

# LABOUR FORCE SURVEY

## 1. Purpose of the survey

The main purpose of the Labour Force Survey is to provide information on the main characteristics of employment and unemployment in the Republic of Bulgaria. Results from the survey are published in the Bulgarian statistical publications, are provided to national and international users, as well as to international organisations such as EUROSTAT, ILO, UNESCO, UNICEF, etc.

The Labour Force Survey is conducted in all EU Member states, incl. Bulgaria in accordance with Regulation (EU) 2019/1700 of the European Parliament and of the Council of 10 October 2019 establishing a common framework for European statistics relating to persons and households, based on data at individual level collected from samples (in force from the beginning of 2021) and subsequent implementing regulations in the field of labour force statistics.

## 2. Main definitions

According to the Labour Force Survey methodology the usual population in the country aged 15 years and over are divided in three mutually exclusive groups - persons employed, unemployed and out of labour force. The respondents are classified in one of these groups according to the answers they gave during the interview by survey questionnaire (included questions on their economic activity) referring to a specific calendar week (reference period).

**Employed persons** - persons aged 15 - 89 years who during the reference period:

- worked for at least one hour for pay or profit;
- did not work but had a job or business from which they were temporarily absent due to:
  - holydays, illness, maternity or paternity leave, working time arrangement;
  - participation in job-related training;
  - off-season, where persons continue to regularly perform tasks and duties for the job or business, excluding fulfilment of legal or administrative obligations;
  - other absence (incl. unpaid parental leave for taking care of a child between 2 and 8 years of age), where the expected duration of this absence is 3 month or less.

Persons that produce agricultural goods are considered employed if the main part of these products is intended for sale or barter.

According to the professional status employed persons are classified in the following categories:

- employers - persons who work in their own enterprise, business, farm, professional practice and employ at least one other person;
- self-employed - persons who work in their own enterprise, business, farm, professional practice and do not employ any other person;
- employees - persons who work for public or private employer and receive remuneration in cash or in kind as wage or salary, remuneration by civil contract, etc.;
- unpaid family workers - persons who work without payment in an enterprise, business or farm, owned and operated by a family member.

**Unemployed persons** - Persons aged 15 - 74 years who were not employed during the reference week, according to the above definition, and

- were currently available for work, i.e. were available for paid employment or self-employment before the end of the two weeks following the reference week; and
- were actively seeking work in the four-week period ending with the reference week or found a job to start within a period of at most 3 months from the end of the reference week.

Active methods of job search are the following:

- contacting a public employment office in order to find work;
- contacting a private employment agency;
- contacting employers directly;
- asking friends, relatives, or acquaintances;
- placing or answering job advertisements;
- studying job advertisements;
- taking a recruitment test or examination or being interviewed;
- placing or updating CVs online;
- making preparations to set up a business.

**Labour force (Current economically active population)** - Persons who were employed or unemployed during the reference week, i.e. persons who furnished the supply of labour for the production of goods and services.

**Persons not in the labour force (Current economically inactive population)** - Persons who were neither employed, nor unemployed during the reference period (incl. all persons below 15 or above 89 completed years of age).

**Discouraged persons** - Persons of 15 - 74 years of age and over who want to work but who are not seeking a job, because they do not believe they will find suitable job.

Criteria used in the LFS for classifying persons according their labour status are different than those used in other sources of employment and unemployment data. Such sources are: Survey on employees, hours worked, wages and salaries and other expenditures paid by the employer; National accounts' employment estimates; administrative statistics of the Employment agency on registered unemployment persons, etc.

### **3. Object and coverage**

The Labour Force Survey covers the usual population of the county. It is a sample survey carried out through a sample of non-institutional households. Data are collected from all members of the selected households. Questions on labour market status are asked to persons aged 15 - 89 completed years.

### **4. Sample design and sample size**

The sample used for the survey is a stratified two-stage cluster sample. The stratification is done by districts and type of place of residence (district's centre, other town, village), i.e. the sample consists of 83 strata. Clusters on the first stage are enumeration areas (established during Population Census) and clusters on the second stage are households. The clusters on the first stage (2 444 enumeration areas) are selected with probability proportional to the size (population). Quarterly 19.6 thousand households are selected - by 8 in each enumeration area.

The sample is rotational. A 2-(2)-2 rotation pattern is used. Respondents are interviewed in two consecutive quarters, then they are temporarily removed for the next two quarters and

included again for the following two quarters, i.e. each household is interviewed four times. The use of this rotation scheme allows sample overlap (of 50%) between two consecutive quarters as well as between the same quarters of two consecutive years.

## **5. Weighting procedure**

The weights are calculated each quarter in three steps:

- initial weights are obtained as the inverse of the inclusion probability of any household within a strata;
- the initial weights are multiplied by correction factor (due to households' non-response) which is calculated as ratio between the total number of selected households in a stratum and the number of interviewed households from the same stratum;
- in final step the intermediate (corrected for non-response) weights are calibrated<sup>1</sup> to the population data by the following variables: at national level - by age group (0 - 14, 15 - 19, 20 - 24, 25 - 29, 30 - 34, 35 - 39, 40 - 44, 45 - 49, 50 - 54, 55 - 59, 60 - 64, 65 - 69, 70 - 74, 75 and over), sex and type of place of residence (urban/rural); at districts level (NUTS 3) - by 3 age groups (0 - 14, 15 - 64, 65 and over), sex and type of place of residence (urban/rural).

## **6. Stochastic reliability**

Due to the sampling approach used in the LFS, the parameters estimates obtained from the survey could vary from their values in the population. Standard errors, coefficients of variation and confidence intervals are calculated for assessment of stochastic reliability of the main LFS indicators.

## **7. Sources of information**

Data for the persons in the selected households are collected by face-to-face interview using the questionnaire.

## **8. Work organisation**

Interviewers from the Statistical Surveys Departments in Regional Statistical Offices visit the selected households and carry out interview with persons living in these households. Filled in questionnaires are coded and data entry is done on PC at the Statistical Surveys Departments. Primary data are sent to the National Statistical Institute (NSI), where additional control and weighting are performed. Weighted data are aggregated by different characteristics and prepared for dissemination and publishing.

## **8. Periodicity**

The Labour Force Survey was conducted for the first time in September 1993. From 1994 until the end of 1999, it was conducted two or three times a year, and during the period 2000 - 2002 - four times a year (in March, June, September and December). The reference period is a fixed calendar week running from Monday to Sunday and is the same for all households.

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<sup>1</sup> The calibration is a technique for producing weights, which allows to achieve consistency between survey estimates and corresponding reliable auxiliary data.

Since the beginning of 2003 quarterly continuous Labour Force Survey is implemented. In case of the continuous survey all households, covered in the sample, are surveyed within three months, the sample being evenly spread throughout the quarter. The reference period for each household is a calendar week, but it is not the same for different groups of households.

Data collected by the Labour Force Survey have different periodicity, in particular:

- quarterly - main demographic and social characteristics; labour market status - employment, searching job, reasons for inactivity; characteristics of main and second job, working time, previous work experience of not-employed people; participation in education in the last 4 weeks, etc.;

- annual - additional characteristics of main job, most effective method used to find the current job, searching other job, impact of care responsibilities on the labour market participation, etc.;

- biennial - atypical work, participation in education and training in the last 12 months, health status, etc.;

- 8-yearly and ad-hoc subject - work organisation and working time arrangements, young people on the labour market, pensions and labour market participation, accidents at work and other work-related health problems, etc.

The annual, biennial and 8-yearly data are collected each quarter through subsamples of the quarterly LFS samples (in the respective year). The subsamples include the households that according to the rotation scheme are to be interviewed for third time (3<sup>rd</sup> wave).

## 9. Main statistical indicators

Main analytical indicators calculated from the Labour Force Survey data are the following:

- **Activity rate (Participation rate)** - the number of persons in the labour force as percentage of the total population.

- **Employment rate** - the number of employed persons as percentage of the total population.

- **Unemployment rate** - the number of unemployed persons as a percentage of the labour force (sum of employed and unemployed people).

## 10. Publicity and transparency

- Access to the methodology used in the Labour Force Survey.

All issues of the National Statistical Institute with published LFS data contain short methodological notes about main definitions, used in the survey. The survey instruments are available in Labour Market Statistics Division and in the NSI Regional Statistical Offices, Statistical Surveys Departments.

- Press releases

Main quarterly and annual LFS results are disseminated via press releases on the NSI's website according to the Release Calendar.

- Publications

Results from the Labour Force Survey are published in the following NSI specialised and general publications:

- 'Employment and unemployment - annual data' - specialised annual electronic publication on CD, NSI;
- 'Labour Force Survey' (leaflet) - annual advertising edition, NSI;

- 'Statistical Reference Book' - annual edition, NSI;
- 'Statistical Yearbook' - annual edition, NSI;
- 'Bulgaria' (brochure) - annual edition, NSI.
- Electronic

Main quarterly and annual results from the Labour Force Survey are available on the NSI web site, section 'Labour Market', as well as in the Information system INFOSTAT.

- Other dissemination format

Additional LFS data could be provide on request by users according to 'Rules for dissemination of statistical products and services of the National Statistical Institute'.

Anonymous micro-data could be provided for scientific and research purposes by individual request according to the 'Rules for provision of anonymised individual data for scientific and research purposes of the National Statistical Institute'.

## 11. Comparability

More important changes in the LFS methodology leading to break in time series took place in 2003, 2012 и 2021.

- In 2003 the periodicity of the Labour Force Survey was changed - from one time survey to quarterly continuous survey providing average quarterly and yearly results.
- Since the first quarter of 2012 a different weighting procedure has been used in the LFS and the main changes are the following:
  - the number of age groups at national level for which the consistence between LFS estimates and population data are achieved increased (from 4 to 14);
  - population data used in LFS weighting procedure exclude population living in institutional households (not covered by the survey);
  - data based on the Population Census as of 1 February 2011 has been used .

Revised quarterly and yearly results from the Labour Force Survey for 2010 and 2011, based on the revised population data and new weighting procedure, were published at the NSI website. They are comparable with the data for 2012 but not fully comparable with data for previous years.

- Since the first quarter of 2021 some changes has been implemented in compliance with the Regulation (EU) 2019/1700 of European Parliament and of the Council establishing a common framework for European statistics relating to persons and households, based on data at individual level collected from samples, and consequent implementing acts in the field of labour force statistics. These changes concern mainly employment and unemployment definitions, in particular:
  - persons on leave for looking after a child between 1 and 2 years of age who are receiving fixed compensation for the duration of the leave, are considered employed (they used to be considered economically inactive up to the end of 2020);
  - persons on unpaid parental leave for looking after a child between 2 and 8 years of age are considered employed only if the expected one-time duration of using that leave is at most three months. All persons on this kind of leave used to be considered employed up to 2020;

- persons who are absent from work due to reasons other than holidays, illness, accident or maternity and parental leave are considered employed only if the duration of this absence is 3 months or less (even they are being partially compensated);

- persons who produce agricultural goods for self-consumption are excluded from the employed person's category even if they satisfy their household's main consumption needs by that production. Employed are considered only persons growing agricultural produce, which main part is intended for sale or barter.

Due to changes in the LFS methodology data for the first quarter of 2021 are not fully comparable with those for previous periods.