

### ANALYSIS

11 March 2013

# STRUCTURE OF EARNINGS SURVEY IN 2012 (PRELIMINARY RESULTS)

The following structural view of wages is based on preliminary results of the Information System on Average Earnings (ISAE), for more information see <u>http://www.ispv.cz/cz/O-ISPV.aspx</u>. Therefore results are not directly comparable to data given in the News Release.

The ISPV survey organised under auspices of the Ministry of Labour and Social Affairs of the CR is based on a sample of enterprises, which data on individual wages are automatically gathered from, and thus it uses a different methodology for the employee wage calculation. The major objective of the ISAE is to enumerate the labour price for a concrete job, not to search for the wage level of the entire national economy. The result is a difference in the total average gross wage mainly due to employees temporarily absent (even short-time absent ones) are not included, which raises the average wage compared to the CZSO data. A higher wage level is than projected in all other indicators expressed in Czech crowns. Thus comparing with results given in the News Release of the CZSO one must apply relative indicators only.

The structural view of wages differs from the aggregate view based on the enterprise reports. The main indicator here is not the average wage, which distributes wages per headcount as every employee would have the same wage, yet the median wage. The median wage is the value of the wage of the middle (median) employee of the distribution; therefore it is not sensitive to extreme values unlike the average wage. While roughly two thirds of employees earn less than the value of the arithmetic mean of wages, the median wage cuts the population of employees exactly in the middle. Comparing the arithmetic average wage and the median wage offers an option to follow variability in wages in approximate manner. If extremely high values of wage occur then the difference in between the median wage and the average wage is significant. Conversely, if everybody has the same wage, the difference in between the median wage and the average wage would be zero. The median wage can be, of course, calculated only if individual earnings are surveyed (as in the case of the ISAE). That is why median wages given in the News Release of the CZSO had to be derived from a statistical-mathematical model.

The median wage in 2012 was CZK 22 247 according to the preliminary processed data of the ISAE and grew by 1.8% compared to that for 2011. Substantially faster growth of the average wage compared to the increase in the wage of the average employee (median wage) indicates extreme earnings has been growing and confirms the hypothesis formulated at the commentary beginning.

One tenth of employees with low income had wages below CZK 11 929 (1<sup>st</sup> decile), on the contrary, one tenth of employees with best remuneration had wages above CZK 40 715 (9<sup>th</sup> decile). Therefore the decile ratio was 3.4.

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According the ISAE the median wage of males was CZK 23 865, the female median wage was CZK 20 271, that means 85% of the male median wage. Variability of male wages was traditionally higher than that of females. The decile ratio was 3.5 for males and mere 3.1 for females. The highest differences were found in the best paid employees; one tenth of males earned more than CZK 45 417, while in females 9<sup>th</sup> decile was solely CZK 34 661.

Educational attainment demonstrated the most significant effect on the employee wage level. Employees with higher education earned, according to the median wages, double the wage (CZK 32 786) of the employees with basic and uncompleted education (CZK 15 695). The employees having A-level examination earned (CZK 23 288) by a half more and those having voluntary training without A-level examination had the median wage (CZK 18 817) by one fifth higher than those having basic education only. Variability of wages was highest in those having higher education; on the contrary, it was lowest in those with no qualification. One tenth of those with higher education and earning best pay had wages higher than CZK 72 808. On the other end of the scale, one tenth of employees with basic education earned less than CZK 9 962.

Wage levels differ widely for employees categories expressed according to the Classification of Occupations (CZ-ISCO), which is the main tool for the labour market research. Highest wages are attained among managers, who have also recorded the fastest increase in earnings in recent years. Wages of professionals and technicians and associate professionals follow. It is assumed that these categories of occupations have a higher degree of educational attainment. Wages of clerical support workers and blue collar workers categories are found slightly below the overall median wage. The lowest wages are used to be found in elementary occupations, see table below. In managers wages vary widely, one tenth of the best paid managers earned wages higher than CZK 108 407 yet the opposite tenth less than CZK 19 804; thus the decile ratio reached 5.5. Other categories show much lower variability in wages – the decile ratio for them is below 2.9.

	123 23 618   294 40 326
960 39	294 40 326
171 28	704 00.000
	784 29 366
961 25	436 25 966
863 20	546 20 877
848 14	465 14 645
853 17	091 17 664
884 20	318 20 766
688 20	262 20 441
131 13	402 13 398
326 21	862 22 247
	961 25   863 20   848 14   853 17   884 20   688 20   131 13

### Median gross monthly wages by Classification of Occupations (CZ-ISCO)

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Concerning age of the employees the highest median wage (CZK 23 104) can be found in the overall small group of employees aged 60+ years, who are working; on the contrary, employees aged up to 20 years had lowest median wage (CZK 14 432). Wages grow fast at the beginning of the professional carrier, the second highest median wage (CZK 23 064) was in the category aged 30-39 years; for two following ten-year age categories wages were slightly descending.

The employees bearing Czech citizenship are not those showing the highest wage level in the Czech Republic, yet their median wage (CZK 22 267) was by CZK 20 above the overall median wage. It may be surprising that Slovak Republic citizens working in the Czech Republic have a higher median wage (CZK 23 864). The lowest wage level in the Czech Republic have pertained to the employees with citizenships of the Ukraine (CZK 16 188), then followed by citizens of Bulgaria (CZK 16 494), Poland (CZK 20 051), and Romania (CZK 21 187).

\* \* \*

The long-term development in wage distribution is towards higher differences in majority of profiles. Concerning economic activities those, which have been reinforcing their positions since the beginning of the current century, are electricity, gas, steam and air conditioning; information and communication; and financial and insurance activities, while these activities at the same time have the highest wage levels, and then human health and social work activities. Wages in the aforementioned economic activities were raised by more than twice from 2000 to 2012. On the opposite side there are administrative and support service activities, which recorded an deeply under average growth.

The growing positive effect of educational attainment on the wage level used to be interrupted by saving measures in the non-business sphere, in which there is a high share of highly qualified employees, including those with educational attainment of higher education.

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