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Development of the Czech labour market in the Q4 2023

The Czech labour market started to feel impacts of an economic slowdown and the unemployment is increasing. Wages continue to catch up on the price level, however, it is differentiated as for economic activities (industries). The average wage nominally increased by 6.3%, y-o-y; in real terms it decreased by 1.2%.

**Introduction**

The Czech labour market currently deals with impacts of an economic slowdown. It came after several external/global shocks and deepened due to a slump in the domestic purchase power. The main topics are varied development in different economic activities (industries) and at the same time “stiffness” of the labour market, when the labour force moves to more perspective activities with a higher value added with difficulties. An uneasy position of the heavy industry is obvious; the public sector pays for the dismal state of the state budget and all that is also reflected in trade and market services.

**Chart 1 Consumer price index and wage index (seasonally adjusted), 2019 = 100%**

Sources: price statistics of the CZSO, wage statistics of the CZSO

During the year 2023, general trends have turned unfavourable, especially growth of unemployment started. On the other hand, the development of Czech economy became more predictable and it is already clear that the high inflation has been finally coped with. It mainly has an impact on the real wage development.

The price level has stabilised already in the beginning of 2023 and the general wage level started to gradually catch up with it, as it is shown in the chart with base indices above. Prices sharply increased in the period from the Q4 2021 to the Q1 2023; afterwards, they already grew more moderately, in the Q4 2023 they were on the level of 137% of the average of the year 2019. The wage level was growing throughout the entire period more smoothly and more gradually. The average gross wage as at the Q4 2023 thus reached the level of 128% of the average of the year 2019 after seasonal adjustment. Macro-economic aggregates and state values, however, show only a few from the dynamic development, which takes place in companies and human society.

Big challenges for the future are coping with the artificial intelligence, using of the so-called green technologies for mitigation of the climate crisis, and adapting the economy to the ageing population.

**Employment, unemployment, and economic inactivity**

Results of the Labour Force Sample Survey (LFSS) brought for the Q4 2023 a year-on-year stagnation of the employment rate (in the age group of 15–64 years) at the value of 75.4%. A very different development between sexes was obvious again – females were catching up with the persisting gap. Whereas the male employment rate decreased by 0.8 percentage point (p. p.) to 81.5%, the female one increased by 0.7 p. p. to 68.8%. As of February 2023, it is possible to take advantage of a discount on insurance premiums for part-time work in the amount of 5% from the aggregate of employees’ assessment bases, which is mainly used by females.

According to the LFSS, in absolute terms, the number of the employed increased by 81.2 thousand, year-on-year, i.e. by 1.6%, to 5 087.5 thousand. However, the quarter-on-quarter development (after seasonal adjustment) shows a decrease by 1.7 thousand persons.

An increase in the number of entrepreneurs without employees (own-account workers), this time by 53.8 thousand, y-o-y, is a long-term trend, whereas the number of the self-employed with employees (employers) stagnated. The number of employees increased less, only by 42.1 thousand.

In the breakdown by economic activity (sections of the CZ-NACE classification), the diversity is evident; in the secondary sector, employment dropped by 18.0 thousand to 1 804.4 thousand. On the other hand, in the tertiary sector, the employment increased by 92 thousand, y-o-y, to 3 142.4 thousand; mainly the number of working persons increased again in the section of ‘education’ by 35.8 thousand and in the section of ‘professional, scientific and technical activities’ by 22.8 thousand. Both the economic activities have in common that rather highly qualified labour force is employed there. It is also similar in the ‘public administration and defence; compulsory social security’ in which, however, there was a decrease by 13.6 thousand. An increase in competency is also documented by a shift in the breakdown by the Classification of Occupations (CZ-ISCO) – the number of professionals is increasing and the number of clerical support workers is decreasing.

The total number of the unemployed according to the LFSS (persons who seek a job in an active manner as defined by the International Labour Organisation (ILO)) reached 133.2 thousand persons in the Q4 2023; after seasonal adjustment, the figures show a q-o-q increase by 5.3 thousand. In the year-on-year comparison, the unemployment increased by 21.1 thousand. The unemployment rate in the age group of 15–64 years thus increased to 2.6%, which was by 0.4 p. p. more, y-o-y.

A regional profile is still noticeable; however, it is changing. The highest unemployment rates were in the *Karlovarský* Region (5.1%), further in the *Ústecký* Region (4.3%), and in the *Moravskoslezský* Region (4.1%). The unemployment rate decreased the most, year-on-year, in the *Plzeňský* Region (by 1.1 p. p. to 1.6%). The lowest unemployment rate within Czechia was in the *Vysočina* Region (1.1%).

42 thousand persons, i.e. 31.5% of all the unemployed were without work for over a year, the number of the long-term unemployed thus increased by 12.2 thousand, year-on-year. While the number of the long-term unemployed males increased by 8.9 thousand, y-o-y, the number of the long-term unemployed females was only higher by 3.3 thousand compared to the corresponding period of the year 2022.

The number of persons who cannot be classified as unemployed and who are considered to be inactive, although they are declaring that they are willing to work, increased in the Q4 2023 by 34.3 thousand, y-o-y, to 81.1 thousand. It is another increase of this indicator of surplus labour.

The LFSS only covers persons living in dwellings (flats), not those living in hostels and similar collective households. It has a negative influence on the capture of foreigners who often use such ways of housing. The weighting and grossing up methodology of the LFSS has been in 2023 adapted to this type of survey, which affected time series of absolute figures on employment, mainly as for classification by age group; relative indicators (rates) were almost unaffected by the change.

**Registered number of employees converted to full-time equivalent employees**

Preliminary data of the CZSO’s business statistics confirmed a slightly positive trend in the increase in the number of employees. The registered number of employees in full-time equivalent (FTE) increased, y-o-y, in the Q4 2023, by 5.9 thousand, which was a relative increase by 0.1%.

In terms of economic activities (industries), the increase in the number of employees concentrated in the tertiary and quaternary sector of services, including the public ones, whereas the numbers decreased in the primary sector and in ‘manufacturing’, year-on-year, as well as in trade, transportation, but also in ‘financial and insurance activities’, and, surprisingly, also in ‘information and communication’. In seven CZ-NACE sections, the number of employees decreased by 30.8 thousand, y-o-y. In the remaining twelve sections it increased by 36.7 thousand. Individually, relative increments or decrements ranged from -2.3% to 8.1%.

The biggest decrease (by 2.3% or by 2.1 thousand) can be found in the Q4 2023 in ‘agriculture, forestry and fishing’, in which 90.4 thousand employees are currently employed. The second largest relative decrease (by 2.0%) and above all the largest absolute decrease (by 22.0 thousand) was in ‘manufacturing’. It is still employing in Czechia over one million employees (1 071.5 thousand), which is far the most numerous section. Table 1 in the news release on average wages therefore provides CZ-NACE divisions of this section, which were the biggest as for the number of employees. In five of those divisions, we can currently find a decrease in the number of employees; the deepest one was in ‘manufacture of fabricated metal products, except machinery and equipment’ (by 3.4% or by 5.0 thousand); it was also considerable in ‘manufacture of other non-metallic mineral products’ (by 3.1% or by 1.5 thousand) and in ‘manufacture of machinery and equipment n.e.c.’ (by 2.8% or by 3.2 thousand). ‘Manufacture of motor vehicles, trailers and semi-trailers’ remains to be the most numerous division; the number of employees slightly increased there by 0.3% or by 0.5 thousand.

A slump in the number of employees continued in ‘transportation and storage’, in which the stock decreased by 0.7% or by 1.9 thousand. It also continued in trade (‘wholesale and retail trade; repair of motor vehicles and motorcycles’), in which the number of employees decreased by 2.7 thousand, year-on-year, which was a weaker relative decrement by 0.5%, because trade is the second most numerous section with over half a million employees (509.2 thousand).

A further decrease in the number of employees occurred in ‘mining and quarrying’; currently it was by 0.7%; expressed as an absolute number it was 0.1 thousand. The trend in this economic activity is constant and long-term, the numbers have been decreasing since the beginning of the century; now it only employs 18.2 thousand employees, which is the smallest section of the CZ-NACE as for the number of employees, with a great gap.

A smaller decrease in ‘information and communication’ (by 0.8% or by 1.1 thousand) can be considered a surprise; it is because up to now there were only year-on-year increases in this economic activity. The reason is a high comparison basis from the previous year, where the piece of data for the Q4 2022 can be marked as a deviated. On the other hand, a decrease in ‘financial and insurance activities’ (by 1.2% or by 0.9 thousand) is not surprising; there has been an occasional downsizing for a long-term in relation to digitisation of the economic activity.

In two smaller industrial sections – ‘water supply; sewerage, waste management and remediation activities’ and in the energy sector (‘electricity, gas, steam and air conditioning supply’) – the numbers of employees increased the same by 1.9%. In total, it was an increase by 1.6 thousand.

Three economic activities from the sector of services, in which the number of employees increased in total by 23.1 thousand, contributed to an increase in the total number of employees much more. It was ‘human health and social work activities’ (by 9.8 thousand), ‘education’ (by 7.5 thousand), and ‘administrative and support service activities’ (by 5.8 thousand). In the former, the increase (by 2.9% to 350.5 thousand) is undoubtedly a response to the ageing of Czech population, while we are still catching up on the deficit, which the Czech Republic still has in this area with regards to an international comparison. In the latter, the relative increase was by 3.2% to 185.8 thousand; the section includes agency workers.

However, the largest relative increases are found in other two sections that are not numerous. By 8.1% the number of employees increased in ‘other service activities’, which includes all sorts of small and difficult to classify activities; by 6.8% the number of employees increased in ‘real estate activities’. In absolute terms, it was by 6.0 thousand jobs in total.

Also remarkable was an increase in ‘arts, entertainment and recreation’ (by 3.0% or by 1.5 thousand). In ‘professional, scientific and technical activities’, there was an increase by 1.0% or by 1.8 thousand. Remaining increases were below the level of one percent.

**Quarterly average gross monthly wages**

The average wage (CZK 46 013) increased nominally by CZK 2 734 in the Q4 2023, compared to the corresponding period of 2022, i.e. by 6.3%. It is an average of a very diverse development on the level of individual branches (fields of activity), enterprises, or organisations. Expressed in real terms, it was still a wage decrease, year-on-year, this time by 1.2%.

Year-on-year nominal indices tended to decline in each quarter of 2023. From 8.8% in the Q1 to 8.0% in the Q2, 7.1% in the Q3 down to 6.3% in the Q4; it is thus a gradual deceleration of wage growth. On the other hand, it holds true that the previous year’s base was growing faster. At the same time, the price growth was developing in a similar way, with the year-on-year inflation rate decreasing in the year 2023 from 16.4% in the Q1 to 11.1% in the Q2, 8.0% in the Q3, and down to 7.6% in the Q4. It also holds true there that the year-on-year consumer price index is markedly influenced by the comparison basis, which was significantly increasing in 2022, whereas in 2023 prices were already increasing moderately. Chart No 1 proves that in the quarter-on-quarter development (after seasonal adjustment) wages were already increasing in real terms in 2023.

Wage dynamics varied widely again by economic activity in the Q4 2023. There was a positive nominal year-on-year increase of average wages everywhere. However, in many CZ-NACE sections, it is a value below the level of an increase in consumer prices (by 7.6%) and therefore in real terms they were y-o-y decreases. We can find them primarily in (public) services but also in construction and agriculture.

The highest increases over ten percent can be currently found in the following two sections: ‘mining and quarrying’ (10.3%) and ‘accommodation and food service activities’ (10.1%). Close behind was a small economic activity of industry – ‘water supply; sewerage, waste management and remediation activities’ (9.8%) and with a smaller gap ‘information and communication’ (8.7%). In ‘manufacturing,’ the average wage increased by 7.1%, in which mainly employees in ‘manufacture of electrical equipment’ were much better of (10.7%).

On the other hand, mainly employees in the following economic activities did not achieve a real increase in their purchasing power: those in ‘public administration and defence; compulsory social security’ and in ‘agriculture, forestry and fishing’ (both nominally by 3.9%, which was in real terms by -3.4%), further those in ‘arts, entertainment and recreation’ (in real terms by -2.8%), in ‘real estate activities’ (in real terms by -2.7%), in ‘education’ (in real terms by -2.6%), in ‘administrative and support service activities’ (in real terms by -2.3%), in ‘human health and social work activities’ (in real terms by -1.4%), and, finally, in ‘financial and insurance activities’ (in real terms by -1.3%). The weakest nominal wage growth was in ‘other service activities’ (by 0.3%), in which the wage level only increased by CZK 104, which was undoubtedly related to a dramatic increase in the number of employees by 8.1%.

The highest wage level in the Q4 2023 can be found in ‘information and communication’, in which the average wage reached CZK 79 156. It is followed with an unprecedented gap by ‘financial and insurance activities’ with the level of CZK 70 319. The third place is held by ‘electricity, gas, steam and air conditioning supply’ with CZK 69 336. Those three have been leading for the long term.

The ranking was as usual also from the other side. In ‘accommodation and food service activities’ the average wage increased by 10.1%; however, it still remains on the lowest level (CZK 26 693) of all economic activities. The second lowest average wage was in ‘administrative and support service activities,’ where it increased by 5.1% to CZK 30 727. The aforementioned ‘other service activities’ ranked third with the average wage of CZK 34 446 and ‘agriculture, forestry and fishing’ ranked fourth with CZK 37 501.

As for the statistics of hours worked, it was characteristic for the Q4 2023 that there was a higher number of hours worked in comparison to the corresponding period of the previous year and a considerable decrease in paid hours not worked.

**Long-term development of wages in economic activities (CZ-NACE sections)**

With results of the Q4 2023 and subsequent full-year cummulations, it is possible to observe long-term trends in the development of wages. Due to turbulences accompanying the years 2020 and 2021 with the covid pandemic, I will make comparisons to the year 2019. At that time, a longer boom period could still be felt, in which wages were increasing with high rates both in nominal and real terms.

**Chart 2: Increase/decrease in real average wages by CZ-NACE section in 2019**–**2023 (%)**

Sources: price statistics of the CZSO, wage statistics of the CZSO

It must be noted that the cumulative figures for the year 2023 are - just like the figures for all individual quarters of 2023 - still preliminary because they come from the task with a smaller sample of enterprises (“*Práce 2-04*” questionnaire/report). Only after including results of larger annual tasks (“*ÚNP 4-01*” and “*P 5-01*” questionnaires/reports) and after connecting it with administrative data sources (especially from the Czech Social Security Administration) they will be refined in the periods to come. Of course, the year 2019 is already closed with final results.

In total, the wage level increased in nominal terms by a quarter (25.3%). In real terms, however, it decreased in that period by 8.2%, because prices increased by 36.5%.

In the breakdown by economic activity, the ranking by level of average wage has remained almost unchanged. ‘Information and communication’ remained the first with the highest wage level; wages increased there from CZK 59 207 to CZK 77 915, i.e. above standard by 31.6%. ‘Financial and insurance activities’ always rank second, however, wages only increased there by 22.4% from CZK 59 181 to CZK 72 440. The highest average wage increase by 37.8% can be found in the energy sector (‘electricity, gas, steam and air conditioning supply’), from CZK 49 480 to CZK 68 186.

From the opposite side, the lowest wages persist in ‘accommodation and food service activities’ where they got from CZK 20 934 only to CZK 25 731, which is a weaker increase by 22.9%. The second lowest average wages are in ‘administrative and support service activities’ where they increased, however, by a non-standard 32% from CZK 22 972 to CZK 30 321. The third lowest wages were in ‘other service activities’ where they increased by 29.2% from CZK 25 291 to CZK 32 676. A very weak wage increase occurred in ‘agriculture, forestry and fishing’ where earnings only increased by 21.7% from CZK 28 044 to CZK 34 136.

Generally, the weakest salary increase was, however, in economic activities in which the state is dominating. It is mainly ‘public administration and defence; compulsory social security’; the average increased there during the entire period only by 18.8% from CZK 38 695 to CZK 45 964. Only a slightly higher growth (by 19.9%) was in ‘arts, entertainment and recreation’ from CZK 31 137 to CZK 37 347 and also in ‘education’ (by 22.1%), from CZK 35 409 to CZK 43 233.

From the aforementioned it results that every nominal increase lower than 36.5% meant in real terms a slump in the purchase power of earnings of employees. It occurred with different strength in all economic activities except for the energy sector, which is depicted by the chart No 2.

**Development in Regions**

In terms of the number of employees, there was a year-on-year decrease in most of the Regions in the Q4 2023. The most considerable decrease, by 1.2%, was in the *Pardubický* Region followed by the one in the *Olomoucký* Region and in the *Zlínský* Region (both by 1.1%), followed afterwards by the *Královéhradecký* Region (by 1.0%) and by the *Moravskoslezský* Region (by 0.9%). A total increase in the number of employees by 0.1% was fundamentally thanks to an increase in Prague (by 2.4%), which was 20.5 thousand of new jobs; smaller increases were also recorded in the *Jihomoravský* Region (0.4%), in the *Středočeský* Region (0.3%), and in the *Plzeňský* Region (0.2%), however, they only added 3.7 thousand in absolute terms.

As for the development of average wages, the dispersion is much smaller among Regions than in the breakdown by economic activity (industry). Wages were increasing nominally in the range from 5.4% to 7.5%; in real terms, they decreased everywhere. The lowest nominal growth by 5.4% (and thus also the biggest slump in the real wage by 7.6% due to the inflation rate) was again recorded by the Capital City of Prague (the *Hl. m. Praha* Region), followed by the *Olomoucký* Region and the *Jihomoravský* Region (both by 6.1%). The *Ústecký* Region currently had the highest nominal increase (by 7.5%), the *Karlovarský* Region ranked second (7.4%), and the *Liberecký* Region (6.9%) followed with a gap.

According to the absolute level of earnings, however, Prague still remained to be the richest among the Regions of the Czech Republic. The average wage in Prague was CZK 55 039. The *Středočeský* Region maintained its second position with CZK 46 535. The *Jihomoravský* Region was the third as usually (CZK 45 569) and a forty-four-thousand threshold was overcome also by the *Plzeňský* Region (CZK 44 231). On the other hand, the *Karlovarský* Region remained to be the Region with the lowest wage level (CZK 40 559). In the *Moravskoslezský* Region, which is following Prague, the *Jihomoravský* Region, and the *Středočeský* Region a Region with the highest number of employees (415 thousand), the average wage reached the value of CZK 42 068.

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**Median wages and decile intervals of wages by sex**

The news release of the CZSO for the Q4 2023 also contains a piece of data on the median wage, which is calculated from a mathematical model of the distribution. It shows the wage of a middle employee, i.e. a common wage level. Extreme deciles were calculated concurrently, too. In the Q4 2023, the median wage got to CZK 39 685, which is by 6.0% (CZK 2 248) more than in the corresponding period of the previous year.

The wage distribution has expanded compared to the previous year. One tenth of employees with the lowest wages were receiving a gross wage below CZK 20 073 (the bottom decile increased by 5.5%, y-o-y), whereas the tenth with the highest wages had wages over CZK 74 654 (the top decile increased by 6.6%). The decile ratio increased by 0.04 point, year-on-year, to 3.72.

Male median wages were higher than female ones; in the Q4 2023, the female median wage was CZK 36 842 (it increased by 6.3%, year-on-year), whereas the male median wage was CZK 42 340 (it increased by 5.7%). The gap between median earnings by sex decreased by 0.5 p. p. to 13.0%.

Concurrently, wages of males were distributed over a substantially wider interval, especially the area of high earnings is significantly higher for males than for females: the top decile for females was CZK 66 653 and for males it was CZK 82 640, by which there was a gap of 19.3% in high earnings and it increased by 0.2 p. p., year-on-year. On the other hand, as for low earnings, the difference was smaller and by 1.2 p. p. lower, y-o-y: the bottom decile for females was CZK 19 574 and for males it was CZK 20 562, which is a gap of 4.8% only.

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Preliminary results from the **Information System on Average Earnings** (ISAE)for **the year** 2023 bring a more detailed view of wage structures, distributions, and socio-economic breakdowns. However, the ISAE applies a different methodology for the calculation of personal earnings of an employee (first of all, it excludes all absences at work) and therefore these data are not comparable either to the aforementioned amounts of the average wages or to figures given in tables annexed to the news release of the CZSO.

According to the valid Classification of **Occupations** (CZ-ISCO), managers were the group with highest earnings having the median wage of CZK 79 296; it increased by 7.2%, year-on-year, i.e. above standard, because the total median only increased by 6.4%. Wages of managers are the most differentiated ones; a tenth of the best-paid earned over CZK 182 978, while the opposite tenth received less than CZK 40 689. The second major group of professionals became the most numerous one, year-on-year; it also has the second highest wage level with the median wage of CZK 55 027, while a tenth earned over CZK 107 360. However, their median wage concurrently only increased by 5.2%, year-on-year. The third major group includes technicians and associate professionals; they had the median wage of CZK 45 110. The fourth major group of clerical support workers had the median wage of CZK 34 382. In the fifth major group of service and sales workers, approximately one of three belongs to the so-called low-income employees[[1]](#footnote-1) – they had the decile ranging from CZK 19 982 to CZK 46 640 and their median wage was CZK 29 948. Qualified workers in ‘agriculture, forestry and fishing’ are permanently the least numerous major group; their median wage was CZK 32 519, which only increased by 4.1%, year-on-year. Craft and related trades workers had the median wage of CZK 37 467 and the second most numerous major group, plant and machine operators and assemblers, had CZK 35 667; in both, there was an increase by 7.1%. At elementary occupations, there is constantly the lowest wage level; currently, the median increased by 6.4% to CZK 24 377; therefore, they have over a half share of low-income employees, their decile range was from CZK 17 793 to CZK 38 152.

For wages broken down by **age group** it holds true that, year-on-year, the ones in older categories were increasing more than the ones in the younger categories. Moreover, the lowest median wage is constantly earned by employees up to 20 years of age (their median wage currently was CZK 28 326); concurrently, their number in the survey sample increased the most (by 9.3%). In the age group of 20–29 years, the median wage was already much higher (CZK 36 462) and in the age group of 30–39 years, the median was the highest (CZK 41 574). In the other two ten-year age categories, wages are decreasing, to CZK 40 459 for the most numerous category of those aged 40–49 years, and to CZK 39 010 for the aged 50–59 years. Finally, for those aged 60+ years, the median wage was CZK 39 109, i.e. a bit higher than for the preceding ones; however, in this category, there is only a third of the number of employees and it is usual that those who are more qualified remain to work longer.

Wages are also highly structured by the level of **educational attainment** of an employee. Employees with higher education had the highest earnings again, their median wage was CZK 55 316. However, as for them, it increased the least, year-on-year, only by 5.3%. Conversely, wages of employees with primary education or with incomplete primary education remained the lowest (CZK 30 659), although they increased by 6.3%. Graduates of secondary schools with an A-level examination earned much more (CZK 40 236) than those without the A-level examination (CZK 33 448), but less than employees with short-cycle tertiary education or graduates from bachelor study programmes (CZK 46 318).

The ISAE also measures earnings of employees by **state** **citizenship**. From large groups of foreigners, the highest representation now belongs to Ukrainians, for whom the number of records increased by 22%, y-o-y, whereas numbers of Bulgarians have slightly decreased. The highest median wage of those groups in Czechia belonged to Slovaks (CZK 43 853); it was by 10% higher than for employees with Czech citizenship (CZK 39 844). On the other hand, by 24% lower than the Czech one was the median wage of Ukrainians (CZK 30 338); however it considerably increased by 8.6%, y-o-y. Lower than Czech ones were also wage levels of other three smaller groups, i.e. of Bulgarians and Romanians (both by 15% lower) and also of Poles (by 9%).

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1. In general, such an employee is considered to be a low-income (low-wage) employee who earns less than 2/3 of the total median wage; according to preliminary results of the ISAE for the year 2023, the threshold was CZK 26 341. [↑](#footnote-ref-1)