

6. Labour Market

Clear signs of cooling related to the cyclical economic downturn started to appear on the CR labour market in H2 2022.

Domestic labour market, which resumed development following the abatement of impacts of counter pandemic restrictions, experienced gradual cooling in the second half of the last year. While the growth of employment¹ attained strong 1.5% in the quarter-on-quarter expression still in Q2 2022 (and the number of workers slightly exceeded the record level from the peak of the pre-pandemic boom for the first time – 5.45 mil persons), the quantity of workers already slightly reduced in the subsequent part of the year (by 27 thousand, 0.5% resp. in total for the whole H2). The decline of job vacancies or worsening of short-term expectations of businesses in the area of employment, which manifested across the main branches also completed the picture of falling demand for labour force. Together with the decrease of GDP it accentuated the fact, that the Czech economy was impacted by recession. It is not surprising with the view to the nature of the economic downturn, that mainly the division Trade, transport, accommodation and restaurants (–28 thousand persons) was losing job positions during H2. Weight dominant branch – manufacturing also experienced a decline (–15 tis persons). The long-time growing demand for workers in the area of public services and also in information and communication on the contrary acted the most against deeper reduction of employment in the economy.

Effect of the post-pandemic revival still prevailed in the annual view. Services contributed from nearly three quarters to the employment growth.

In total for the last year however the total employment still grew briskly (+1.7%, the most after year 2008). The lower comparative basis stood primarily behind it, since the domestic labour market was still significantly affected by the impacts of the counter pandemic restrictions in year 2021 and the number of workers was thus not growing in number of key branches. Employees alone essentially contributed to the growth of total employment last year (+93 thousand persons), since the number of self-employed persons was in fact stagnating². If the increase for employees had rather all pervasive character, small entrepreneurs still faced weaker demand in some branches (manufacturing, professional, scientific, technical and administrative activities). Growth of total number of workers was from nearly three quarters driven by the services sector. It was in the first instance division Trade, transport, accommodation and restaurants (+26 thousand) and public services³ (+24 thousand), where the state responded to the heightened demand mainly in the area of education and both health and social care similarly to the previous years. At least mild employment growth however manifested in all main branches of services last year. Beyond the tertiary sphere construction expanded the job positions the most (+14 thousand of persons), since it benefited from the sound dynamics of the public investment on transportation structures towards the end of the EU programme period. Employment in industry expanded slower (+0.7%) under the influence of persisting difficulties with the supply chains as well as the strong cost pressures arising from the rapid surge of prices of energies, in that it stagnated in total in non-manufacturing segment of mining and energy industry (similarly to the majority of the past decade).

Industrial businesses proceeded with caution to creation of new job positions.

Employment grew relative the most in ICT areas at the end of the last year. So called Other services recorded decline.

Total employment grew by 1.3% year-on-year in Q4 2022, mostly thanks to public services. The number of workers increased relatively the most in information and communication (+5.5%), real estate area also fared well (+2.1%). In contrast so called Other services⁴ detected nearly 2% decrease. It could have been related to the limitation of expenditures of households on the “non-essential” services. There were 7% of workers less in this branch

¹ Data regarding employment stem from the national accounts' conception. They are expressed in physical persons and adjusted for seasonal effects.

² More detailed data from the Labour Force Sample Survey (LFSS) imply, that the number of employers (entrepreneurs with employees) further decreased (fourth year in a row). This group of entrepreneurs is in the methodology of national accounts included into the category of employees.

³ Branches with the prevalent public services, including public administration, defence and social security and also education and health and social work, had the most pro-growth effect on the employment out of all key branches also in years 2020 and 2021.

⁴ They include arts, entertainment and recreational activities and further especially the provision of personal services (e.g. hairdressing, beauty services, cleaning services or repairs of products for personal use and mainly for households).



compared to the peak of the pre-pandemic boom (period 2015 to 2019), even 13% less in the branch financial and insurance activities (here however small businesses were for the most part behind the decrease). Employment in industry (by 4%) or in branch of Agriculture and forestry (5.5%) also stayed behind the pre-pandemic level at the end of the last year, on the contrary it clearly exceeded this level in the areas of ICT, real estate or public services (by 6 to 9%).

Growth of the number of foreigners working in the CR accelerated. It was mainly aided by the beginning integration of refugees from Ukraine.

Also in year 2022 businesses filled (mainly in industry, construction as well as some „low-income“ branches of services) to a significant extent the demand for free labour force via recruitment from abroad, since the source of the potential domestic labour force became nearly exhausted in the last years⁵. The growth of the number of foreigners working in the CR considerably gained pace last year, it reached record 800 thousand for employees in November 2022⁶. The beginning integration of refugees from Ukraine was evident here⁷, ongoing migration from economically weaker regions of the EU as well as states outside the EU had an effect in much smaller order.

Growth of the labour productivity per hour worked halted last year. Productivity per worker however mildly increased and approached the level from year 2019.

The labour productivity expressed by the real size of the created gross value added per one employee slightly increased year-on-year last year (by 0.7%) and nearly reached the level from year 2019. From the position of the whole economy, manufacturing was key driver of higher productivity last year (even though it still did not fully catch up on the slump from year 2020), from the longer term view then rather the financial activities. Productivity per hour worked of the national economy decreased by 1.1% in real terms last year and fell for the first time in the last six years. Last year's result was adversely affected mainly by the division of Trade, transport, accommodation and restaurants and also Public services, where the workload (from the view of the average hours worked) in some of its segment shrank since the retreat of the pandemics. The productivity per hour however increased by nearly 5% here compared to year 2019, it was also higher in the majority of other main branches of services (apart from activities in the real estate area, where it lagged by more than one tenth behind the pre-crisis level). Construction also had a similar distance last year (-12%). On the contrary, the productivity in industry accomplished the level from year 2019, exclusively thanks to manufacturing branches (+0.7%) since it still considerably stayed behind the pre-pandemic level in mining as well as energy industry.

Expectations of businesses in the area of employment gradually deteriorated last year. Traders still maintained mild optimism.

Short term expectations of businesses in the whole economy in the area of employment following the optimistic outlooks from the beginning of the last year (when it was the most favourable since summer 2019) gradually slightly worsened. In February 2023, it descended to the lowest level since March 2021 (when the counter-pandemic measures peaked). The negative tendencies were evidenced mainly in industry and construction. The employment outlooks in retail as well as services did not change much for the majority of the last year, at the turn of years 2022 and 2023 however the worsening manifested also here. Only businesses in trade preserved mild optimism, which contrasted with very low consumer confidence. 10% of firms planned reduction of the level of employees (in the nearest three months) in January 2023 (similar proportion presumed in contrast to create new positions),

⁵ As also evidenced by the long-term decline of the number of economically inactive persons stating willingness to work (partially also affected by the change of the age structure of population, e.g. decrease of young aged 15 to 24 years). There were only 50 thousand of these inactive persons in Q4. Together with underemployed and all unemployed it was just below 200 thousand of persons. In relation to the total number of employed it was less than 4%.

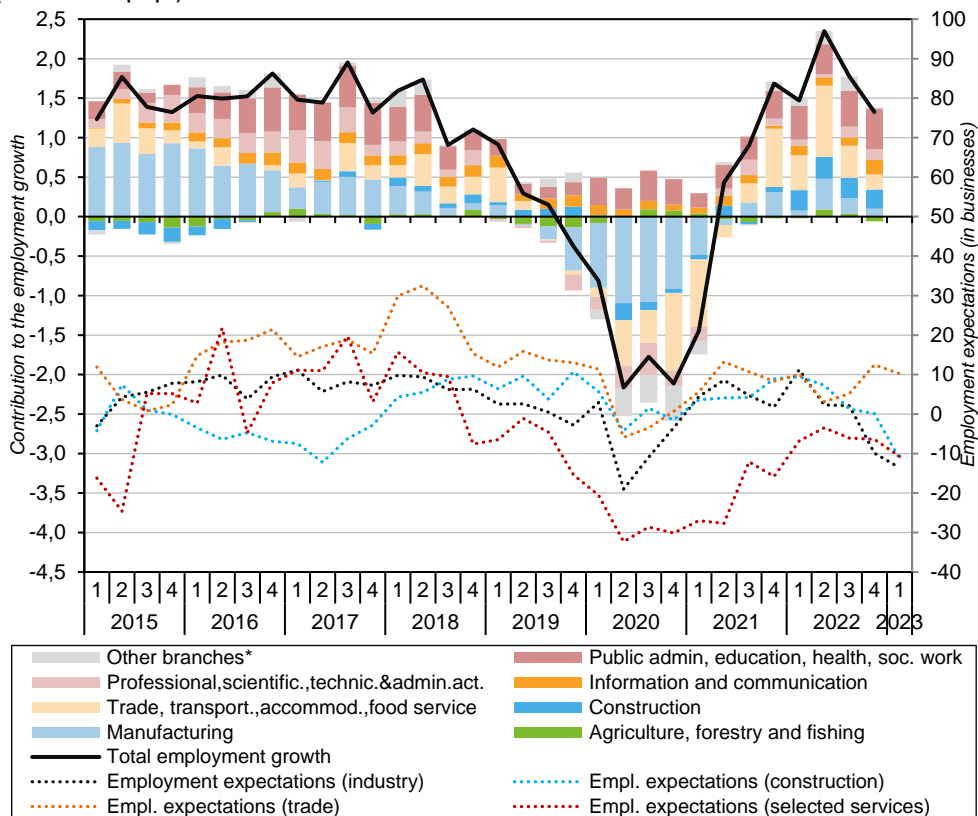
⁶ Labour offices (LO) registered 774 thousand of foreigners in the employee position on the CR territory in January 2023 (mild decrease against the end of the preceding year is associated with regular seasonal movements). The number of working in employee positions expanded by 77 thousand against January 2022. Workers from Ukraine essentially contributed to this result, with their number rising nearly by one third (+63 thousand, in that +51 thousand females) to total 262 thousand. By contrast the number of Slovaks, who comprised the most numerous group of foreigners still in year 2021, increased only by 2.6 thousand (to 208 thousand) for the similar period.

⁷ Number of all citizens of Ukraine with the temporary stay on the CR territory expanded according to the data of the MI CR from 108 thousand (from the end of January 2022) to 543 thousand (December 2022). Women participated from more than three fifths on the total increase. Only a minority from the total number of persons with newly granted stay however could have joined the labour market in the CR (large part of them consists of children, pupils and students, in addition some persons likely already left the CR).

Shortage of labour force remains the main growth barrier in construction, its role rather weakened elsewhere.

13% in industry, 18% in construction and 21%⁸ in services. It cannot be omitted, that the situation differed at the level of subbranches within industry as well as services⁹. Due to the effect of deterioration of the overall economic outlooks as well as unexpectedly larger inflow of persons from Ukraine to the domestic labour market, the share of businesses which consider the shortage of labour force as a one of the significant growth barriers, dropped during the last year in the majority of the main branches (e.g. 20% of businesses marked this barrier in services in January 2022, only 9% one year later). This issue however still remained pressing in construction, because it limited more than 40% of businesses at the beginning of year 2023 and still constituted a key growth barrier.

Chart 14 Total employment (year-on-year in %), contributions of branches to year-on-year change of employment (in p.p.) and expectations of employment development (balance in p. p.)



* Mining and energetics; Financial and insurance activities; Real estate activities; Arts, entertainment and recreation activities.
 Note: Balance of expectations expresses the difference in p.p. between categories growth vs. decrease of employment in the nearest three months. Data are seasonally adjusted and relate to the second month of the given quarter.
 Source: CZSO, Eurostat (national accounts, business cycle surveys)

General unemployment rate slightly fluctuated near historical minimum last year. Number of long-term unemployed kept falling.

Decline of the general unemployment rate¹⁰ (persons aged 15 to 64 years) halted in the CR already at the beginning of year 2022. However neither a trend of its rising was apparent in the subsequent period. The data regarding the job applicants registered at labour offices (LO) also corresponded with this development, their course matched the common seasonal

⁸ Data are not seasonally adjusted.

⁹ Especially industrial businesses in energy-intensive branches of metallurgy, metalworking industry, manufacturing of building materials, chemical industry or food industry anticipated a reduction of the number of employees (according to the survey from January 2023). Further also in the main sub-supplier branches of manufacturing of motor vehicle and among the smaller branches mainly in manufacturing of wearing apparel. Manufacturers of computers, electronic and optical appliances, manufacturers of transport equipment and from the smaller branches then pharmaceutical industry and printing activities planned increase of employment.

In services the negative expectations were observed mainly in the air transport, travel agency activities, publishing activities, financial activities and further for instance in the area of advertising. On the contrary in number of services for business (legal and accounting activities job employment placement agencies) or in the area of insurance activities, programming or warehousing, rather higher employment is expected.

¹⁰ Unless stated otherwise, all data regarding the unemployment rates are sourced from the LFSS (based on the ILO methodology) and are adjusted for seasonal effects.



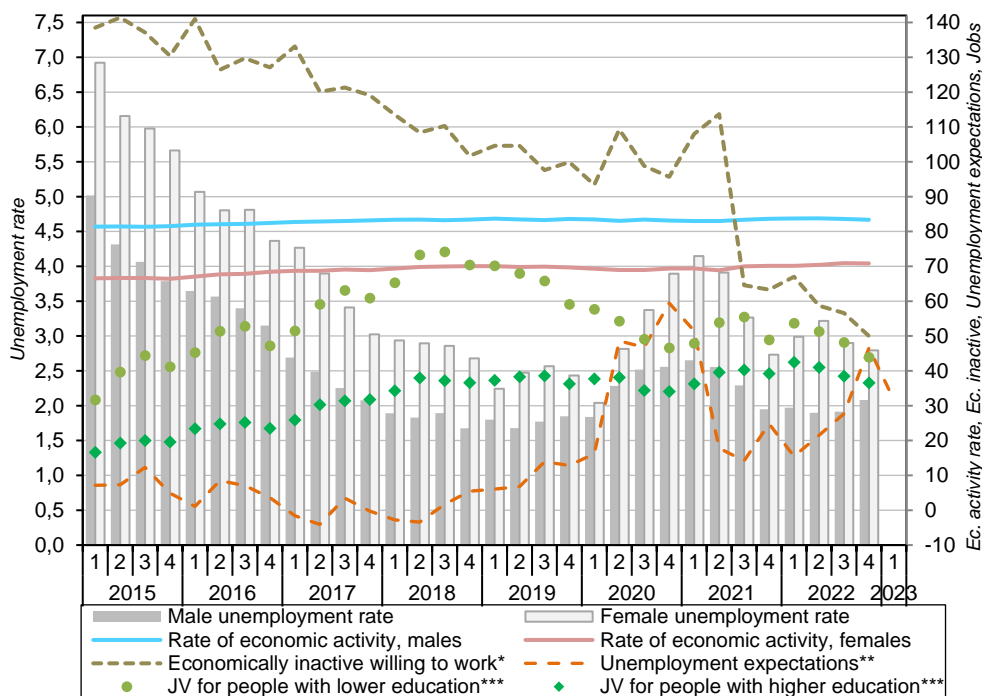
Concerns of people regarding the growth of unemployment were rising for the most part of the last year.

influences¹¹. General unemployment rate attained 1.8% for males in December 2022 and 2.5% for females and thus stayed near its historical minimum. A positive fact is that the number of long-term unemployment lowered year-on-year in H2 2022. Based on the LFSS it slightly exceeded 30 thousand in Q4 and composed only one quarter of all unemployed (similar proportion as in the last „pre-pandemic“ year). It is related to the still high stock of job vacancies and proves, that significant part of the local unemployment still has frictional character. Concerns of people regarding the rise of unemployment grew for the majority of the last year, which was connected to their negative perception of the overall economic situation in the CR as well as worsened expectations of own financial situation of households. Unemployment worries however have not fully reached the intensity from the period of culminating pandemics yet or e.g. the period of recession in year 2012 to 2013. In addition the beginning of year 2023 saw a sign of mild decrease of the household concerns.

Offer of job vacancies at LO was continuously falling since Spring last year and it was lower than the number of job applicants in January this year.

If in year 2021 the number of job vacancies offered by LO depicted typical seasonal course, the total supply of vacancies was shrinking even in times of peaking seasonal jobs last year. Number of vacancies was falling continuously month-on-months since March 2022 (from 360 thousand) till December (to 289 thousand).¹² This trend was also confirmed in January 2023, when the supply of vacancies (281 thousand) reduced nearly to five year minimum and it was even lower than the number of all job applicants for the first time since April 2018 (283 thousand). The impact of the cyclical economic downturn manifested here, when the businesses started to limit the creation of new job positions and at the same time, more frequently laid off workers (even though not usually on a mass scale so far).

Chart 15 General unemployment rate (in %, age 15 to 64 years), rate of economic activity (in %, age 15 to 64 years), economically inactive willing to work (in thousand persons)*, job vacancies (in thousand) and unemployment expectations of households (in p. p.)**



Note: Figures regarding the unemployment rate as well as economic activity are seasonally adjusted. JV = job vacancies (state at the end of quarter)

¹¹ According to the MLSA data, the proportion of reachable job applicants aged 15 to 64 per population of the same age was 3.6% in January 2022, 3.1% in June and 3.7% in December last year.

¹² Significant part of vacancies however cannot be considered active for various reasons. It e.g. constitutes positions offered by companies, which terminated their operations, further positions, which are outdated, but were not removed from the offer or positions considerably unattractive, remaining vacant for a long time. Only part of the entire offer of job vacancies can thus be considered truly active. Number of positions, which were offered less than half a year, totalled only 124 thousand at the end of Q4 2022, which was by 65 thousand less year-on-year.

*Persons not in employment, not seeking work, but expressing the willingness to work.

**Seasonally adjusted balance of expectations of unemployment in the next 12 months (difference between percentage frequency of answers of households, growth and decrease expressed in percentage points). Data relates to the middle month of the given quarter.

*** Job vacancies for apprentices and people with secondary education without A-level examination

**** Job vacancies for people with secondary education with A-level examination, and higher (tertiary) education

Source: CZSO (LFSS, business cycle surveys), MLSA (job vacancies registered at labour offices in the CR)

Decline of job vacancies was all-encompassing, the supply for persons with minimal qualification shrank the most.

Job vacancies requiring minimum qualification (maximum primary education) decreased relatively the most year-on-year, by 23% compared to January 2022 (to 202 thousand). It can be assumed, that part of the less qualified positions could have been filled by the refugees from Ukraine. The supply of positions for secondary school leavers without certificate decreased, specifically by 13.9% (to 43 thousand), for persons with higher education then by 8.5% (to 37 thousand.). The excess of the entire supply of job vacancies over the number of registered job applicants occurred in five regions (*Kraje*) of the CR in October and in one third of smaller units (*Okresy*) (apart from Prague usually in Central, Southwest and East Bohemia). In contrast, in all smaller units of Ustecky, Liberecky, Olomoucky as well as Moravia Silesia regions the supply of job vacancies at LO could not even theoretically (regardless of the qualification demands) fully cover the demand on the part of job applicants already at the end of January this year. Traditionally, the worst situation exists in Karvinsko (with 12 applicants per one position), where in addition the decision regarding the prolongation of coal mining prevented more substantial worsening.

Five regions of the CR registered excess supply of vacancies over numbers of job applicants in January 2023.

Quarter-on-quarter nominal growth of the average wage slightly accelerated during year 2022.

The average gross monthly nominal wage (per employee, with regards to the length of job contract) climbed up to 43 412 CZK thousand in Q4 2022 and it was by 7.9% higher year-on-year. Wage after adjustment for seasonal effects increased by 2.1% quarter-on-quarter in Q4, which in the context from the beginning of the last year signal a mild acceleration. It however was not sufficient for employees to cover the sharply growing costs of living. Since the deep year-on-year fall of the average real wage continued for the fifth quarter in a row, even though in comparison to record nearly 10% falls in both Q2 and Q3 2022 eased its pace at the end of the year (to -6.7%). Cause of this moderation lied more than in the area of earnings in the temporary slowdown of the consumer price growth (due to introduction of the saving energy tariff for households). Regardless of this influence, the real wage dropped in all monitored branch divisions as well as all main industrial branches, similarly as across the CR regions in Q4. The Q4 wage development (similarly to the entire last year) thus likely presented the decisive factor in the decrease of the total purchasing power of domestic households¹³. The real wage plunged by 7.5% for year 2022, the purchasing power of the average employee earnings thus reached approximately the level from year 2018¹⁴.

Striking year-on-year fall of real wages continued for the fifth quarter in a row. It afflicted all branches and regions.

Primarily the market branches stood behind the wage growth. Part of them still struggled with the shortage of labour force.

Wage growth was promoted by the ongoing tension on the labour market for the whole last year, related to the persisting low unemployment, still high number of job vacancies as well as fact, that the shortage of employees significantly limited production in some branches. The continuing raising of the minimum wage had a partial effect mainly in branches with low level of earnings. On the contrary the arrival of Ukrainian refugees did not influence much the level of average wages even in these branches so far¹⁵. The growth of wages in the whole economy was hampered by the setting of wage tariffs in the public sphere or a major part of the year (freeze or only a very mild growth for majority of employee categories)¹⁶. High inflationary

The effect of saving measures manifested in

¹³ The Gross disposable income (GDI) of households in real expression decreased by 3.1% year-on-year in Q3 2022, the volume of wages and salaries in the national accounts conception (after considering the price development of final consumption expenditure of households) dived by 9.9% in real terms in the same time period. Wages and salaries include (in contrast to the business statistics) also other factors, for instance grey economy, possible increase of economic activity of population, e.g. in the form of second employments or work agreements. GDI contains next to wages and salaries also income flowing from running a business or ownership of capital and also social transfers from state, including the retirement pensions (which were adjusted three times last year).

¹⁴ Purchasing power of wages increased only in 7 out of 19 main branch divisions in this four year period (it concerned e.g. energy industry, real estate activities, education, health and social care and also administrative and support service activities, where temporary agency workers play important part). On the contrary, weight significant branches of manufacturing or trade experienced a mild decrease of wage purchasing power (by 4%, 1% resp.).

¹⁵ These persons integrated on the labour market gradually and often primarily via part-time jobs or only in the form of various agreements.

¹⁶ As of 1st September 2022, 10% increase of wage tariffs eventuated for employees belonging under the Public Servants Act and further for part of workers in culture and other, mainly manual workers with low wage level.



branches with the dominance of state.

expectations displayed ambiguous results in the wage area so far. They did lead to the growing pressure of employees on swifter wage growth, it however encountered still more and more difficult situation of employers (for reasons of fast growth of the non-wage production costs). Still some businesses with favourable economic situation partially compensated the high growth of the livings costs to employees in the form of extraordinary bonuses, especially at the end of the year.

Wage growth was varied among branches in Q4. It was strengthened by the pay out of bonuses in number of branches with good economic results.

Among branches the average monthly wages were raised the most in the energy industry also thanks to favourable economic results year-on-year in Q4 2022¹⁷ (+14.6% nominally), when their size exceeded the level of the whole economy by one half and markedly neared the earning level in financial and insurance activities (66.4 CZK thousand). It also grew briskly (+10.3%), similarly to information and communication (+9.1%), where the wage level is an all-time highest between branches in the past years. Mining and quarrying, where likely the notable restructuring from preceding years (together with vigorous reduction of employment) as well as improved economic results thanks to the growth of demand for coal, recorded unusually above average wage growth in Q4 (as well as the entire last year). Earnings in administrative and support services activities or branch agriculture, forestry and fishing rose by one tenth year-on-year. Unlike the mining however, it concerns branch with very low wage level. Wage growth in other market branches oscillated around 9% at the end of the last year, which was also valid for manufacturing. Manufacturing of motor vehicles stood out among more significant manufacturing branches, with average wages also thanks to the pay out of bonuses at the end of the year rising by 13.4% here – i.e. nearly double than in the energy intensive manufacturing of non-metal products¹⁸. The situation was different in branches with dominant government sector¹⁹, specifically from the view of employment dynamics as well as average earnings. The Autumn selective increase of wage tariffs was partially reflected in the 8% growth of wages in the branch public administration, health and social work, it was also similar in the area of culture. On the contrary the average monthly size of earnings decreased negligibly in education, still it reached 49 CZK thousand.

The Autumn increase of wage tariffs was reflected in earnings in some branches with significant role of state.

Wage dynamics did not fundamentally differ among market branches for the whole last year, even though it was affected by varied mix of factors.

The average monthly wage in the economy increased by nominal 6.5% and tightly crossed the 40 CZK thousand boundary in total for year 2020. The wage growth (unlike the employment) did not fundamentally differ among market branches – it moved from 7.4% (agriculture, forestry and fishing) to 10.7% (in financial services)²⁰. After-effects of the post-pandemic revival of demand was mirrored in the above average growth of earnings in some branches (trade, transport and warehousing, accommodation, food services and restaurants). In other places the growth of wages was likely associated to the dismissal of little qualified workers (administrative and support services activities). Wages in the branches with the significant role of the government sector nearly stagnated in total year-on-year (+0.5%)²¹. Wages in health and social work still maintained the highest level among them (44.4 CZK thousand monthly). Against the earnings from year 2021 (raised by extraordinary „pandemic“ bonuses) they however decreased by 4.3% (in the annual sum they decreased for the first time in the comparable time series after year 2000). Earnings increased by 1.8% in education, the least in the last seven years. Still their size stayed above the level of the whole economy, even though only by near 3% for the last year.

Growth of wages in education moderated to seven-year minimum last year.

Median of the wages in the economy expanded by even 9% year-on-year in Q4 2022. It was 40.2 CZK thousand monthly for males, 34.6 CZK thousand for females. Percentage growth of the medium earnings was mildly higher for males than females for the whole last year (the

¹⁷ It involves generation and distribution of electricity, gas, heat and air conditioning.

¹⁸ The wage pace however did not differ much between main manufacturing branches in total for year 2022.

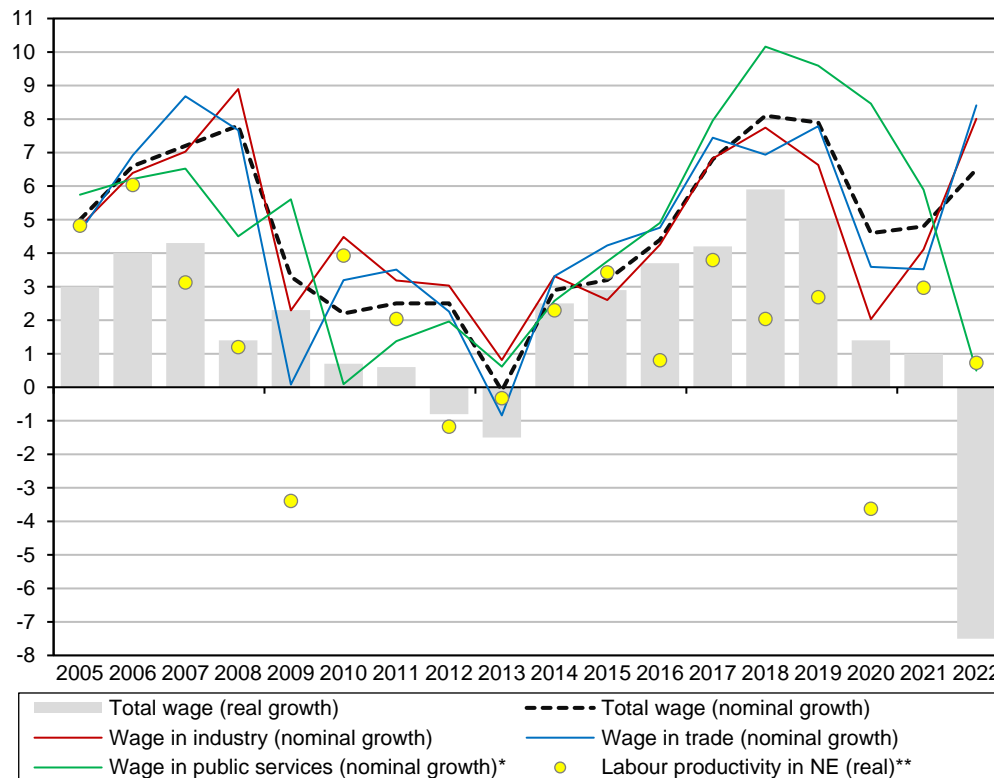
¹⁹ For simplification it includes branches Public administration and defence, mandatory social security; Education; Health and social care; Cultural, amusement and recreation activities.

²⁰ Relatively smaller differences were present also in the growth of total average wages among regions outside Prague last year (from 5.3% in Ustecky region, to 6.7% in Central Bohemia, Zlinsky region resp.). Wages grew by 7.2% in Prague, even though the wage growth in the metropolis stayed behind the republic wide pace in the period of pandemics as well as previous boom.

²¹ Without their influence the hypothetical wage growth was 8.5% in the economy for the last year.

opposite pattern was generally valid in the preceding years). The wage differences slightly lowered throughout the whole year 2022, specifically thanks to females, for whom the relative growth of low wages (in the first decile) surpassed the increase of the highly above average earnings (in the ninth decile). From the view of the main groups of the classification of occupations the median wage increased the most to craft and repairmen (+8.4%)²², legislators and chief executives also recorded slightly above average growth (7.3%) last year. The average earnings grew the least to employees in armed forces (+1.8%). The numerous group of professionals also recorded weaker wage growth (+4.1%), which was also reflected in the below average percentage growth of earnings of university graduates.

Chart 16 Average nominal and real wage and real labour productivity
(annual totals, y-o-y change in %)



* Includes branches with a significant state involvement: Public administration, defence, social security; Education; Human health and social work activities; Arts, entertainment and recreational activities.
 **Labour productivity in national economy (NE) is depicted by the gross value added (in comparable prices of year 2015) per one worker.
 Source: CZSO

²² It represents a preliminary estimate. More detailed figures will be available in the publication Employee wage structure for year 2022, which will be published 23rd May this year.

