

Methodology

The Czech Statistical Office publishes an overview of retrospective data of the labour market statistics.

The data were acquired from surveys in businesses or from administrative data sources. The survey in businesses is carried out depending on their numbers of employees either as a census or a sample survey. In case of the sample survey results are grossed up to the population of all active entities included in the Statistical Business Register of the CZSO.

The overview involves trends of the most significant indicators broken down by economic activity and territory. The entities are broken down by the Czech national Classification of Economic Activities (CZ-NACE), version valid since 1 January 2008, which, at the level given here, fully corresponds to the international classification of the NACE, Rev. 2. In case of the breakdown by territory the entities are sorted by the Classification of Territorial Statistical Units (CZ-NUTS) which complies with the Regulation (EC) No. 1059/2003 of the European Parliament and of the Council of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS).

Data in Tables 1, 2, 3, 4, 7, 8, 9, and 10 are taken from the results of the processing of the CZSO annual statistical reports.

Data in Tables 5, 6, 11, and 12 come from the processing of quarterly statistical reports, including estimates for the non-covered part of the population, which are based on administrative data sources.

The transition to the new classification of economic activities of the CZ-NACE (corresponding to the NACE, Rev. 2) brought such significant changes it was impossible in certain economic activities to use the previously published data only with newly renumbered economic activities. The CZSO developed a method of a retroactive conversion of time series at the microdata level taking into account the newly discovered misclassifications of some businesses in previous years. Available administrative sources were used to gross up the time series as well. Data in tables according to the CZ-NACE are not comparable with previously published data processed according to the previous Industrial Classification of Economic Activities (abbreviated as OKEČ and corresponding to the international classification of the NACE, Rev. 1.1). The time series from data of quarterly statistical reports and from data of annual statistical reports have been recalculated starting 2000 and 2005, respectively.

The historical section includes **tables 31, 32, 33, 34, 35, 36, 37, 38, 39, and 40** processed using the classification of OKEČ.

Tables 34 and 39 give data for the civilian sector of the national economy. The civilian sector does not include data for activities in the scope of authority of the Ministry of Defence and the Ministry of the Interior and their respective organisations that are not legal entities. These organisations employ both civilian employees and professional soldiers and members of the Police of the Czech Republic. Since 2013 data for these ministries have been included into the processing and the time series have been recalculated starting in 1993. **Tables 35 and 40** give data of respective indicators for the civilian sector (as total, or public administration, for instance) at the ends of the tables.

The **registered number of employees** includes persons under employment contracts, service contract, and members of producer cooperatives (having employment contracts as a part of the membership). It excludes persons in public office (deputies, senators, and full-time councillors of all levels), judges, females on maternity leave, persons on parental leave (unless they have simultaneous employment contract), apprentices, persons working for companies under contracts for work outside employment, and employees of economic activities that are not covered by the statistics. Data on numbers of employees also include, according to the valid methodology, foreigners legally working in the Czech Republic.

The **average registered number of employees (headcount)** is calculated as an arithmetic mean of the monthly average numbers (calculated as a sum of daily numbers divided by the number of calendar days in a given month).

The **average registered number of employees (full-time equivalent)** is the average registered number of employees (headcount) recalculated by their contracted hours of work to the regular hours of work (full-time hours) determined by the employer.

The **average gross monthly wage** is the proportion of wages, excluding other personnel expenses, per one employee of the registered number of employees per month. The wages involve basic wages and salaries, extra payments to wages or salaries, bonuses and premiums, wage compensations, remuneration for standby duty, and other components of wages or salaries accounted to pay to

employees in a given period. The wages do not include wage or salary compensations for time of temporary incapacity for work or quarantine paid by the employer. These are gross wages, i.e. wages before public health insurance and social insurance premiums, advance payments of income tax of natural persons, and other legal deductions, or deductions agreed with the employee have been deducted.

Data in Tables 13, 14, 41, 42, 43, and 44 come from the **structural statistics of wages** of employees and sources used are the Information System on Average Earnings (ISAE) of the Ministry of Labour and Social Affairs and the Salary Information System (ISP) of the Ministry of Finance. The data on wages are calculated using different methodologies and cannot be compared to results of the regular statistical surveys on wages. The data cover the sample of employees with 1 700+ paid hours of work in 1996-2000 and 1 592+ hours of work in 2001, which roughly corresponds to full-time employees who worked in the reporting unit for majority of the year and were not on a long-term sick leave, for instance. (The different numbers of paid hours result from an amendment to the Labour Code due to which lunch break time is included into hours worked and therefore the comparability of the time series is not disrupted anymore.) There was no grossing up to the whole national economy performed before 2001. Since 2002 the wages have been calculated as measured by the employee's paid hours and grossed up to the population.

The data for 2008 were recalculated applying an updated weighting scheme based on the new classification of economic activities of the CZ-NACE.

Since 2011 the results cover samples of the entire population of employees in the Czech Republic because employees of businesses with less than ten employees, employees of non-profit institutions, and the self-employed as own-account workers have been included into the survey. This change brought statistical data of a higher level of representation. Results for the previous years were not grossed up to the whole national economy. They especially did not cover businesses with less than ten employees and therefore results in the time series are not fully comparable.

The Classification of Occupations KZAM was used to break down wages by occupation. The classification of was developed on the basis of the international standard of ISCO-88. Since 1 January 2011 the new version of the classification of occupations of the CZ-ISCO-08, based on the international standard of the ISCO-08, has been in force. Data for 2010 were recalculated applying the new version of the classification.

The comparison uses the **median wage** instead of the average wage. The median wage shows the wage of a middle employee that means a half of wages is lower and the second half of them is higher than the median wage. More detailed information from the sample surveys on wages of employees, including the survey methodologies and sample sizes, can be found in the CZSO publications called Structure of Earnings Survey [*the given year*].

The aforementioned changes to the methodology of the structural sample survey on wages led to the termination of the old time series and introduction of new time series processed using a comparable methodology.

Figures in Tables 15, 45, and 46 show **costs** the employers spent on recruiting and training of employees, remuneration for work, and on providing for social needs of employees. The survey is carried out in businesses of all economic activities irrespective of their number of employees.

Figures in Tables 16, 17, and 18, and 47, 48, and 49, respectively, were processed from data provided by the Ministry of Labour and Social Affairs.

Since July 2004 the Ministry of Labour and Social Affairs has carried out a change to the methodology of the calculation of the **rate of registered unemployment** consisting in that certain groups of persons are taken both into the numerator and the denominator, that means a way different from the previous methodology. On the contrary to the previous methodology, in which the numerator comprised of the number of all job applicants kept in the register of the labour offices, in the new methodology the numerator comprises of all available job applicants (including citizens of the EU and EEA). These are registered unemployed persons who do not have any objective obstacle to be hired and, in the case of a suitable job, are able to join the employer immediately. The denominator comprises of the labour force, which in the previous methodology was the number of the employed measured by the Labour Force Sample Survey + the number of all job applicants, and which was newly expanded by the number of the employed citizens of the EU (EEA) + the number of working foreigners from third countries having valid working permit or trade licence. The number of job applicants was replaced by the number of available job applicants. Data for 2004 in Table 47_5 are in all months given processed by both the methodologies for the sake of comparison.

Since January 2013 the Ministry of Labour and Social Affairs has been using a new indicator of the registered unemployment in the Czech Republic named the **share of unemployed persons**, which expresses the share of available job applicants kept in the labour office register aged 15 – 64 years in the whole population of the same age. This indicator replaced the previously released rate of registered unemployment, which measures all available job applicants merely to economically active persons. The indicator of the share of unemployed persons attains different values due to its different definition and therefore cannot be compared to the previous indicator

The **job vacancy rate** (Tables 18 and 49) represent the share of job vacancies in the total of the numbers of occupied jobs and job vacancies. The methodology, applied in accord with a recommendation of Eurostat, does not include jobs emerging in companies or the self-employed, which had not have any employee before, into the total number of job vacancies. The number of job vacancies is taken over from the statistics of the Ministry of Labour and Social Affairs, the number of occupied jobs is defined as the total number of employees and members of producer co-operatives from the Labour Force Sample Survey in the Czech Republic.

The resulting data are calculated using unrounded figures and rounded subsequently, therefore total sums may differ in certain cases.

Dalibor Holý

Director of the Labour Market and Equal
Opportunities Statistics Department