## Introduction

The Czech Statistical Office (CZSO), in cooperation with the Ministry of Labour and Social Affairs , have been publishing results of the structural statistics on earnings of employees for a number of years. The structural earnings survey differs from other earnings surveys in several aspects. First of all, it monitors earnings of individual employees, not the overall sums at the level of an enterprise or organization. All components of the gross earnings are observed along with important personal information on employees such as age, sex, and educational attainment. The resulting statistics is therefore very detailed and is used for in-depth analyses of the labour market and its development.

At present the structural earnings statistics is a result of merging the databases of the sample survey of the Information System on Average Earnings (ISPV) of the Ministry of Labour and Social Affairs, which covers the wage sphere, and of the administrative source of the Salary Information System (ISP) of the Ministry of Finance, which exhaustively covers the salary sphere.

As the volume of information gathered by the ISPV is huge and the survey is labour-and-cost consuming, especially for smaller enterprises, it is carried out in a sample of reporting units that are randomly chosen from the Statistical Business Register, when the probability of being selected for the survey grows as the unit size increases. Data are collected using an electronic collection directly from enterprise databases.

Since 2011 the results cover the whole population of employees in the sample surveys, because since then the sample has been involving employees of enterprises with less than ten employees, employees of non-profit organizations, and also own-account workers that had not been measured before. This change means statistical data in the publication are now more representative. Yet it is necessary to keep in mind that results for the years prior the change in the previous publications were not grossed up to the whole economy. They especially do not cover enterprises with less than ten employees and thus there is a disruption in the time series.

Because indices of year-on-year changes are published, data for the same period of the previous year must be revised, that means changes and corrections, that have been carried out since their previous processing, must be added, the data must undergo the same control and grossing-up methods as the data for the current period, and then these data must be harmonised with the CZSO revision of the appropriate data. Therefore updated results for the same period of the previous year have been regularly published since 2011.

In 2016 there was an occasional revision of results for the reference years of 2012 to 2014 carried out. The reason for was the change of modelled data for the wage sphere micro-businesses for 2010 by a new survey for the reference year of 2014 and implementation of changes to legislation concerning the minimum wage at micro-businesses.

Micro-businesses are enterprises (or businesses) having from 1 to 9 employees. The wage distribution in micro-businesses differs significantly from the wage distribution in businesses having 10+ employees and has a substantial effect on, first of all, beginning of the wage distribution in the Czech Republic.

On the contrary to the standard surveying of businesses with 10+ employees, the micro-businesses are measured only once in four years. Therefore data for calculations are distorted namely in the time period close to the next measurement round.

The revision also solved issues of changes to legislation in the field of minimum wage at microbusinesses the way it reflects current legislation in every reference period in a systematic manner.

In the structural statistics the gross earnings cover all wages and salaries, including premium and bonus pays and other pays and, moreover, all reimbursements of pay (holidays, vacations, obstacles at work, etc.), and standby duty pays for the whole year. The average monthly earnings of an employee in the reference year is calculated by dividing his/her hours paid that means the number of months, for which he/she actually received wage or salary, or reimbursement, while time of sick leaves and of other non-reimbursed absences at work in the reference year is deduced from. This way the calculated gross monthly earnings (CZK) gives the most accurate information on comparable earnings levels of various occupations (jobs) when the length of time paid is exactly measured.

This way calculated average earnings, however, is not and cannot be identical with the average earnings collected from the regular enterprise reporting to the CZSO, in which the total sum of wages is divided by the total number of registered employees of the enterprise. The reason is that the number of registered employees includes also employees on sick leave or on an unpaid temporary leave shorter than 4 weeks. Other differences of earnings levels, when compared to other statistical sources, may result from the fact that the structural survey results do not cover employees whose employment contract is for hours worked shorter than 30 hours per week, besides effects of unpaid absences and different samples of the surveys.

The ISPV results have a sample error as those of any sample survey. Furthermore, it is a fact that certain reporting units questioned did not provide the data requested (non-response) or that some records had to be set aside from processing due to their error rate and thus minor distortions could happen. Finally, it is necessary to realize that the results are of the same quality as the source databases of enterprises and organisations, which statistical data are taken from. This holds especially to detailed breakdowns by occupation or by educational attainment of employees.

## This publication consists of **two parts**:

- Part A contains aggregated results for the Czech Republic as a whole. They were grossed up
  by stratified weights by group of industries and by size group. In the grossing up final phase
  they were post-stratified to full-time equivalent employees and the sum of earnings according
  to the CZSO survey on earnings in the reference period broken down by respective section of
  CZ-NACE.
- Part B includes aggregated results for regions of the Czech Republic. They were grossed up
  by weights with stratification by group of industries and by size group. In the grossing up final
  phase they were post-stratified to full-time equivalent employees and the sum of earnings
  according to the CZSO survey on earnings in the reference period broken down by region of
  the Czech Republic according to NUTS3.

The objective of this publication is to describe the structure of earnings and to find out differences in earnings levels among various categories of employees, while the earnings distribution is emphasised. Not only arithmetic mean of earnings is used, but also **median earnings**, that indicates the earnings of an employee in the middle of the earnings distribution and this way better shows the real earnings level of a respective category of employees. The breakdown by sex is strongly emphasised as well. The aim of the structural statistics is not to identify the average earnings of the whole national economy; this purpose is better served by statistical surveys of the CZSO.

The most important breakdown in the structural survey is undoubtedly that by occupation. The Czech Classification of Occupations of the CZSO developed on the basis of the international standard is used for. In 2011 the new version of the International Standard Classification of Occupations ISCO-08 was implemented in the Czech Republic as an expanded five-digit version called CZ-ISCO.

Results in this publication are broken down by main group and by group (one-digit and two-digit codes of CZ-ISCO) and Table A22 also includes figures broken down by subgroups of occupations that means by four-digit code of CZ-ISCO. More detailed results broken down by concrete occupations (five-digit code of CZ-ISCO) for the wage sphere and for the salary one, including further information on the source survey, can be found in the publication of the Ministry of Labour and Social Affairs called **Informační systém o průměrném výdělku za rok 2015** (Information System on Average Earnings for 2015) or on Internet pages of the Ministry at <a href="www.mpsv.cz">www.mpsv.cz</a>, including detailed results by region (page called Regionální statistika ceny práce – RSCP (Regional statistics of the price of labour) at the address <a href="http://portal.mpsv.cz/sz/stat/vydelky">http://portal.mpsv.cz/sz/stat/vydelky</a>).

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## Notes:

Data given in brackets refer to results which are naturally dominated by one or two enterprises. These are the cases in which over 80% of employees have employment contract with one or two dominating enterprises in the given breakdown.

Data replaced with asterisk did not comply with criteria for publishing; specifically the estimate of the median gross monthly earnings had an average error higher than ±10.0%.