of time and **temporary** employee that person with labour contract on a definite (limited) period.

- **Employer** – is that person who carries out his occupation (trade) in his own unit (enterprise, agency, workshop, shop, office, farm etc.), for whose activity he has employed one or several employees. This category also includes employers, who are also employees of their own enterprise, as well as holders of management agreements or franchise which use employees.

- **Self-employed** – is that person who carries out his activity in his own unit or individual business, hiring no employee, being helped or not by contributing family members. This status also includes independent entrepreneurs (peddlers, coaches, women taking care of children, carters, private taxi-drivers etc.), free-lancers (strolling musicians, fine artists, lawyers), occasional day-workers, holders of management or franchise contracts who do not use employees, individual farmers or those who work in agricultural associations.

- **Contributing family worker** – is that person who carries out his activity within an economic family unit run by a family member or relative, not receiving remuneration as salary or pay in kind. Such a unit is considered peasant’s (agricultural) household. If several persons of a household work in their own agricultural household, one of them – generally the household head – is considered self-employed, while the others are considered contributing family workers.

- **Member of an agricultural holding or of a non agricultural co-operative** – is considered that person who has worked either as owner of agricultural land within an agricultural holding constituted according to the Law 36/1991, or as member of a craftsmen, consumer or credit co-operative.

The employment in persons from the Labor Force Survey are broken down by status in employment, by age groups, by gender and by NACE Rev.2 divisions and have quarterly and annual availability.

The set of data on employment delivered by the specialized department contain data for both the main activity and the secondary activity.

The Ministry of Labor and Social Justice provides us quarterly information on the average number/month of persons receiving child rearing benefit. The amounts of money given to these people are

granted according to the Government Emergency Ordinance no.111/2010 regarding the leave and the monthly benefit for child rearing, with subsequent modifications and additions.

The National Agency for Employment and Labor Inspection are specialized institutions of the general government subordinated to the Ministry of Labor and Social Justice. The National Agency for Employment has the main objective to increase the employment rate and implicitly decrease the unemployment rate. The Labor Inspection has legal personality and fulfills the function of state authority, which ensures the exercise of control in the fields of labor relations, security and health at work and market surveillance. Both institutions provide us quarterly and annual data on labor migration.

The General Inspectorate for Immigration is organized and acts as a specialized structure of the central public administration. It is a public institution with legal personality, coordinated by **Ministry of Internal Affairs**. The General Inspectorate for Immigration was set up through the reorganisation of the Romanian Office for Immigration and fulfills its tasks under the law in order to implement Romanian policies in the fields of migration, asylum, and foreigners' integration as well as the relevant legislation in these fields. From this institution we get the number of annual work permits issued to foreign citizens.

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)?

Not applicable

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).

In Romania, the data we receive from Labour Force Survey are expressed in "persons" not in "jobs". We obtain "jobs" by adding people working in the main and secondary activities and decreasing persons in maternity leave.

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.

The employment includes both residents and non-residents who work for resident producer units. The following categories are also included:

- non-resident frontier workers meaning persons who cross the border each day to work in the economic territory;
- non-resident seasonal workers, meaning persons who move into the economic territory and stay there for less than one year in order to work in industries which periodically require additional labour;
- nationals who are on the staff of diplomatic missions abroad.

In order to be able to make the transition to the concepts generally used in labour force statistics (employment on a national basis), the ESA especially provides for the following items to be shown separately:

- the conscripted forces (not included in the labour force statistics, but included in the ESA under general government services);

- residents working for non-resident producer units (included in labour force statistics but not included in employment as defined in the ESA);
- non-residents working with resident producer units (not included in labour force statistics but included in employment as defined in the ESA).

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.)?

We don't made adjustments for the unobserved economy.

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.)?

We don't made any other adjustments.

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.

Total hours worked represent the aggregate number of hours actually worked as an employee or self-employed during the accounting period, when their output is within the production boundary.

For the system of national accounts, total hours worked is the preferred measure of labour inputs.

According to the norms established by the International Labour Office (ILO), total hours worked cover:

- hours actually worked during normal working hours;
- hours worked in addition to those worked during normal working hours, and generally paid at higher rates than normal rate (overtime);
- time which is spent at the place of work on tasks such as preparing the site, repair and maintenance work, the preparation and cleaning of tools, and the making-out of receipts, invoices, records of the length of time worked and other reports.

Hours actually worked do not include:

- hours which are paid but not worked, such as paid annual holidays, public holidays, or sick-leave;
- breaks for meals;
- time spent travelling between home and the place of work, even when paid.

Total hours worked that are total hours actually worked during the accounting period in employee and self-employment jobs within the economic territory:

- including work outside the economic territory for resident employer institutional units

who have no centre of economic interest there;
- excluding work for foreign employer institutional units who have no centre of economic interest within the economic territory.

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.

The main statistical data source used in national accounts regarding hours worked is Labour Force Survey (LFS) which provide us data on actual hours worked by week, in main activity and in the secondary activity. The actual hours worked from the Labor Force Survey are provided in the same format with employment in persons data (broken down by status in employment, by age groups, by gender and by NACE Rev.2 divisions).

The set of data on actual hours worked delivered by the specialized department contain data for both the main activity and the secondary activity.

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

The LFS data on actual hours worked per week in the main activity adds to the actual hours worked per week of secondary activity. The number of actual hours worked per week is multiplied by the number of working weeks of the reference year. Thus, the total number of hours actually worked per year is obtained. The number of working weeks per year is established taking into account the number of weeks per year, from which the holidays and annual leave are decreased. Finally, we make some national accounts adjustments, in correlation with those applied to employment in persons, to certain branches.

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.

We don't made a specific adjustment to account for under- or over-reporting in the source data.

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?

We don't made adjustments for the persons working in unobserved economy not for hours worked by them.

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

No other adjustments.

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).

No any additional calculations.

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.

We consider that the Labor Force Survey is largely an accurate tool for measuring employment and hours worked. In this context, this is the only statistical data source used in Romania which gives us a great amount of detail.

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?

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?

We are not currently producing flash estimates of employment (t+30 or t+45).
We have no plans.

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

Not the case.

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.)?

We have no plans.

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.

We don't produce other input data than that already discussed.

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.

In Romania are calculated two types of labour productivity:

- Labour productivity, by employed person, as a ratio between gross value added and employment
- Labour productivity per hour worked, as a ratio between gross value added and the number of hours worked

Labour productivity, per employed person and per hour worked, estimated by activities of national economy CANE Rev.2 (A*10), according to ESA 2010 are disseminated on the TEMPO database, on NIS website and on Statistical Yearbook of Romania. Please find below the path on NIS website:

B. ECONOMIC STATISTICS

B.1 [NATIONAL ACCOUNTS](#)

1. MACROECONOMIC INDICATORS ON EMPLOYMENT

- 1.11 [CON110E - Labour productivity, by employed person, by activities of national economy CANE Rev.2 - ESA 2010](#)
- 1.12 [CON110F - Labour productivity per hour worked by activities of national economy CANE Rev.2 - ESA 2010](#)

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.

Is not the case.