3. Branches Performance

Growth rate of GVA contracted by one third year-on-year. However, the economy did not slow down quarter-onquarter in trend last year. Performance of all economic branches viewed via the optics of the gross value added (GVA)¹ grew by 3.0% last year and contracted by one third in comparison to the pace achieved in the previous year. More detailed quarter-on-quarter comparison shows, that both the high basis of the first half of year 2017 (when the domestic economy benefited mainly from the swift growth of the foreign demand) and the temporary slowdown in Q2 2018 (when the guarter-on-quarter growth of GVA fell down to 0.3%, to the two-year minimum) stood behind the relatively weaker last year's result. Quarter-on-quarter growth persisted in the domestic economy already twenty two quarters in a row, the GVA increased in total by 21.2% during this time period.

Manufacturing contributed the most to the growth of the value added last year. However, its pace was the fastest in construction, financial activities and information and communication.

Even though the value added grew in manufacturing at the slowest pace for the last five years last year (+3.4%), this branch added to the growth of GVA in the whole economy 0.9 p.p. - still the most out of all the main eleven monitored branches. The weight significant manufacturing of motor vehicles as well as dynamically growing manufacturing of computers and electronic and optical products had an effect. Among the services, the weight dominant grouping trade, transportation, accommodation and restaurants contributed the most (+0.8 p.p.) last year. The majority of other branches of the tertiary sphere also benefited from the more stable domestic demand. GVA growth achieved a five year maximum (6.9%) in financial and insurance activities. The value added increased by a similar pace also in information and communication (the cumulated growth arrived at nearly 40% in the last five years). On the contrary, only a moderate growth was typical for the real estate activities in the last years and also for branches with the predominant public sector. GVA growth in professional, scientific, technical and administrative activities slackened already third year in a row, it lowered down to eight-year minimum (+1.0%) last year. Construction recorded a major turnaround. If the GVA dropped here by 2.3% in 2017, its growth hiked up to 6.7% last year (stronger yearly rate of growth was last recorded in year 2004). On the contrary, the fall in agriculture, forestry and fishing from the year 2017 continued by a similar rate of growth also in year 2018 (-2.8%). It was the consequence of lower outputs of the plant production impacted by the below average harvest of the majority of the main crops (except for oilseed rape, dry and warm weather also benefited the fruit farming)².

the last year's slowdown of industry in the CR - mostly the slowdown of growth in the weight significant branch energetics⁴ and in the chemical industry⁵. In spite of less

Weaker harvest of main crops marred the output of agriculture already second year in a row.

> Business statistics provide a more detailed overview of the sub-branches. Industry did not fully continue in the very strong year 2017 last year. Industrial production index³ grew by 3.2% year-on-year (by not even half pace relative to 2017 - similarly to the whole EU), by 2.3% in Q4 itself. This development resulted mostly from the worsening situation in key export territories. Industrial output in the EU fell for the first time since the end of recession year-on-year in Q4 2018 (by 0.8%), it also decreased in all the five largest EU economies (both year-on-year and quarter-on-quarter). Domestic factors also influenced

Growth rate of industrial output slowed down by one half in the CR last year compared to year 2017...

CZSO

Year 2018 1

¹ Data regarding the GVA are expressed in constant prices and adjusted for seasonal and calendar effects.

² The total harvest of cereals was 6.97 mil of tons in 2018. It was by 11% lower compared to the average of years 2008 till 2017.

³ Included branches: Mining and quarrying, Manufacturing, Energetics. All year-on-year rates of growth of output (at the level of activity sections as well as divisions) are adjusted for calendar effects, quarter-on-quarter rates are then also seasonally adjusted.

Even though the performance of the branch slowed down (to +1.4%, from +4.8% in 2017), output grew already third year in a row. According to the data of the Energy Regulatory Office, majority of the last year's year-on-year growth of the total gross electricity production in the CR (by 1.1%) was due to the higher production of the nuclear power plants (+5.6% to 29.92 TWh - value close to the so far record output from period 2012 to 2014). Dry and hot weather positively affected the yearly output of photovoltaic power plants (+6.6%), it had an opposite effect on the hydroelectric and pumping power plants (-11.9%, where the output level slumped to the ten year minimum: 2.68 TWh).

Output in this branch rose only by 0.8% year-on-year, however by 19.3% in 2017. High growth rate in 2017 was connected to the full renewal of the production capacities (following accidents, which restricted the output of the whole branch in both years 2015 and 2016). Output in the chemical industry exceeded level before the accidents (Q2 2015) already at the beginning of year 2017. Lower last year's

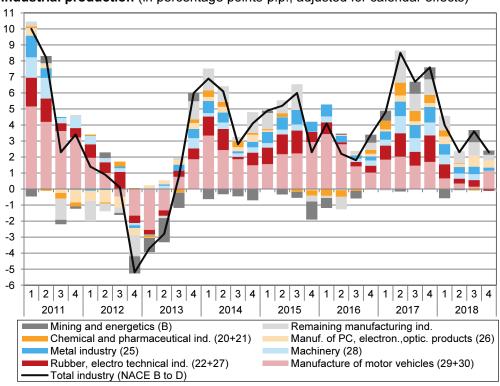
...however only three sub-branches faced lower output in the CR.

favourable development of the foreign demand, only three industrial branches recorded the fall of output in year 2018 (out of nearly 30 monitored branches) – coal mining (-4.2%)⁶, textile industry (-5.6%) and leatherworking industry (-21.9%).

Growing manufacturing of computers and electronic and optical products pushed the growth of industrial output last year. Addition of the manufacturing of motor vehicles in contrast significantly contracted compared to 2017.

Manufacturing of computers, electronic and optical products presented the fastest growing industrial field so far (+12.1%) and contributed to the year-on-year growth of the whole industry (+0.40 p.p.) last year. Influence of the manufacturing of motor vehicles on the contrary notably weakened (to 0.41 p.p.). Although this branch secured nearly one third of growth of the whole industry on its own in year 2017 (contribution 1.82 p.p.). Regulative measures also affected the development of this branch in the second half of the last year (introduction of stricter emission standards). The data related to the physical production also provide evidence of a mild growth in the motor vehicle industry last year. The closest sub-branches also recorded a considerable slowdown – especially the manufacture of rubber and plastic products – where the production only stagnated last year following the swift growth in year 2017 (+8.3%).

Chart 5 Contributions of sub-branches to the year-on-year change of the whole industrial production (in percentage points-p.p., adjusted for calendar effects)



Source. C23

Manufacture of metal products or machinery prospered. Thanks to the domestic demand, recovery continued in metallurgy as well as construction materials.

Weight significant branch manufacturing of metal products also supported the growth of industry last year (contribution 0.45 p.p.), its production grew faster than the whole manufacturing already the fourth year in a row. In machinery, where the strong impulse in the form of domestic demand acceleration in 2017 already dissipated for the most part, the production growth slowed down to 3.0%. Still it represented the third best result after year 2011. In metallurgy and foundry industry, the revival of mainly the domestic demand from

growth was also the consequence of the temporary shutdowns of the production facilities at the end of summer. The quarter-on-quarter output fell by 4.5% in Q3 2018, the most since the end of year 2015.

_

2

⁶ On the contrary, in another segment of the branch mining and quarrying, so far peripheral by weight – mining of construction materials (mainly buildings stone, sand, clays) – output grew swiftly already second year in a row (+9.0 resp. by 6.9% in 2017).

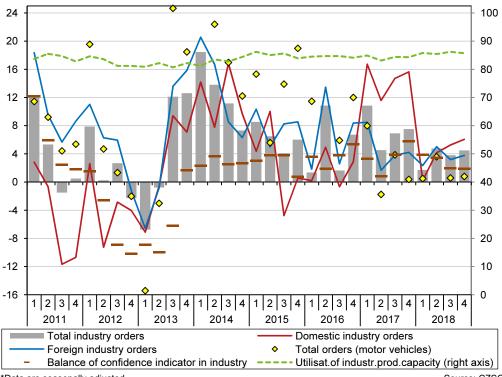
⁷ Based on data from the Automotive Industry Association, the number of produced motor vehicles increased by 1.7% in the CR year-on-year in 2018 (while achieving the record number of vehicles 1.437 mil). Manufacture of majority of other types of motor vehicles grew even faster last year.

the year before the last prevailed also in 2018 and the industry output thus increased by 2.7% last year (the most in the last four years)⁸. Similar situation rules also in the manufacture of construction materials. Even though the rate of growth of production even strengthened in the food industry as one of the few more significant industrial branches last year, it still ended below 3.5%. The traditionally weaker performance here is connected to the deepening negative balance of the foreign trade with the food products⁹.

Among smaller manufacturing industries, a swift growth continued in the pharmaceutical industry, warm weather also assisted to manufacturers of beverages.

Last year's slowdown of growth of the majority of weight significant industrial branches was partially offset by the dynamical development of some of the smaller industries. It concerned mainly the largely export oriented pharmaceutical industry (+5.7%) and manufacturing of other – especially rail – transport equipment (where the growth fully compensated the nearly 10% fall of production from year 2017). Higher domestic demand was also favourably reflected in the output of the manufacture of furniture or manufacture of other products¹⁰. Manufacture of wood, wearing apparel (with the production growth of more than one third in the last four years) as well as the manufacture of beverages, where the growth of 5.1% (supported by the long hot weather period as well as the export revival) represented the best result after year 2007, also fared well.

Chart 6 New orders in manufacture of motor vehicles, in industry in total (in current prices, year-on-year in %), balance of confidence indicator in industry * (in p.p.) and utilisation of production capacities in industry * (in %)



*Data are seasonally adjusted.

Source: CZSO

Balance of confidence indicator in industry in the second half of 2018 weakened, however it still remained slightly

Even though the year-on-year growth of production as well as sales in industry slumped approximately by one half last year in comparison to the rate of growth attained in year 2017, short term outlook for the whole branch remains slightly positive. Value of new orders was by 4.5% higher in Q4 (by 3.7% for the whole year). Even though the demand in

CZSO Year 2018 3

_

⁸ Compared to the business cycle peak year 2007 however, the last year's output still lagged behind (by 9%) in this branch. The same was valid however for nearly one half (especially smaller) of manufacturing branches. Among the more significant branches, manufacturing of other non-metal mineral products – i.e. especially construction materials (by 10%) – and food industry (by 2%) still lagged behind. The whole section of manufacturing however exceeded this level by 27% and industry in total then by 21%.

It reached the value of -39.2 CZK bn in the national conception in 2018, "only" -31.4 bn five years earlier.

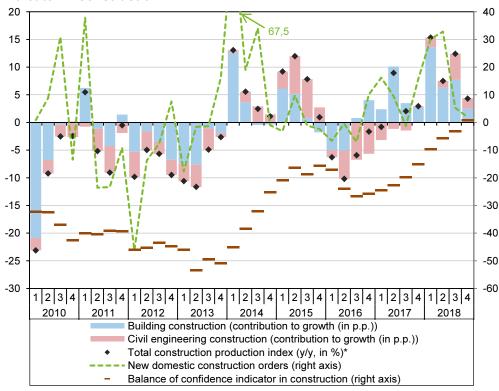
¹⁰ This branch includes e.g. manufacturing of sport equipment, toys, musical instruments or bijouterie.

positive.

Businesses were still limited the most by the tense situation on the labour market. This influence however mildly weakened at the beginning of year 2019.

the motor vehicle industry as well as the associated branch manufacture of electrical equipment in fact stagnated, in the overwhelming of other monitored branches the orders grew (especially due to the stronger foreign demand). It included mainly the manufacture of rail equipment, computers, both electronic and optical equipment, pharmaceutical industry and manufacture of metal products. Seasonally adjusted balance of confidence indicator in industry maintained in the positive band – following the stagnation from the first half year of 2018 it slightly decreased in its remaining part (to December +0.3, a five-year minimum). The weaker assessment of the total demand as well as the short term expectations of the production activity stood behind this result. The lack of employees¹¹ stays as the main barrier to growth of industry already since the half of year 2017, which was apparent in the higher investment in the area of machinery equipment as well as the growing utilisation of the industry production capacities. Inadequate demand limited one third of businesses at the beginning of year 2019 (similarly to the year before). Since the half of last year, they also experience more intensively the lack of materials (the most in the chemical and motor vehicle industry).

Chart 7 Contribution of sub-branches to year-on-year change of construction output* (in p.p.), new orders (year-on-year in %) and balance of confidence indicator in construction**



^{*}Data are adjusted for calendar effects.

Source: CZSO

Construction output grew the fastest last year after year 2003. Both building Construction output accelerated as a consequence of rising both public and private investment last year. Very favourable weather conditions ¹² also assisted this branch. Construction output ¹³ grew already second year in a row, last year's +9.1% ¹⁴ comprised

Year 2018

4

^{**}Data are seasonally adjusted.

¹¹ At the beginning of year 2019, the proportion of businesses stating this barrier however mildly fell to 39% (from 45% in Q4 2018), which was likely associated with the more intensive perception of the external risks in the area of the total economic development in 2019. Short term positive expectations of the employment growth in the industrial businesses started slightly falling during the second half of the year and this development continued also at the beginning of year 2019.

¹² Average air temperature was 9.6 °C in the CR in 2018 (1.7 degrees above the long-term standard from period 1981-2010). It stayed more than 1 degree above its normal however in all months of the year, apart from February and March (when it was by 2.6, resp. 2.1°C lower)

¹³ All year-on-year data related to the construction output are adjusted for calendar effects, quarter-on-quarter rates of growth then also for the seasonal effects.

construction and civil engineering construction prospered.

the strongest pace in the last fifteen years. It is credited to the development in Q1 to Q3 of the year, a slowdown occurred in the last quarter (to +4.3%). In the quarter-on-quarter expression it even fell by 1.8%¹⁵. While only the building construction drove the output of the whole industry in year 2017, last year also the civil engineering construction was able to keep the pace.

Number of commenced dwellings grew already fifth year in a row up to a nine-year maximum.

While the civil engineering construction greatly benefited from the progress in drawing on the European funds (apparent in comparison to year 2017, but also during the last year itself), weight dominant buildings construction capitalised on the growing demand for commercial as well as residential real estate. In spite of the fact, that the number of commenced flat reached the nine-year maximum last year (33.1 thousand) and grew already fifth year in a row (in total by nearly 50%), it still lagged by nearly one fourth behind in comparison to the average of the peak period (2006 till 2008). Higher number of commenced flats in non-residential buildings, in the family houses and also in reconstructed non-residential premises (the highest number after year 2005) contributed the most to the last year's growth. On the contrary the volume of commenced construction of flats in the residential buildings stagnated year-on-year and did not reach even one half of year 2007. Given the regional view, the construction in Prague contributed the most to the growth in the CR, still the number of commenced (and also completed) flats there notably lagged behind the total population growth also here already fifth year in a row. Only gradual revival of the flat construction together with the efficiency of using the existing flat stock in the capital city is reflected in the sharp growth of realised prices of both new flats and rents¹⁶.

Raise of value of new domestic construction orders continued already second year in a row. The pace however slackened towards the end of the year.

Construction still enjoyed a positive outlook towards the end of year 2018 in the CR. Yearon-year growth of the value of new domestic orders (for businesses with 50 employees and more) continued already second year in a row. It was strong in the first half of the last year, both in buildings construction (28.1%) and in the civil engineering construction (34.6%). Despite the rate of growth slackening in the remaining part of the year, a moderate growth persisted in the whole branch also in the last quarter (+1.9%). As a positive observation, large projects became more frequent - the average size of the new order was rising second year in a row (it amounted to 3.7 CZK mil in 2018). Total stock of work in the form of all so far not-completed orders summed up to 153 CZK bn at the end of the year (+15% year-on-year). Growth of the stock of work was driven primarily by the public domestic orders. On the contrary, the volume of contracted work abroad, which had in the last years rather anti-cycle effect, reduced for the fourth year in a row¹⁷. Confidence indicator of the managers of the construction companies grew already two and a half years and left the negative band in November 2018 (for the first time since September 2008). The proportion of construction businesses considering the lack of labour force for the growth barrier nearly doubled during the year 2018 (to December 41%), it already comprised the main barrier in the last third of the year in the whole branch. In contrast the factor of inadequate demand was weakening (as far as 24% - mildly below the level reached in the peak of the last decade).

Confidence indicator in construction significantly improved. However, construction businesses were considerably limited by the lack of available labour force.

CZSO

Year 2018

5

¹⁴ Growth of construction was above average even in the European context last year. It was only 2.1% in the whole EU. The CR ranked ninth among the countries. Among the older EU (15) members, only Ireland achieved higher growth than the CR. Primarily countries from central and eastern Europe fared well (e.g. Hungary +22%, Poland +20%), where the strong construction dynamics was assisted not only by swift economic growth but also to a facility on the funds from the EU budget.

¹⁵ Investment (gross fixed capital formation) also experienced a slight quarter-on-quarter decrease in the whole economy towards the end of year 2018.

¹⁶ The year-on-year growth of rents on flats in Prague was 6.2% in H2 2018, nearly double the pace recorded in the whole CR.

¹⁷ Proportion of foreign orders on the total stock of work of construction businesses (with 50 and more employees) lowered last year below the 10% level. Still it was nearly double compared to the level of the business cycle peak in the last decade (2006 till 2008).

120 **** 35 115 110 30 105 25 100 20 95 15 90 10 85 5 80 Total services Transportation and warehousing Accommodation, food service, restaurants Information and communication Real estate activities Professional, scientific, technical. activities

Chart 8 Sales in selected services divisions (in real terms, seasonally adjusted, level of year 2015 = 100) and confidence indicator balance in selected services* (in points)

Administrative and support service activities

*Data are seasonally adjusted, includes also the financial sector.
Source: CZSO

Even though the growth of sales in selected services slowed down last year, it reached nearly 3%.

Sales in selected services¹⁸ grew by 2.8% last year. Even though the rate of growth eased by more than one third compared to year 2017, it still constituted the third best result after year 2007. Last year's slowdown was for the most part influenced by a weaker Q4, when the output of services grew only by 0.6% (it dropped even by 0.7% in quarter-on-quarter expression). Despite all branch sections recording a strengthening sales last year (except for real estate activities, where they fell by 1.6%), only two main branches contributed significantly to the services growth – transportation and warehousing and also information and communication.

Balance of confidence indicator in services

Development of industry, trade as well as higher mobility of population led to swift growth of sales in transportation and warehousing. Long-term strong demand persisted in information and communication.

Sales strengthened by 4.6% in transportation and warehousing year-on-year, their growth was expanding for the third year in a row. The branch was pulled (similarly to years 2016 and 2017) mainly by the brisk growth in the division warehousing and support activities for transportation (+6.3%). All other types of transportation also prospered, apart from the postal and courier activities (-2.1%). Both land transportation and warehousing profited from the development of industry as well as domestic and foreign trade. Growth of services (especially in the domestic transportation) was associated with higher mobility of population propelled by the record employment size and in the last third of the year also by the widening discounts on the prices of fare in the public transport.

Growth in the long-term dynamic branch of information and communication gained pace (from 4.0% in 2017 to last year's 5.4%). Even though the information activities¹⁹ remained its most dynamic field in the last four years, activities in the area of information technologies²⁰ contributed the most to the growth of the whole branch last year. Only the

. .



6 Year 2018

¹⁸Excluding 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).

¹⁹ Including mainly the data processing and hosting, web portals and news agency and information service activities.

²⁰ Include mostly computer programing, computer facilities management activities and also consultancy in the IT area.

peripheral segment of motion picture and sound recording and music publishing activities faces weak results in the long term²¹.

The sales in the branch accommodation, food service activities and restaurants faster nearly double digit growth in 2017 strengthened only by 0.8% last year (they even slightly fell in the accommodation segment). It was linked with the slower dynamics of the arrival tourism industry²². The possible impact of the jump in the prices of food services in 2017 cannot be also excluded, it could have affected the demand (especially domestic) in the subsequent period.

Strong recovery in construction so far did not manifest in the architectural and engineering activities

In the branch of professional, scientific and technical activities the sales grew only by 0.8% lastly year, mostly due to the effect of weak growth of architectural and engineering activities (despite the development of construction) as well as fall of sales for advertising (already third year in a row). On the contrary, the advisory in the area of management, accounting and auditing activities, tax consultancy or market research and public opinion polling prospered. Sales growth in the branch administrative and support service activities (+2.3%) was driven by the long term strong demand in the area of renting and leasing (especially transport vehicles, but also machinery) and operating lease. The unceasing demand for agency employees also played a role, mainly in the secondary sector.

Growth of retail sales continued for the fifth year in a row. They were driven by the dynamic development of non-food products and also sales via internet.

Dynamic growth of earnings accompanied by positive balance of the consumer confidence indicator (which hit the historical peak in the half of the year) was reflected in the 4.8% year-on-year growth of retail sales last year²³. Even though their pace slowed down somewhat in comparison to year 2017 (similarly to the EU), sales growth prevailed for the fifth year in a row and at the same time, it ranked among the highest also within the frame of the Union states²⁴. Traditionally the sales of non-food products contributed the most to the year-on-year strengthening of the retail in the CR (with the growth of 7.4%). Especially the sales of computer and communication equipment thrived, growing by double digit rate of growth already second year in a row. Expansion of the sales via internet continued (+19.8%). Sales grew in all the main groups of specialised stores, except for stores with food (-0.4%) last year. Despite rising prices for the most part of the year, the demand for automotive fuels remained high (growth of sales by 4.0%, by 5.7% in 2017). However, the same did not occur for the sales of motor vehicles, where the sales fell for the first time (by 2.2%) last year following the five growth years.

Year 2018 7

²¹ Lower sales in the film and music industry (0.3%, in year 2017 -14.9%) were linked to the more frequent irregularities in orders and invoicing. The segment of the motion picture distribution itself however thrived much better. According to the Union of motion picture distributors, the sales from entrance fees in cinemas increased by 13.2%, number of visitors by 7.3% (to 16.3 mil, the largest number after year 1993) in the CR in 2018.

22 Number of overnight stays of foreign visitors in the mass accommodation facilities increased year-on-year by 1.9% (but by 8.2% in year

²⁰¹⁷⁾ in the CR last year.

All year-on-year rates of growth and sales for retail are given in constant prices and adjusted for calendar effects.

Growth was only 2.1% in the EU last year. Retail grew faster than in the CR in six states (in that: Lithuania, Hungary, Ireland and Poland – between 6.4 and 6.6%).