

# THE CZECH ECONOMY DEVELOPMENT

Year 2022

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Source of data in the whole analysis: Czech Statistical Office (CZSO), Ministry of Finance (MF CR), Czech National Bank (CNB), Ministry of Labour and Social Affairs (MLSA), Czech Social Security Administration (CSSA), Eurostat, CZSO calculations.

Latest information provided in this report has been dated the 14<sup>th</sup> March 2023.

### 1. Summary

- The Gross domestic product (GDP) increased by 2.4%<sup>1</sup> in year 2022. Especially the capital expenditures and foreign demand contributed to this development. On the contrary, the domestic consumption was falling last year. The growth was weakening during the year 2022 and the GDP went up by 0.2% year-on-year in Q4. The year-on-year economic growth was mainly supported by the foreign demand in the second half of the year. In contrast, the favourable effect of the capital expenditures subsided and the decrease of the domestic consumption deepened. Compared to Q3, the GDP dropped by 0.4% and it represented a second quarter-on-quarter decrease in a row. The foreign demand had a positive effect also on the quarter-on-quarter GDP dynamics; however both the consumption and capital expenditures were falling. The Gross domestic product expanded in total by 1.7% in the EU year-on-year in Q4 and it fell by 0.1% quarter-on-quarter. The CR thus ranked among the countries with the below-average GDP dynamics towards the end of the year.
- The Gross value added (GVA) increased by 2.5% in year 2022. Mainly services contributed to growth, while various difficulties prevailed in industry disruption of supplies of components or the growth of prices of energies and raw materials. The GVA increased the most under the influence of weak comparative basis in other activities. Information and communication and professional, scientific, technical and administrative activities also prospered. Due to the effect of favourable results in manufacturing of motor vehicles and affiliated branches the GVA grew soundly in manufacturing, industry as a whole however grew slower. The GVA only decreased in agriculture, forestry and fishing last year. The GVA grew by 1.0% year-on-year in Q4 and it grew by 0.3% quarter-on-quarter. The GVA grew the most in manufacturing year-on-year towards the end of the year. On the contrary, it fell in the significant division trade, transportation, accommodation and food service.
- Export of goods and services as well as the import expanded similarly in real terms by 5.7%<sup>2</sup> year-on-year last year. The balance of foreign trade with goods and services in current prices dropped into the 8.3 CZK bn deficit for the first time since year 2003. Export of goods and services increased by 9.7% in real terms year-on-year in Q4. Import increased by 7.6% year-on-year. The balance of foreign trade with goods and services worsened by 4.9 CZK bn year-on-year in Q4, it nevertheless remained in surplus (11.1 bn). The trade with oil and natural gas as well as other imported goods and materials, which experienced a marked price growth the most affected the worsening of balance of trade with goods last year. Price factors also stood behind the improvement of the balance of trade with electricity, gas, steam and air conditioning and the revival of export of motor vehicles also contributed positively.
- Total price level (gauged by the GDP deflator) rose by 8.4% last year. The year-on-year growth of the price level during the year strengthened up to 10.7% in Q4. Quarter-on-quarter, the price level lowered by 0.5%. The consumer prices increased by 15.1% last year. Their year-on-year growth reduced to 15.7% in Q4. The growth of prices was all encompassing last year and it was double digit in 7 out of 12 consumer basket divisions. The three most weight-significant divisions of consumer basket, i.e. housing and energies, food and non-alcoholic beverages and transport, had the largest effect on the growth of price last year. For food the growth accelerated in the second half of the year, the dynamics on the contrary eased its pace in case of housing and energies and transport.
- Monetary policy-relevant interest rates were rising in H1 last year and remained at a constant level since June till the end of the year. The client rates on term deposits were raised and the credit financing for both households and businesses became more expensive during the year. There was perceptible spill over of funds from current accounts to term deposits.
- Total employment<sup>3</sup> expanded by 1.7% last year. It increased by 1.3% year-on-year in Q4, however quarter-onquarter it decreased for the second time in a row, specifically by 0.4%. The general unemployment rate stagnated since the beginning of the year and it attained 1.8% for males and 2.5% for females in December. The average gross monthly nominal wage reached 40 353 CZK last year. It grew by 6.5% in nominal terms, however



<sup>&</sup>lt;sup>1</sup> Data regarding the GDP, gross value added and their components are expressed in constant prices and adjusted for seasonal and calendar effects.

<sup>&</sup>lt;sup>2</sup> According to the methodology of quarterly national accounts (export and import in FOB/FOB prices).

<sup>&</sup>lt;sup>3</sup> Employment data are in the national accounts conception and adjusted for seasonal effects.

considering the strong growth of the consumer prices it plunged by 7.5% in real terms. The average wage rose by 7.9% to 43 412 CZK year-on-year in Q4. Quarter-on-quarter, it was by 2.1% higher.

• The state budget (SB) ended in deficit of 360.4 CZK bn last year. More successful SB management in Q1 mainly contributed to the year-on-year decrease of the total deficit. The impacts of the war in Ukraine, i.e. the acceleration of the growth of prices of energies as well as fuels and costs connected to the refugee wave were at the beginning adversely apparent more on the expenditure side of the budget. Their negative impact also on the budget revenues was however still more evident towards the end of the year, first of all in the area of indirect taxes.

### Selected Key Indicators of the Economic Development\*

ha Paratan	11	2021			2022		Whole	year
Indicator	Unit	4q	1q	2q	3q	4q	2021	2022
Economic Performance								
Gross Domestic Product in the CR <sup>1</sup>	y/y, in %	3,5	4,7	3,5	1,5	0,2	3,5	2,4
	q/q, in %	0,8	0,6	0,3	-0,3	-0,4	х	х
Gross Domestic Product in the EU <sup>1</sup>	y/y, in %	5,1	5,7	4,4	2,6	1,7	5,4	3,5
Final consumption expenditure <sup>1</sup>	y/y, in %	5,4	5,9	0,5	-4,1	-5,4	3,2	-0,4
Gross fixed capital formation <sup>1</sup>	y/y, in %	4,1	7,0	6,0	7,2	4,6	0,8	6,2
Exports of goods and services <sup>1,3</sup>	y/y, in %	-3,9	0,4	1,7	11,1	9,7	6,8	5,7
Imports of goods and services <sup>1,3</sup>	y/y, in %	6,0	5,3	2,2	7,6	7,6	13,2	5,7
Balance of foreign trade <sup>2,3</sup>	in CZK bn	16,0	1,2	-23,0	2,4	11,1	179,3	-8,3
Balance of economic sentiment indicator <sup>6</sup>	in p.p.	3,3	4,4	6,3	-2,6	-3,3	3,3	-3,3
Performance in Main Branches								
Industrial production <sup>4</sup>	y/y, in %	-1,9	0,3	0,8	6,1	3,2	6,6	2,5
Construction production <sup>4</sup>	y/y, in %	5,0	11,3	4,0	-0,8	-0,1	2,4	2,6
Sales in services <sup>4</sup>	y/y, in %	12,7	14,1	12,3	7,2	1,6	7,5	8,5
Sales in retail trade <sup>4</sup>	y/y, in %	6,2	6,5	-3,0	-7,5	-9,2	4,4	-3,8
Prices								
Consumer price index	y/y, in %	6,1	11,2	15,8	17,6	15,7	3,8	15,1
HICP in the CR	y/y, in %	5,0	10,2	15,0	17,4	16,5	3,3	14,8
HICP in the EU	y/y, in %	4,9	6,5	8,8	10,3	11,0	2,9	9,2
Agricultural producer prices	y/y, in %	15,7	23,9	39,0	37,0	28,0	6,3	31,8
Industrial producer prices	y/y, in %	12,8	21,8	27,7	25,9	21,8	7,2	24,3
Service producer prices in the bus. sph.	y/y, in %	1,8	4,2	5,8	6,5	6,7	1,3	5,8
Terms of trade in trade with goods	in %	97,9	96,4	95,9	94,3	98,2	99,7	96,2
Labour Market								
Total employed in the CR <sup>3</sup>	y/y, in %	1,7	1,5	2,3	1,8	1,3	0,4	1,7
General unemployment rate in the $CR^5$	in %	2,3	2,4	2,4	2,3	2,4	2,8	2,4
General unemployment rate in the $EU^5$	in %	6,5	6,2	6,1	6,1	6,1	7,0	6,1
Average employee wage (nominal)	y/y, in %	2,9	7,3	4,4	6,2	7,9	4,8	6,5
Average employee wage (real)	y/y, in %	-3,0	-3,5	-9,8	-9,7	-6,7	1,0	-7,5
Monetary Conditions								
Two week repo rate <sup>6</sup>	in %	0,75	3,75	4,50	7,00	7,00	0,25	3,75
Exchange rate CZK/EUR		25,4	24,7	24,6	24,6	24,4	25,6	24,6
Exchange rate CZK/USD		22,2	22,0	23,2	24,4	23,9	21,7	23,4
State Budget <sup>7</sup>								
State budget balance in the CR	in CZK bn	-93	-59	-124	-88	-90	-420	-360
State debt <sup>6</sup>	in CZK bn	2 466	2 594	2 708	2 890	2 895	2 466	2 895

Data source: CZSO, CNB, MF, Eurostat

 $^{\ast}$  Unless stated otherwise, data relate to the CR.

<sup>1</sup> data adjusted for seasonal and calendar effects in constant prices

<sup>2</sup> data adjusted for seasonal and calendar effects in current prices

<sup>3</sup> in the national account conception, in natural persons

<sup>4</sup> adjusted for seasonal effects

 $^{5}$  seasonally adjusted, age group 15 – 74 years

<sup>6</sup> balance at the end of period

<sup>7</sup> based on treasury fulfilment



# 2. Overall Economic Performance

The Czech economy narrowly maintained its year-on-year growth in Q4, quarter-on-quarter however it fell for the second time in a row. The Gross domestic product (GDP) increased by 2.4%<sup>4</sup> in year 2022, which represented a slowdown of the dynamics compared to year 2021. The gross capital formation and the foreign demand supported the GDP growth the most last year. In contrast, the domestic consumption hindered the economic growth. Because especially households reduced their expenditures in the environment of the sharp price growth. The real GDP level (expressed in prices of year 2015) slightly overtook the pre-pandemic year 2019 last year. The year-on-year GDP dynamics gradually slowed down during the year 2022 (additions 4.7%, 3.5% and 1.5% in Q1, Q2 and Q3) and the economy stagnated year-on-year in Q4 (0.2%). Compared to Q3 the GDP decreased by 0.4%, which was the second decrease in a row. The year-on-year GDP growth was based on the favourable development of the foreign demand at the end of the year. The addition of the capital expenditures however weakened and the domestic consumption strongly hindered the year-on-year GDP dynamics, but the consumption as well as the capital expenditures were falling.

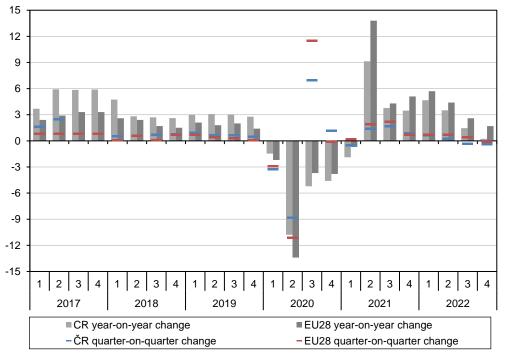


Chart 1 GDP (volume indices, adjusted for seasonal and calendar effects, in %)

Source: CZSO, Eurostat

The economic growth also slowed down in the EU last year.

The year-on-year GDP growth slowed down in the European Union during the whole year 2022 and reached  $1.7\%^5$  in Q4. The quarter-on-quarter dynamics also gradually stifled during the year and it fell by 0.1% compared to Q3 in the Union. Colling down of both consumption and capital expenditures was apparent in the EU countries towards the end of the year. The GDP grew the strongest in Ireland (13.1%), Greece (5.2%) and in Romania (4.9%) year-on-year in Q4. On the contrary, the economies of Estonia (-4.4%), Lithuania (-0.4%) and Sweden (-0.1%) registered decrease compared to the same period of year 2021. Apart from the CR (0.2%), the GDP remained close to year-on-year stagnation also in Finland (0.1%). The GDP in Greece (1.4%), Malta (1.2%) and Cyprus (1.1%) had the largest increase compared to Q3. The GDP slumped the most quarter-on-quarter in Poland (-2.4%) and it was also lower in Estonia (-1.6%), in

<sup>&</sup>lt;sup>5</sup> Data for Luxembourg were not available.



<sup>&</sup>lt;sup>4</sup> The development of the GDP, gross value added and their components is expressed with the help of the volume indices (i.e. adjusted for changes in prices) and adjusted for seasonal and calendar effects. Data are valid as of 3rd March 2023.

Finland (-0.6%), Sweden (-0.5%), Lithuania (-0.5%), Hungary (-0.4%), Germany (-0.4%), the Czech Republic (-0.4%) and Italy (-0.1%).

Wages and salaries plummeted in real terms last year.

The total volume of wages and salaries expanded by 8.8% given the growth of the total employment by 1.7%<sup>6</sup> in year 2022. The nominal addition to wages and salaries thus accelerated in comparison to year 2021 and it was also higher than in the pre-pandemic year 2019. Considering the sharp price hike however the household earnings dropped in real terms. Wages and salaries reduced by 6.4%<sup>7</sup> in real terms last year. Real estate activities recorded the highest increase of the volume of wages and salaries last year (19.5% given the employment growth of 4.3%), which continued in the sharp hike from vear 2021. Further strengthening of growth was further observed for branches strongly hit by the pandemic slump. It was the case of trade, transportation, accommodation and food service (growth of wages and salaries by 16.1% given the simultaneous increase of employment by 2.1%) and of other activities<sup>8</sup> (wages and salaries by 14.9%, employment by 0.7%). The strengthening of the dynamics of wages and salaries accompanied by significant increase of employment affected information and communication (13.3% given the employment growth of 3.9%) and construction (10.5%, employment rose by 3.4%). The volume of paid out wages and salaries grew at an above average pace in professional, scientific, technical and administrative activities (9.6%, employment was higher by 1.1%) and also in financial and insurance activities (9.6%, employment grew by 0.5%). The growth of wages and salaries was below average in manufacturing (8.7%, employment growth 0.7%), agriculture, forestry and fishing (7.8%, employment 0.4%) and branches with the predominance of the government sector<sup>9</sup> (1.0%, employment grew by 2.3%) last year.

Pressure on the growth of nominal wages and salaries was apparent at the end of the year.

In Q4, the year-on-year growth of the volume of paid out wages and salaries slightly accelerated to 8.0%. The wages and salaries rose by 2.2% guarter-on-guarter. The yearon-year growth of employment slowed down to 1.3% and the employment fell by 0.4% quarter-on-quarter. The pressure on the growth of wages thus continued in the highinflation environment despite the total economic slowdown. The wages and salaries however dived by 8.5% in real terms year-on-year. The wages and salaries grew the most in the real estate area year-on-year in Q4 (18.7% given the employment growth of 2.1%). The notable growth for information and communication continued (13.9% with the employment growth of 5.5%). The year-on-year increase was above average in case of financial and insurance activities (10.8%, employment grew by 0.7%), trade, transportation, accommodation and food service (10.3% given the simultaneous increase of employment by 0.8%), construction (9.8%, employment was higher by 3.2%), manufacturing (9.6%, employment of 0.4%), in professional, scientific, technical and administrative activities (9.6%, employment was higher by 1.6%) and in agriculture, forestry and fishing (8.5%, employment decreased by 2.0% year-on-year). In contrast the wages and salaries in branches with the predominant government sector (1.4% given the employment growth of 2.7%) and other activities (5.8%, employment fell by 1.8%) lagged behind the average growth.

Wages and salaries rose The strengthening of the guarter-on-guarter dynamics of wages and salaries affected the in all branches quartermajority of branches in Q4. The earnings rose the most in financial and insurance on-quarter. activities (6.2%), in professional, scientific, technical and administrative activities (5.0%), real estate activities (4.8%), other activities (4.2%), agriculture, forestry and fishing (4.0%) and information and communication (3.0%) quarter-on-quarter. The increase was milder



<sup>&</sup>lt;sup>6</sup> Employment data in the national accounts conception (persons), figure seasonally adjusted.

<sup>&</sup>lt;sup>7</sup> Converted into the real expression using the deflator of household consumption.

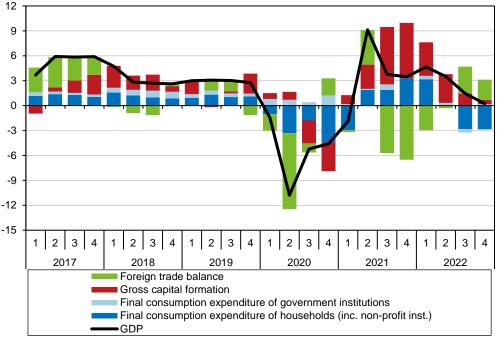
<sup>&</sup>lt;sup>8</sup> This section includes activities of organisations uniting persons for the purpose of advancing their common interests, repairs of computers and personal and household goods and number of other personal services (hairdressing and other beauty treatment etc.). <sup>9</sup> Public administration, education, health and social work.

in division trade, transportation, accommodation and food service (2.5%), construction (2.1%) and in manufacturing (1.9%). Wages and salaries stagnated in branches with the predominant government sector (0.1%).

The household consumption plunged.

Domestic consumption decreased by 0.4% in year 2022. The real level of consumption (in prices of year 2019) thus still did not overtake the year 2019 following the pandemic slump in year 2020. The reduction of expenditures of households (-0.9%), who faced an unprecedented slump of real earnings was definitely the reason of the last year's decrease. The real level of the household consumption even lagged behind the year 2018. Consumption of the government sector was on the contrary higher by 0.7%. Expenditures on the final consumption worked in the direction of the GDP decrease 0.5 p. p.<sup>10</sup>. The consumption fell year-on-year for the second time in a row in Q4 2022 itself, specifically by 3.4%. In that the household consumption slumped by 5.5%, while the government institutions experienced a mild increase of 0.9%. Quarter-on-quarter, the consumption shrank by 0.6%, for the fifth time in a row. For households the decrease deepened to 2.8% compared to Q3, on the contrary the government institutions recorded a marked increase by 3.9%.

Chart 2 Contribution of expenditure items to real GDP change\* (volume indices, year-on-year growth, contributions in p.p., GDP in %)



Source: CZSO

\* after exclusion of imports for final use

Consumption of services maintained a year-on-year growth.

With regard to durability<sup>11</sup> the demand for durable goods dropped the most last year (-10.4%). It corresponds to the usual behaviour of consumers, who limit expenditures in just these areas in periods of uncertainty. However, the consumption of non-durable goods recorded the second largest decrease (-5.6%), which is very atypical and points to the restriction of expenditures in the area of essential goods, such as for instance food. Consumption of medium-term durability goods was lower by 1.6%. On the contrary, the increase of consumption strengthened to 7.1% for services last year. The expenditures on durable items lowered year-on-year by 16.4%, medium-term durability goods by 13.2% and short-term durability goods by 7.9% in Q4. Consumption of services

<sup>&</sup>lt;sup>10</sup> Additions to the GDP change after exclusion of imports for final use.

<sup>&</sup>lt;sup>11</sup> Data regarding consumption based on durability are in domestic conception.

maintained year-on-year growth throughout the whole year and it went up by 2.7% in Q4. Compared to Q3, only the consumption of non-durable goods was falling (-3.6%), while the slump was deepening. The consumption of services (2.3%) and further durable goods (1.7%) grew the most quarter-on-quarter. The medium-term consumption recorded stagnation (0.3%) following a series of four deep slumps.

Investment went up last Expenditures on gross capital formation went up by 8.4% in real terms last year. In that year. expenditures on gross fixed capital formation (investment) were higher by 6.2%. In addition the inventory stock was also growing<sup>12</sup> - while it represented mainly the unfinished products in industry in year 2021, the natural gas supplies also had an effect last year. The gross capital formation added to the last year's GDP growth 2.3 p.p., in that fixed capital 1.4 p.p. Year-on-year growth of the expenditures on gross capital formation gradually weakened during the year - the addition reached 2.6% in Q4. In that however investment expanded by 4.6%. Quarter-on-quarter however, the gross capital formation reduced by 1.3% (second decrease in a row). Investment activity fell quarteron-quarter for the first time since Q1, specifically by 1.1%.

Investment into housing Type classification of gross fixed capital formation documents the concerns of were falling. households and downswing of the real estate market associated with the increase of the interest rates and worsened accessibility of mortgages. Because investment into housing decreased by 1.2% last year. On the other hand investment into transport equipment (14.9%), other buildings and structures (8.9%), intellectual property products (6.3%) as well as ICT and other machinery and equipment (5.9%) grew. Year-on-year development in Q4 resembled the year-round development – only investment into housing fell by 4.7%, but growth of the other investment items continues. Expenditures on intellectual property products were thus year-on-year by 9.7% higher, on ICT and other machinery and equipment by 7.6%, on other buildings and structures by 4.7% and on transport equipment by 2.6%. The quarter-on-quarter dynamics however shows that investment into other buildings and structures (-7.3%) as well as transport equipment (-4.0%) considerably slowed down towards the end of the year. Expenditures on housing were slightly lower (-0.7%). Investment into the intellectual property products (5.5%) and ICT and other machinery and equipment (0.6%) in contrast grew quarter-on-quarter.

(contribution 0.6 p.p.). Total balance of foreign trade with goods and services in current prices deteriorated by 187.6 CZK bn last year and fell into the 8.3 bn deficit, the first since the year 2003. Mainly the trade with goods stood behind this development (total deficit 100.4 CZK bn, worsening by 170.6 bn), but the balance of trade with services also developed in the adverse direction (worsening of surplus by 17.0 CZK bn to 92.1 bn). Steep rise of the prices of oil and natural gas as well as other materials, which further transferred to prices of other goods, played a key role in the dramatic worsening.
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Foreign trade balance The export of goods and services increased by 9.7% in real terms year-on-year in Q4. worsened year-on-year. In that, the export of goods grew by 8.2% and services by 18.4%. The strong year-onyear real growth was also connected to the weak comparative basis from the second

prices and after seasonal adjustment.

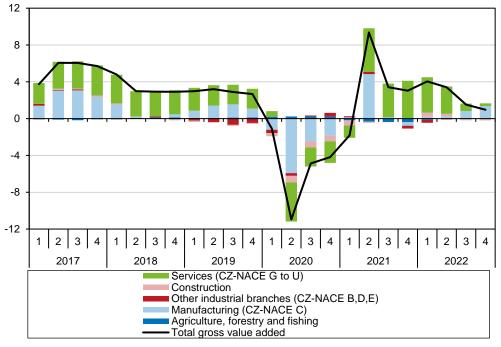


<sup>&</sup>lt;sup>12</sup> Change of inventories (in current prices and seasonally adjusted) attained 392.4 CZK bn last year and 104.9 bn in Q4 itself. The indicator in constant prices grew in total last year due to the development in H1. The change of the inventory stock was slightly lower in real terms year-on-year in Q4 2022. <sup>13</sup> According to the methodology of quarterly national accounts (export and import in FOB/FOB prices). Foreign trade balance in current

half of year 2021, when the culminating shortage of components complicated situation to exporters. Import increased by 7.6% year-on-year in Q4. Import of goods was by 3.7% in real terms, services featured a sharp jump of 33.3%. Foreign demand had a favourable effect on the year-on-year growth of GDP in Q4, the increase attained 2.4 p.p. Quarter-on-quarter, the export of goods and services rose by 0.5% in Q4 – it fell by 0.8% for goods, while services prospered (growth of 7.5%). Import stagnated quarter-on-quarter – import of goods fell by 1.5%, on the contrary the addition reached 8.1% for services. Total balance of foreign trade with goods and services in current prices deteriorated by 4.9 CZK bn year-on-year in Q4, it however remained in surplus (11.1 bn). Balance of trade with goods ended in deficit 4.4 CZK bn (year-on-year improvement of 10.6 bn). In case of services, the positive balance worsened by 15.6 CZK bn to 15.4 bn.

Gross value added grew mostly thanks to services last year. The Gross value added (GVA) increased by 2.5% in year 2022. Mainly services contributed to growth, while various difficulties persisted in industry – disruption of supplies of components or the raised prices of energies and materials. The GVA increased the most in other activities (9.5%), where the increase was affected by the low comparative bases of the first half of the year 2021. Growth was considerable in information and communication (5.0%), professional, scientific, technical and administrative activities (3.6%) and in division trade, transportation, accommodation and food service (3.4%). Gross value added grew also in manufacturing (2.9%), industry as a whole grew slower (1.6%). Real estate activities also increased last year (2.9%) following two previous falls. GVA increase in construction (1.9%), financial and insurance activities (1.6%) and branches with the dominant government institutions (1.2%) was mild. Only agriculture, forestry and fishing recorded decrease (-2.4%).

> Chart 3 Contributions of branches to real change in GVA (volume indices, year-onyear contributions in p.p., GVA in %)



Source: CZSO

GVA growth in manufacturing notably revived at the end of the year.

The GVA increased by 1.0% year-on-year in Q4 and it increased by 0.3% quarter-onquarter. Relatively substantial difference between the dynamics of GDP and GVA in Q4 was caused by the real decrease of collected taxes on products, which was connected to the slump of household consumption. Increased subsidies also had an effect in the



similar direction. The GVA grew the most in manufacturing (6.0%), in real estate areas (5.1%), in other activities (2.7%) and in information and communication (2.5%) yearon-year in Q4. GVA grew only modestly in branches with the dominant government sector (0.7%) and in financial and insurance activities (0.6%) year-on-year. Division trade, accommodation and food service (-2.9%), construction (-2.8%), agriculture, forestry and fishing (-1.4%) and professional, scientific and administrative activities (-0.2%) recorded a year-on-year GVA decrease. GVA in financial and insurance activities (3.6%), real estate activities (2.4%), manufacturing (1.6%) and in branches with the dominant government sector (1.2%) achieved the largest GVA increase compared to Q3. Construction (0.9%) and agriculture, forestry and fishing (0.8%) also experienced a revival. Other activities slightly grew (0.3%). GVA was falling quarter-onquarter in information and communication (-1.4%) for the first time since Q2 2020 and it was also lower in division trade, transportation, accommodation and food service (-0.3%).

# 3. Branches Performance

Quarter-on-quarter growth of total GVA halted in Q3. Lower household consumption afflicted the performance of a number of market services as well as the energy industry.

Total branch performance stays behind the peak from the pre-pandemic boom in the CR.

Despite growing challenges, the division Trade, transportation, accommodation and food service fundamentally contributed to the growth of the economy for the whole last year.

Long-term swift growth of GVA in the area of ICT eased pace at the end of the year.

#### GVA growth in manufacturing was maintained even at the end of year 2022 unlike the energy industry as well as construction.

Decrease of the wood logging continued for the second year in a row. The crop of cereals was above average again. Data from the supply side of the economy confirm, that the Czech economy found itself due to the effect of external shocks in the contraction phase of the business cycle last year. Quarter-on-guarter growth of the Gross value added (GVA)<sup>14</sup>, lasting five guarters in a row, halted in Q3 (-0.2%) and the development in the remaining part of the last year also did not bring any fundamental change (+0.3%). Distinct GVA decrease affected the weight significant segment of services in H2 last year - Trade, transportation, accommodation and food service. This was linked to the deepening slump of the household consumption. Quarter-on-quarter GVA development also adversely impacted the lower consumption expenditures of government institutions for most part of the year. Post-pandemic recovery ceased also in construction and in the number of services for businesses. Savings of households as well as businesses also reflected in the lowered performance of the energy industry at the end of the year. In contrast, manufacturing had a pro-growth effect on the whole economy in spite of fluctuating development of number of industrial branches for the most part of the last year, the similar was also valid for the public services<sup>15</sup>. Performance of all branches (GVA) of the Czech economy has not exceeded its maximum so far (from the end of year 2019)<sup>16</sup> and slightly lagged behind it in Q4 (by 0.3%).

In the year-on-year view the GVA growth subsided (down to even 1% in Q4 2022), it was 2.5% for the whole year (after 3.4% from year 2021). Even despite this slowdown, all main divisions of services contributed to the economic growth last year – the segment Trade, transportation, accommodation and food service (+0.6 p.p.) the most. The GVA however grew the most dynamically in other services activities<sup>17</sup> (+9.5%), partially due to the effect of low comparative basis from the beginning of year 2021, when these services were as a result of government counter pandemic measures considerably restricted. In the long-term prospering information and communication the GVA increased by even 5% last year (the growth narrowed to 2.5% in Q4 2022 itself, which was the least since the end of year 2016). It was associated with weakening demand in the wider spectrum of services for businesses. On the contrary, the bloom of activities in the area of real estate continued despite the slump of the mortgage market throughout the whole year. The performance of this branch was however compared to year 2019 still lower at the end of the last year (by 2%). Public services registered moderate, nevertheless long-time stable GVA growth (1.2% last year).

Among the branches outside the services sector, the GVA grew the most in manufacturing last year (+2.9%, contribution to the growth of the whole economy +0.7 p.p.), which profited from the solid both domestic and foreign demand and thus maintained its growth at the end of the year as well. This is not valid for other branches – energy industry or construction. The GVA fell by 2.4% in the branch Agriculture, forestry and fishing last year and mitigated the 15% slump from year 2021. The situation in forestry, where the receding bark beetle outbreak drastically lowered the need for the wood logging for the second year in a row, was likely still essential for the development of the whole primary sector. Total last year's harvest of cereals only negligibly lagged behind the above average crop form 2021 by 0.1%<sup>18</sup>. Deeper slump of the harvest of grain maize was offset by the growth for wheat and barley. Oilseed rape and other industrial crops or fruit farming flourished. Moderate 2% year-on-year decrease of crops however occurred for both potatoes and sugar beet, deeper decline affected forage plants and majority of vegetable types. Hop plant recorded a slump of harvest<sup>19</sup>, on the

<sup>&</sup>lt;sup>14</sup> Data regarding GVA are expressed in constant prices and adjusted for both seasonal and calendar effects.

<sup>&</sup>lt;sup>15</sup> For simplification, branches public administration, education, health and social work are included here.

<sup>&</sup>lt;sup>16</sup> Within the EU countries, it was valid only for Spain, among other European countries for instance for the Great Britain.

<sup>&</sup>lt;sup>17</sup> Includes arts, entertainment and recreational activities and further provision of personal services (e.g. hairdressing, beauty treatment services, cleaning services or repair of products for personal use and mainly for households).

<sup>&</sup>lt;sup>18</sup> Based on the final data for year 2022, it in total (incl. grain maize) attained 8.22 mil of tuns. It overtook the average of harvests from previous five years by 6.9%, ten year average then by 5.2%.

<sup>&</sup>lt;sup>19</sup> Its harvest dived by 46% year-on-year. The crop from the preceding year 2021 (8.3 thousand tons) was the highest in the CR after year 1996.

#### The Czech Economy Development

Rising production costs as well as weaker consumer demand added to the decrease of the meat production.

The quarter-on-quarter growth of the industrial output continued in the period Q1 to Q3. Its volume for the first time overtook the maximum level from year 2019.

The industrial production was adversely affected by the impacts of sharp hike of prices of inputs, rising difficulties with the supplies of production components as well as worsened performance of the euro area economy in Q4.

Last year's growth of industrial output was driven mainly by the manufacturing of motor vehicles. It however also faced difficulties. contrary the long-term trend of harvest growth continued for vineyards. Four years lasting growth of the natural production of meat halted last year (its level returned to the extent from year 2018). Last year's decrease (4.2%) was affected the most by lower production of pork meat, the decrease however occurred for all other main types of meat. High growth of the production costs (feed, energies) as well as lower consumption in households manifested. Decline within the animal production was partially softened by mildly growing production of milk. The GVA in all main branches of the primary as well as secondary sector was in Q4 2022 below the level of year 2019 (the most in construction – by 11%).

Data from the business statistics also confirm, that the domestic industry continued in mild post-pandemic revival for the most part of the last year. It managed to offset the weaker performance of the motor vehicle segment at the beginning of the year 2022 and later also of some significant businesses in other branches, which were affected by the disruption of the supply chains due to the unexpected ignition of the war in Ukraine. During Q3, when the quarter-on-quarter growth of the domestic economy stopped, the industrial output<sup>20</sup> however increased by 1.9% (which was the most since the end of year 2020). The fact, that the investment activity in the economy did not weaken markedly also contributed. The same was also valid for the value of foreign industrial orders since the euro area as well as the German economy itself still resisted the threat of recession. The fact, that the situation with the supplies of the production components for the motor vehicle industry temporarily improved. played an important role. The total industrial output thus exceeded the level from the prepandemic boom for the first time last year in summer<sup>21</sup>. However, the stock prices of both electricity and gas escalated in Europe in August last year, which together with the ongoing swift growth of prices of other material inputs adversely reflected in the performance especially of more energy-intensive branches (metallurgy, metalworking industry, manufacturing of glass or extraction and manufacturing of building materials). Savings translated into falling demand (both of households and enterprises) affected the branch of energy industry. In addition the industrial businesses in the CR started still more to experience concerns associated with the worsening economic situation in the number of significant export territories, which also became apparent in the negative business cycle expectations of domestic businesses. Thus the quarter-on-quarter growth of production in industry as well as its key segment of manufacturing of motor vehicles in effect halted in Q4.

Even though the output dropped in approximately one third of industrial activities for the last year, it went slightly up in total for the whole industry (+2.5%). It was mainly thanks to the manufacturing of motor vehicles, which even despite weaker basis (because of forced shutdowns of operations in Q3 2021) increased by 11.8% and contributed even 2 p.p. to the growth of the whole industry. It was assisted by the strong demand connected to the renewal of the company vehicle fleet (interrupted during the pandemics) as well as the gradually developing segment of electrical vehicles – as also evident from the data regarding the physical production<sup>22</sup>. Still the situation in the manufacturing of motor vehicles remains complicated. Utilisation of production capacities was around 80% here nearly for the whole

<sup>&</sup>lt;sup>22</sup> Based on the Automotive Industry Association data, monthly production usually exceeded the boundary of 100 thousand personal vehicles from May till September last year. As a result these months approached the level from the same period of years 2017 till 2019, when the motor vehicle manufacturing peaked locally. The manufacturing of motor vehicles reached 1.218 mil in total for year 2022 (by 10% more year-on-year, but by 15% less compared to both years 2018 and 2019). Already more than one tenth of the manufactured personal vehicles concerned electrical vehicles (incl. vehicles hybrid cars). Producers of other motor vehicles (motorcycles, buses) also registered an increase of output compared to year 2021, simultaneously their output was exceeding the pre-crisis level.



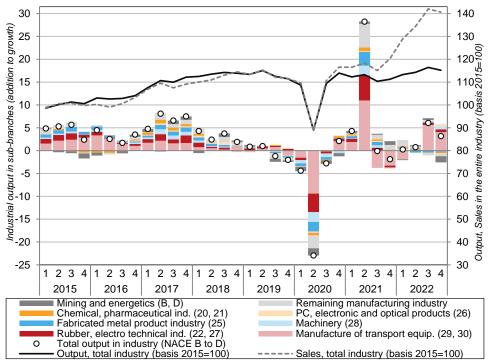
<sup>&</sup>lt;sup>20</sup> Includes branches of mining and quarrying, manufacturing and also energetics (here as activities of production and distribution of electricity, gas, heat and air conditioning supply). All year-on-year rates of growth of output (at the level of branch sections as well as divisions) are adjusted for calendar effects, quarter-on-quarter rates then also for seasonal effects.
<sup>21</sup> The industrial output was closely (by 0.1%) above the level of the previously record period (Q2 2019) in Q4 2022. However three fifths (out of

<sup>&</sup>lt;sup>21</sup> The industrial output was closely (by 0.1%) above the level of the previously record period (Q2 2019) in Q4 2022. However three fifths (out of nearly thirty) of main industrial branches stayed behind theirs peak from the pre-pandemic boom era (years 2014 till 2019). It was mainly mining and quarrying of coal (by 39%), leatherworking and footwear industries (28%), metallurgy (22%), wood industry (20%), textile industry (15%) and among the more significant branches e.g. the energy industry (14%), chemical industry (10%) or manufacturing of computers, electronic and optical appliances (7%), fabricated metal product industry and also rubber and plastic industries (similarly 5%). On the contrary, especially manufacturers of electrical equipment (by 12%) and manufacturers of motor vehicles (by 7%), from the smaller activities then e.g. pharmaceutical, paper and wearing apparel industries already overtook the pre-crisis level.
<sup>22</sup> Based on the Automotive Industry Association data, monthly production usually exceeded the boundary of 100 thousand personal vehicles from

last year (while the long-term average slightly exceeds 90%). In addition, 85%<sup>23</sup> of businesses in the manufacturing of motor vehicles declared a shortage of material or equipment in January 2023 (their share did not lower as opposed to other industrial branches in the last half-year).

Manufacturing of electrical equipment, computers or machinery also thrived. Some smaller branches strongly hit by the slump of demand during the pandemics markedly revived. Next to the manufacturing or motor vehicles, the diversified branch of manufacturing of electrical equipment also more notably added to the industry growth (+0.5 p.p., given the branch growth of 6.7%), since it was supported by a solid demand both locally and abroad. The output in the significant branch of machinery increased by 5%, its output thus evened up the level from the peak of the pre-pandemic boom in Q4 2022. The last year's growth of output was supported by the growing domestic demand in the manufacturing of computers, electronic and optical products (+4%). Among smaller branches, mainly leatherworking and footwear industries (output growth by record 20.7%) or wearing apparel industry (+13.0%), which were also assisted by the domestic demand, prospered. The gradually expanding numbers of foreign tourists in the CR fuelled the manufacturing of beverages, whose output increased by 7.8% last year (the most after year 2006). Long-time developing and substantially export oriented pharmaceutical industry fared well (+8.0%).

Chart 4 Contributions of sub-branches to the year-on-year change of the total industrial output (adjusted for calendar effects, real, in p.p.) and sales and output in the entire industry (seasonally adjusted, level of year 2015=100, right axis)



Note: Sales are given in current prices, Output in constant prices. Source: CZSO

The fall of output deepened in the majority of high energy-intensive industrial branches in H2 2022. High energy-intensive branches of chemical, metallurgical and metalworking industries or manufacturing of glass and building materials on the contrary sank into still more complicated situation. Following the fast recovery in year 2021, when the performance of these branches climbed up above the level from the pre-crisis year 2019 (thanks to the swift demand both locally and abroad), a slump occurred due to the sharp jump of prices of inputs, which deepened during H2 2022. At the same time, the largest slump afflicted metallurgy, where the output fell by 8.3% due to the weakening of the foreign demand last year (it last recorded a deeper slump during recession in year 2009). Milder, however still significant in the view of the whole industry was the output decrease, which affected the chemical and also the

<sup>&</sup>lt;sup>23</sup> Businesses could have indicated more main growth barriers simultaneously.



#### The Czech Economy Development

Decline of the household consumption as well as the rising production costs led to the decreased output in the long-term growing food industry.

Output growth in the coal mining reached record level last year, the quarrying of building materials on the other hand decreased.

Warmer weather as well as savings of customers stood behind the decrease of output of the energy industry, especially at the end of the last year.

Domestic sales grew more swiftly than sales from direct export to the industrial businesses year-on-year. fabricated metal product industry, which was not aided much even by the growing demand in the small segment of the arms production. The food industry also struggled with high growth of production costs together with the weakening consumer demand, whose output lowered for the first time after year 2013 (by 1.5%). In contrast the slump in the wood industry, which manifested for the second year in a row (last year by 7%) had a different background. The performance of the follow-up branches (paper and furniture industries) stagnated; the weaker demand started to be evident also here in H2 2022. The output in the manufacturing of other (especially rail) transport equipment features traditionally fluctuating character. It dived mainly due to the high comparative basis by 7.5%<sup>24</sup> last year.

The energy shock, which shook the so far relatively stable energy mix in the number of European economies and interrupted long-term trends in the demand for important commodities substantially influenced the situation in the non-manufacturing industrial branches last year. Output in the mining and quarrying went mildly up for the second year in a row. In that the output in the segment of coal mining increased in 2022 by nearly one tenth year-on-year, when it grew for the first time since year 2011 and its pace was the highest in the comparable time series (since year 2000). On the contrary the output slightly decreased in the extraction of building materials (by 1.6%), which was related to the weakening of demand on the part of builders as well as the high energy intensity of this branch. The output decreased also in the energy industry last year (by 2.9%), primarily due to the development in Q4, when the marked cut down of consumption as a result of warmer weather as well as expected operating savings in business and households was felt. Consumption of the natural gas dived by record 20% in the CR last year and its volume was the lowest in the last eight years<sup>25</sup>. Decline also occurred for the manufactured heat<sup>26</sup>. The amount of manufactured electricity lowered by negligible 0.4%<sup>27</sup> year-on-year (it was however by 2.9% lower compared to year 2019). Since the domestic consumption of electricity dropped faster last year (by 3.9%). the long-time surplus of the CR foreign trade with this commodity further widened<sup>28</sup>.

Nominal sales of industrial businesses<sup>29</sup> increased by 16.1% in year 2022, when they grew in all its main branches. Domestic sales strengthened by more than one fifth year-on-year, by more than double the pace of sales from direct export. Number of branches traditionally oriented on the domestic market faced strong cost pressures, which were reflected in the realised sales – that is why these e.g. in coal mining or energy industry rose in total by nearly one third, in food industry by nearly one fifth. On the contrary the sales were only by 5.4% higher in the significantly pro-export manufacturing of computers, electronic and optical products and the price growth was out of the more moderate here. In Q4 2022 however, the quarter-on-quarter growth of sales halted in the whole industry (for the first time since summer 2021), which was connected to the weakening of the economy as well as the fact, that the



<sup>&</sup>lt;sup>24</sup> It however worked in the direction of the decrease of the whole industry only marginally (-0.2 p.p.).

<sup>&</sup>lt;sup>25</sup> According to the data of the Energy Regulatory Office of the CR (ERO), the total consumption of natural gas after adjustment for long-term thermal standard plummeted by 16.5% last year. The absolute size of such expressed consumption reached a minimum in the comparative time series since year 2001. The non-adjusted consumption was falling in all months of the year (mainly in May by 33%). For the whole year, the consumption decreased the most for wholesale customers – e.g. the largest businesses (by 22%) and households (21%), the least for businesses in the retail (small) customer category (14%).

<sup>&</sup>lt;sup>26</sup> According to the up to date ERO data, the total gross production of heat dropped by 6.6% for Q1 to Q3 2022, mainly due to the lower utilisation of natural gas and black coal (in contrast the weight of the brown coal and heating oils grew). The amount of consumed heat decreased faster (by 10.3%), in that by 12% in households, decrease also occurred across the business sphere (4% in industry, 24% in energy industry).

<sup>&</sup>lt;sup>27</sup> Combined gas/steam plants contributed mainly to the decrease of the total gross generated electricity according to the ERO data in year 2022 (their production sank by one half year-on-year), water stations were also less utilised. Thermal (steam) power plants on the contrary contributed positively (output growth of 6.3%), specifically mainly due to the higher utilisation of coal. Production in nuclear power plants also mildly strengthened (+0.9%), its size totalled record 31 TWh (37% of all electricity generated in the CR). Total gross domestic consumption of electricity was slightly falling year-on-year for the whole last year, however the most in Q4 (-6.6%). Mainly households participated on the yearly savings (they decreased their consumption by 9%, the most in the last 20 years). Savings in the business sphere were in much lower range – for wholesale customers (-2.5%), for retail customers - e.g. small entrepreneurs (-0.1%). The electricity consumption was higher only for households last year (+2.9%) compared to year 2019, it lagged behind the pre-crisis level in the business sphere (5.6% for wholesale customers).

<sup>&</sup>lt;sup>28</sup> According to the ERO data, the value of difference between export and import increased by 22%, to total +13.5 TWh in year 2022.

<sup>&</sup>lt;sup>29</sup> It concerns sales from the industrial activity only. The year-on-year rates of growth are adjusted for calendar effects.

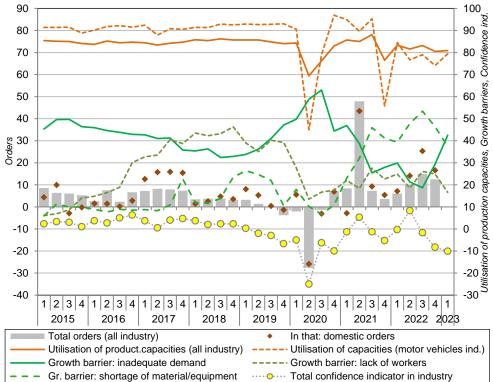
Quarter-on-quarter growth of sales ceased at the end of the year.

Growth of the value of new industrial orders lagged behind the sales dynamics since the beginning of the year.

Demand in the most energy-intensive branches was decreasing. price growth of the number of inputs had been weakening already since the last summer. The sales were thus shrinking especially in the energy industry (by 19%), a milder decrease was observed in metallurgy or manufacturing of chemical and paper products in comparison to Q3 2022.

The growth of the nominal value of new orders (in selected industrial branches<sup>30</sup>) was also markedly impacted by the price effects for the whole last year. In addition it still lagged behind the dynamics of both sales and growth of industrial producer prices. The orders grew by 12.5% year-on-year in Q4, from more than two thirds aided by the demand in the manufacturing of motor vehicles. It was partially affected by the lower comparative basis. It is encouraging, that the size of these orders expanded also compared to Q3 2022. It cannot be claimed regarding the most energy-intensive industrial branches (metallurgy, chemical industry), where the demand was falling quarter-on-quarter already in Summer 2022. With regard to the growth of prices of intermediate inputs, the dynamics of orders can be assessed favourably in manufacturing of wearing apparel, pharmaceutical industry and (thanks to strengthening domestic demand) also in the manufacturing of computers, electronic and optical appliances.

Chart 5 New orders in industry (nominal, year-on-year change in %), utilisation of production capacities in industry, selected growth barriers\* (in %, right axis) and balance of business confidence indicator in industry\* (in p.p., right axis)



\*Both utilisation of production capacities and growth barriers express the level in the first month of the given quarter, business confidence balance relates to the second month in the quarter. Orders are adjusted for calendar effects; other indicators are seasonally adjusted. Businesses could have indicated more key growth barriers simultaneously. Source: CZSO, Eurostat

Business confidence in industry perceptibly dropped since the last Spring.

Business confidence in industry was after a short growth in Q2 2022 (associated with the moderation of pressures in the supplier chains at the motor vehicle manufacturers) gradually decreasing in the subsequent months. The largest pessimism since June 2020 thus set in February 2023. Unfavourable assessment of the current demand prevailed; the inventory stock

<sup>&</sup>lt;sup>30</sup> Survey of orders is performed only in twelve manufacturing branches producing mostly custom-made products, with longer production cycle and larger stocks of orders. Year-on-year growth rates of orders are adjusted for calendar effects, quarter-on-quarter rates also for seasonal effects.



Inadequate demand again became the key barrier to growth following a two-year pause.

Output mildly increased in construction for the last year, specifically thanks to its both main branches.

Number of finished dwellings significantly expanded last year. Large number of unfinished works from the past manifested here.

Pace of the commenced construction subsided in H2.

Growth of the value of new construction orders as well as their total stock did not exceed the dynamics of the of finished products remained above the long-term average. With the rising number of businesses anticipating a decline in production in the short-term horizon (as far as 15%) the negative outlooks for the employment were deepening<sup>31</sup>. With the length of the outlook nevertheless, the expectations of the total economic situation were improving<sup>32</sup>. Inadequate demand represented the key barrier to growth<sup>33</sup> (for 42% of businesses), shortage of material or labour force played a smaller role since the last year's Autumn (it still stayed essential for businesses in some branches).

Construction performance displayed a fluctuating nature in the CR during the last year. In Q1, 2022 the growth of its output<sup>34</sup> accelerated (due to the effect of warm winter as well as large stock of both public and private orders) to quarter-on-quarter 4.3% (mainly thanks to the civil engineering construction) and with its size overtook the pre-crisis year 2019 for the first time. The output lowered quarter-on-quarter (in total by 6.1%) during both Q2 and Q3. The adverse impact of the strong price growth (energies, fuels as well as material inputs), worse accessibility of materials, equipment but also the labour force (partially as a result of the war in Ukraine) became more evident. This often led to the extension of completion of existing projects or to the postponement of commencement, or alternatively the revision of planned investment actions. A mild recovery occurred during the last quarter (both building construction and civil engineering construction equally participated on the total 2.2% output growth). The output increased by 2.6% for the whole year 2022 and continued in the similar growth from the preceding year. Unlike the year 2021 however, both main disciplines contributed to its growth last year – weight more significant building construction by 1.7 p.p., civil engineering construction by 0.9 p.p.

The building construction profited from the development of housing construction. There were 13.9% more dwellings completed year-on-year last year. Their number (39.4 thousand) represented the second largest volume of construction in the history of the independent CR<sup>35</sup>. Units in the residential buildings formed two thirds of the last year increase, more flats were however created in all other construction categories. Different situation was in the area of commenced flats, whose number compared to the record construction form year 2021 (45 thousand) shrank by 6.1% last year, mainly due to the development in H2 2022<sup>36</sup>. Weakening of the demand due to the perceptible cooling of the mortgage market, but also high and still growing costs of construction firms stood in the background. The civil engineering discipline, which consists of higher number of larger businesses (compared to the building construction area), could have profited from the solid pace of public expenditure in the area of transport infrastructure, especially in the second half of the last year<sup>37</sup> primarily linked to the drawing on European subsidies.

The year-on-year rate of growth of the nominal value of new local construction orders (in businesses with more than 50 employees) grew by double digit pace throughout the whole last year (by 13.0% in Q4). However, when considering the growth of the price of construction works<sup>38</sup>, it can be more assessed as stagnation of the real construction demand in the CR (this

<sup>&</sup>lt;sup>38</sup> It attained 12.0% year-on-year in Q4 2022 and 12.3% in total from the beginning of the year. Price effects were also substantially mirrored in the average value of the newly concluded construction orders – it arrived at 4.2 CZK mil for the whole last year and increased by 0.5 CZK mil year-on-year.



<sup>&</sup>lt;sup>31</sup> They were the lowest in the last two and a half years. They can also be compared to year 2013, when both the domestic economy and industry were in the clutches of a mild recession. Number of registered employees fell by 0.4% year-on-year in Q4 2022.

<sup>&</sup>lt;sup>32</sup> In the time horizon from March till May 2023, 10% of businesses anticipated worsening of their own economic situation (improvement 8%), for the period of Q3 2023 9% assumed worsening, but already 29% of businesses improvement.

<sup>&</sup>lt;sup>33</sup> Businesses could have stated more main barriers simultaneously. Barriers are adjusted for the seasonality effect.

<sup>&</sup>lt;sup>34</sup> Data regarding the construction output are in constant prices, year-on-year rates of growth are adjusted for calendar effects, quarteron-quarter rates also for seasonality effects.

<sup>&</sup>lt;sup>35</sup> The highest number of dwellings has been completed in the boom year 2007 so far (41.6 thousand).

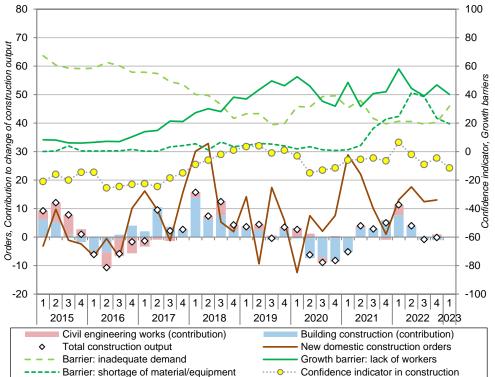
<sup>&</sup>lt;sup>36</sup> The decrease of the number of all commenced dwellings was more than 30% in Prague year-on-year last year, still the construction of 6.5 thousand flats was started there (the second highest number after year 2008). In the segment of family houses (FH) in contrast more-or less across-the-board decrease occurred across the CR regions. The number of commenced flats in all regions in new FH reached only 8.6 thousand in H2 2022 (it represented a six-year minimum within all H2).

<sup>&</sup>lt;sup>37</sup> 78 CZK bn was paid out on investment from the CR state budget into the State Fund for Transport Infrastructure (SFDI) last year, by one sixth more year-on-year. The annual size of the investment subsidies approached the budget anticipations.

construction works last year.

Value of construction permits fell year-on-year in Q4 2022. is also supported by the fact, that the number of new orders did not change compared to year 2021). Demand in the segment of the civil engineering construction gives a more positive impression (the value of new orders went up by nearly one fifth here year-on-year in Q4 2022). Total stock of work (in the form of value of the orders to be realised) was by 8.6% higher year-on-year last year at the end of December 2022, for the most part however thanks to the public investors locally (they covered over 60% of all stock of orders in the portfolio of the construction firms). The stock of private orders was only by 2.4% higher in the CR year-on-year (after taking into account the prices, it can thus be talked about the decrease of the demand from this segment of the economy). Indications regarding the cooling of demand were apparent also for the granted building permits, which signal investment activity in the medium-term horizon. Their approximate value slightly decreased last year in Q4 (by 1.3% year-on-year). Except for the transportation structures (for both construction and reconstruction) all more important categories of structures experienced a decline<sup>39</sup>.

Chart 6 Contributions of sub-branches to year-on-year change of the total construction output (real, in p.p.), new construction orders (nominal, year-on-year in %), balance of business confidence indicator in construction\* (in p.p., right axis) and selected barriers to growth\* (in %, right axis)



Note: Data related to construction output are adjusted for calendar effects.

\* Balance of business confidence as well as barriers to growth are seasonally adjusted and express the level in the second month of the given quarter. Businesses could have indicated more main barriers simultaneously. Source: CZSO, Eurostat

Business confidence in construction was deteriorating since the last year\s Spring. Negative expectations were also apparent in the Positive results of construction supported the optimism of businesses in this branch at the beginning of the last year and the February balance of confidence indicator thus balanced out with the absolute maximum (from January 2019). The economic sentiment in construction however worsened later on, especially at the turn of years 2022 and 2023, when it slid the lowest in the last two and a half years (it was, however still placed above the long-time average).

<sup>&</sup>lt;sup>39</sup>The value of the permit also mildly fell for the whole year 2022 (by 1.2%). Authorisation of the construction of new Prague subway line (D), which occurred in July 2021 played an important role here. In the area of new construction of residential as well as non-residential buildings the value of permit was growing – by 6 %, 12% resp.. After the deduction of all other large structures (with the approximate value above 1 CZK bn) the permit value would increase by more than 9% year-on-year for the last year (i.e. still less than was the growth of prices of construction works for the same time period). In the environment of strengthening cost prices (material, energy, wage) it is not possible to exclude, that the invoice prices can substantially depart from the prices anticipated at the construction authorization.

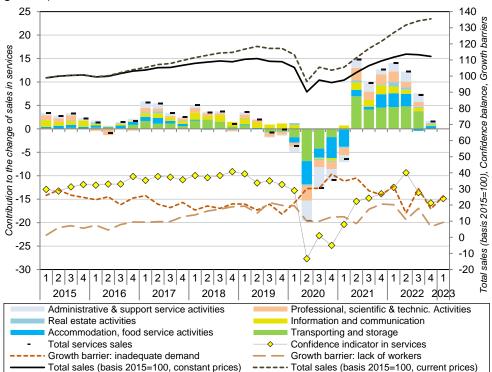


outlook to the whole H1 2023.

The fast growing cost pressures showed in the negative assessment of the current as well as expected demand, employment outlooks or future economic situation of businesses (pessimism persists here - in contrast to the industrial businesses - also in the outlook to the whole H1 2023). In spite of the role of inadequate demand as a barrier to growth for the construction firms notably expanded at the beginning of this year (in February 2022 to 32%, the most since May 2021), key restriction still lies in the shortage of the labour force (for 40% of businesses)<sup>40</sup>.

Sales in services grew quarter-on-quarter only in the first half of the last year. Later they were influenced by the falling demand on the part of both households and businesses. Demand for services developed unevenly during the last year. Sales in selected services<sup>41</sup> increased quarter-on-quarter by 2.1% at the beginning of the year and climbed above the level of the boom year 2019 for the first time. Services thrived also in Q2, when mainly the branches with tight link to tourism markedly revived. The growth of sales however ceased in the remaining part of the year. The key branch of transportation and warehousing registered signs of the demand weakening (for the first time since half of year 2020). In addition the deteriorating economic situation of the domestic households was reflected in the area of food service and restaurants. Further, the businesses started to restrict their demand for some activities (of administrative and support service character, but also more sophisticated services). The decrease of sales deepened in warehousing (to 8.2% quarter-on-quarter) in Q3 2022, which was connected to the deteriorated performance of industry as well as the decrease of the turnover of the foreign trade of the CR with goods<sup>42</sup>.

Chart 7 Contributions of sub-branches to year-on-year change of sales in services\* (real, in p.p.), total sales in services\* (basis 2015=100, right axis), balance of business confidence indicator in services\*\* (in p.p., right axis), selected growth barriers\*\* (in %, right axis)



Note: all data are seasonally adjusted, only contributions of sub-branches to the growth of sales are adjusted only for calendar effect. \*Without branches trade, financial activities, insurance activities, science, research and public services. \*\*Also includes the financial sector. Balance of business confidence indicator as well as the barriers to growth express the

level in the first, resp. in the second month of the given quarter (growth barriers and confidence balance respectively). Businesses could have indicated more key barriers simultaneously. Source: CZSO, Eurostat

<sup>&</sup>lt;sup>41</sup> Without trade, financial and insurance activities, science, research and public services. All data for services are in constant prices, year-on-year data are adjusted for calendar effects, quarter-on-quarter data are adjusted for seasonal effects (including the effect of the number of working days).
<sup>42</sup> It was 1.5% quarter-on-quarter (expressed in current prices and after seasonal adjustment).



<sup>&</sup>lt;sup>40</sup> Businesses could have indicated more barriers simultaneously. Barriers are adjusted for the seasonality effects.

Reverberations of the post-pandemic recovery of demand were still reflected in the high last year's annual growth of sales in services.

Year-on-year growth of sales in services was only modest in Q4 since the key branch of transportation was driven down by weaker demand in warehousing and support activities for transportation.

Sales in activities tied to tourism kept further recovering, they nevertheless have not reached the level from year 2019 so far.

Traditionally dynamic growth in the ICT area waned since the demand growth prevailed only in the area of programming.

Sales for advertising and market research went down markedly. The majority of business support services signalled lower demand. Sales in services strengthened by 8.5% year-on-year for the whole last year. This pace, the fastest since year 2007, for the large part reflected the effect of the low comparative basis from the beginning of year 2021, when the strict counter-pandemic measures fundamentally restricted especially the development of tourism and number of other leisure activities of the population. As expected the sales in accommodation, food service and restaurants recovered the most last year (+27.0%), all main branches of services however felt the higher demand. At the level of sub-branches, the sales fell for the radio broadcasting and television programming (by 15.3%), job agencies (10.0%), advertising and market research (-6.7%) and postal and courier services (-3.5%). While the lower sales of couriers were more the consequences of the "post-pandemic" return to the traditional forms of trade in the brick and mortar stores, declines in the other mentioned branches reflect mainly the cyclical slump of the demand resulting from the impacts of the energy crisis.

This slump of demand is more plastically expressed in sales for services in Q4 2022. These exceeded the preceding year's level only by 1.6%. Despite modest pace, all main branches added to the growth apart from the weight dominant transportation and warehousing, where the sales mildly decreased (-0.3%). The drop of demand in the long-time developing postal and courier services, similarly, to warehousing and support activities for transportation, was not fully offset by the growth of sales in the land and pipe transportation (3.2%), which was aided by higher sales in rail as well as road transportation. The recovery continued in both air and water transportation; these branches however still have not attained the pre-crisis level of demand.

Sales were by one tenth higher year-on-year in the branch accommodation, food service and restaurants in Q4 2022 and contributed the most to the growth of all services (+0.5 p.p.). Gradual recovery of the arrival tourism substantially assisted this result. The demand however still considerably lagged behind the level from the end of year 2019 – it was more pronounced in accommodation (by 25.4%) than in food service and restaurants (15.4%). In contrast the branch information and communication already overtook the pre-crisis level (by 6.0%), similarly to the real estate activities (+3.8%). The year-on-year growth of sales however weakened in the long-time developing ICT area last year and it arrived only at even 1% in the last quarter. The demand grew only in the information technology activities here (e.g. programming, computer facilities management activities), considerable slump manifested for radio and television broadcasting activities. Sales also fell in the so called music and motion picture industry (even though the segment of motion picture distribution activities flourished<sup>43</sup>) and a mild decrease of demand non-traditionally also hit the information activities (including hosting, web portals as well as news agency activities).

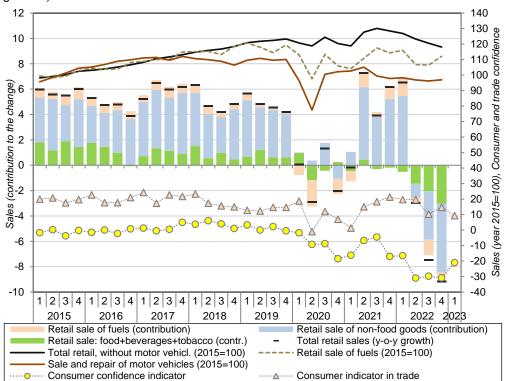
Weakening of the demand for business support services was the most evident in the branch professional, scientific and technical activities, where the sales only stagnated year-on-year last year in Q4 2022. These were compressed mainly by the plunge of sales for advertising and market research (-9.7%), demand was also falling for other services. The legal and accounting services (sales did not decrease meaningfully here even during the peak of the pandemics) and architectural and engineering activities (+3%) comprised the exception. Higher growth of sales (5.6%) still prevailed in the branch administrative and support service activities in Q4, it was however mainly thanks to travel agency agencies, which were catching up on the deep losses from year 2020. Demand on the contrary lowered in the areas responding sensitively to the business cycle, e.g. the rental and leasing activities (especially motor vehicles and machinery) by 3.4% and further also at the job agencies (-4.6%). Demand for the vast majority of sub-branches within the administrative and support services activities remained below the pre-pandemic level even at the end of the last year (the most at the job agencies, where the sales were by more than one quarter lower compared to Q4 2019).

<sup>&</sup>lt;sup>43</sup> Based on the data from the Union of Motion Picture Distributors, the sales of the domestic cinema operators increased by 10.7% year-onyear in Q4 2022. In total from the beginning of the last year, both the sales and attendance nearly doubled year-on-year (from January till May 2021 however the cinemas in fact did not operate), thus the sales lagged behind by 19% compared to year 2019 (attendance even by 26%, however the number of shows was lower only by 4%).

Quarter-on-quarter decrease of retail sales persisted for the fifth quarter in a row.

Very negative consumer confidence moderated at the turn of years 2022 and 2023. Retail sales<sup>44</sup> were by even 2% lower quarter-on-quarter in Q4 2022, when they dropped in all its significant segments except of the sale of motor fuels. The slump of demand in retail continued for the fifth quarter in a row (similarly as in the case of total expenditures of domestic household on final consumption). On contrary, higher consumption expenditures of non-residents associated both with the revival of tourism and the refugee wave from Ukraine had a pro-growth effect. The month-on-month decrease of the retail sales ceased in January 2023, their size however only balanced out the level from October 2018. The slump of the consumer confidence down to the historical minimum (in October 2022)<sup>45</sup> fully manifested here. Household confidence partially recovered at the beginning of year 2023, since the pessimism in the area of the anticipated household financial situation (for year 2023) eased up. Their concerns regarding the growth of prices as well as unemployment also lowered. It could have been connected to the relatively favourable trends in the area of the up-to-date development of prices on the market with energies and motor fuels. On the other hand, people remained fairly careful in the area of planning large purchases (mainly durable goods or investment).

Chart 8 Contributions of sub-branches to year-on-year change of retail sales\* (real, in p.p.), total retail sales and sales of motor vehicles\*\* (real, level of year 2015=100, right axis), balance of consumer confidence indicator and confidence in trade\*\*\* (in points, right axis)



\*Sales are adjusted for calendar effects.

\*\* Sales are adjusted for both seasonal and calendar effects.

\*\*\* Consumer confidence indicator is seasonally adjusted and expresses the position in the second month of the given quarter Source: CZSO

Lower sale of food added from one half to the decrease of the retail sales for the entire last year. Demand also fell Retail sales plunged by 9.2% year-on-year in the last year's quarter. Large slump of demand was felt across all its main segments, including the vast majority of specialised shops. Retail sales decreased by 3.8% for the entire year 2022 (the largest year-on-year decrease in the comparable time series since year 2001). One-half of the last year's decrease was associated

<sup>&</sup>lt;sup>45</sup> Business confidence in trade on the contrary went down only gradually and it was not much weaker at the end of the last year than in the pre-crisis year 2019. Despite deterioration during Summer, trade businesses perceived their current economic situation still positively and outlooks to the nearest half-year were also mildly positive. This is confirmed by the fact, that traders still planned to hire new employees more frequently that their layoffs.



<sup>&</sup>lt;sup>44</sup> All year-on-year rates of growth of retail sales are stated in constant prices and adjusted for calendar effects, quarter-on-quarter as well as month-on-month rates are adjusted for seasonal effects (including the number of working days). Retail includes branch CZ NACE 47.

considerably in the area of sales via internet.

Decrease of demand moderated in the motorist segment of trade, still it notably stayed behind the year 2019. with the lower sales for food, beverages and tobacco (by 5.1%), when both large nonspecialised shops (chains) and specialised shops recorded similar decrease of demand. Sales for non-food goods, which were the decisive factor in the retail slump in H2 2022 also registered a record decrease in the whole last year (by 3.1%). Weaker sales via internet or mail order houses, where sales plummeted by 10.6%<sup>46</sup> for the entire last year played an essential role (there were still by nearly one third higher compared to year 2019). Milder decrease of demand was however apparent also in the majority of other specialised stores with non-food goods. Mainly the shops with wearing apparel, footwear and leather goods represented the exception, with sales strengthening by more than one tenth year-on-year (but lagging by nearly one fifth behind the year 2019). Specialised stores with cosmetics and toilet articles recorded milder 4% growth. The demand for pharmaceutical and health goods, where the price growth was only mild this year in contrast to the majority of other range of products, also grew similarly. Price development also affected the demand for motor fuels last year. Sales decreased by 2.3% in this area year-on-year, they still stayed behind the year 2019 (by 7.5%)<sup>47</sup>. It was also valid for the motorist segment of trade, where however the decrease of sales (lasting since the half of year 2021) moderated to 1.8% last year in Q4 2022. The only part of this segment, where the demand for the entire last year exceeded the pre-crisis year 2019 was trade, repairs and maintenance of motorcycles (+2.4%), in contrast it stayed behind by 14.1% for the trade with the motor vehicles (apart from motorcycles).

<sup>&</sup>lt;sup>46</sup> These forms of sale represented the only retail segment, where the sales dropped even in current prices last year (by 1.4%). At the same time the nominal sales in the entire retail increased by 10.8%.

<sup>&</sup>lt;sup>47</sup> Lower consumption of motor fuels was connected to the price escalation bolstered by the war in Ukraine. Sales for motor fuels in current prices increased by 36.6% year-on-year in Q2, by 19.5% in Q3. The development of prices of motor fuels was however more favourable for the motorists in Q4 2022, which was reflected in the demand revival (sales thus increased by 4.7% quarter-on-quarter).

### 4. External Relations

Value of export of Total value of export of goods<sup>48</sup> attained 4 413.8 CZK bn<sup>49</sup> in year 2022 and nominally thus goods expanded increased by 532.4 bn (13.7%). However the growth of the price level participated on the mainly due to the relatively strong increase - the most for materials and energies, prices however significantly strong rise of prices rose for the majority of types of goods<sup>50</sup>. In individual quarters the year-on-year export dynamics last year. continued at a strong level with the peak in Q3 (8.3%, 11.6% and 22.3% in individual quarters). The value of export climbed up to 1 148.4 CZK bn in Q4 and increased by 136.2 bn year-onyear (13.5%). Price growth constituted a significant stimulus of the year-on-year dynamics throughout the whole year. The export was by 1.0% lower guarter-on-guarter based on the seasonally adjusted data. Export grew faster Last year's increase of export of goods was for the most part allotted to the growth of export into into the EU the EU countries (+472.3 CZK bn, 15.4%). Export outside the EU went up considerably slower countries. (+60.2 CZK bn, 7.5%). Export to Germany (+170.6 CZK bn, 14.7%), Slovakia (+70.2 bn, 18.7%) and to Poland (+38.3 bn, 14.1%) featured the highest increase. The export of electricity played a significant role in the increase to Germany and Slovakia<sup>51</sup>. Export of motor vehicles grew the most for Poland. Export to Italy (+35.8 CZK bn, 23.7%), France (+26.0 bn, 13.9%), Austria (+27.2 bn, 15.7%), the United States (+22.9 bn, 24.6%) and Spain (+20.6 bn, 19.8%) also went up considerably. The export had a substantial percentage increase for some destinations, where the value of export is relatively low such as Kazakhstan (170.2%), the United Arab Emirates (58.9%), Azerbaijan (73.2%) or Mexico (39.7%). Export into the majority of monitored countries grew last year. Russia (-48.3 CZK bn, -59.9%)<sup>52</sup>, where the value of export following a series of deep slumps arrived at the lowest level since year 2005 (32.3 bn) comprised a distinct exception. The stagnating Export into the EU expanded by 109.5 CZK bn (13.7%) in Q4 itself and by 26.9 bn (12.8%) export into the outside the EU. In retrospect, the strong recovery of export into the countries outside the EU is countries outside the also apparent in the second half of the year (year-on-year change -1.0%, 0.3% and 18.7% in EUR revived at the Q1 to Q3). Export to Germany (+41.7 CZK bn, 13.9%), Poland (+9.8 bn, 13.8%), France (+9.5 end of the year. bn, 21.0%), Spain (+9.4 bn, 39.1%), Italy (+8.7 bn, 21.8%) and Belgium (+5.4 bn, 25.8%) expanded the most year-on-year. Export to Russia plunged deeply year-on-year (-11.9 CZK bn, -66.5%). Export of motor In the view of the goods structure, the export of motor vehicles (+101.4 CZK bn, 10.8%) electrical vehicles the most equipment (+66.7 bn, 19.1%) and electricity, gas, steam and air conditioning (+58.9 bn, 97.5%) stimulated the went up the most last year. Export of machinery and equipment (+36.4 CZK bn, 7.9%), chemical growth of export last substances and products (+34.6 bn, 17.2%), fabricated metal products (+32.1 bn, 13.3%), food year. products (+29.5 bn, 24.9%), basic metals (+27.5 bn, 16.4%), rubber and plastic products (+19.2 bn, 10.0%), paper and paper products (+18.9 bn, 28.9%), computers, electronic and optical products (+16.9 bn, 4.1%) and coke and refined petroleum products (+15.4 bn, 36.1%) also attained a large increase. Motor vehicles The export of motor vehicles grew the most year-on-year in Q4 itself (+45.1 CZK bn, 19.3%). dominated the export Considerable annual addition for motor vehicles can be attributed for the major part to the growth in H2.

<sup>49</sup> Unless stated otherwise, all figures are not seasonally adjusted and in current prices.

<sup>&</sup>lt;sup>52</sup> Export to Russia plummeted mainly for the motor vehicles (-16.4 CZK bn), computers, electronic and optical products (-9.5 bn), electrical equipment (-5.4 bn) and machinery and equipment (-5.1 bn). At the same time, strengthening of export into some former Soviet republics is also observed, the most to Kazakhstan (+7.4 CZK bn, absolute majority from this increase occurred in the second half of the year). Mainly export of computers and electronic and optical products and motor vehicles (including parts) was higher here.



<sup>&</sup>lt;sup>48</sup> Data regarding the foreign trade with goods are recalculated using an update method based on a bigger degree of detail since year 2020, see <a href="https://www.czso.cz/csu/czso/update-of-the-compilation-method-international-trade-in-goods-change-of-ownership">https://www.czso.cz/csu/czso/update-of-the-compilation-method-international-trade-in-goods-change-of-ownership</a>.

<sup>&</sup>lt;sup>50</sup> Prices of exports of goods hiked by 12.7% for the entire year and grew by 11.2%, 15.1%, 14.9% and 9.8% year-on-year in individual quarters.

<sup>&</sup>lt;sup>51</sup> Strengthening of the export of electricity, gas, steam and air conditioning was noticed at all our neighbours. Addition to the export to Germany reached 38.7 CZK bn and to Slovakia 15.6 bn. In addition, the increase was also considerable in case of Austria (+8.9 CZK bn) and to certain extent also Poland (+3.4 bn).

development in H2. Export of electrical equipment (+29.6 CZK bn, 33.8%), machinery and equipment (+19.0 bn, 16.8%), computers, electrical and optical products (+13.3 bn, 12.5%) and food products (+9.2 bn, 28.4%) further strongly increased year-on-year in Q4. Export of the majority of articles grew year-on-year, the growth trend however changed for electricity, gas, steam and air conditioning after a longer time in Q4, when the export fell by 4.0 CZK bn (-11.8%) year-on-year after six quarters. Export of basic metals also decreased year-on-year for the first time since Q3 2020 (-2.4 CZK bn, -5.4%).

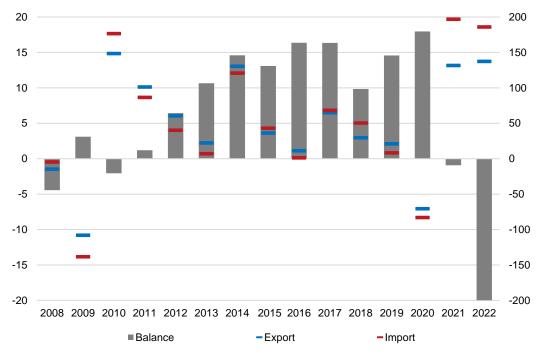


Chart 9 Export and import of goods (y-o-y change, in %) and balance of foreign trade with goods (in CZK bn, right axis)

#### Source: CZSO

Import grew stronger than export last year.

Import of goods reached the value of 4 613.5 CZK bn for the whole year 2022 and it was by 723.0 bn higher (18.6%). The import dynamics thus to a large extent exceeded the export last year, which was mainly due to the sharp rise of prices of the imported materials<sup>53</sup>. The year-on-year additions to import overtook the export in all quarters of the year. The import gradually increased by 16.9%, 20.3% and 22.3% in Q1 to Q3 year-on-year. The value of import reached 1 198.8 CZK bn in Q4 and went up by 157.3 bn year-on-year (15.1%). Quarter-on-quarter, the (seasonally adjusted) import went down by 1.9%.

Increase of import from countries outside the EU exceeded the increase from the EU countries.

Effect of the rising prices of materials is apparent on the difference between the percentage increase of the import from the EU (+303.9 CZK bn, 12.5%) and countries outside the EU (+415.7 bn, 29.2%), where the main portion of the imported oil and natural gas comes form.
 Import from China grew the most (+125.0 CZK bn, 26.6%), import from Russia had the second largest increase due to the provision of natural gas (+113.8 CZK bn, 74.9%) and Germany ranked the third (+89.4 bn, 9.9%). Import from Poland (+66.2 CZK bn, 19.4%) also grew strongly. The effort to lower the reliance on Russia in the import of the natural gas is noticeable on the sharp growth of the value of import from Norway (+38.3 CZK bn, import was boosted fivefold) and Azerbaijan (+21.2 bn, 160.5%)<sup>54</sup>. Larger decrease was recorded only for import from

<sup>&</sup>lt;sup>53</sup> Prices of import of goods were thus raised by 17.2% last year.

<sup>&</sup>lt;sup>54</sup> According to the breakdown of import of oil and natural gas to individual importers, mainly Norway was added among "new sources" last year (from 1.2 CZK bn in year 2021 to 38.3 bn last year). Import of this commodity from the United States (+7.3 CZK bn, 79.2%) considerably increased via tankers with liquefied gas and strengthened the existing ties to Azerbaijan (+21.2 bn, 161.7%). On the contrary the value of import of oils and natural gas from Kazakhstan decreased (-3.8 CZK bn, -26.6%). These changes eventuated mainly in the second half of the year. Russia was liable in total for 68.7% of the value of imported oil and natural gas last year (73.7% in year 2021).

Kazakhstan (-3.5 CZK bn, -20.4%) and Ukraine (-2.4 bn, -6.4%). Significant percentage increases were also recorded for the import from the United Arab Emirates last year (87.7%), Greece (43.2%), Bulgaria (40.8%), India (40.7%), Indonesia (40.5%) or Israel (30.0%). Import of goods from the EU went up by 55.6 CZK bn year-on-year (8.8%) in Q4 itself and import outside the EU by 101.7 bn (25.1%). The largest year-on-year increase occurred for import from China (+46.0 CZK bn, 33.2%) and Norway (+37.1 bn, the value of import expanded by more than elevenfold). Increase of the import from Norway was simultaneously accompanied by the year-on-year slump for Russia (-25.6 CZK bn, -48.0%). Import from Germany (+21.9 CZK bn, 9.8%), the United States (+10.0 bn, 36.3%), Poland (+9.3 bn, 10.2%), Azerbaijan (+6.2 bn, 139.2%) and the Great Britain (+6.1 bn, 38.0%) also grew strongly.

Import of goods was growing mainly due to the effect of oil and natural gas. Import of electrical equipment sharply jumped up in the second half of the year.

Total balance of foreign trade with goods ended in deep deficit last year.

Growth of the prices of materials impacted the balance deterioration. It was also related to the deepening of the trade deficit with the countries outside the EU. The value of imports of oil and natural gas grew the most (+190.0 CZK bn, 123.1%) in year 2022. Mainly under the influence of the revival in the second half of the year, the import of electrical equipment also strongly increased (+89.7 CZK bn, 26.0%). Notable increases were also recorded for the import of basic metals (+57.1 CZK bn, 17.7%), chemical substances and products (+52.1 bn, 15.2%), motor vehicles (+66.0 bn, 12.8%), coke and refined petroleum products (+38.2 bn, 55.2%), pharmaceutical products (+35.8 bn, 20.7%), machinery and equipment (+32.5 bn, 8.9%) or fabricated metal products (+22.1 bn, 12.6%). For the majority of the mentioned articles, mainly the change of prices stimulated the increases. Together with the renewal of demand for fossil fuels in connection to the energy crisis it was also the case of revival of import of black and brown coal and lignite (+17.2 CZK bn, 117.2%) and electricity, gas, steam and air conditioning (+12.3 bn, 50.2%). Import of electrical equipment (+44.8 CZK bn, 50.9%), motor vehicles (+31.1 bn, 25.0%) and oil and natural gas (+28.7 bn, 52.4%) was growing the fastest year-on-year in Q4, the slump of dynamics however continued here (it was the lowest addition since Q3 2021). Increase was also notable for machinery and equipment (+12.4 CZK bn, 13.1%), food products (+8.9 bn, 18.3%), coke and refined petroleum products (+6.1 bn, 29.5%), fabricated metal products (+5.7 bn, 12.6%) and chemical substances and products (+5.3 bn, 6.0%). Import of basic metals (-5.3 bn, -6.0%) and electricity, gas, steam and air conditioning (-1.4 bn, -14.5%) dropped the most year-on-year.

Balance of foreign trade with goods ended in deficit of 199.7 CZK bn last year. It was the second annual deficit in a row and it worsened by 190.5 CZK bn. The balance was negative in all last year's quarters and attained the sixth deficit in a row in Q4, this time in the amount of 50.4 CZK bn. The deficit deteriorated by 21.1 CZK bn year-on-year. Seasonally adjusted data nevertheless suggest that the balance was improving quarter-on-quarter for the second quarter in a row.

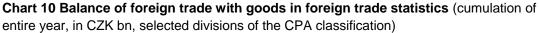
Worsening of the balance of foreign trade with goods was completely attributed to the trade with countries outside the EU last year (deficit deepening by 355.5 CZK bn). Even the record improvement of the trade balance with the EU by 168.4 CZK bn was thus not sufficient for the maintaining the total overall surplus. Trade with Russia (-162.1 CZK bn), China (-127.2 bn), Norway (-34.0 bn), Poland (-27.9 bn) and Azerbaijan (-19.9 bn) worked the most in the direction of balance deterioration last year. On the contrary, the balance improved in case of trade with Germany (+81.2 CZK bn), Slovakia (+46.4 bn), Italy (+15.5 bn), Spain (+11.2 bn), Hungary (+11.1 bn) or Kazakhstan (+10.9 bn). In Q4 itself, the trade balance with China (-46.8 CZK bn) and Norway (-35.5 bn) worsened the most year-on-year. Smaller downswings were then recorded for the trade with the United States (-6.3 CZK bn), Azerbaijan (-5.7 bn) or South Korea (-4.9 bn). The foreign trade result was markedly better in case of Germany (+19.8 CZK bn) and Russia (+13.7 bn). Trade with Italy (+6.5 CZK bn), Spain (+6.3 bn), Slovakia (+5.1 bn), Kazakhstan (+5.1 bn), Austria (+4.5 bn) or France (+4.3 bn) also worked in the direction of surplus.

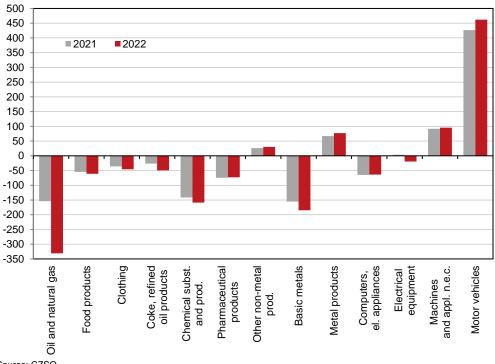
Trade with oil and natural gas was the main cause of the foreign trade with Balance of trade with oil and natural gas worsened the most (-177.0 CZK bn) last year and further with basic metals (-29.6 bn), electrical equipment (-23.0 bn), coke and refined petroleum products (-22.8 bn) and chemical substances and products (-17.6 bn). Trade with brown coal

# goods balance deterioration.

and lignite (-14.0 CZK bn), wearing apparel (-9.8 bn), food products (-6.3 bn), other products of manufacturing (-4.7 bn), other transport equipment (-4.6 bn) or leather and associated products (-4.5 bn) also had an adverse effect on the total balance. Balance improvement on the contrary occurred in case of trade with electricity, gas, steam and air conditioning (+46.6 CZK bn), motor vehicles (+35.4 bn), fabricated metal products (+10.0 bn) or products of agriculture and hunting (+7.9 bn).

Trade with oil and natural gas and electrical equipment worsened the balance at the end of the year. Trade with oil and natural gas (-24.6 CZK bn) and electrical equipment (-15.2 bn) worsened the balance the most year-on-year in Q4. The deficit for coke and refined petroleum products (-3.9 CZK bn), chemical substances and products (-2.8 bn.) or wearing apparel (-2.2 bn) also deepened. Surplus of trade with electricity, gas, steam and air-conditioning also shrank (-2.5 CZK bn). Balance was improving for a minority of products. Marked year-on-year balance strengthening was recorded for trade with motor vehicles (+14.0 CZK bn) and computers, electronic and optical products (+10.4 CZK bn) in Q4. Trade with machinery and equipment (+6.7 CZK bn) or basic metals (+2.9 bn) also worked in the direction of improvement of the total balance.





Source: CZSO



## 5. Prices

Total price level sharply hiked up in the economy last year. Total price level gauged by the GDP deflator rose by 8.4% in the Czech economy in year 2022. It represents the highest increase since year 1998. Prices of consumer goods were by 11.9% higher, while large differences prevailed between the household consumption (increase of price level by 16.3%) and government institutions (3.3%). Prices of capital goods were by 12.0% higher last year. The terms of trade were negative and attained 95.8%. Terms of trade with goods were 94.8%, while they were positive for services and reached 102.4%. The growth of the price level strengthened during the year and the year-on-year addition to price level arrived at 10.7% in Q4. In that prices of consumption rose by 12.7% (it was 18.0% for household consumption, 3.8% for consumption of government institutions). Prices of capital goods hiked up by 14.0% year-on-year. The terms of trade were negative in Q4 (97.3%) – terms of trade with goods totalled 96.9% and it was 99.1% in case of services. The price level declined by 0.5% quarter-on-quarter. Prices of consumption were by 0.9% lower compared to Q3, prices of capital goods stagnated (0.1%) and quarter-on-quarter terms of trade were slightly positive (100.1%).

Consumer prices were raised the most since year 1993.

The Consumer price index jumped by 15.1% in total in year 2022 and compared to year 2021 (3.8%) its growth sharply accelerated. It comprised the largest increase since year 1993. The growth of prices was all encompassing and in 7 out of 12 divisions of the consumer basket it was double-digit. Increase of cost of housing, water, energies and fuels (housing and energies), which contributed to the total increase from one third, impacted the price development the most in the last year. Food and non-alcoholic beverages featured the second highest contribution. There the price growth accelerated mainly in the second half of the year and it was focused into the areas of the most basic food. The strong increase of prices of transport and restaurants and hotels also had a considerable effect. Prices of goods were in total raised by 16.8% and services by 12.3% last year.

Year-on-year increase of the consumer prices slowed down in Q4. Year-on-year growth of the consumer prices accelerated from Q1 to Q3 (11.2%, 15.8% and 17.6%) and mildly slowed down only at the end of the year. Consumer prices increased by 15.7% year-on-year in Q4 2022 itself. Compared to Q3 however they stagnated in total. Sharp jump of prices of food and non-alcoholic beverages added the most to the year-on-year growth. Prices of housing and energies, restaurants and hotels and transport also had a significant effect. Slowdown of the year-on-year contribution compared to Q3 was the result of moderation of the growth of prices of transport and also inclusion of the saving tariff and waiving the fee for the supported sources of energy into the cost of housing and energies. Notable strengthening of the dynamics of prices of food and non-alcoholic beverages prevented larger slowdown of the total growth. Prices of goods increased by 17.4% in total year-on-year in Q4 and prices of services by 12.9%.

Year-on-year growth of prices of energies as well as imputed rentals reduced towards the end of the year. Prices of housing and energies increased by 19.0% in year 2022. In that prices of electricity, gas and other fuels grew the most (30.9%). Cost of maintenance and repair of dwelling also sharply hiked up (19.4%) and the imputed rentals also did not stay far behind<sup>55</sup> (16.1%). Rentals for housing went up by 4.9% last year, similarly to other services related to the dwelling. Year-on-year growth of prices in this division culminated in Q3 and weakened to 14.9% in Q4. Prices lowered here by 5.6% quarter-on-quarter. After inclusion of the effect of the saving tariff and waiving the fee for the supported sources of energies the year-on-year growth of prices of electricity, gas and

<sup>&</sup>lt;sup>55</sup> Imputed rentals expresses the cost of owner living. Apart from prices of housing themselves, it also contains the cost of construction and renovation and further fees. More at: <u>https://www.czso.cz/csu/czso/methodological-note-to-consumer-price-index-imputed-rentals</u>.



other fuels slowed down to 23.8%. Imputed rentals also grew slower in comparison to the preceding quarter (12.3%). Prices of regular maintenance and small repairs of the flat went up by 20.8% year-on-year, growth of rentals for housing mildly strengthened to 5.7% and prices of other services associated with housing were by 5.1% higher.

Year-on-year growth of prices of food considerably strengthened during the entire year and this division also contributed the most to the total growth of consumer prices in Q4. Prices of food and non-alcoholic beverages went up in total by 16.7% last year. Because the fast growth of prices in the agricultural production was sensitively reflected in their development during the entire last year. The trio meat (growth of 16.7%), bread and cereals (21.7%) and milk, cheese and eggs (20.8%) thus the most contributed to the total increase of the consumer prices. Prices of oils and fats also rose steeply (38.6%). Fast acceleration of the year-on-year pace of the growth of prices manifested for food and non-alcoholic beverages during the whole year (6.7%, 14.6% and 20.0% in Q1, 2 and 3). The year-on-year addition then reached 25.5% in Q4. The prices of food and non-alcoholic beverages increased by 4.7% quarter-on-quarter. The development mainly of prices of milk, cheese and eggs (growth of 32.9%), bread and cereals (30.5%) and meat (27.4%) contributed to the acceleration of the year-on-year growth in Q4. Price dynamics of the majority of types of food was however accelerating. Similarly to the annual view, the prices of oils and fats also sharply increased year-on-year in Q4 (43.0%).

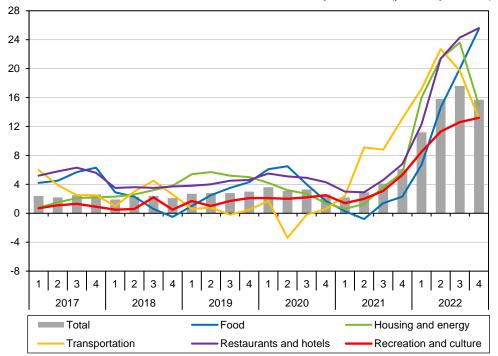


Chart 11 Prices in the selected divisions of the consumer price index (year-on-year in %)

Source: CZSO

Moderation of the growth of prices of motor fuels reduced the year-on-year increase of prices of transport. Prices of transport increased by 18.1% last year. Cost of operation of a personal transport equipment grew the most (23.9%) under the influence of prices of motor fuels. Prices of purchase of vehicles nevertheless also strongly increased (12.9%) and the abolition of reduction of prices of fares stimulated the increase of the prices of transport services (14.2%). Prices of transport rose the most year-on-year last year in Q2 and then the dynamics started to slow down. Their year-on-year increase reached gradually in individual quarters 17.2%, 22.7% and 19.7%. In Q4 2022, they were by 13.1% higher year-on-year. Prices of transport lowered by 1.2% compared to the previous quarter. Together with the motor fuels, the year-on-year growth of the prices of operation of a personal transport equipment also considerably slowed down (13.6%) at the end of the

# **CZSO**

Prices of wearing

strongly increased.

apparel, footwear and

household items further

Prices of postal services

and telecommunication

went up for the first time

since year 2006 last

year.

year. Increase of the prices of purchase vehicles was also smaller (11.7%). Prices of transport services thus increased the most year-on-year (16.6%).

Growth of prices was all encompassing. In the view of the contribution to the total growth of consumer prices, prices of restaurants and hotels, which went up by 21.0% last year also came to the forefront. Their year-on-year growth sharply accelerated in Q2 and it was further strengthened for the rest of the year. The prices of restaurants and hotels increased by 25.6% yearon-year in Q4. In that prices of catering services were by 26.2% higher and accommodation services by 20.7%. The year-on-year dynamics of the prices of catering services was higher than accommodation throughout the whole year. Growth of prices of recreation and culture, which were in total by 11.4% higher, also accelerated. Mainly package holidays (12.1%) stood behind the pace strengthening. Price of other recreational items and equipment, gardens and pets (16.7%) grew the most for the entire year. Prices of recreations and culture rose by 13.2% year-on-year in Q4 itself. Prices however dropped by 1.1% quarter-on-quarter.

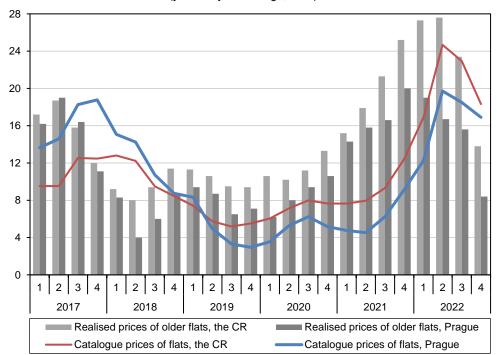
> Strong growth of prices of clothing and footwear, whose strengthening is obvious since the post-pandemic revival of demand combined with the disruption of the supply chains in year 2021, also continued last year. Prices of clothing and footwear went up in total by 18.6% last year. Prices were by 18.2% higher year-on-year in Q4 itself. Prices of clothing and footwear went up by 7.1% quarter-on-quarter, the most of all divisions of the consumer basket. The situation was similar for the furnishings, households equipment and maintenance. The disruption of the supply chains influenced the acceleration of the growth of prices already in year 2021 and prices increased here in total by 12.0% last year. Furniture and furnishings, carpets and other floor coverings (addition of 13.4%) participated the most on the total growth, prices of households equipment and maintenance increased by 13.3% year-on-year and by 2.4% quarteron-quarter.

> The growth of prices of miscellaneous goods and services<sup>56</sup> accelerated under the effect of financial and personal services for the whole year. Prices increased by 10.1% here for the whole year and it was by 12.7% year-on-year in Q4 itself. The growth of prices of alcoholic beverages and tobacco reduced in the last year. They were in total higher by 6.2%. Prices of alcohol went up by 3.2% and tobacco by 8.2%. Price of alcoholic beverages and tobacco were by 6.0% higher year-on-year and by 0.9% higher guarter-on-guarter in Q4. Their prices however followed a varied development during the year. The year-on-year dynamics for alcohol tended to accelerate up to 5.4%, while for tobacco it moderated to 6.5%. Prices of health, which usually do not have more significant effect on the total index due to their weight, were raised markedly (8.5%). Their year-on-year growth accelerated up to 9.6% in Q4. Prices of education increased in total by 3.8% last year, in that they increased by 7.5% year-on-year in Q4. Prices of post and telecommunication (0.7%) grew the slowest year-on-year last year. It represented first growth since 2006 for them. Since the prices in this division are traditionally mildly falling. The development of prices of telephone and telefax equipment (9.3%) stood behind the price increases. Prices of post and telecommunication grew by 2.1% year-on-year in Q4, the most since Q1 2007. Prices of telephone and telefax equipment were by 8.6% higher, telephone and telefax services by 1.4% higher and postal services by 2.7%.

<sup>&</sup>lt;sup>56</sup> Consists of personal care services and personal needs and supplements, social care, insurance and further financial services etc.



Year-on-year growth of the consumer prices was accelerating in the EU throughout the entire year. Harmonised index of consumer prices (HICP)<sup>57</sup> increased in total by 9.2% in the European Union last year. It presents a record increase (previous maximum was 3.7% from year 2008). Price growth continued across the whole consumer basket, but the dynamics acceleration was the most apparent for prices of food and non-alcoholic beverages, housing and energies, transport and restaurants and hotels. HICP grew the most in Estonia (19.4%), Lithuania (18.9%) and Latvia (17.2%) last year. The CR ranked fifth with the increase of 14.8%. The increases were very high also in case of countries with the most moderate dynamics. HICP went up by 5.9% in France, 6.1% in Malta and 7.2% in Finland. The year-on-year dynamics of consumer prices was accelerating in the EU during the year and HICP was thus higher by 11.0% year-onyear in Q4. In Q4, the consumer prices grew the most year-on-year in Hungary (23.3%), Latvia (21.4%) and Lithuania (21.2%). Estonia also crossed the twenty percentage level (20.4%) and the CR ranked behind only with a distance (16.5%). Spain (6.5%), France (7.0%) and Malta (7.3%) recorded the smallest year-on-year increase. Consumer prices increased by 2.5% in the EU compared to Q3. They grew the most in Hungary (6.5%), Italy (5.8%) and Lithuania (3.7%). In contrast the guarter-on-guarter decreases were recorded in Malta (-2.4%), Cyprus (-0.5%), Spain (-0.2%) and Estonia (-0.1%).





Source: CZSO

Growth of the catalogue prices of flats slowed down at the end of the year...

The rapid year-on-year surge of prices of flats peaked in year 2022. The Index of the catalogue prices of flats in the CR increased by 20.7% for the whole year. Prices of flats outside Prague went up by 25.2%, while the increase reached 16.9% in Prague. Both the year-on-year and quarter-on-quarter dynamics peaked in Q2 and increases were weakening from then on. Catalogue prices of flats in the CR expanded year-on-year by 18.3% in Q4, prices outside Prague by 19.9% and by 16.9% in Prague. Quarter-on-quarter increase of the catalogue prices weakened to 0.5% in the CR in Q4. It was caused exclusively by the plunge of catalogue prices by 1.2% outside Prague, the first quarter-on-quarter decrease since Q1 2017. Catalogue prices of flats increased by 2.1% in Prague. In case of realised prices of older flats, the slump of pace was more

<sup>&</sup>lt;sup>57</sup> Contrary to the consumer price index, which is compiled by the CZSO for the Czech economy, HICP does not consists of imputed rentals, which is the main reason for the difference between the HICP and Consumer price index.



pronounced at the end of the year. The realised prices of older flats went up by 22.6% in the CR year-on-year for the whole year, mainly due to the rapid surge of prices outside Prague (24.9%).

...year-on-year increases of the realised prices of older flats however dived notably, which indicates cooling of the real estate market.

Prices of industrial producers were affected by the sharp surge of prices of materials as well as energies.

Increase of the prices of food products exerted the highest influence on the prices of products and services of manufacturing at the end of the year. Realised prices of older flats were by 14.7% higher in Prague year-on-year last year. The year-on-year dynamics of flats outside Prague however attacked 30% mainly in the first half of the year and the increase maintained its hold high above 20% still in Q3. The realised prices of older flats in the CR however increased by 13.8%, by 15.3% outside Prague and by 8.4% in Prague in Q4 itself. Quarter-on-quarter the realized prices of older flats in the CR recorded decrease of 1.0%, first since Q4 2013. Realised prices of older flats outside Prague were by 1.4% lower compared to Q3 (first decrease since Q3 2013). Small growth of 0.4% manifested only in case of Prague. Realised prices of new flats, which are available only for Prague, describe similar development - their year-on-year increase dived to 2.9% in Q4 and prices lowered quarter-on-quarter by 4.3%. A sharp plunge of demand can be seen from the development described above, associated with the rapid increase of price of mortgage financing. This situation again enables the buyers to negotiate regarding the price after long years. Growth of the catalogue prices did slowdown; the market reality is however mirrored more in the plunge of the realised prices. It can also be observed that the sharp hike of prices of flats outside of Prague, which was evident in the last two years, more profoundly encountered the ceiling of the financial capabilities of the buyers as well as the interest of potential investors.

Prices of industrial producers hiked up by 24.3% last year. Very strong increase was affected by the development of prices of materials and energies, which practically hit the whole industry spectrum. Year-on-year growth of prices of industrial producers peaked in Q2 of the year and then weakened. Increases attained gradually 21.8%, 27.7% and 25.9% in individual quarters. Prices rose by 21.8% year-on-year in Q4 itself.

Prices of manufactured products contributed the most to the total growth last year (19.5%). These were influenced mainly by the sharp surge of prices of coke and refined petroleum products<sup>58</sup>. Food products, beverages and tobacco (19.2%) had the second largest impact on the growth of prices of industrial producers and prices of basic metals and fabricated metal products (22.3%), rubber and plastic products, other non-metallic mineral products (19.7%) and chemicals and chemical products (35.2%) also strongly contributed. Prices of wood, paper and printing (24.8%), textiles, clothes and leather (13.1%) and machinery and equipment (11.6%) also grew strongly last year. Increase of prices of furniture and other manufactured products (8.9%), computer, electronic and optical products (6.9%), electrical equipment (6.3%), basic pharmaceutical products (6.0%) were relatively milder. Prices of manufactured products rose by 16.0% year-onyear in Q4 2022, which was the weakest increase within the last year. The strong basis from the end of year 2021, when the sharp hike of prices of materials was already apparent, also had partially effect on the weakening. Still growing increase of prices of food products, beverages and tobacco (25.7%) added the most to the growth. The influence of coke and refined petroleum products in contrast notably weakened. Rubber and plastic products, other non-metallic mineral products (20.1%) maintained a strong effect. Similarly to the prices of petroleum, the year-on-year growth of prices of basic metals and fabricated metal products weakened (13.1%).

Year-on-year increase of prices of electricity mildly slowed down at the end of the year.

Prices of electricity, gas, steam and air conditioning hiked up by 50.7% last year. Yearon-year growth of prices accelerated here for the entire year until Q3. The year-on-year increase slightly slowed down to 54.3% in Q4, it was however partially the effect of



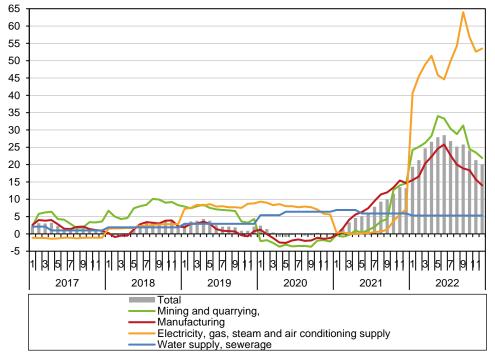
<sup>&</sup>lt;sup>58</sup> Precise values of the indicator are not given due to the protection of individual data.

up in the EU.

comparative basis from the preceding year, when the acceleration dynamics of prices of electricity was already strongly evident. Prices of mining and guarrying were in total higher by 27.5% last year. It was mostly the result of the surge of prices of crude petroleum and natural gas (70.4%), but prices of other materials, e.g. the building materials, which were included into other mining and quarrying products also grew strongly (17.9%). The increase weakened also for prices of mining and guarrying yearon-year in Q4 (23.3%).

Prices of industrial Industrial producer prices<sup>59</sup> jumped up by 34.3% in the EU last year, while they producers went sharply continued in the very high increase of 12.4% from year 2021. Prices of mining and guarrying were by 69.7% higher, manufactured products by 17.6% and electricity, gas, steam and air conditioning by 94.9%. Prices of industrial producers grew the most in Romania (58.1%), Hungary (53.1%) and Latvia (49.5%) last year. Prices in Malta (8.8%), Sweden (20.4%) and Portugal (20.6%) featured the lowest increase. The yearon-year dynamics of prices of industrial producers was strengthening until Q3 and the increase weakened to 27.9% in Q4. At the same time the prices dropped guarter-onquarter for the first time since Q2 2020 (-0.3%). The slowdown of the year-on-year increase concerned all divisions. Prices of mining and quarrying were by 39.9% higher year-on-year, manufactured products by 15.3% and electricity, gas, steam and air conditioning by 64.0%. Prices of industrial producers in Hungary (64.7%), Latvia (53.1%) and Romania (46.6%) grew the most year-on-year at the end of the year. In contrast, the prices fell year-on-year in Ireland (-6.1%) and the smallest increases were recorded in Malta (8.1%) and in Portugal (10.8%).

> Chart 13 Prices of main groups of industrial producers (year-on-year change, in %, based on CPA classification)



Source: CZSO

Prices of construction works grew strongly last vear.

Prices of construction works went up in total by 12.3% last year. In that prices of material inputs of construction output rose by 20.7%. Year-on-year growth of prices of construction works peaked in Q2 and then slightly weakened. Prices of construction works grew by 12.0% year-in-year and by 1.2% quarter-on-quarter in Q4. Prices of

<sup>&</sup>lt;sup>59</sup> Excluding prices of water supply and waste management.



material inputs of construction output were by 16.7% higher year-on-year and stagnated quarter-on-quarter.

Prices of market services expanded in total by 5.8% last year. The increase gained

pace markedly compared to the previous year, which was mainly caused by the prices

of warehousing and support services for transportation, land transport services and

transport services via pipelines and then advertising and market research services.

Rise of prices of warehousing and support services for transportation (15.1%)

contributed the most to the total increase of prices of market services. Higher prices of

advertising and market research services by 17.4% and land transport services and

transport services via pipelines by 6.2% was also significant. Increase of prices in the area of computer programming, consultancy and related services (5.1%), employment services (15.1%), real estate services (3.1%), architectural and engineering services and technical testing and analysis (4.2%), rental and leasing services (8.7%) or legal and accounting services (5.5%) also had an effect. The growth of prices was strengthening nearly in all areas and only prices of telecommunication services

The year-on-year increases of prices of market services accelerated during the year

and the increase reached 6.7% in Q4. Prices of land transport services and transport

services via pipelines (7.7%) and warehousing and support services for transportation (15.2%), advertising and market research services (15.0%) and services in the area of computer programming and related consultancy (7.7%) provided the largest influence on the total year-on-year growth. Among other areas, prices of employment services (18.5%), architectural and engineering services and technical testing and analysis

Prices of market services grew strongly under the influence of land transport services and transport services via pipelines and warehousing and support services for transportation.

Acceleration of price dynamics continued for market services in Q4. decreased (-0.7%).

Prices of agricultural products grew rapidly last year.

Year-on-year dynamics

moderated for the crop

production at the end of

the year.

Prices of agricultural products including fishes hiked up by 31.8%. Very strong growth was the result of large surge of costs on energies, fuels or also the prices of fertilisers. Owing to the geopolitical situation, considerable growth of prices of some agricultural commodities also occurred on the world markets. The year-on-year growth of prices peaked in Q2 and then weakened also in case of the crop products. Prices grew here by 28.0% year-on-year in Q4.

(5.6%) or real estate services (3.2%) also contributed significantly.

Prices of crop products were by 37.1% higher last year. Prices of cereals went up by 48.9%, in those prices of soft wheat by 50.8%, rye by 67.8%, barley by 46.7% and grain maize by 38.8%. Prices of industrial crops also surged rapidly (33.0%), especially due to the effect of prices of oil seeds (40.2%). Prices of forage plants rose by 7.7%, vegetables and horticultural products by 19.0% and potatoes by 28.4%. On the contrary prices of fruits (-2.4%) as well as wine (-1.0%) fell. The year-on-year price growth of the crop products reached the highest level in Q2 and then slowed down. Prices swelled by 23.5% here year-on-year in Q4. Prices of cereals jumped up by 41.8%, in that soft wheat by 41.6%, rye by 61.1%, barley by 43.6% and corn by 36.0%. Year-on-year dynamics moderated to a large extent for the industrial crops (11.4%), mostly under the effect of the development of prices of oil seeds (17.4%). Growth of prices of the forage plants slowed down to 3.1%. Prices of vegetables and horticultural products rose by 30.6%. Prices of fruits on the contrary considerably fell (-12.8%) and prices of wine were also lower (-4.3%).

Year-on-year growth of the prices of animal products accelerated during the year.

Prices of animals and animal products swelled by 24.4% last year. Strong growth struck the whole category. Prices of animals increased by 22.8%, in that they grew by 23.5% for cattle, by 24.4% for pigs and piglets and prices of poultry were by 19.5% higher. Prices of animal products increased by 25.7% last year. Prices of milk went up by 25.4% and eggs by 28.2%. Year-on-year growth of the prices of animals and animal products was

year.

year.

accelerating for the entire year up to 36.6% in Q4. Prices of animals were 35.8% higher year-on-year at the end of the year, in that price of cattle by 21.7%, pigs and piglets by 49.4% and poultry by 33.7%. Prices of animal products jumped by 37.3% year-on-year in Q4. Prices of milk hiked up by 35.5% and eggs by 58.1%.

Prices of export strongly Prices of export of goods increased in total by 12.7% last year. The exchange rate grew year-on-year forces hampered the year-on-year growth of prices of export throughout the entire year throughout the whole because the koruna foreign exchange per euro appreciated year-on-year<sup>60</sup>. Prices of mineral fuels and lubricants strengthened the most on average for the entire year 2022 (120.1%), followed by food and live animals (21.3%), semi-finished products<sup>61</sup> (18.9%) and other materials<sup>62</sup> (18.0%). The year-on-year dynamics of prices of export peaked in Q2 and the increase shrank to 9.8% in Q4. Prices of mineral fuels surged the most in Q4 (64.3%), increase for food and live animals (20.8%), semi-finished products (14.0%), chemicals and related products (12.1%) and beverages and tobacco (11.3%) was strong. Prices of miscellaneous manufactured articles (4.3%) and machinery and transport equipment (2.3%) were higher. Prices of other materials were falling year-onyear (-1.6%).

The terms of trade were Import prices increased by 17.2% last year. Prices of import of mineral fuels and negative for the whole lubricants (104.4%) surged the most, followed by beverages and tobacco (16.6%) and semi-finished products (16.6%). Prices of food and live animals (14.7%), chemicals and related products (12.3%) and other materials (10.8%) also featured a double-digit increase. Year-on-year dynamics of prices of import strengthened until Q3. The increase then moderated to 11.8% in Q4. Prices of mineral fuels (46.8%) and further food and live animals (21.5%), beverages and tobacco (20.6%), miscellaneous manufactured articles (11.6%) and semi-finished products (10.0%) grew the most yearon-year in Q4. Increase for other materials (6.6%) and chemicals and related products (5.9%) was also large and prices of machinery and transport equipment were also slightly higher (2.4%). Terms of trade of the foreign trade with goods were markedly negative last year and arrived at 96.2%. Terms of trade with beverages and tobacco (91.0%) and miscellaneous manufactured articles (96.7%) were markedly negative last year. In contrast they were strongly positive for mineral fuels (107.7%), other materials (106.5%) and food and live animals (105.8%). The terms of trade attained 98.2% in Q4 itself. Terms of trade were negative for trade with beverages and tobacco (92.3%), other materials (92.3%), miscellaneous manufactured articles (93.5%), food and live animals (99.4%) and machinery and transport equipment (99.9%). On the contrary the terms of trade were positive in case of mineral fuels (111.9%), chemicals and related products (105.9%) and semi-finished products (103.6%).

<sup>62</sup> SITC 2 - crude materials inedible, except fuels.



<sup>&</sup>lt;sup>60</sup> Based on the CNB data, the average koruna foreign exchange per euro reached 24.387 CZK/EUR in Q4 2022. It was 25.377 CZK/EUR in year 2021. The average was 24.565 CZK EUR for the whole year 2022 (25.645 CZK/EUR in the preceding year). Koruna foreign exchange per dollar depreciated year-on-year. The average was 22.192 CZK/USD in Q4 2021 and 23.923 CZK/USD this year. Last year's total average attained 23.360 CZK/USD and 21.682 CZK/USD in year 2021.

<sup>&</sup>lt;sup>61</sup> SITC 6 – manufactured goods classified chiefly by material.

### 6. Labour Market

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

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

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. 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 employment<sup>63</sup> attained strong 1.5% in the guarter-on-guarter 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 accented 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.

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 stagnating<sup>64</sup>. 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 services<sup>65</sup> (+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).

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 services<sup>66</sup> 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

<sup>&</sup>lt;sup>66</sup> 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).



<sup>&</sup>lt;sup>63</sup> Data regarding employment stem from the national accounts' conception. They are expressed in physical persons and adjusted for seasonal effects.

<sup>&</sup>lt;sup>64</sup> 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.

<sup>&</sup>lt;sup>65</sup> 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.

Growth of the number of

foreigners working in the

CR accelerated. It was

beginning integration of refugees from Ukraine.

Growth of the labour

productivity per hour

worked halted last year.

Productivity per worker

from year 2019.

however mildly increased and approached the level

mainly aided by the

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%).

Also in year 2022 businesses filled (mainly in industry, construction as well as some "lowincome" 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 years<sup>67</sup>. 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 2022<sup>68</sup>. The beginning integration of refugees from Ukraine was evident here<sup>69</sup>, ongoing migration from economically weaker regions of the EU as well as states outside the EU had an effect in much smaller order.

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),

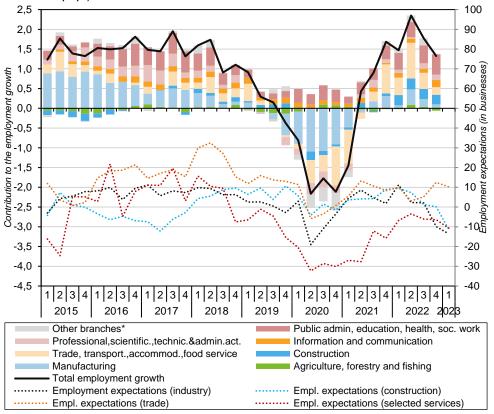
<sup>&</sup>lt;sup>67</sup> As also evidenced by the long-term decline of the number of economically inactive persons stating willingness to work (partially also affected by the change of the age structure of population, e.g. decrease of young aged 15 to 24 years). There were only 50 thousand of these 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%.

<sup>&</sup>lt;sup>68</sup> 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 Slovakians, 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.

<sup>&</sup>lt;sup>69</sup> 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%<sup>70</sup> in services. It cannot be omitted, that the situation differed at the level of subbranches within industry as well as services<sup>71</sup>. Due to the effect of deterioration of the overall economic outlooks as well as unexpectedly larger inflow of persons form 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-onyear 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 longterm unemployed kept falling. Decline of the general unemployment rate<sup>72</sup> (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

<sup>&</sup>lt;sup>72</sup> 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.



<sup>&</sup>lt;sup>70</sup> Data are not seasonally adjusted.

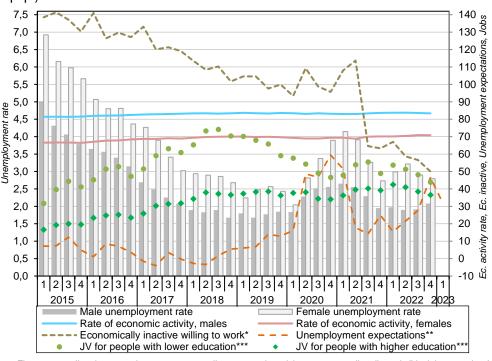
<sup>&</sup>lt;sup>71</sup> Especially industrial businesses in energy-intensive branches of metallurgy, metalworking industry, manufacturing of building materials, chemical industry or food industry anticipated a reduction of the number of employees (according to the survey from January 2023). Further 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.

Concerns of people regarding the growth of unemployment were rising for the most part of the last year. influences<sup>73</sup>. 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.)<sup>74</sup>. 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)

<sup>73</sup> 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.

<sup>&</sup>lt;sup>74</sup> 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 ant 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.

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.

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.

The effect of saving measures manifested in

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.

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 yearon-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 households<sup>75</sup>. The real wage plunged by 7.5% for year 2022, the purchasing power of the average employee earnings thus reached approximately the level form year 2018<sup>76</sup>.

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 far<sup>77</sup>. 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)<sup>78</sup>. High inflationary

<sup>78</sup> As of 1<sup>st</sup> 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.



<sup>&</sup>lt;sup>75</sup> 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).

<sup>&</sup>lt;sup>76</sup> 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.).

<sup>&</sup>lt;sup>77</sup> These persons integrated on the labour market gradually and often primarily via part-time jobs or only inf the form of various agreements.

branches with the dominance of state.

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.

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.

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

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.

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 2022<sup>79</sup> (+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 alltime highest between branches in the past years. Mining and guarrying, 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 products<sup>80</sup>. The situation was different in branches with dominant government sector<sup>81</sup>, 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 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)<sup>82</sup>. 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%)<sup>83</sup>. 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.

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

<sup>&</sup>lt;sup>79</sup> It involves generation and distribution of electricity, gas, heat and air conditioning.

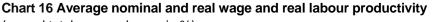
<sup>&</sup>lt;sup>80</sup> The wage pace however did not differ much between main manufacturing branches in total for year 2022.

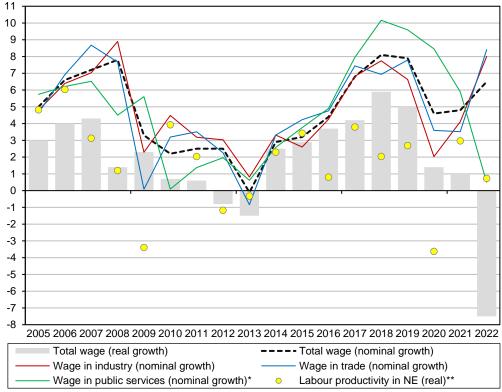
<sup>&</sup>lt;sup>81</sup> For simplification it includes branches Public administration and defence, mandatory social security; Education; Health and social care; Cultural, amusement and recreation activities.

<sup>&</sup>lt;sup>82</sup> 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.

<sup>&</sup>lt;sup>83</sup> Without their influence the hypothetic 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%)<sup>84</sup>, 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.





(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

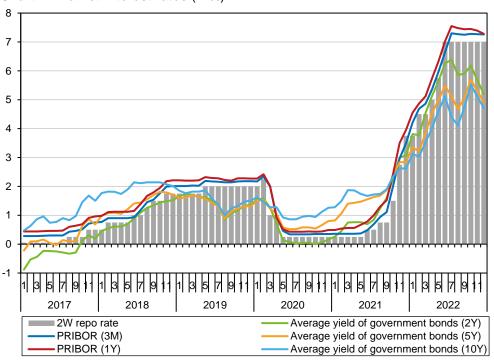
\*\*Labour productivity in national economy (NE) is depicted by the gross value added (in comparable prices of year 2015) per one worker. Source: CZSO

<sup>&</sup>lt;sup>84</sup> It represents a preliminary estimate. More detailed figures will be available in the publication Employee wage structure for year 2022, which will be published 23<sup>rd</sup> May this year.



## 7. Monetary Conditions

Set up of monetary policy-relevant rates was not changed in H2. Level of the basic monetary policy-relevant rates did not change in Q4. After the fast increase in H1, two-week repo rate remained at 7.00%, discount rate at 6.00% and Lombard rate at 8.00% till the end of the year.<sup>85</sup> In case of koruna foreign exchange per euro, the development was affected by the forex interventions against depreciation last year, which the CNB launched since half of May. The interventions manifested on the ridged exchange rate the most clearly in May and June, then however a mild appreciation occurred, which lasted till the end of the year. In Q4, the average value of koruna exchange rate per euro attained 24.39 CZK/EUR. Koruna appreciated per euro by 3.9% year-on-year. The rate was by 0.8% stronger quarter-on-quarter. The development was more turbulent for the koruna foreign exchange per dollar. Koruna followed a weakening trend apart from temporary exceptions since the beginning of the year, which peaked at the turn of Q3 and 4. Considerable strengthening from the level above 25 koruna per dollar to 23.50 koruna occurred during November. The foreign exchange fell to 22.62 CZK/USD till the end of December, which is still lower level than at the beginning of the year (the highest value was 21.18 CZK/USD in February). The average for the whole Q4 was 23.92 CZK/USD, which represents year-on-year weakening by 7.8% and quarteron-year strengthening by 2.0%.





Source: CNB

Bond yields were falling at the end of the year.

Rates of the interbank market imitated the development of the monetary policy-relevant rates and kept a stable level since July. The three months PRIBOR rate ended the year 2022 at the value of 7.26%. Certain expectations of future decrease of monetary policy-relevant rates were evident on the six-month and annual PRIBOR rate, which slightly dropped in the last months of year 2022 (the annual rate more perceptibly – from 7.44% at the end of September to 7.28% at the end of December). Bond yields markedly increased in the first half of the last year but were falling in Q4. The average interest in case of short-term bonds lowered the most ( $-0.71 \text{ p.p.}^{86}$ ), nevertheless they still

<sup>&</sup>lt;sup>86</sup> Unless stated otherwise, the difference between the value as of 31.12.2022 and 30.9.2022 is intended by the change of interest rates.



<sup>&</sup>lt;sup>85</sup> Unless stated otherwise, the source of data in the chapter is the Czech National Bank database ARAD. Values of foreign exchange rates also stem from the CNB.

maintained the highest level of interest, when they finished the year at 5.38%. Medium-term bonds held interests 4.73% (-0.16 p.p.) and long-term 4.47% (-0.01 p.p.) at the end of December.

Volume of non-term deposits, which savers transferred to term accounts, reduced last year.

Interest on client accounts gradually climbed up during the year. One-day deposits of households held average interest 1.33% towards the end of the year (increase by 1.04 p.p. year-on-year and 0.26 p.p. since the end of September). Small shift occurred also on the current accounts, where the interest rates remained at zero for the several last years (by +0.16 p.p. year-on-year to 0.22% at the end of December 2022). Largest increase was observed in case of interest rates on deposits with agreed maturity last year, mainly for the maturity below two years. The average interest rate on deposits with agreed maturity attained 6.0% at the end of year 2022 and it increased by 3.68 p.p. year-on-year. In total rates rather stagnated (-0.08 p.p.) here quarter-on-quarter, which can be ascribed to deposits with maturity below one year, which comprise the largest proportion among population. On the contrary, the rates grew quarter-on-quarter for longer maturities. Current accounts of non-financial businesses bore interest on average 0.81% at the end of the year (year-on-year +0.61 p.p., quarter-on-quarter -0.07 p.p.). The average rate of their deposits with agreed maturity was 5.78% (+3.31 p.p. year-on-year). Rate dropped by 0.67 p.p. quarter-on-quarter. The volume of non-term deposits was falling completely uncharacteristically for the entire last year, with savers likely transferring funds to term deposits. The total volume of deposits was by 356.6 CZK bn higher year-on-year at the end of year 2022. In that however non-term deposits dropped by 315.4 CZK bn and on the contrary the term deposits expanded by 671.9 bn. Households<sup>87</sup> shared the most in the described increase (+131.8 CZK bn), followed by financial institutions (+104.3 bn), government institutions (+73.3 bn) and non-financial businesses (+58.1 bn). Deposits of non-residents fell by 16.6 CZK bn year-on-year.

Credit interest rates went swiftly up. Credit financing kept becoming more expensive last year. Household consumption credit bore interest on average 9.66% at the end of the year, which presented a yearon-year increase of 1.75 p.p. and quarter-on-quarter stagnation (-0.04 p.p.). The volume of consumer credit was by 7.3% higher year-on-year at the end of the year. It is relatively solid increase, which however lagged behind the price growth. The average interest rate of mortgages was by 1.96 p.p. higher year-on-year at the end of the last year (4.88%). The year-on-year dynamics of mortgages thus continued in decline. Volume of provided mortgage credit was by 4.8% higher year-on-year at the end of the year, which is the smallest increase since Q2 2013. Volume of new mortgage credit<sup>88</sup> sharply plunged last year following the immense expansion from year 2021. The decrease concerned mainly net new credit. Other agreements, that is credit, where the fixation of the interest rate ended formed the majority of new credit in H2 2022.

Businesses to a higher extent acquired credit in foreign currency. Interest rates on credit for businesses also hiked up rapidly last year. Credit with volume up to 7.5 CZK mil bore interest on average 7.54% (+2.68 p.p. year-on-year.) at the end of the year, credit between 7.5 and 30 mil had average rate 8.03% (+3.32 p.p.) and credit above 30 mil charged interest 9.17% (+4.79 p.p. year-on-year). Total volume of credit and liabilities of non-financial businesses was by 4.1% higher year-on-year at the end of December. At the same time the credit and liabilities in CZK plunged by 13.2% year-on-year, while credit in foreign currency jumped up by 36.6%<sup>89</sup>. Credit provided in financial and insurance activities (22.0%), public administration, mandatory social security, education, health and social care (10.1%), wholesale and retail, repairs and

<sup>&</sup>lt;sup>89</sup> Credit in foreign currency started sharply grow after the beginning of repeated increase of monetary policy-relevant rates in June 2021. Their volume expanded by 198.9 CZK bn (54.8%) until December 2022.



<sup>&</sup>lt;sup>87</sup> Population including self-employed.

<sup>&</sup>lt;sup>88</sup> Refinanced credit as well as other agreements are included in the new contracts. Refinanced credit includes existing contracts agreed newly at a different bank, while other new agreements are existing contracts agreed with new conditions at the same bank.

maintenance of motor vehicles (9.2%), construction and real estate activities (similarly by 7.1%) showed the largest year-on-year increase at the end of December. Credit for information and communication was by 11.1% lower year-on-year at the end of year 2022.

## 8. State Budget

State budget managed a deep deficit last year for a third year in a row.

Impacts of the war in Ukraine influenced the total revenues as well as outlays. They stayed identically by 3.7% behind the budget anticipations.

Higher collection of VAT and social security insurance contributed the most to the growth of total revenues.

Swift growth of the VAT collection was substantially influenced by the rising prices level, the effect of weakening household consumption also became evident in H2.

Collection of consumption taxes increased only slightly and stayed behind the budget anticipations for all significant items.

The state budget (SB)90 ended in deficit in the amount of 360.4 CZK bn for the entire year 2022, which did not significantly digress from the budget anticipations<sup>91</sup>. Deep deficit was recorded already third year in a row, last year's result was however relatively the most favourable in this regard<sup>92</sup>. More favourable SB management in Q1, when the deficit did not exceed 60 CZK bn mostly stood behind the year-on-year decrease of the total deficit last year. The economic activity had not been restricted due to the counter pandemic measures anymore unlike the beginning of year 2021 and the need to aid affected businesses as well as household also considerably receded. In the subsequent part of year 2022, vigorous acceleration of growth of prices of both energies and fuels manifested due to the war in Ukraine. The rise of prices gradually permeated the whole domestic economy and directed it to the downward phase of the business cycle. These influences negatively manifested more on the expenditure side of the budget at first - by higher social transfers (including those related to the refugee wave from Ukraine), payments of part of costs on energies to households, more expensive common operations of the state as well as increased cost of planned investment. Their negative impact on the budget revenues however also started to be felt towards the end of the year - mainly in the area of indirect taxes. Both annual total revenues and outlays thus stayed behind the budget anticipations (identically by 3.7%).

Total SB revenues increased by 9.2% year-on-year (+137.2 CZK bn) in year 2022. Mainly higher tax revenues, especially from VAT (+46.7 CZK bn) as well as growth of the collection of mandatory social security insurance (+35.9 bn). Non-tax and capital revenues and transfers (+5.5 CZK bn) had a slightly positive effect in total, primarily due to the planned transfer of funds from the privatisation account into the SB revenues realised in December 2022. Dividend yields also went up (by 14 CZK bn). Thanks to this the unexpected payment gap from the EU budget was offset (their volume was by 6.6% lower year-on-year and did not reach even three fifths of the annual size of the budget anticipation)<sup>93</sup>. State-wide tax collection (without insurance) expanded by 13.2% year-on-year last year, the impact of the weakening economic performance was however clear in the second half-year. While this collection strengthened by 22.5% in Q2, already only by 7.2% in the last quarter. The slowdown reflected the development of collection of indirect taxes, for direct taxes the trend has not manifested yet.

From the weight dominant tax – VAT – the SB gained by 15.6% more year-on-year last year. It represented the highest growth in the current millennium, where mainly the price acceleration of weight significant items of consumer basket played role. Pace of the collection growth was falling during the last year – it was 10.9% in Q3, 9.0% in Q4. Negative effect of the decrease of household consumption was still more absorbed by the effect of the rising prices (e.g. food). Equally negative, but one order less, effect had both collection and VAT waiver to selected commodities (e.g. vaccines, respirators). State wide collection of VAT (at the level of all public budgets) exceeded the collection from the pre-crisis year 2019 by 24.2%, consumer prices (23.4%) also increased by nearly same pace in the same time period (23.4%)

Despite 2.2% more flowing into the SB year-on-year from consumption taxes (incl. energetic) last year, the size of collection (similarly to VAT) stayed behind the budget anticipations. Collection of the most weight significant tax – from mineral oils – dropped by 4.1% (by 3.1 CZK bn resp.) compared to year 2021 exclusively due to the adverse

<sup>&</sup>lt;sup>93</sup> Delay of payments for approved projects, which had already been pre-financed from the CR budget before, stood behind it.



<sup>&</sup>lt;sup>90</sup> Unless stated otherwise, all data related to the state budget stem from the data of the Ministry of Finance regarding the treasury fulfilment.
<sup>91</sup> According to the amendment of Act (no. 57/2022 Coll.) on the state budget of the Czech Republic for 2022 (approved on 18<sup>th</sup> October 2022), which raised the anticipated deficit to 375 CZK bn (from 280 CZK bn given in the original version of the Act on the budget from 10<sup>th</sup> March 2022).
<sup>92</sup> It also underlines the deficit after adjustment for revenues and outlays related to the common CR and EU projects, which summed 316.1 CZK bn last year (364.9bn and 408.6 bn then in years 2020 and 2021 respectively).

development in H2 2022<sup>94</sup>. Both lower summer as well as autumn consumption of diesel fuel and petrol (mainly due to record high prices) and impacts of the lowered tax rate had an effect here<sup>95</sup>. Collection of tax on tobaccos products increased by 5.6% last year and compensated the SB the lower collection of tax on mineral oils (a decline also occurred here however in Q4 itself). Higher annual collection mainly reflected the effect of the ongoing increase of tax rate on tobacco products. Total collection of consumption taxes also grew thanks to higher rate of levy from older solar power generation plants, the yearly planned collection was not however completely fulfilled here. It was also valid for the collection of tax on alcohol (with year-on-year growth of 1.7%) or beer (+6.7%). The collection of marginal tax on wine fared better (+14.4%) and considerably overtook even the pre-crisis level.

Collection of income tax of legal persons grew fast for the entire last year. Large businesses in some branches influenced it positively. SB revenue from the corporate tax ascended to record size (151.5 CZK bn) last year. It strengthened by one sixth year-on-year and considerably also surpassed the budget anticipations (by 15%, 20 CZK bn resp.). High June collection had a favourable effect (including both quarter and half-yearly advance tax payments and part of the payment of tax for year 2021), nevertheless the collection maintained a high dynamic also at the end of the year (thanks to quarterly tax advance payment). Collection of taxes reflected the favourable economic results of some large businesses (e.g. in the area of energy, trade or financial activities). Legislative amendments influenced the size of collection as well<sup>96</sup>.

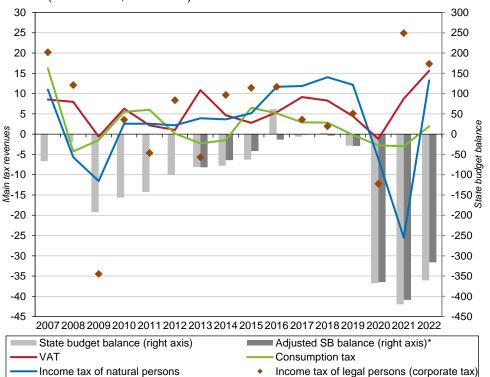


Chart 18 State-wide collections of main tax revenues (y-o-y in %) and state budget balance (annual total, in CZK bn)

\*SB balance adjusted for both revenues and expenditures connected to EU/FM. Data adjusted for effect of EU funds and Financial mechanisms are available since year 2013. Source: MF CR

<sup>&</sup>lt;sup>96</sup> High year-on-year rise of the collection of the corporate tax was partially influenced by the extension of the time period for the payment of the tax advances of the year before the last (based on the individual requests from the firms) with a negative impact on the collection of this tax into the SB in the amount of 22.1 CZK bn (for year 2021). Further it also concerned the change in the taxation of reserves of the insurance companies.



<sup>&</sup>lt;sup>94</sup> The collection plunged by 13.7% in Q3 2022, even by 18.1% the subsequent quarter.

<sup>&</sup>lt;sup>95</sup> The rate of the consumption tax on petrol and diesel fuel was lowered by 1.50 CZK per litre from June till the end of September 2022. This measure was extended for diesel fuel till the end of year 2023. According to the MF CR calculations, these tax arrangements exerted a negative effect on the yearly collection in the amount of 5.3 CZK bn.

Growth of ITNP collection paid by payers increased thanks to favourable development on the labour market. Legislative amendments had an opposite effect.

ITNP collection collected by deduction recorded a high growth.

Expenditures on pensions displayed a record increase, the number of their recipients mildly decreased for the third year in a row.

Non-pension social benefits grew swiftly mainly due to the material deprivation assistance benefits and state social assistance benefits. 13.4% more flowed into the SB from the collection of the income tax of natural persons (ITNP) year-on-year, which was affected both by the higher employment and brisk nominal growth of average wages in the business sphere. With the retreat of pandemics the role of the formerly paid out compensation bonuses (to aid small businesses) weakened, which significantly dwindled the ITNP collection still in year 2021. Legislative amendments had the opposite effect (continuing increase of the tax rebate per taxpayer, higher tax deduction on children or abolishment of the ceiling to use tax bonus). The key tax by volume paid by the payers (on behalf of employees) contributed the most to the ITNP collection growth, whose collection increased by even 8% year-on-year (7 CZK bn resp.)<sup>97</sup>. Collection of other income taxes of natural persons grew more dynamically – both for ITNP payers, resp. persons lodging tax returns (+45%) thanks to economic recovery the year before the last as well as the adjustment of the tax rate for high incomes and for the deduction tax (+30%) due to growth of the interest rates on deposits as well as increase of the number of persons working in the form of work agreements (partially related to the integration of the Ukrainian refugees on the domestic work market).

Total SB outlays mildly increased year-on-year last year (+4.1%, 77.8 CZK bn resp.), greatly assisted by the current outlays (+68.2 CZK bn), one order less than investment. Drawing of outlays was more uneven during the year 2022. It was limited by the regime of interim budget in Q1<sup>98</sup>, subsequently the need arose for extraordinary outlays resulting from the war in Ukraine (foreign aid, outlays on the integration of the refugees in the CR, crisis management in the area of state material reserves). In addition the impacts of the strengthening inflation in the CR amplified by the unexpected August surge of prices of energies on the world markets still more stimulated the fiscal expansion. These led to the need for the pension adjustment as well as other social benefits or introduction of the saving energy tariff to aid the households. Even though the growth of the total current outlays was the second lowest in the last six year last year (3.9%), their size exceeded the pre-crisis year 2019 by 27.3%.

Unlike the years 2020 as well as 2021, the growth of current outlays was driven mainly by the funds on pensions last year. They increased by unprecedented 10.9% year-on-year, since a record three-fold legal adjustment of pensions was performed<sup>99</sup>. Number of pension recipients was on the contrary falling for a third year in a row, in total it was by 1.8% lower compared to December 2019, mainly due to the heightened mortality. At the same time the long-term trend of the growth of number of persons with early pension continued<sup>100</sup>. Good condition of the labour market supported the ongoing growth of the pension insurance revenues (+6.7%). The pension account balance<sup>101</sup> again plunged into deficit (17.4 CZK bn) following a mild surplus in year 2021.

Unlike the year 2021, the non-pension social benefits (by 11.2% higher year-on-year) also contributed to the growth of the SB current expenditures. Higher material deprivation assistance (+9.0 CZK bn), driven from the vast part by the payment of the humanitarian aid to the refugees from Ukraine, played an essential role here. State social assistance benefits also expanded considerably (SSAB, +7.6 CZK bn). These increased primarily due to the

<sup>&</sup>lt;sup>101</sup> Difference between revenues and expenditures on pensions from the SB. Expenditures do not contain the costs of administration of the pension insurance system.



<sup>&</sup>lt;sup>97</sup> State-wide collection of this tax (149.6 CZK bn) was only around the level from year 2016 last year, mainly due to the decrease of the tax burden on labour since year 2021 (in connection with the abolition of the so called super gross wage).

<sup>&</sup>lt;sup>98</sup> Sum of monthly outlays in all the central government institutions thus could have reached maximum of one twelve of the total SB outlays determined by the adopted Act on SB from year 2021. The possibilities to pre-finance some current transfers were restricted at the beginning of the year and utilisation of other source of financing was also substantially limited (e.g. extra-budgetary sources – mainly claims from the unused expenditures from the past years). It led among other things to the postponement of non-essential operational outlays as well as investment.

<sup>&</sup>lt;sup>99</sup> The due January adjustment meant increase of the average retirement pension by 5.2% (805 CZK), the extraordinary adjustment in June analogically by 6.3% and even 4% then in September. The average monthly retirement pension (without combination with other incomes) thus arrived at 19 755 CZK for males, 16 484 CZK for females in December last year.

<sup>&</sup>lt;sup>100</sup> It was stimulated by unusually high adjustment in year 2022, which exceeded the effect of "penalty" for leaving into the early retirement. From the total number of all recipients of the retirements pensions, persons with early retirement comprised already 28.7%.

Sickness insurance benefits were further decreasing, still they exceeded the insurance revenues.

Strong growth of outlays on non-investment purchases related mainly to the strengthening of state material reserves. Growth of outlays on servicing the state debt accelerated and approached so far record size from year 2013.

Higher current transfers to regional budgets reflected especially the mild increase of wage tariffs in education.

Budget anticipated downturn of current transfers to business entities was linked to the retreat of support programs in pandemics. It was however hampered by expenditures on the energy tariff in the second half of the year. single payment of the child benefit<sup>102</sup>, child allowances (thanks to the broadening of the number of recipients entitled to the benefit) and housing benefits (due to the raising of costs accepted for the pay-out). The mild decrease for the weight dominant item of SSAB – parental benefits – had the opposite effect (–2.4 CZK bn). From other benefits the volume of care benefits increased (+3.7 CZK bn)<sup>103</sup>. On the contrary thanks to the improvement of the epidemic situation the expenditures on sickness insurance benefits dropped for the second year in a row (by 3.7 CZK bn), the SB however expended by one fifth more on these benefits compared to year 2019<sup>104</sup>. The SB "saved" one order less also on the unemployment benefits, whose paid out size slightly fell for the second year in a row. Still it totalled not negligible 9.9 CZK bn.

All social benefits strengthened by 75.7 CZK bn last year (one half of it pertained to the last four months of the year). They comprised 42.7% of all current SB outlays, which was approximately by 3 p.p. less than in the period of the economic recession (2012 till 2013). Outside of the area of social benefits, the unexpectedly large volume of non-investment purchases of the state the most contributed to the growth of the total current expenditures (+15.8%, 12.4 CZK bn resp.), where the higher expenditures on strengthening of the state material reserves (mainly natural gas), payment of older cost to the Czech Post, rising prices for consumed energies or higher need to purchase medicine and medical manifested. Net expenditures on servicing the state debt also burdened the SB more<sup>105</sup>. Their growth accelerated compared to year 2021. It attained 17.7% last year and with its size (49.7 CZK bn) closely approached the record expenditures from year 2013. It was connected with the growth of the size of debt as well as interest rates on domestic state bonds. Significant by volume current transfers towards regions and municipalities mildly grew in alignment with the budget anticipations for the last year (+2.3%, +5.3 CZK bn). Mild growth of the wage tariffs of teachers of primary and secondary schools (+2%) as well as compensations to local authorities for the accommodation of refugees had a pro-growth effect, the decline of funds on social services or inpatient care (connected to the extraordinary bonuses the year before the last) had the opposite effect. From other current expenditures, the payments of the public health insurance for the so called state insured person (2.4%), which were affected both by the change of the adjustment mechanism<sup>106</sup> and the higher number of insured persons.

Noninvestment transfers to business entities, which plunged by 28.8% year-on-year, 36.1 CZK bn resp. significantly worked in the direction of decrease of current expenditures in line with the anticipation. The fundamental retreat of support programmes for business entities hit by the impacts of pandemics manifested here (by 60 CZK bn), lower advance subsidies to the renewable sources of energies also had a partial effect. Mainly the new subsidies on the savings of energy (so called energy tariff serving as an assistance to households) paid out this year in September (17.4 CZK bn) and to a lower extent also the abolition of the mandatory fee for the development of renewable energy had the opposite effect. Lowering of subsidies to budgetary organisations (-4.3%) is closely connected with the higher basis in the year before the last affected by the payment of extraordinary bonuses to medical professionals. The decrease of subsidies to the non-profit organisations was also related to the retreat of the pandemics (-11.9%), mainly in the area of education and sport. Growth of the long-time rising mandatory payments of the CR into the EU budget halted last year (-1.8%), specifically for the first time since year 2017. Weight significant expenditures on the salaries in the central government institutions in reality stagnated for the second year in a row.

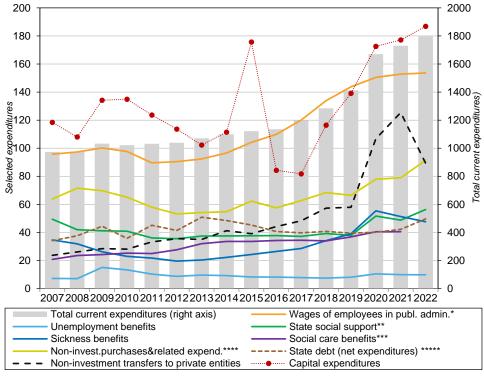
<sup>&</sup>lt;sup>102</sup> It is paid out (in the amount of 5 thousand CZK for each child) to families with middle and lower incomes from August this year with the aim to partially compensate for the rising prices of energies, food and further needs to these families.

<sup>&</sup>lt;sup>103</sup> It occurred mainly due to the legal raising of the benefits for people with disabilities in the two most severe degrees of dependency.

<sup>&</sup>lt;sup>104</sup> Expenditures on sickness insurance benefits thus exceeded the revenues flowing to sickness insurance by 8 CZK bn in year 2022. It marked better result than in year 2021 (-14.4 bn) and 2020 (-21.3 bn). The surplus in the area of sickness insurance was last recorded in year 2018 (+0.6 bn).

<sup>&</sup>lt;sup>105</sup> Net expenditures correspond to the balance of the budget chapter State debt (no. 396).

<sup>&</sup>lt;sup>106</sup> Monthly payments of the state increased from 1767 CZK to 1967 CZK per person since January 2022. According to the later approved amendment of Act on Public Health Insurance however the payment decreased to 1487 since September 2022.



## Chart 19 Selected expenditures of the state budget (annual total, in CZK bn)

\* Covers expenditures on salaries in central government institutions. Does not include e.g. wage costs of regional education. \*\*Also includes the foster care benefits.

\*\*\*Includes Material deprivation assistance benefits, Benefits for people with disabilities, Care benefits based on Act on State Social Support. Humanitarian aid provided for citizens of Ukraine are also included here.

\*\*\*\*Contains mainly expenditures on purchase of services, materials, energies or other services (e.g. expenditures on repairs and maintenance).

\*\*\*\*\*Corresponds to the balance of the budget chapter State debt. Source: MF CR, MLSA

SB capital outlays thanks to marked acceleration of drawing increased by 5.5% year-onyear at the end of the last year<sup>107</sup> and reached record 186.9 CZK bn. Still they lagged behind the budget anticipations by more than one tenth (further mildly lowered amended budget). Nearly one half of resources aimed for the state funds last year, especially the State Fund for Transport Infrastructure (by 11.7 CZK bn more year-on-year) and State Environmental Fund (+8.0 CZK bn, mainly for the realisation of the New Green Savings programme financed from the resources of the National Programme Environment). Investment transfers to business entities also mildly increased. From the view of the source of financing. Investment on the common CR and EU projects contributed to the growth (+19 CZK bn, to 93 bn). In contrast the expenditures on projects from exclusively national resources decreased by nearly one tenth year-on-year. Total investment formed 9.4% of all SB expenditures last year. It was the most in the last seven years but did not digress significantly from the longterm average (for the whole period since the CR accession to the EU).

Size of the state debt increased by more than 400 CZK bn for the third year in a row. The value of both internal and external debt rose last year.

Mild growth of investment

expenditures on transport

infrastructure as well as

reflected higher

the environment. Common CR and EU

projects contributed.

Deep budget deficit was mirrored in the high borrowing need of the state. The state debt climbed up to 2 895 CZK bn at the end of the last year's December, when in increased by record 429 bn (+17.4%)<sup>108</sup> for the entire year 2022. The issues of medium as well as long-term koruna bonds (with maturity above 1 year) on the domestic market fundamentally participated in this, even though they did not achieve the intensity from years 2020 neither 2021<sup>109</sup>. State on the contrary borrowed considerably more from households last year

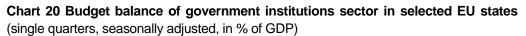
<sup>&</sup>lt;sup>109</sup> Value of all state bonds in circulation expanded by 243.7 CZK bn for the last year, i.e. to 2 609.8 bn. Domestic financial institutions held precisely two thirds of the value of bonds in December 2022, non-residents then little less than 27%. From the view of the total possession of

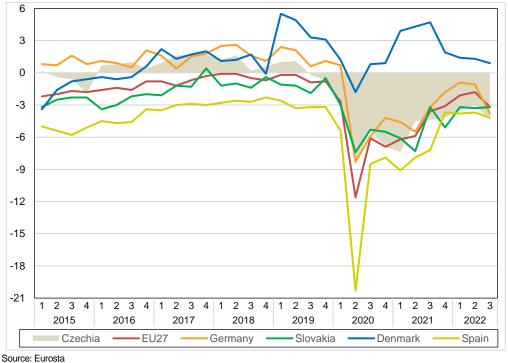


<sup>&</sup>lt;sup>107</sup> 39.5 CZK bn was drawn on investment from the SB in December, i.e. more than for the first four months of the year (28.5 bn), which were to a large extent impacted by the regime of the interim budget.

 <sup>&</sup>lt;sup>108</sup> Increase of debt in the preceding two years severely affected by the impacts of the pandemics however also exceeded 400 CZK bn (+409.5 bn in year 2020, +416.1 bn one year later).
 <sup>109</sup> Value of all state bonds in circulation expanded by 243.7 CZK bn for the last year, i.e. to 2 609.8 bn. Domestic financial institutions held

(bond issue at the beginning of the year reached 43 CZK bn) and it also more intensively utilised short-term debt instruments (treasury bills as well as loans on the euro financial market). Consequently the external indebtedness of the CR also increased for the second year in a row (by more than 110 CZK bn) – it nevertheless still participated on the total amount of the state debt by less than one tenth.





Budget deficit of the sector of government institutions in the CR shrank by one third yearon-year for the three quarters.

Acceleration of the dynamics of expenditures of sector VI in Q3 was also one of the impacts of the unusually high surge of prices in the economy. The whole sector of government institutions (VI) in the CR recorded deficit 145 CZK bn<sup>110</sup> for Q1 to Q3<sup>111</sup>, which represented by nearly one third more favourable result against the record deficit from the same period last year. Development in the first half of the year, when the impact of the post-pandemics revival of the economy was still more notably evident stood exclusively behind this improvement. In contrast the deficit deepened to 60 CZK bn in Q3 (worse result was in this time period observed only in the crisis year 2009). Strengthening year-on-year growth of expenditures of sector VI manifested here (from 5.5% in Q2 to 12.2% in Q3), caused by higher social benefits (incl. extraordinary pension adjustments) as well as other current transfers (effect of introducing the Energy-saving tariff), growth of paid out owner income (due to higher interest) and larger volume in intermediate consumption and investment (also as a result of growth of prices in the economy). On the contrary the volume of paid out subsidies reduced significantly, it however remained above the level from year 2019. Total revenues of sector VI, unlike the expenditures, grew by stable pace during the last year (by 10.7% in total for three guarters). Especially the collection of tax on production and from import exhibit positive results, however its growth pace was decreasing due to the weakening consumption of households (from 13.1% in Q2 to 8.7% in Q3). The collection of common taxes on income or social

<sup>&</sup>lt;sup>111</sup> Data regarding the budget of government institutions for Q4 2022 will be published by the CZSO on 3<sup>rd</sup> April 2023, Eurostat then analogically on 21<sup>st</sup> April 2023. More detailed assessment of the development for Q3 2022 is contained in the publication Analysis of the sector accounts: <u>https://www.czso.cz/csu/czso/cri/analyza-ctvrtletnich-sektorovych-uctu-3-ctvrtleti-2022.</u>



bonds the proportion of domestic households strengthened the most year-on-year (to more than double -3.7%), to a lesser extent then also the proportion of pension funds, insurance companies, investment funds and also non-residents.

<sup>&</sup>lt;sup>110</sup> Unless stated otherwise, data regarding the budget of sector VI in the CR are expressed without seasonal adjustment.

contributions in contrast displayed a stable growth thanks to the good condition of the labour market.

Trend of the decrease of relative budget deficit of sector VI halted in both the EU and euro area in Q3.

The indebtedness rate was mildly falling for the second year in a row in the EU. It however increased in the CR as the only member country during the last year.

Ratio of revenues of sector VI to GDP remained below the level of year 2019 in the CR. Improvement of the shape of public finances in the EU as well as the euro area states (also associated with the significant reduction of extraordinary public outlays connected to the pandemics) apparent since the beginning of year 2021, halted. The budget deficit of sector VI deepened to 3.2% of GDP in the Union in Q3 2022 (since it was 1.8% of GDP in the preceding quarter – the least since the end of year 2019)<sup>112</sup>. The deficit also deepened in the CR in Q3 (to 4.4% of GDP). It thus recorded worse result compared to both the EU and euro area for the fifth quarter in a row. Despite worsening macroeconomic situation still approximately one third (generally middle and smaller) states of the Union maintained mild budget surpluses last year in Autumn. In contrast, deep, more than 5% deficit troubled sector VI in Belgium, Hungary and Romania.

The indebtedness of the sector VI in the EU was continuously mildly decreasing following reaching absolute maximum at the beginning of year 2021 (92% of GDP). It was 85.1% of GDP last year at the end of Q3 and fell by 4.6 p.p. year-on-year. Reduction of indebtedness occurred exclusively thanks to the effect of the nominal growth of the economic performance in both the Union and euro area since the absolute size of the debt kept growing (even though only slowly contrary e.g. to the situation in the CR). Some long-time highly indebted states achieved the largest improvement - Greece (by 25 p.p.) and Cyprus (by 15 p.p.), it was however significant also among traditionally fiscally stabilised countries (Ireland, Denmark, Lithuania). The CR presented the only member state of the Union, where the indebtedness increased year-on-year (from 40.4% of GDP to record 45.3%). The indebtedness rate of the CR ranked the eighth lowest among the member states in Q3 (it was the worst position after year 2014), it still however did not reach even one half of the euro area level. The ratio of total revenues of sector VI to GDP still stayed behind the level from 2019 in the CR in last year's Q1 to Q3 unlike the EU. On the contrary, the relative volume of expenditures grew faster in the CR than in the Union for the same time period. Compared to the lowest level of indebtedness from the era of the pre-pandemic boom (period 2015 to 2019) the debt of the sector VI of the EU countries was higher by 7.6 p.p. last year in Q3 – even in the range 17 to 18 p.p. in the most affected states (Spain, France), by 15 p.p. in the CR. On the contrary, only Ireland was in better situation than before the pandemics (by 8 p.p.), with large distance then Denmark, Sweden and Croatia.



<sup>&</sup>lt;sup>112</sup> Data regarding the budget balance of sector VI in the EU countries expressed after seasonal adjustment.