

2. Economic Activity

Serbia's economic activity continued to slow down in Q4. Year-on-year GDP growth was only 0.4% and was the lowest since the beginning of 2021. This result was expected and we announced it in previous editions of QM. Namely, 1) high and growing inflation reduces the real income of the population and consequently private consumption; 2) investments and industrial production record declining or unconvincing, barely positive trends during 2022; 3) the slowdown of economic activity in the EU, with which the domestic economy is closely connected, is still noticeable. At first glance, the seasonally adjusted GDP in Q4 shows slightly more favorable short-term trends than the year-on-year indices. The growth of seasonally adjusted GDP in Q4 compared to Q3 was 0.7% (annualized almost 3%). However, we interpret this result as an oscillation on an approximately stagnant trend of economic activity, and not as an announcement of the start of a stronger economic recovery - especially since in the previous quarter (Q3) the seasonally adjusted GDP had a drop of 0.7% (which is identical to the growth achieved now). At the level of the entire 2022 the GDP growth of Serbia was 2.3%, which can be assessed as a modest result. Other CEE countries had an average economic growth rate of 4.3% in 2022, which was 2 p.p. above Serbia, and noticeably faster economic growth than Serbia was also achieved at the level of the entire EU (3.5%). One reason for Serbia's low economic growth in 2022 was a bad agricultural season due to a drought, which reduced overall GDP growth by about 0.5 p.p. The second reason is the fact that in comparable CEE countries, the delayed effect of recovery from the health crisis continued during 2022 (for example, the strong growth of tourism in Croatia). Serbia, unlike most other CEE countries, exhausted the effect of recovery from the crisis somewhat earlier, with faster economic growth during 2021. Looking ahead, forecasts for Serbia's GDP growth in 2023 are still very uncertain and we expect them to change during the year. At the same time, the first indicators of economic trends in January were mixed, so they do not provide much new information on the basis of which more reliable forecasts can be made for the next period. For this reason, we are keeping the forecast from previous editions of QM that Serbia's GDP growth in 2023 could be around 2%. Within this growth, the largest part of the economy would have a growth of about 1.5%, with an additional contribution of agriculture of about 0.5 p.p. (recovery from the drought is expected in 2023).

Year-on-year GDP growth in Q4 was 0.4%, and at the level of the entire 2022, 2.3%

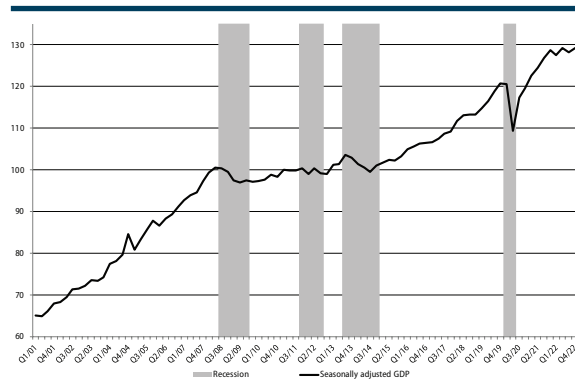
According to the latest SORS estimates the year-on-year growth of Serbia's GDP in Q4 was 0.4%, which represents the continuation of the decrease in year-on-year GDP growth rates that lasted throughout 2022. More specifically, at the beginning of 2022, i.e., in Q1, Serbia's economic growth was 4.1%, and then it gradually decreased from quarter to quarter - to 3.8% in Q2, then to 1% in Q3 and to 0.4% in Q4. At the level of the entire year Serbia thus achieved a GDP growth of 2.3%, which is half lower than the forecasts with which we entered the year (4.5%). The main reasons for Serbia's significantly worse economic results than expected are events that could not be predicted at the time when the GDP forecasts for 2022 were made (autumn 2021). These are: the outbreak of war in Ukraine (along with European sanctions against Russia), further acceleration of inflation, the energy crisis (which in Serbia was further exacerbated by the catastrophic mismanagement of public enterprises), as well as the slowdown of the economies of EU countries and regions with which the Serbian economy is closely linked.

In Q4, seasonally adjusted GDP grew by 0.7% compared to the previous quarter.

Unstable, but in principle stagnant trends of economic activity in Serbia throughout 2022 can be clearly seen on the seasonally adjusted GDP index shown in Graph T2-1. Although a solid seasonally adjusted GDP growth of 0.7% (2.8% annualized) was actually achieved in Q4, Graph T2-1 quite clearly indicates that from the beginning of 2022 the basic trend of economic activity in Serbia is stagnation, and that the achieved result from Q4 seems to be another oscillation on the approximately stagnant trend of economic activity¹. Quarterly fluctuations in seasonally adjusted GDP that occurred throughout 2022 were unusually large. At the beginning of the year,

¹ We gave a similar assessment in the previous edition of QM, when we also interpreted the drop in seasonally adjusted GDP from Q3 of 0.7% as instability in the basic trend of economic activity, and not as an announcement of the beginning of a recession.

Graph T2-1. Serbia: Seasonally adjusted GDP growth, 2001-2022 (2008 = 100)



Source: QM estimates based on SORS data

Note: shaded periods represent a recession, estimated based on the Bry-Boschan procedure

The main reason for the slowdown in year-on-year GDP growth in Q4 is the further slowdown in the growth of trade, transport and tourism

production principle, i.e. by individual sectors of the economy. The main and expected change that happened in Q4 is the continuation of the slowdown in the growth of trade, transport and tourism. This heterogeneous grouping of services (which are presented together in the quarterly national accounts) had year-on-year growth of only 2.8% in Q4. This is a serious slowdown compared to the previous quarter, when this group of services had a growth of 5.5%, but also compared to the first half of the year when the year-on-year growth of this part of the economy was around 10%. The movement of this group of services had the greatest impact on the slowdown of the year-on-year growth of total GDP during 2022. Namely, these services, which participate in the total GDP of Serbia with 20%, reduced their growth from 11.4% in Q1 to 2.8% in Q4, which significantly reduced the year-on-year growth rate of the total GDP. The systematic slowdown in the growth of trade, transport and tourism during 2022 was due to the acceleration of inflation as well as the gradual depletion of space for the continuation of the accelerated post-crisis recovery of tourism and transport (which had the deepest decline during the health crisis).

seasonally adjusted GDP recorded a decrease of 0.9% compared to Q4 2021 (annualized decrease of 3.6%), and then in Q2 there was a quarterly growth of 1.3% (annualized growth of 5, 3%). The same thing happened again in Q3 and Q4 when the seasonally adjusted GDP first fell by 0.7% and then increased by the same percentage. Such frequent and large fluctuations of seasonally adjusted GDP at the quarterly level as in 2022 have not occurred in Serbia since 2012 (Graph T2-1), which well illustrates how turbulent and unpredictable economic trends are at the moment.

In Table T2-2, we presented data on the year-on-year growth of Serbia's GDP by production principle, i.e. by individual sectors of the economy. The main and expected change that happened in Q4 is the continuation of the slowdown in the growth of trade, transport and tourism. This heterogeneous grouping of services (which are presented together in the quarterly national accounts) had year-on-year growth of only 2.8% in Q4. This is a serious slowdown compared to the previous quarter, when this group of services had a growth of 5.5%, but also compared to the first half of the year when the year-on-year growth of this part of the economy was around 10%. The movement of this group of services had the greatest impact on the slowdown of the year-on-year growth of total GDP during 2022. Namely, these services, which participate in the total GDP of Serbia with 20%, reduced their growth from 11.4% in Q1 to 2.8% in Q4, which significantly reduced the year-on-year growth rate of the total GDP. The systematic slowdown in the growth of trade, transport and tourism during 2022 was due to the acceleration of inflation as well as the gradual depletion of space for the continuation of the accelerated post-crisis recovery of tourism and transport (which had the deepest decline during the health crisis).

Table T2-2. Serbia: Gross Domestic Product by Activity, 2017–2022¹

	Y-o-y indices														
	2017	2018	2019	2020	2021	2022	2021				2022				Share 2021
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Total	102.1	104.5	104.2	99.1	107.5	102.3	101.7	113.8	107.8	107.2	104.1	103.8	101.0	100.4	100.0
Taxes minus subsidies	102.2	105.5	103.5	97.7	108.3	104.1	99.3	116.7	109.1	108.1	108.2	105.1	102.5	101.1	17.3
Value Added at basic prices	102.1	104.3	104.4	99.4	107.4	101.9	102.2	113.2	107.5	107.1	103.3	103.5	100.7	100.3	82.7
Non agricultural Value Added	103.3	103.4	104.9	99.2	108.5	102.6	102.7	114.6	108.9	108.2	104.0	104.3	101.5	100.9	92.4 ²⁾
Agriculture	88.6	115.1	98.4	102.3	94.3	91.7	94.1	94.6	94.4	94.2	91.6	91.4	91.5	92.2	7.6 ²⁾
Industry	102.6	100.9	100.4	100.5	106.3	101.8	104.4	115.7	102.3	104.0	102.0	104.6	99.6	101.2	21.6 ²⁾
Construction	105.4	112.4	133.7	96.7	117.6	90.2	119.8	118.3	119.4	114.4	94.3	93.1	87.9	87.5	7.3 ²⁾
Trade, transport and tourism	105.2	106.3	106.0	94.7	114.3	106.7	102.4	128.9	114.9	112.7	111.4	108.1	105.5	102.8	20.0 ²⁾
Informations and communications	103.7	105.4	108.3	108.7	104.9	106.6	104.9	106.4	103.7	104.8	105.3	105.2	108.1	107.7	6.2 ²⁾
Financial sector and insurance	101.0	107.5	102.3	104.6	109.4	102.3	110.0	110.1	109.1	108.3	102.1	102.3	102.8	101.8	3.9 ²⁾
Other	102.5	101.5	102.6	98.8	105.5	103.2	97.8	108.0	108.8	107.7	103.9	104.9	102.0	101.9	33.5 ²⁾

Source: SORS

1) In prices from the previous year

2) Share in GVA

Agriculture and construction had a relatively deep decline throughout the entire 2022

Other sectors of the economy in Q4 mostly repeated similar results as in previous quarters (Table T2-2). Due to the drought, agriculture recorded a drop in the whole of 2022 of about 8%, which is an important figure since it noticeably reduced the growth of the total GDP of Serbia in 2022 (by about 0.5 p.p.), and is a consequence of extraordinary circumstances that will probably not repeat in 2023. In Q4, construction slightly deepened its decline from previous quarters to 12.5% (in the first three quarters of 2022 the decline in construction was 8.5% on average). While for agriculture it is quite clear that its decline is a consequence of temporary circumstances (drought), unfavorable trends in construction could be of a more permanent nature and are probably related to lower investment activity and an increase in interest rates on loans. In the coming period, we will carefully monitor the impact the increase in interest rates will have on the Financial Sector.

During 2022, this sector had a relatively mild growth of 2.3%, which was somewhat lower than in previous years, and it is possible that it will continue with a further slowdown in the coming quarters. In Q4, industrial production had a low year-on-year growth of 1.2%, which is approximately at the level of the annual growth of this activity in 2022 (1.8%). There will be more about the industry in a separate section of the text.

The IT sector is becoming more and more important for the economy of Serbia

The sector of the economy that has had high and stable growth rates in 2022, as well as in a longer series of previous years, is Information and Communications (which relate mainly to telecommunications and the IT industry). In 2022, this sector had a growth of 6.6%, and in the previous 10 years the cumulative growth of this sector was about 65%. It is possible that an additional impetus to the growth of this sector of the economy will be given by the increased influx of immigrants from Russia who moved their businesses to Serbia. Another important indicator, which we noticed in the previous editions of the QM, is that the Information and Communications sector after 2022 already participates in the GDP of Serbia with about 6.5%. This is significantly more than traditional economic sectors such as Transport and storage or Financial services, and it is already close to the participation of the Agriculture and Construction sectors in the Serbian economy.

In Q4, the gradual slowdown of private consumption continues, but with a certain recovery of net exports

The structure of GDP growth by consumption is shown in Table T2-3. In principle, these data in Q4 were complementary to the analysis of GDP movements by production sectors of the economy. Private consumption, which makes up the largest part of expenditure GDP, had a real year-on-year growth of 1.5% in Q4, which represents its further gradual slowdown compared to previous quarters. At the beginning of the year, i.e. in Q1, private consumption had a year-on-year growth of 6.9%, so its decrease by about 4.5 p.p. from the beginning to the end of the year was the main reason for the slowdown in the overall growth of Serbia's GDP. We see the reason for this trend of slowing growth of private consumption primarily in the increase in inflation, which reduced the real income of the population. State consumption, with certain oscillations, mostly stagnated during 2022, which is a consequence of its expected gradual stabilization after several very turbulent years during the corona virus pandemic. In addition, high inflation affected the real reduction of salaries in the public sector in 2022, which also reduced government spending. As far as investments are concerned, under the influence of a strong decline in the construction activity, in the second half of 2022 investments moved into the zone of year-on-year decline. However, it is important to note that the total fall in investments in Q4 of 2.7% is significantly lower than the estimated fall in construction activity (12.5%), which indicates that the economy is still maintaining the growth of investments in machinery and equipment of 3-4%. Finally, net exports in Q4 significantly and positively contributed to GDP growth due to faster real growth of exports (12.9%) than imports (6.6%). The main reason for these trends in net exports in Q4 is the international drop in energy prices that Serbia predominantly imports, as well as the warmer winter, which also reduced the amount of imported energy.

Table T2-3. Serbia: GDP by expenditure method, 2017-2022

	Y-o-y indices														
	2017	2018	2019	2020	2021	2022	2021				2022				Share 2021
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
GDP	102.1	104.5	104.2	99.1	107.5	102.3	101.7	113.8	107.8	107.2	104.1	103.8	101.0	100.4	100.0
Private consumption	102.2	103.1	103.6	98.1	107.7	103.7	98.1	117.2	108.3	107.5	106.9	103.8	103.0	101.5	66.0
Government	102.9	103.7	102.0	102.8	104.1	100.2	101.7	98.5	109.3	107.2	102.7	104.9	96.2	97.6	16.9
Investment	106.6	117.5	117.2	98.1	115.9	99.4	111.5	125.1	115.6	113.0	101.2	102.1	98.1	97.3	23.1
Export	108.2	107.5	107.7	95.8	119.5	117.6	108.6	136.3	122.5	114.0	120.0	121.6	116.9	112.9	54.5
Import	111.1	110.8	110.7	96.4	117.7	117.8	98.5	142.4	121.2	113.8	134.9	122.9	111.0	106.6	62.3

Source: SORS

Other CEE countries in Q4 also slowed down economic growth, but continued to achieve slightly better results than Serbia

In Table T2-4, in addition to Serbia, the year-on-year GDP growth rates in the EU 27 and especially in the CEE countries² are shown. The Table shows that the entire EU and CEE countries also had noticeably higher economic growth than Serbia in Q4 (1.5% and 1.3%, respectively, compared to Serbia's 0.4%). This negative difference in the economic growth of Serbia compared to most other European countries has existed since the beginning of 2022,

² In addition to the CEE 11 EU member countries, our data also includes the countries of the Western Balkans.

but in Q4 it was somewhat reduced (especially taking into account that the Serbian economy was extraordinarily affected by the decline in agriculture due to the drought). The reasons why CEE countries, and even the entire EU, achieved faster economic growth than Serbia in 2022 were discussed in more detail in previous editions of QM³. To put it simply, Serbia relaxed the epidemiological measures a little earlier, so it recovered faster economically from the health crisis in 2021, but other countries caught up with it in 2022. The comparative results from Q4 indicate that these effects are already being exhausted, so the analysis of the impact of the health crisis on the economy of Serbia and other CEE countries can be completed.

Table T2-4. Serbia and CEE countries: GDP growth in the period 2018-2022

	Y-o-y indices												
	2018	2019	2020	2021	2022	2021				2022			
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Serbia	4.5	4.2	-0.9	7.5	2.3	1.7	13.8	7.8	7.2	4.1	3.8	1.0	0.4
EU27	2.1	1.9	-5.6	5.4	3.5	-0.8	14.0	4.3	5.0	5.8	4.4	2.6	1.5
CEE (weighted average)	4.5	4.1	-3.4	6.4	4.3	-0.4	12.6	6.6	6.7	7.6	4.8	3.4	1.3
Albania	4.0	2.1	-3.3	8.5	:	4.2	17.6	6.8	5.5	6.4	2.6	4.0	:
Bosnia and Herzegovina	3.7	2.8	-3.0	7.6	:	3.2	11.8	7.4	7.4	5.7	5.8	2.6	:
Bulgaria	2.7	4.0	-4.0	7.6	3.4	3.7	7.1	8.6	10.2	4.4	3.9	2.9	2.6
Montenegro	5.1	4.0	-13.3	12.1	:	-5.6	16.9	27.9	9.3	4.6	13.6	2.8	:
Czech Republic	3.2	3.0	-5.5	3.6	2.4	-2.2	9.5	3.5	3.6	4.9	3.5	1.5	0.1
Estonia	3.8	3.7	-0.6	8.0	-1.3	2.5	13.9	8.4	7.4	2.9	-0.3	-2.9	-4.1
Croatia	2.8	3.4	-8.6	13.1	6.3	2.6	20.8	16.7	12.2	7.8	8.7	5.2	4.0
Latvia	4.0	2.6	-2.2	4.1	2.0	-0.6	9.8	4.4	2.5	5.5	2.5	0.2	0.3
Lithuania	4.0	4.6	0.0	6.0	1.9	2.8	9.1	5.6	6.5	4.8	1.7	1.8	-0.4
Hungary	5.4	4.9	-4.5	7.1	4.6	-2.2	17.8	6.2	7.4	8.2	6.5	4.0	0.4
North Macedonia	2.9	3.9	-4.7	3.9	2.1	0.1	14.5	1.4	1.2	2.2	4.0	2.0	0.6
Poland	5.9	4.5	-2.0	6.8	4.9	-0.8	11.3	7.4	9.4	10.5	5.2	4.4	0.5
Romania	6.0	3.9	-3.7	5.8	4.8	-0.3	15.4	6.7	2.4	6.3	5.1	3.8	4.6
Slovakia	4.0	2.5	-3.4	3.0	1.7	-0.1	9.9	1.4	1.3	2.9	1.3	1.4	1.1
Slovenia	4.5	3.5	-4.3	8.2	5.4	1.6	16.2	5.1	10.5	10.2	8.6	3.3	0.2

Notes: data for Q4 for three countries have not been published yet: Albania, Bosnia and Herzegovina and Montenegro

Source: QM based on Eurostat data

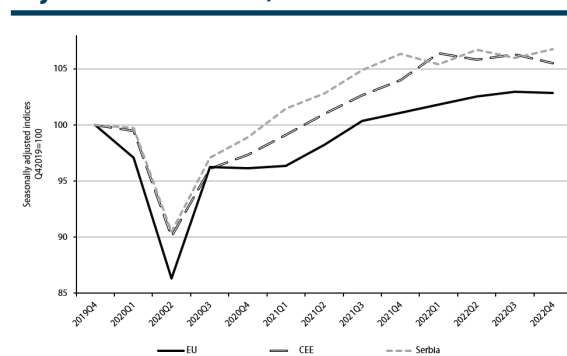
Since the outbreak of the health crisis, the economy of Serbia has had somewhat better but not spectacular results than comparable countries

In Q4 the noticeable slowdown in economic activity continues throughout Europe

In the previous three years, from 2020 to 2022, Serbia's GDP increased by around 9%. The growth of comparable CEE countries in the same period was approximately 7.3% on average. So, Serbia had somewhat better results than the average of CEE countries, but this difference is not dramatically large (about 0.5 p.p. per year). At the same time, there are CEE countries that achieved better economic results than Serbia in the previous three years (Croatia, Poland and Slovenia). This is why the frequent assessments of state officials that Serbia is the European champion in economic growth in previous years are unfounded in the data.

Comparative data also show widespread signs of a slowdown in economic activity in Europe. Year-on-year GDP growth at the EU level in Q1 was 5.7%, and by Q4 it had already decreased to 1.5% (Table T2-4). At the CEE level, the year started with a GDP growth of 7.6% and ended with a growth of 1.3%. The short-term economic growth trends in these groups of

Graph T2-5. Serbia, CEE and EU: seasonally adjusted GDP indices, 2020–2022



Source: QM based on Eurostat data

countries are even more clearly described by the seasonally adjusted GDP indices that we (including Serbia) presented in Graph T2-5. The Graph also shows from another angle the differences in economic trends since the outbreak of the health crisis in Serbia, the CEE countries and the entire EU, which we wrote about extensively in QM during the previous years. What we are drawing special attention to is that in Q4 2022 the seasonally adjusted GDP index at the level of the entire EU for the first time since the end of the health crisis had a decline compared to the previous quarter (although this decline was minimal and amounted to only 0,1%).

³ For more details, see for example QM68, section "Economic Activity".

We maintain the Serbian GDP growth forecast of 2% in 2023

Economic developments in Serbia, as well as in the entire CEE region, are currently very unstable, which is well illustrated by the fluctuations of the seasonally adjusted GDP in 2022, which can be seen in Graph T2-5. Therefore, it is currently very difficult to assess which way the economic trends will turn in the coming period: whether in the direction of economic recovery, the beginning of a recession, or whether the stagnation that marked the previous year will continue. Even the first available indicators for January 2023 do not provide any more information about this question. Serbia's industrial production in January had a solid year-on-year growth of 4.1%, but its seasonally adjusted index still fell by as much as 2% compared to December 2022. January growth in retail sales (in constant prices) was a low 1.8% - certainly under the influence of high inflation, which continues to accelerate. However, this was again a better result of retail sales than in November and December 2022. To all this, preliminary data on foreign trade from January should be added, which indicate a strong growth in net exports, as exports of goods grew at a rate of 21%, and imports at a rate of 12.5%. So, such divergent movements of January indicators of economic activity definitely cannot reliably indicate in which direction the economic movements of Serbia will continue in the coming period. As a result, somewhat more reliable forecasts of the economic growth of Serbia in 2023 are currently practically impossible. That is why for now we will keep the forecast presented in previous editions of QM, that the GDP growth of Serbia in 2023 could be around 2% - where the largest part of the economy would have a growth rate of around 1.5%, while the expected recovery of agriculture from drought could raise the overall GDP growth rate to around 2%. Of course, this forecast should be treated as conditional and indicative, and it is possible that it will be revised a lot during the current year - as it happened in the period from 2020 to 2022.

Industrial production

In Q4, industrial production recorded a slight year-on-year growth of 0.7%

The entire 2022 was marked by the following trends in industrial production: 1) the total growth of industrial production was relatively low and amounted to 1.7%; 2) within industrial production there were three completely divergent trends – high growth of mining of 22.6%, low growth of the manufacturing industry (1.4%) and a relatively deep decline in electricity production of 7.1% (Table T2-6). Data for Q4, as well as for January 2023, show, however, certain changes in these trends. First of all, the period of deep year-on-year decline in electricity production ended in Q4 - not so much because of the better performance of EPS, but primarily because of the comparison with the lower base from the previous year.⁴ Also, mining continued with quite high, double-digit growth rates, although these rates are now somewhat lower than the usual ones from the previous year. Finally, perhaps the most important trend concerns the manufacturing industry, which forms the backbone of industrial production in Serbia and best describes the market trends of the entire industry. The results of the manufacturing industry are gradually deteriorating. The manufacturing industry started the year 2022 with growth rates of over 4% (Table T2-6), but in Q4 this sector of the economy had a decline of 2.3%, and in January 2023 only a slight growth of 0.2%.

Graph T2-6. Serbia: Industrial Production Indices, 2017-2023

	Y-o-y indices															Share
	2017	2018	2019	2020	2021	2022	2021				2022				2021	
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Total	104.2	101.4	100.3	100.5	106.4	101.7	104.1	117.4	102.6	103.8	101.9	104.8	99.5	100.7	104.1	100.0
Mining and quarrying	102.2	95.2	101.2	102.7	127.6	122.6	100.9	125.3	140.6	143.0	139.0	133.0	109.2	116.9	116.3	11.7
Manufacturing	106.6	102.0	100.2	100.1	105.6	101.4	103.0	119.3	100.3	103.0	104.1	104.8	99.1	97.7	100.2	72.6
Electricity, gas, and water supply	94.1	101.2	100.5	101.0	100.7	92.9	109.1	107.5	96.1	90.6	80.9	91.9	95.9	106.0	112.5	15.6

Source: SORS

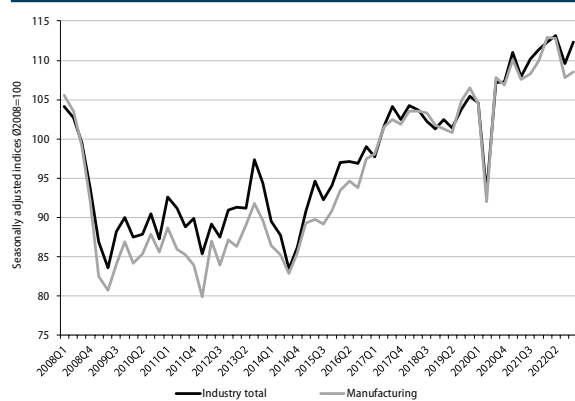
We have presented the seasonally adjusted indices of industrial production (and separately for the manufacturing industry) in Graph T2-7. The Graph confirms that the peak of industrial production in Serbia was reached in mid-2022, since then it has decreased, especially in the

⁴ Despite the solid year-on-year growth of this sector of industrial production in Q4 2022 and in January 2023, the production of electricity from the same periods in 2020 has not yet been reached.

Seasonally adjusted indices of industrial production confirm a certain deterioration in the basic trends of industrial production from the second half of 2022

In the CEE countries there was a relatively strong slowdown in industrial production in Q4

Graph T2-7. Serbia: Seasonally Adjusted Industrial Production Indices, 2008-2022



Source: SORS and Eurostat

manufacturing industry (lighter line on the Graph). Although a certain increase in seasonally adjusted industrial production was recorded in Q4 compared to Q3, its level from Q2 2022 was not reached. We also note that in January 2023 there was a new seasonally adjusted decrease both in total industrial production and in the manufacturing industry (which is not shown in the Graph, as it only shows data on a quarterly level).

In Table T2-8 along with Serbia we provide comparative data on industrial production in the EU and especially in the CEE countries⁵. The Table shows that during the health crisis in 2020 Serbia had a significantly smaller drop in industrial production than both the CEE countries and the entire EU. However, in 2021 and 2022 Serbia had lower industrial production growth rates than both observed groups of countries. The CEE countries managed to overtake Serbia on average by the end of 2022, i.e., the cumulative growth of industrial production in the CEE countries in the previous three years averaged 10.7%, and Serbia's in the same period was 8.7%. The data for Q4, however, indicate that the period of relatively high growth of industrial production in the CEE countries is coming to an abrupt end. Year-on-year growth of industrial production in Q4 decreased in CEE to only 1.6% (after 6.1% in Q3). In addition, as many as 9 of the observed 13 CEE countries had a year-on-year decline in industrial production in Q4.⁶ At the level of the entire EU such a slowdown of industrial production in Q4 as in the CEE countries has not yet occurred (Table T2-8), but it must also be taken into account that there was no high growth of this activity at the level of the EU even in the first half of 2022 as in CEE.

Table T2-8. Serbia and the CEE countries: the y-o-y growth of industrial production, 2018-2022

	Y-o-y indices												
	2018	2019	2020	2021	2022	2021				2022			
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Serbia	1.4	0.3	0.5	6.4	1.7	4.1	16.3	2.5	3.8	1.9	4.8	-0.5	0.7
EU27	1.2	-0.2	-7.3	8.3	1.9	4.9	23.7	6.0	1.3	1.1	1.7	2.8	2.1
CEE (weighted average)	4.3	1.8	-5.2	10.9	5.3	5.7	29.0	5.9	6.3	8.2	5.9	6.1	1.6
Bulgaria	1.7	-5.5	-6.6	9.8	0.9	7.0	17.8	8.4	6.7	3.3	4.5	-0.9	-2.8
Montenegro	0.4	0.6	-6.2	10.1	12.8	0.6	16.8	10.5	13.2	17.1	17.5	14.0	3.9
Czech Republic	3.1	-0.4	-7.2	6.6	2.5	4.3	28.2	-0.1	-1.9	0.3	0.8	6.1	3.2
Estonia	4.8	7.1	-2.8	12.8	-2.3	5.8	21.6	12.7	11.8	4.3	2.6	-5.0	-10.4
Croatia	-0.7	0.6	-3.4	6.3	1.6	5.8	13.1	3.1	3.9	3.0	2.5	2.4	-1.5
Latvia	2.0	0.8	-1.7	6.4	0.8	3.7	12.6	6.3	3.5	4.0	3.6	-2.6	-1.2
Lithuania	6.0	2.9	-1.9	20.3	9.3	13.7	25.1	17.6	24.2	23.5	9.2	10.0	-2.5
Hungary	3.9	5.6	-7.1	9.9	5.7	5.5	36.7	2.4	1.2	5.6	4.5	9.2	3.7
North Macedonia	5.4	3.7	-9.5	1.5	-0.3	-6.1	22.3	-3.5	-2.3	3.4	1.3	-1.8	-3.4
Poland	5.8	4.3	-2.1	14.9	11.0	8.5	30.1	10.4	12.9	16.1	12.6	10.2	5.7
Romania	4.3	-3.2	-9.3	6.7	-1.7	1.6	32.5	0.9	-2.4	-0.4	-2.6	-0.6	-3.3
Slovakia	4.5	0.7	-8.1	10.3	-3.7	6.7	36.0	0.9	3.4	-2.6	-3.0	-1.6	-7.0
Slovenia	5.1	3.1	-5.3	10.3	1.5	3.3	25.5	6.1	7.9	6.4	3.0	2.3	-4.9

Source: QM based on Eurostat data

At the moment, it looks like industrial production in Serbia could stagnate in 2023

Taking all of the above into account - the relatively bad trends of the manufacturing industry in Serbia in the second half of 2022 (which will continue in January 2023), as well as the strong and widespread slowdown of industrial production in the entire CEE region - we assess that it is unlikely that the industrial production in Serbia during 2023 will have good results. So far, we

⁵ Since data on industrial production are available on Eurostat for Bosnia and Herzegovina and North Macedonia, these two countries are also included in the group of CEE countries.

⁶ Three of the four CEE countries that had positive year-on-year industrial production growth rates in Q4 were Poland, the Czech Republic and Hungary, which together account for around 60% of the total CEE industrial production. Due to such a large weighting, the total growth of industrial production in CEE was positive in Q4 despite the fact that the largest number of countries in the sample (9 out of 13 countries) had a decline in industrial production.

are the closest to the forecast that in 2023 there could be stagnation or low growth in industrial production, like the one that was achieved in 2022. Of course, as with all forecasts of economic activity that are given at the moment, this one is only indicative and it is possible that we will change it in future editions of QM.

Construction Activity

According to the SORS assessment the construction activity had a deep year-on-year decline of 12.5% in Q4, and at the level of the whole of 2022 a decline of around 10%

In Q4, the rather bad results of the construction activity, which lasted throughout 2022, continued and further worsened. The estimated year-on-year decline in construction GVA in Q4 amounted to 12.5% and is somewhat deeper than in the first three quarters of 2022, when it was 8.5% (Table T2-2). The movement of GVA of the construction activity is determined by official statistics mainly on the basis of the value of construction works performed in Serbia at constant prices. According to the SORS assessment, the value of the construction works performed had a year-on-year drop of 13.7% in Q4. At the level of the whole year the decline in construction activity in 2022 is estimated at 9.8%.

However, we always additionally analyze official data on construction activity trends. Namely, construction is an activity that is statistically quite difficult to monitor because it is a very dynamic sector with a large number of companies that are quickly founded and shut down, and a good part of the activity is also carried out in the gray zone. Because of this it sometimes happens that official data on the development of construction activity do not best reflect the real market trends in this sector. This additional analysis that we conducted confirms that the construction activity in Q4, but also in the whole of 2022, significantly worsened its trends compared to previous years and that it was most likely truly in decline. However, it is quite possible that this drop is somewhat less than the 10% the official statistics show.

Indirect indicators suggest that the decline in construction activity in 2022 was perhaps somewhat smaller than official statistics show.

The real wage growth in construction in 2022 was positive and amounted to 0.3%. Also, during 2022 the growth of employment in this sector continued. According to LFS the growth of total employment in construction activity during 2022 was 0.9%, and the growth of registered employment (based on administrative data) was 1.7%. These are noticeably worse trends in employment and wages in construction activity compared to previous years, which confirms that there has been a deterioration in the trend of this activity, but again they do not indicate that during 2022 there was a decline in construction activity by about 10%, as shown by official statistics. Similarly, the cement production index during 2022 also had a minimal growth of 0.6% (Table T2-9). This is also a worse result in cement production than usual in previous years, but again not so bad as to be entirely consistent with the 10% decline in construction activity. Taking everything into account, data from the labor market and the cement production index indisputably confirm that during 2022 there was a significant worsening of the trend, and probably a decline in construction activity during 2022. However, we reserve a certain

Table T2-9. Serbia: cement production index, 2001–2022.

	Y-o-y indices				
	Q1	Q2	Q3	Q4	Total
2001	89.5	103.5	126.9	148.1	114.2
2002	83.6	107.9	115.6	81.6	99.1
2003	51.1	94.4	92.7	94.4	86.6
2004	118.8	107.4	98.5	120.1	108.0
2005	66.1	105.0	105.8	107.4	101.6
2006	136.0	102.7	112.2	120.2	112.7
2007	193.8	108.9	93.1	85.0	104.4
2008	100.1	103.7	108.1	110.2	105.9
2009	34.1	81.4	86.0	75.3	74.4
2010	160.7	96.9	96.0	97.4	101.1
2011	97.7	101.3	96.2	97.7	98.3
2012	107.9	88.3	58.2	84.9	79.6
2013	83.5	78.7	127.6	93.5	94.9
2014	136.2	90.3	96.2	104.7	101.5
2015	77.9	112.4	104.5	108.7	103.1
2016	120.2	109.8	109.9	100.4	108.9
2017	110.4	104.1	96.4	118.7	105.9
2018	107.5	110.6	112.8	106.3	109.7
2019	112.2	96.7	103.3	104.1	102.8
2020	154.9	97.9	112.7	118.2	116.8
2021	80.2	130.8	101.9	101.2	103.9
2022	108.1	97.8	94.3	105.9	100.6

Source: QM based on SORS data

reserve that this activity has such a deep decline of around 10% - which is shown by the SORS.

It is unlikely that the construction activity will recover in the coming period

For the construction activity, it is currently very difficult to reliably assess existing trends, and it is even more difficult to forecast future trends. At the same time, in the past, it often happened that the construction activity surprised with its results. Although no scenario can be ruled out yet it currently does not seem realistic to expect a turnaround and stronger growth in the construction activity in the near future. The great global uncertainties currently prevailing influence investors to temporarily refrain from investing, and the construction activity is negatively affected by the relatively strong increase in interest rates. For this reason, we expect that the construction activity will continue to decline in 2023, i.e. with similar trends as in 2022. However, it would not be a surprise if the official data in 2023 show a significantly smaller decline in construction activity than in 2022 - not so much because of market trends in construction (which we expect to be similar to 2022), but because that there are hints that the shown decline in this activity in 2022 may have been overestimated by official statistics.