National Bank of Serbia

2021
August

INFLATION REPORT

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Introductory note

The Agreement on Inflation Targeting between the Government of the Republic of Serbia and the National Bank of Serbia, effective as of 1 January 2009, marks a formal switch of the National Bank of Serbia to inflation targeting as a monetary policy regime. The main principles and operation of the new regime are defined by the Memorandum on Inflation Targeting as a Monetary Strategy.

Since one of the underlying principles of inflation targeting is strengthening the transparency of monetary policy and improving the efficiency of communication with the public, the National Bank of Serbia prepares and publishes quarterly *Inflation Reports* as its main communication tool. The *Inflation Report* provides key economic facts and figures that shape the Executive Board's decisions and underpin activities of the National Bank of Serbia.

The *Inflation Report* aims to cover information on the current and expected inflation movements and to provide an analysis of underlying macroeconomic developments. It also seeks to explain the reasoning behind the Executive Board's decisions and to provide an assessment of monetary policy effectiveness during the previous quarter. Also integral to this *Report* are the inflation projection for eight quarters ahead, assumptions on which the projection is based and an analysis of key risks to achieving the target.

The information contained in this *Report* will help raise public understanding of monetary policy implemented by the central bank and awareness of its commitment to achieving the inflation target. It will also play a role in containing inflation expectations, as well as in achieving and maintaining price stability, which is the main statutory task of the National Bank of Serbia.

The August *Inflation Report* was considered and adopted by the NBS Executive Board at its meeting of 12 August 2021.

Earlier issues of the *Inflation Report* are available on the National Bank of Serbia's website (http://www.nbs.rs).

Executive Board of the National Bank of Serbia:

Jorgovanka Tabaković, Governor

Željko Jović, Vice Governor

Ana Ivković, Vice Governor

Dragana Stanić, Vice Governor

ABBREVIATIONS

bp – basis point
CPI – Consumer Price Index
EBRD – European Bank for Reconstruction and Development
ECB – European Central Bank
EIB – European Investment Bank
EMBI – Emerging Markets Bond Index
EU – European Union
FAO – UN Food and Agriculture Organization
FDI – foreign direct investment
Fed – Federal Reserve System
FOMC – Federal Open Market Committee
GDP – gross domestic product
GVA – gross value added
H – half-year
IFEM – Interbank Foreign Exchange Market
IMF – International Monetary Fund
LHS – left hand scale
mn – million
NAVA – non-agricultural value added
NPL – non-performing loan
OFO – other financial organisation
OPEC – Organization of the Petroleum Exporting Countries
pp – percentage point
Q – quarter
q-o-q – quarter-on-quarter
RHS – right hand scale
RMCP – real marginal cost of processed food production
s-a – seasonally-adjusted
SDR – Special Drawing Right
SORS – Statistical Office of the Republic of Serbia
y-o-y – year-on-year

Other generally accepted abbreviations are not cited.

Macroeconomic projections presented in the Report were concluded on 5 August.

Contents

I Overview

Though continuing to depend on the course of the pandemic, the global and euro area growth outlook improved further in the period from the previous Report.

Global recovery gathered pace in Q2 owing to faster vaccination and gradual lifting of restrictive containment measures, as well as continued fiscal and monetary stimuli in a number of countries. As estimated by the majority of leading international financial institutions, in the period from the previous *Report*, the global growth outlook for this and the next year has improved further, despite the persisting occasional halts in supply chains and news about the spread of new virus strains. However, in the period from the previous *Report*, the gap between advanced and emerging economies in terms of the expected speed of recovery widened, reflecting primarily uneven vaccine rollout and pace of vaccination. This factor was also emphasised by the IMF, which in July published its global growth projection for this year, keeping it unchanged from April at 6%. When it comes to the **euro area,** our key trade partner, economic activity indicators signal its accelerated recovery in Q2. The euro area growth outlook for this and next year was adjusted upward. It is now expected that the pre-crisis level of GDP will be reached late this or early next year, which is earlier than previously expected.

Higher inflation since the start of 2021 did not reduce the degree of monetary policy accommodation of leading central banks as the underlying factors are assessed to be temporary.

Global inflation has sped up since the start of 2021, led primarily by the low base effect of petroleum product prices from April and May last year, and their relatively vigorous growth in the past months over increased optimism as to global economic recovery. Cost-push pressures are building up also on account of other primary commodities – metals and agricultural commodities, which touched multiple-year highs, as well as on account of higher transportation costs due to halts in supply chains, which has a bearing on producer prices. This has still not spilled over to consumer prices to a large degree, as also confirmed by relatively stable core inflation in most countries. As inflation is estimated to be led by temporary factors, leading central banks – the Fed and ECB, continued to pursue monetary accommodation. As a result, global financial conditions remained favourable. A more positive global growth outlook also reflects on higher propensity to invest in emerging economies.

The NBS continues to pursue monetary accommodation, helping preserve favourable financing conditions in the domestic market.

Unlike some central banks in the region, which began to lower the degree of monetary accommodation in Q2 due to inflationary pressures and factors at home, the **NBS**

continues to pursue monetary accommodation. The NBS is the Government's equal partner in providing support to businesses and citizens, in an environment of preserved relative **stability of the exchange rate and anchored inflation expectations**. In the period from the previous Report, **the key policy rate has been kept at 1%**, which is its lowest level in the inflation targeting regime and by 1.25 pp lower than before the pandemic. Owing to the effects of past monetary policy easing, borrowing conditions in the domestic market remained favourable in Q2 as well. As a result, lending activity was fuelled and the share of dinar loans in total loans continued up. Since early 2021, the growth in lending to the non-monetary sector decelerated to 6.3% y-o-y in June, but this was expected and reflects the high base from last year, primarily due the loan repayment moratorium. This is also indicated by the amount of new corporate and household loans, which in H1 2021 was similar to the same period of 2019, and was by more than a fourth higher than in 2020. Such trends are also borne out by the results of the July Bank Lending Survey – loan demand continued up both in the corporate and household sectors, with banks easing standards for dinar loans. The NPL share in total loans equalled 3.6% in June. It was below the pre-pandemic level, suggesting that – owing to the timely and adequate measures of the NBS and the Government aimed at easing the pandemic's negative effects on corporate and household sectors – the quality of bank assets has been preserved and further reinforced.

A large-scale fiscal package had a positive impact on economic growth, without prejudice to the sustainability of public finance.

Fiscal support to economic recovery from the crisis continued into 2021. In our estimate, despite the implementation of the third support package, **fiscal trends** in H1 this year were more favourable than expected. This reflects primarily higher than expected revenues, propped up by faster economic rebound. The share of the general government deficit in GDP was 1.4% in H1, while the Fiscal Strategy for 2022 with Projections for 2023 and 2024 defined it at 6.9% for the whole of 2021. The third package of economic measures was designed in such way that the most vulnerable sectors should receive most support. Also planned is a further rise in the share of capital expenditure, to around 7% of GDP this year, supporting faster growth in investment and potential output. Central government public debt stood at 55% of GDP at end-June, and should not exceed the Maastricht criterion of 60% at the year level. Though substantial funds will remain channelled to infrastructure projects, the fiscal deficit is anticipated to gradually narrow in the medium run and turn into a primary surplus, ensuring that public debt resumes a downward trajectory.

In H1 2021, the country's external position improved further compared to last year. The current account deficit measured EUR 432 mn (1.8% of GDP), down by EUR 855 mn y-o-y. This was supported by a lower trade deficit and faster y-o-y growth in goods exports (31.3%) than imports (22.3%), including a rising surplus in trade in services and the recovery of remittances. Under our projection, the current account deficit in 2021 will be around 4% of GDP, which is better than expected earlier. An even better outturn is also possible. Despite the noticeable acceleration of import growth in Q2, notably of equipment and intermediate goods – owing to a continued investment cycle, which temporarily slowed amid the pandemic – since early 2021, goods and services exports have been rising faster, on account of higher export supply thanks to past investment in tradable sectors and the recovery of external demand. In the medium run, as the investment cycle and the related procurement of equipment from abroad continue, we expect the current account deficit to move between 4% and 5% of GDP. The deficit will continue to be fully covered by net FDI inflows, as it has been the case in the past six years. At the same time, FDI inflows will be additionally spurred by large investment in infrastructure. Expanding export capacities and expected global recovery will continue to support the improvement of the external position.

Faster recovery of goods and services exports than imports since early 2021 contributes to further improvement of the country's external position and a reduction in the current account deficit to around 4% of GDP this year, under our estimate.

Capital inflows from FDI worth EUR 1.7 bn in H1, up by almost 20% y-o-y, were multiple times higher than the current account deficit. In the same period, portfolio investment inflows came to close to EUR 800 mn, and the country's FX reserves continued up – to EUR 14.1 bn at end-June. Against the backdrop of high capital inflows in Q2, appreciation pressures prevailed. They gathered pace after dinar government bonds were included in the J.P. Morgan index family in late June, reflecting elevated demand and the broadening of the base of foreign investors investing in dinar government bonds. As a result, yields on dinar government bonds with the maturities of seven, ten and 12 years declined by around 30 bp – to 2.2%, 2.4% and 3.3% at end-July, respectively. On these grounds, we may expect a further reduction in public debt servicing costs in the coming period, which testifies to the importance of the NBS and Government's long-standing efforts to include the bonds in this renowned index family.

Capital inflows to Serbia remained relatively high, propping up the country's FX reserves and strengthening the resilience to external risks.

Since early 2021, economic activity indicators have outperformed expectations. According to SORS data, GDP growth measured 1.7% y-o-y in Q1, exceeding the flash estimate of 1.2% stated in the previous *Report*. Serbia exceeded the pre-crisis level of economic activity

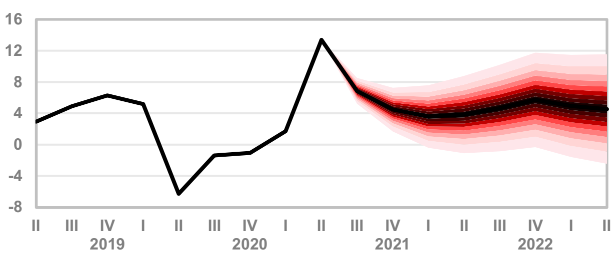
After exceeding its pre-crisis level in Q1 2021, GDP continued up in Q2, thanks to the improved epidemiological situation globally and at home, the effects of monetary and fiscal stimuli in the domestic market and, as a result, preserved investment and consumer

confidence, including the continuation of infrastructure projects.

already in Q1 this year, before most European countries. Significant improvement of the epidemiological situation in Q2 globally and at home, and past economic measures aimed at mitigating the crisis effects, oiled the wheels of economic growth in Q2, which, in our estimate, was by 1.2% higher q-o-q, excluding seasonal factors. According to SORS estimate, GDP sped up to 13.4% in Q2 y-o-y, mirroring continued positive tendencies of our economy and the low base from last year, when containment measures were the strictest. On the production side, the major positive impulse in Q2 came from the services sector, which was hit the most by the pandemic in the same period last year. A significant contribution, just like in the quarter before, also came from manufacturing and construction. On the expenditure side, growth was led by consumption and fixed investment, owing to progress in vaccination, preserved investment and consumer confidence, and the implementation of infrastructure projects.

We raised the economic growth projection for this year to 6.5%, from 6% in May. In the medium run, we expect GDP growth to move from 4.0% to 5.0%, versus 4.0% in our earlier projections.

GDP growth projection
(y-o-y rates, in %)



The **economic growth projection for this year has been revised up to 6.5%** owing to faster than anticipated economic growth since the start of the year primarily on the back of a brisker rise in investment and exports and faster recovery in services sectors. Growth will mostly be led by domestic demand, with a key contribution expected to come from successful vaccination, continued implementation of infrastructure projects, a timely and adequate response of economic policy makers in Serbia and the resulting favourable terms of financing and preserved production capacities and jobs. In addition, higher export supply, together with a normalisation of global economic flows amid mass vaccination and the expected rebound in external demand, will lead to double-digit export growth and a reduction in the foreign trade deficit. In our judgement, the same factors, coupled with the expected further acceleration of implementation of infrastructure projects, will contribute to a more favourable medium-term growth outlook. At this point, we therefore expect economic growth to move between 4% and 5% p.a. on average, instead of 4% in the medium run as we previously anticipated. The risks to the projection are still mostly associated with the global course of the pandemic and the effectiveness of vaccines to contain new virus strains. Overall, they are judged to be symmetric, with risks associated with international factors slightly skewed to the downside, and those associated with domestic factors mildly tilted to the upside.

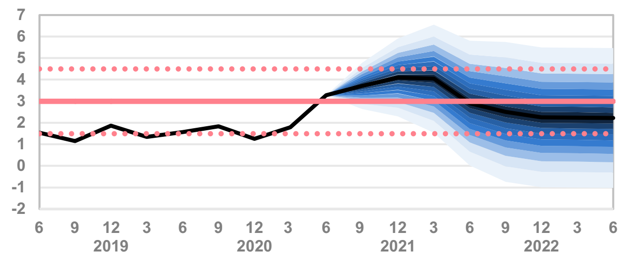
As in other countries of the region, in Serbia y-o-y inflation sped up in Q2 and moved around the target midpoint, under the influence of the low base for petroleum product prices and elevated prices of oil and other primary commodities.

Consistent with expectations stated in the May Inflation *Report*, **in Q2 y-o-y inflation moved around the target midpoint**. Its increase from Q1 was dominantly under the sway of the low base for petroleum product prices and higher cost-push pressures due to elevated global oil and primary agricultural commodity prices in the past months. Conversely, there are no significant demand-side inflationary pressures, as indicated by stable core inflation of around 2% since early 2021. That stronger inflationary pressures are not expected in the medium run, i.e. that the factors pushing up actual inflation are temporary, is also confirmed by short-term and medium-term inflation expectations which stand around the target midpoint in the financial sector, and are even lower in the corporate sector.

Under the current central projection, we expect that y-o-y inflation will temporarily, i.e. in the next three quarters, most probably overshoot the target midpoint, but remain within its bounds (3±1.5%), led by elevated global prices of oil and primary agricultural commodities which to some degree spilled over to higher petroleum product and food prices at home through cost-push pressures, including the base effect for vegetable prices. As the effect of these transitory factors wanes, y-o-y inflation is expected to slow in Q2 2022 and level off within the lower half of the target tolerance band until the end of the projection horizon. **Core inflation, which is most influenced by monetary policy measures, will remain relatively stable over the projection horizon. Its moderate growth is not expected until the end of the projection horizon** as domestic demand accelerates further. Higher than expected growth in primary commodity prices in the past months is the key reason why the new inflation projection is higher in the short term than the projection we published in May. Uncertainties surrounding the inflation projection continue to stem from the international environment, and relate primarily to the speed of global economic recovery, particularly in the euro area, movement in global prices of primary commodities, bottlenecks in global supply chains and capital flows to emerging economies. In part, the risks to the projection are also associated with the domestic market – a new agricultural season, pace of recovery of demand and movement in administered prices. Overall, the risks to the inflation projection are judged to be symmetric.

Under the central August projection, y-o-y inflation will move within the upper half of the target band in H2 2021 and Q1 2022. It is expected to slow first in Q2 2022 and then settle within the lower half of the target tolerance band until the end of the projection horizon.

Inflation projection
(y-o-y rates, in %)



The priority of monetary policy going forward will remain the preservation of price and financial stability, as well as support to the fastest possible growth of our economy, a further increase in employment and living standards, strengthening the export sector, and preservation of a favourable investment environment. The NBS will continue to keep a close eye on developments and the impact of key factors at home and abroad on inflation, financial stability and the pace of economic growth. Consistent with this, it will fine-tune its measures in the interest of our economy and citizens.

The priority of monetary policy going forward will remain the preservation of the achieved price and financial stability, and support to sustainable economic growth.

II Monetary policy since the May *Report*

Since the previous Report, the NBS Executive Board has kept the key policy rate unchanged at 1.0%, its lowest level in the inflation targeting regime and 1.25 pp lower than pre-pandemic. The rate was last cut in December.

The Board's decision to keep the rate on hold was motivated primarily by the effects of past comprehensive monetary and fiscal stimuli, including the third package of economic measures of support to citizens and corporates, and their expected continuation in the period ahead. As a result, financing conditions will remain favourable and disposable income will go further up. Owing to a faster recovery of investment and exports, the pre-crisis level of economic activity was exceeded already in Q1, which is a quarter earlier than hoped for. As in other countries of the region, y-o-y inflation in Serbia rose in Q2, reflecting the low base for petroleum product prices and the surge in global primary commodity prices, and moved around the target midpoint. The Board judges that the effects of these factors are temporary and that their waning as of Q2 next year will lead to a slowdown in y-o-y inflation.

The Executive Board assesses that the solid global economic growth outlook and the announcements of leading central banks that they would keep interest rates low going forward have mitigated uncertainty in the international financial market to an extent and that that the financing conditions for emerging countries therefore remain favourable. Caution in monetary policy conduct is mandated by developments in the international commodity markets, notably rallying global prices of oil, primary agricultural commodities and food.

At the Executive Board meetings held in June and July, the key policy rate was kept unchanged at 1.0%, its lowest level in the inflation targeting regime and 1.25 pp lower than pre-pandemic. In its decision-making, the Board was guided primarily by the anticipated further effects of past monetary and fiscal stimuli and the third package of measures supporting citizens and businesses worth around 4.5% of GDP and implemented this year in order to additionally bolster growth of the domestic economy. This means that monetary and fiscal policy measures will continue to have a positive effect on financing conditions for corporates and households and on their disposable income. Robust monetary and fiscal support to the people and economy during the pandemic is owed to the responsible conduct of economic policy in the prior period, which improved the capacity of monetary and fiscal authorities to fight the ongoing crisis without threatening the achieved low and stable inflation or other indicators of macroeconomic stability.

Reviewing economic indicators carefully, the Board stressed repeatedly that the performance of the domestic economy since the start of this year as well had exceeded expectations. Serbia exceeded the pre-crisis level of economic activity before most world economies did – already in Q1 this year, although this was initially expected in Q2. According to SORS data, GDP growth came at 1.7% y-o-y in Q1, compared to the preliminary estimate of 1.2%. Robust growth was powered the most by construction and industry, on the production side, and by fixed investment and net exports, on the expenditure side.

Data on high y-o-y growth rates of industrial production and manufacturing, commodity exports and imports, as well as service sector indicators for April and May, reflect in part the low base from the same period last year, when the economic effects of the pandemic in Serbia and the entire world were at their highest, but are also connected with the continued positive trends in our economy since the start of the year. The Board emphasized that economic growth is set to continue going forward, largely as a result of the well-coordinated monetary and fiscal policies that helped preserve production capacities and jobs, as well as consumer and business confidence, and sustained fixed investment and consumption growth. The recovery is also supported by the vaccination process and its beneficial impact on many activities within the services sector. External demand is unquestionably on the path of recovery and Serbian exports – diversified by product and geography, will grow further, supported by the continued strong inflow of diverse FDI. All of this, along with the planned increase in government capital expenditure for infrastructure projects, will ensure strong GDP growth momentum in the period ahead.

For the eighth year in a row, the NBS has achieved its primary objective, keeping inflation low and stable, within the bounds of the target band (3%±1.5 pp), despite numerous challenges from the international environment and the changes in business and consumption conditions brought about by the pandemic. The absence of a seasonal rise in vegetable prices early in the year was compensated for in April, which, along with the low base effect from petroleum product prices, pushed inflation in April to 2.8% y-o-y. Consistent with the Board's expectations, inflation rose to 3.6% y-o-y in May, just as it did in most other countries, reflecting primarily the low base effect, notably from petroleum products due to the pandemic-triggered collapse of global oil prices last year. The Executive Board stated that it expects inflation to move around the target midpoint of 3% in the coming months, and to slow down starting from Q2 next year with the waning of the temporary effects of petroleum product and food prices. The absence of major inflationary pressures is indicated by stable core inflation of around 2%. Also, the NBS has ensured two important factors of low and stable inflation – relative stability of the exchange rate and anchored inflation expectations of the financial and corporate sectors, which attest to monetary policy credibility.

In keeping the key policy rate unchanged, the Executive Board took into account that global economic prospects remain under the impact of the pandemic, but also the encouraging fact that the global economy is on the path of recovery. Though economic recovery remains uneven across countries, with downside risks due to new virus strains, the global economy's medium-term outlook is favourable thanks to the vaccination process. Potential risks to global economic growth may include disruptions in supply chains and imbalances in the labour market, as they increase production costs and lead to global concerns that inflationary pressures might rise. Leading economic activity indicators in the euro area, our key foreign trade partner, suggest that recovery in Q2 was robust, driven by growth in manufacturing, as well as in the services sector. Euro area GDP growth projections for 2021 and 2022 were revised up, despite concerns that the fast spread of new virus strains might lead to the tightening of epidemiological measures. The upward revisions are based on the expectations that the economic impact of the further course of the pandemic would be smaller given primarily the vaccination process, additional fiscal stimuli and the new instrument for recovery from the pandemic (Next Generation EU), which will be incorporated into the EU long-term budget. Positive prospects also reflect the more optimistic forecasts of external demand growth supported by the US fiscal package. According to the ECB, euro area economic activity should return to its pre-crisis level in Q4 this year or early next year.

Accelerated growth in the euro area and higher inflation from the start of the year have not driven the ECB towards a decision to reduce the level of monetary policy accommodation, because higher inflation factors are assessed as temporary. Also, the Fed believes that developments in the US economy still do not call for the withdrawal of central bank's support measures. Good prospects for global economic growth and announcements by leading central banks that their rates would stay low going forward have alleviated uncertainty in the international financial markets to some degree, therefore financing conditions for emerging countries remain favourable. As for Serbia, its dinar government bonds were included by the end of June into the renowned J.P. Morgan index family, which sparked the demand for its bonds and increased their market value. This resulted in higher FX inflows from international investors, which stand proof of their confidence in the sustainability of Serbia's favourable economic indicators and in the continuity of responsible economic policies.

In the period under review, uncertainty persisted in the global commodity market, notably in terms of movements in the global oil price, which went up by more than 45% in the first half of the year. The increase in the global price of oil was under the impact of a strong surge in demand which exceeded the supply, due to it being limited by decisions of OPEC+ countries. An upward trend was also recorded by global prices of other primary commodities, as well as global food prices. The FAO index suggests that food prices have reached their 10-year highs in recent months.

At its meeting in August, the Executive Board left the key policy rate unchanged, having in mind the temporary character of the factors that will keep inflation in the coming months in the upper half of the target band. The Board expects inflation to slow down starting from

Q2 2022, once the temporary effects of petroleum product and food prices are exhausted.

In conditions of rampant global uncertainty caused by the pandemic, the NBS maintained price and financial stability, being all the while an equal partner to the Serbian Government in providing support to corporates and households. The Executive Board underlines that safeguarding price and financial stability will remain a priority of the monetary policy, together with support to faster growth of our economy and employment, further rise in the export sector, as well as favourable investment environment. The NBS will continue to carefully monitor the trends and impact of the key factors in the domestic and international environment on inflation, financial stability and the speed of economic recovery, and to adjust its measures accordingly, in the interest of our corporates and citizens.

III Inflation movements

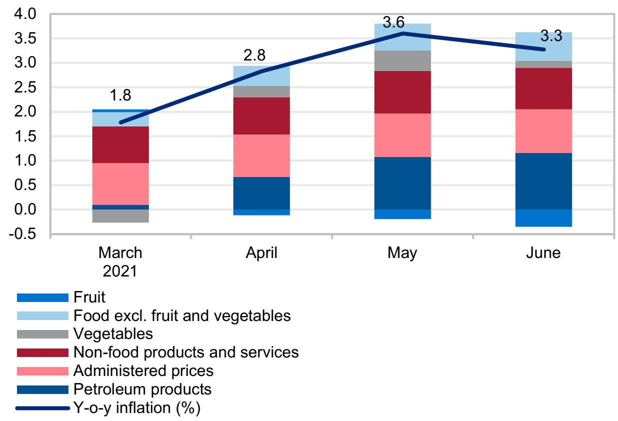
Consistent with the expectations stated in the May Inflation Report, y-o-y inflation moved around the target midpoint in Q2. Its higher level compared to Q1 predominantly reflects the low base from the same period last year, notably of petroleum product prices. Additionally, rising global oil prices and the prices of other primary commodities in the prior months led to stronger cost-push pressures in the global and domestic market, primarily in food and energy production. On the other hand, as indicated by stable core inflation at around 2% since the beginning of the year, there were no major inflationary pressures on the demand side despite further economic recovery.

Years-long anchored inflation expectations are the evidence of monetary policy credibility – short- and medium-term inflation expectations of the financial sector move around the target midpoint, while corporate expectations are even lower.

Inflation movements in Q2

Y-o-y inflation in Q2 was higher than in Q1, primarily due to the low base effect of petroleum product prices, as the global oil prices stood at a rather low level in April and May last year, mostly ranging between USD 20 to USD 30 per barrel. Furthermore, global oil prices, as well as other primary commodity prices, have recorded a relatively robust rise since the start of the year, reflecting positive news about the vaccination and favourable global growth outlook. The contribution of petroleum product prices to y-o-y inflation went up to 1.2 pp in June, from an almost neutral level in March. This predominantly determined the acceleration of y-o-y inflation from 1.8% in March to 3.3% in June. The contribution of fruit and vegetable prices was negative and practically unchanged from March, as the rising contribution of vegetables was neutralised by the declining contribution of fruits. Other food prices (excluding fruits and vegetables), on account of higher global prices of primary agricultural commodities and consequently higher costs of food production, increased their contribution to y-o-y inflation in Q2, while the prices of non-food products and services and administered prices maintained a relatively stable movement, providing a similar contribution to y-o-y inflation in June as in March. Even in the conditions of stronger consumer demand due to the opening of economy, **core inflation** (measured by the change in CPI excluding prices of energy, food, alcohol and cigarettes) remained stable, measuring 2.0% y-o-y in June.

Chart III.0.1 **Contribution of CPI components to y-o-y inflation**
(in pp)



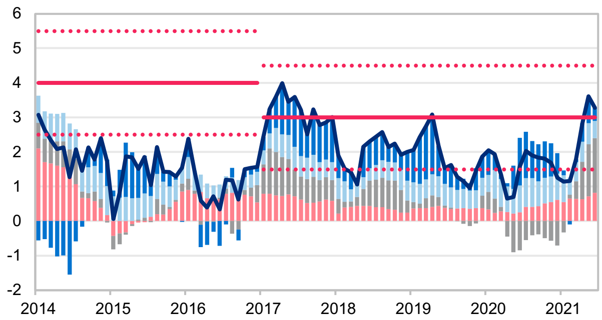
Sources: SORS and NBS calculation.

Table III.0.1 **Growth and contribution of components to consumer price growth in Q2 2021**
(quarterly rates)

	Growth rates (%)	Contribution (pp)
Consumer prices (CPI)	**1.9**	**1.9**
Unprocessed food	8.6	0.9
Processed food	1.3	0.3
Industrial products excluding food and energy	1.0	0.3
Energy	1.4	0.2
Services	1.0	0.2
CPI excluding energy, food, alcohol and cigarettes	1.1	0.5
Administered prices	0.2	0.0

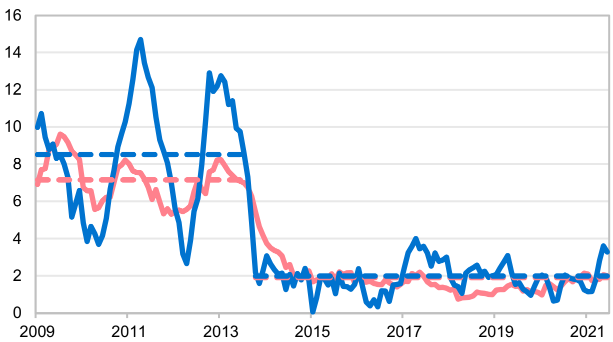
Sources: SORS and NBS calculation.

Chart III.0.2 **Contribution to y-o-y consumer price growth**
(in pp)



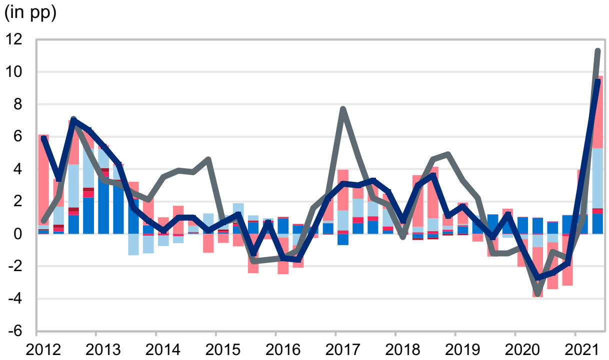
Sources: SORS and NBS calculation.

Chart III.0.3 **Headline and core inflation**
(y-o-y rates, in %)



Sources: SORS and NBS calculation.

Chart III.0.4 **Contribution to y-o-y producer price growth***
(in pp)



Sources: SORS and NBS calculation.
* Industrial producer prices for the domestic market.

In quarterly terms, consumer prices picked up by 1.9% in Q2. The 3.6% hike in the prices of **food and non-alcoholic beverages** gave the strongest boost to Q2 inflation (1.1 pp), mostly reflecting higher prices of **unprocessed food** and, to a somewhat lesser degree, **processed food**. The dynamics of food prices in Q2 was predominantly driven by the higher **prices of vegetables** (with 0.5 pp contribution to inflation), which fully compensated for the absence of the seasonal increase in these prices in the previous quarter. The prices of fruits also moved up in Q2 (with 0.1 pp contribution to inflation), as well as the prices of fresh meat (with 0.2 pp contribution to inflation).

The prices of **industrial products (excluding food and energy)** posted a 1.0% rise in Q2, led by the seasonal increase in the prices of clothes and footwear (with 0.1 pp contribution to inflation). In addition, Q2 saw higher prices of computer equipment and audio devices, alcoholic beverages, furniture and household appliances, as well as apartment maintenance materials (with 0.1 pp cumulative contribution to inflation).

Energy prices grew by 1.4% in Q2, which is entirely attributable to the rise in **petroleum product prices** in the domestic market (3.8%), reflecting a further hike in the global prices of crude oil (by 13.1% in Q2). Other energy prices stagnated in Q2.

The **prices of services** increased by 1.0% in Q2, mainly as a result of the higher prices of travel packages (22.0%) and restaurant and hotel services (1.3%), with a 0.1 pp cumulative contribution to inflation. The demand for such services grew as advances were made in vaccination and restrictive measures were relaxed. The prices of other services also went up in Q2, but this did not reflect significantly on inflation.

Administered prices edged up negligibly in Q2 on the back of higher prices of transport services in April and utility services in May. Administered prices stepped up their y-o-y growth to 4.8% in June (from 4.6% in March).

Prices within core inflation increased by 1.1% in Q2 (with 0.5 pp contribution to inflation), mostly driven by the seasonal hike in the prices of clothes and footwear and travel packages.

Producer and import prices

In the period since the May *Inflation Report,* **industrial producer prices in the domestic market** grew additionally to 9.4% y-o-y in June (from 3.8% y-o-y in March), indicating that cost-push pressures in the industry increased. Such movements in producer prices in Q2 were driven by the two-digit y-o-y growth in the **energy production prices** (crude oil and petroleum products), and the prices of intermediate goods (base metals, chemical products and rubber and plastic products). The prices of other components also edged up in Q2, though to a smaller extent, primarily the **prices of non-durable consumer goods** (food and beverages). The **prices of elements and materials incorporated in construction** rose to 11.3% y-o-y in June (compared to 0.9% y-o-y in March), confirming persistent cost-push pressures on account of numerous factors on the supply side.

As an indicator used to track movements in the prices of goods and services imported into Serbia, **import prices expressed in dinars**[1] recorded a y-o-y increase in previous months, reaching 7.2% in June (after 4.6% in March). This increase was driven primarily by the higher export prices of Germany, which are used for the approximation of the import prices of equipment and intermediate goods (3.6 pp contribution). This can be associated with higher global prices of primary commodities and input shortages in global supply chains. Further hike in the global oil prices worked in the same direction (with 2.0 pp contribution to y-o-y rise in import prices), as well as the global food prices and euro area consumer prices (used for the approximation of the import prices of services), providing a 1.6 pp cumulative contribution to total import prices.

Inflation expectations

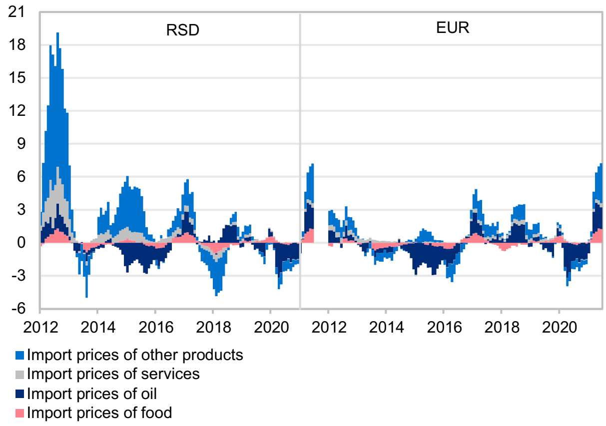
Most likely under the impact of actual inflation movements, in Q2 **one-year ahead inflation expectations of the financial sector** gradually moved towards the target midpoint – from 2.1% in April to 3.0% in June according to the Ipsos survey, and from 2.2% to 2.8% according to the Bloomberg survey.

One-year ahead corporate inflation expectations continued to move in the lower half of the target tolerance band, equalling 1.9% in April and 2.0% in May and June.

Usually higher than those of other sectors, **household inflation expectations** have stood at 10% since February. Higher inflation expectations of households can be

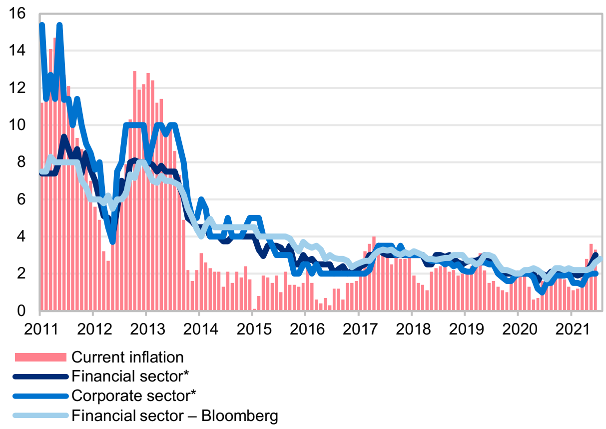
[1] Preliminary data. The weighted average of the global Brent oil price, food price index (FAO index), euro area consumer prices, and export prices of Germany, one of Serbia's most significant foreign trade partners, is used as an indicator of import prices. The base year is 2010.

Chart III.0.5 **Contribution of individual components to y-o-y rate of import price growth**
(in pp)



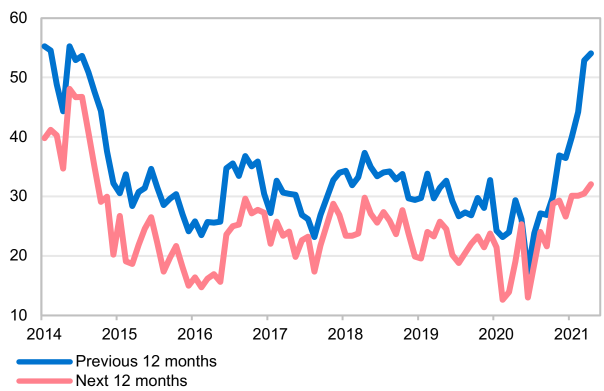
Sources: Destatis, FAO, Bloomberg, Eurostat, SORS and NBS calculation.

Chart III.0.6 **Current inflation and one-year ahead inflation expectations**
(y-o-y rates, in %)



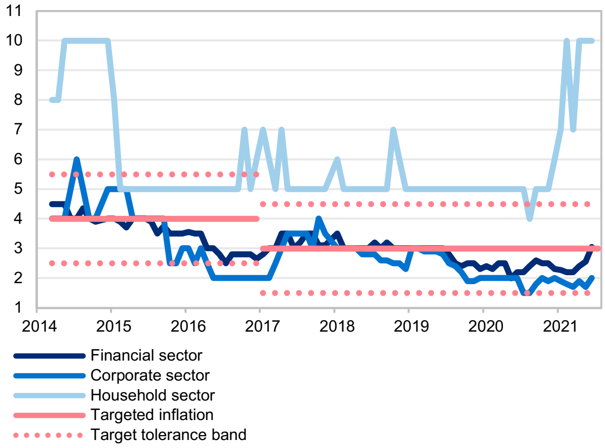
Sources: Gallup, Ipsos/Ninamedia, Bloomberg and NBS.
* Ipsos and Gallup until December 2014, Ninamedia since December 2014, and Ipsos since January 2018.

Chart III.0.7 **Household perceived and expected inflation***
(in index points)



Sources: Ipsos/Ninamedia and NBS calculation.
* Ipsos until December 2014, Ninamedia since December 2014, and Ipsos since January 2018.

Chart III.0.8 **Two-year ahead inflation expectations***
(y-o-y rates, in %)



Sources: Ipsos/Ninamedia and NBS.

* Ipsos until December 2014, Ninamedia since December 2014, and Ipsos since January 2018.

associated with the energy price hikes since the start of the year (oil and electricity). On the other hand, the qualitative survey[2] shows that, as so far, the majority of respondents (around two-thirds) expect the consumer prices to rise moderately or somewhat over the next twelve months. The index of expected inflation continued to record lower values than the index of perceived inflation, indicating that households expect inflation to be lower in the next 12 months than in the past year.

Medium-term inflation expectations of the financial sector have been anchored within the NBS target tolerance band since their monitoring began (March 2014), standing in Q2 around the target midpoint for both two and three years ahead. Medium-term corporate expectations averaged around 2% in Q2.

Years-long anchored short- and medium-term inflation expectations of the financial and corporate sectors within the target tolerance band best speak of the adequacy of monetary policy measures and confidence in the activities taken by the NBS.

[2] For more details on qualitative expectations of households see the February 2016 *Inflation Report*, Text box 2, p.15.

Text box 1: Impact of producer price growth on consumer prices

Over the past months producer prices in Serbia have witnessed robust growth, which, in contrast to trends in 2020, has significantly outstripped consumer price growth. In June, y-o-y growth in industrial producer prices in the domestic market equalled 9.4%, versus the consumer price growth of 3.3%.

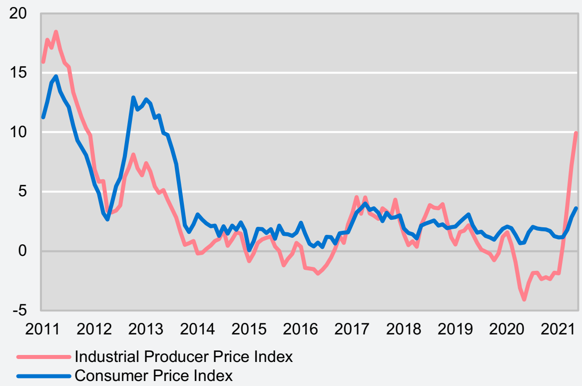
The main cause of growth in industrial producer prices in the domestic market is the surge in production costs, led by global primary commodity prices, notably of oil, base metals and agricultural products. The growth in prices of these three groups of primary commodities within producer prices had the most direct impact on the prices of petroleum products, base metals and food (the joint contribution of these three industrial areas reaching 6.3 pp in June). Spurred by rising primary commodity prices, the producer prices of chemicals and chemical products, and rubber and plastic products, were also on a sharp rise (Chart O.1.2).

The impact of global primary commodity prices on industrial producer prices in Serbia is also confirmed by the econometric analysis. We estimated the model of regression between monthly changes in industrial producer prices in the domestic market and global primary commodity prices expressed in dinars. As shown by the results of the analysis, the global prices of oil, primary agricultural commodities and metals have a statistically significant effect on domestic producer prices (Table O.1.1). In the short run (during the same or next month), higher global primary commodity prices, through an increase in cost-push pressures, pass through to domestic producer prices.

Cost-push pressures generated by higher global primary commodity prices also influence consumer prices, but usually to a lesser extent as a part of higher costs of producers and merchants is at least partially compensated by a reduction in margins, particularly if the rise in primary commodity prices is judged to be temporary and if aggregate demand is low. Therefore, in the current situation, a question that arises is whether the producer price growth will lead to the acceleration of growth in consumer prices, as the main measure of inflation.

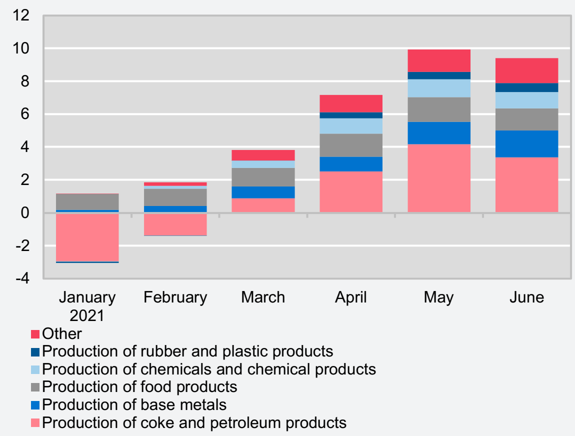
To answer this question, we must primarily bear in mind the definitions and scope of these two measures of inflation. The Consumer Price Index (CPI) measures the movement of prices of goods and services (produced in the country and abroad) paid in the domestic market by end-users, while the Industrial Producer Price Index (IPPI) measures a change in industrial product prices at which domestic producers sell their products to other producers or merchants. In addition to

Chart O.1.1 **Movement of producer and consumer prices**
(y-o-y rates, in %)



Sources: SORS and NBS calculation.

Chart O.1.2 **Contribution of individual components to industrial producer prices in the domestic market**
(in pp)



Sources: SORS and NBS calculation.

Table O.1.1 **Estimated link between producer prices and global primary commodity prices**

Variable	Estimated coefficient
Industrial producer prices in the domestic market (t-1)	0.346972***
Global oil price in RSD (t)	0.031687***
Global oil price in RSD (t-1)	0.017641***
Composite index of global primary agricultural commodity prices in RSD (t-1)	0.040594***
Global metal prices in RSD	0.021166*
R^2	0.474
DW	2.297
Period of analysis	2009M1:2021M5

Sources: SORS, IMF, CBOT, Euronext and NBS calculation.
Note: *** means statistical significance of 1%, ** 5%, and * 10%.

covering the prices in different phases of the cycle from the producer to the end-user, these two indices also feature some other differences:

• CPI measures the movement of prices with included trade margins and transportation and other costs occurring from the producer to the consumer, while IPPI does not include them;

• CPI measures the movement of prices of domestic and imported products in retail trade, while IPPI observes only the prices of goods produced for the domestic market;

• IPPI follows the prices of industrial products, while CPI, in addition to these prices, follows the prices of unprocessed food and services.

Given the above, we should not expect a full pass-through from producer to consumer prices. It should be noted that the link between these two measures of inflation is not necessarily one-way. At first sight, more obvious is the impact of producer on consumer prices as the former are factory-gate prices, which precede consumer prices as goods travel from the producer to the end-user. On the other hand, a rise in demand, for instance, can impact consumer prices first, and then lead to a rise in demand for production inputs and, as a result, trigger an increase in producer prices. However, in our case, we have seen that producer prices are dominantly led by global primary commodity prices, i.e. supply-side factors. This is also confirmed by the Granger causality test which we have performed for Serbia and which has shown an impact of producer on consumer prices, but not vice versa. We therefore carried out an econometric analysis, estimating the pass-through of producer on consumer prices, observed aggregately and for different groups of products.

The results presented in Table O.1.2 show a stronger pass-through from producer to consumer prices in case of food and petroleum products, and a weaker pass-through in case of other industrial products. As for food prices, a monthly rise of 1% in food production costs leads to the estimated growth in consumer prices of processed food and fresh meat of around 0.4%, in the same month. As for petroleum product prices, the estimated pass-through is lower – around 0.3%, and materialises during the same and next month, while the estimated pass-through for other prices of industrial products is twice lower. We also estimated consumer prices and industrial producer prices observed aggregately. The results indicate that around a half

Table O.1.2 **Estimated link between consumer and producer prices**

	Dependent variable			
	Consumer prices (total)	Consumer prices of industrial products excluding food and energy	Prices of processed food and fresh meat	Consumer prices of petroleum products
Variable	**Estimated coefficient**			
Industrial producer prices in the domestic market (t)	**0.338447*** **			
Industrial producer prices in the domestic market (t-1)	**0.180001*** **			
Industrial producer prices in the domestic market excluding food and oil (t)		**0.158542*** **		
Consumer prices of industrial products excluding food and energy (t-1)		0.25526***		
Food industry producer prices in the domestic market (t)			**0.406596*** **	
Prices of processed food and fresh meat (t-1)			0.263653***	
Dummy variable 2012M10	0.021595***	0.02826***	0.013749*	
Oil production prices (t)				**0.205084*** **
Oil production prices (t-1)				**0.070764*** **
Consumer prices of petroleum products (t-1)				0.253596***
c	0.001555***	0.001605***	0.001155*	0.002054***
R^2	0.41697	0.449285	0.445379	0.78283
DW	2.012849	2.122417	1.986791	1.878802
Period of analysis	2011M1:2021:5	2011M1:2021:5	2007M3:2021:5	2011M1:2021:5

Sources: SORS and NBS calculation.

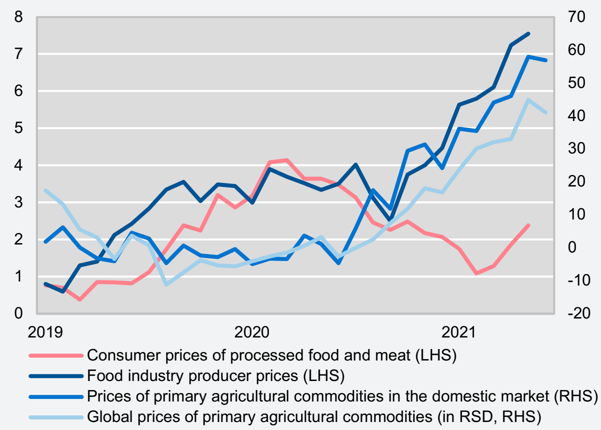
Note: *** means statistical significance of 1%, ** 5%, and * 10%. The estimate includes the dummy variable that took value 1 in October 2012 when the VAT rate was raised from 18% to 20%.

of the monthly producer price growth passes through to consumer prices, i.e. the pass-through is not complete, which is why producer prices increased more than consumer prices in the past months. We also examined the pass-through after more than one lag period, but it turned out not be statistically significant in any case.

Although we have shown (on the sample covering the 2007–2021 period) that there is a fast pass-through from producer to consumer prices, this does not mean that it will be always present. A good example is processed food, whose producer prices, led by the surge in global agricultural commodity prices since August last year, have been recording robust y-o-y growth, which has not been followed by their adequate measure in CPI; it even slowed down and has been on an upturn only since April this year. This divergence can, most probably, be explained by low demand for food products by catering and tourist facilities, due to the anti-epidemic measures and work restrictions in some months last year and early this year. The speed of the pass-through also depends on current movements, i.e. specific circumstances in many markets since the outbreak of the pandemic.

A reduction in cost-push pressures and slowdown in y-o-y rates of industrial producer prices in the domestic market can be expected in the coming period, with the expected stabilisation of global primary agricultural commodity prices and their decline in the next two years, as projected by most relevant international institutions, and as also indicated by the futures prices for these products. Moreover, given that, according to the obtained estimates, the pass-through from producer to consumer prices takes place in the current and next month, the past producer price growth has already largely passed through onto consumer prices. Therefore, on these grounds, we do not expect any stronger inflationary pressures in the coming period although the effects of the past growth will remain in y-o-y inflation for some time yet.

Chart O.1.3 **Prices of primary agricultural commodities, food production prices and consumer food prices**
(y-o-y rates)



Sources: SORS, CBOT, Euronext and NBS calculation.

IV Inflation determinants

1 Financial market trends

Stable movements of interest rates in the interbank money market, as well as of interest rates on bank loans and deposits, extended into Q2. Inclusion of dinar government bonds in J.P. Morgan indices pushed down their yield rate.

Interest rates

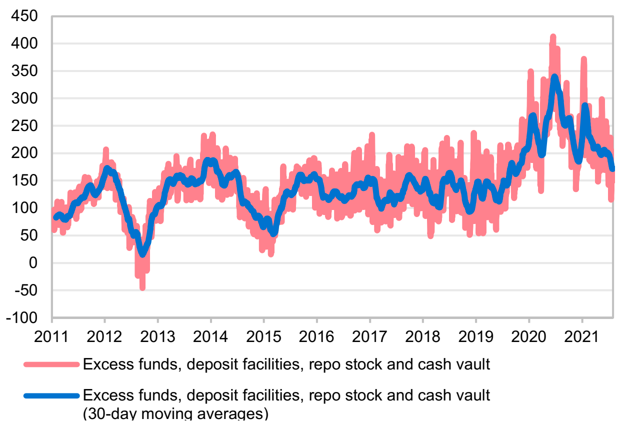
In Q2, the average repo rate in regular weekly open market operations remained unchanged (0.11%) and almost equal to the deposit facility rate. The stock of securities sold in repo operations in late June, same as in late March, amounted to RSD 30 bn. On the other hand, in repo purchase auctions held at a fixed rate (0.1% i.e. deposit facility rate), the volume of dinar liquidity provided to banks for a three-month term increased by RSD 4.0 bn to RSD 19.1 bn at end-June.

The **overnight interbank money market** saw a further rise in activity, with the average daily trading expanding for the fourth quarter in a row, from RSD 5.7 bn in Q1 to RSD 7.4 bn in Q2. Same as in the quarter earlier, BEONIA averaged 0.12%.

BELIBOR rates of all maturities displayed minimum volatility in Q2. In June, same as in March, they ranged on average between 0.3% for the shortest and 1.07% for the six-month maturity. The weighted average interest rate on one-week interbank loans concluded in Q2 (0.14%) was almost unchanged from Q1 (0.13%). In July as well, interest rates in the interbank money market maintained the same values.

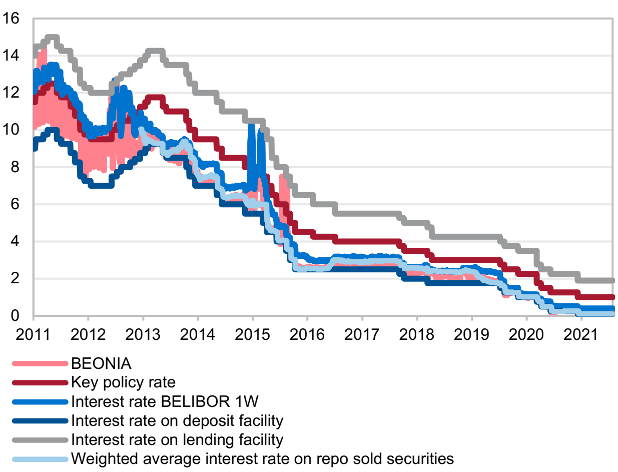
In the **primary market of dinar government securities**, effective rates recorded minimum changes in Q2: the rate on two-year maturity dropped negligibly (by 3 bp to 1.57%), the rate on five-year maturity remained unchanged (2.23%), while the effective rate on 12-year maturity was slightly adjusted upward (by 11 bp to 3.55% in June).

Chart IV.1.1 **Dinar liquidity**
(in RSD bn)



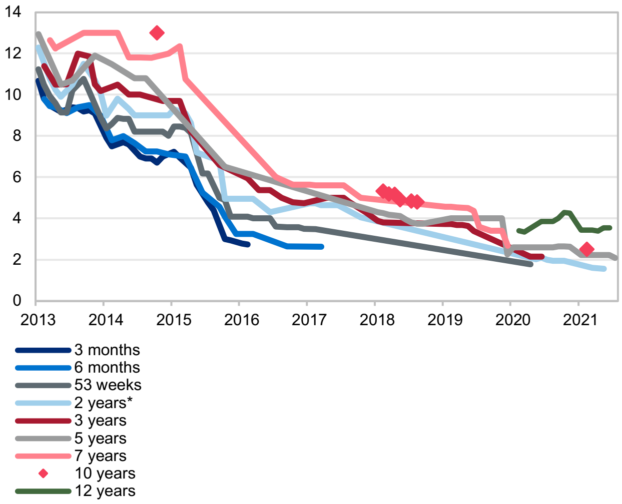
Source: NBS.

Chart IV.1.2 **Interest rate movements**
(daily data, p.a., in %)



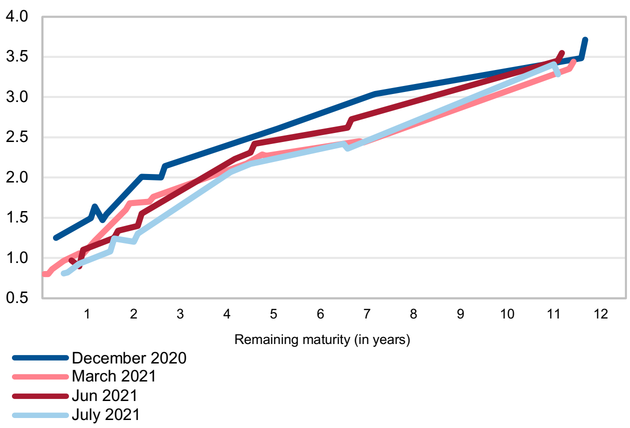
Sources: Thomson Reuters and NBS.

Chart IV.1.3 **Interest rates in the primary market of dinar government securities**
(p.a., in %)



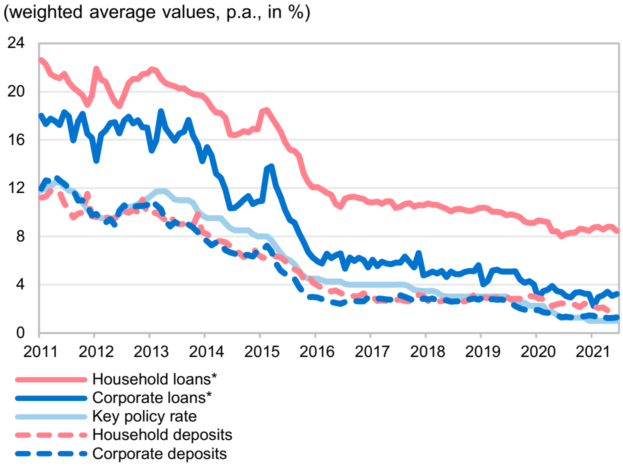
Source: Ministry of Finance.
* Excluding coupon securities with the rate linked to the NBS key policy rate.

Chart IV.1.4 **Yield curve in the secondary government securities market**
(average values, p.a., in %)



Source: Central Securities Depository and Clearing House.

Chart IV.1.5 **Interest rates on new dinar loans and deposits**
(weighted average values, p.a., in %)



Source: NBS.
* Excluding revolving loans, current account overdrafts and credit card debt.

The stock of securities sold went up by RSD 7.2 bn to RSD 1,006.8 bn, while non-residents slightly decreased their investment in dinar securities (by RSD 4.5 bn to RSD 227.5 bn at end-June), primarily due to their higher participation in the sale of dinar securities in the secondary market, while in the primary market they bought RSD 16.4 bn worth of securities in nominal terms.

In July, at one auction for sale of dinar securities, the effective rate on five-year maturity decreased by 13 bp to 2.1%.

The **secondary market** saw a rise in trading in dinar securities, from RSD 129.5 bn in Q1 to RSD 146.0 bn in Q2. End-June witnessed a somewhat higher trading volume, owing to the expected inclusion of 7Y, 10Y and 12.5Y securities in the J.P. Morgan family of indices, which translated into lower yield-to-maturity, by around 0.1 pp relative to the beginning of the month – to 2.3%, 2.6% and 3.4%, respectively. July trends confirmed that, given the record monthly trading volume of RSD 90.2 bn, while the average yield rates in July for securities included in J.P. Morgan indices (remaining maturity of 4.5, 6.5 and 11 years) declined additionally by 0.1–0.2 pp compared to end-June.

Consistent with the movement of interest rates in the money market, interest rates on **new corporate and household loans, as well as on time deposits**, also displayed minimum volatility in Q2, almost flatlining from March to June.

In dinar corporate loans, minimum adjustments were seen for interest rates on working capital loans (up by 0.1 pp to 3.3%) and other non-categorised loans (down by 0.1 pp to 2.8%), so that the average interest rate on total dinar corporate loans moved slightly up (by 0.1 pp to 3.2%).

Interest rates on euro corporate loans, same as the rates on dinar corporate loans, were adjusted upward by 0.1 pp to 2.5%, owing to a mild rise in interest rates on working capital loans (by 0.1 pp to 2.5%). On the other hand, interest rates on new euro investment loans decreased in Q2 by 0.2 pp to 2.7% in June.

The average interest rate on new dinar household loans was slightly adjusted downward (by 0.1 pp to 8.4%), with the unchanged interest rate on cash loans (9.1%), which are the dominant category of dinar household loans.

New euro-indexed household loans in June were approved at an average rate of 3.0%, which is a decrease of 0.2 pp relative to March, mostly associated with the fall in the average interest rate on euro-indexed housing loans to its lowest level thus far (by 0.1 pp to 2.5% in June).

In Q2, the average interest rate on household savings dropped by 0.1 pp to 0.8% on euro savings and by 0.2 pp to 2.0% on dinar savings. On the other hand, interest rates on term corporate deposits remained unchanged since March, measuring in June 0.7% for euro deposits and 1.3% for those in dinars.

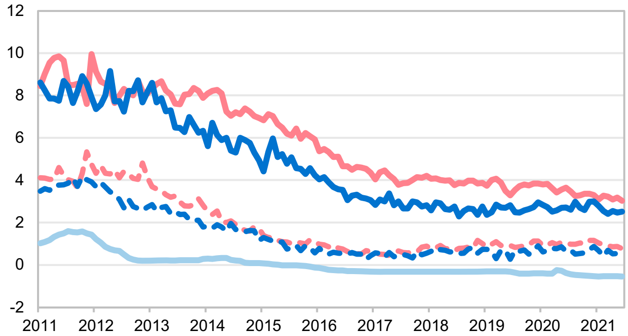
Risk premium

Serbia's risk premium on euro debt, EURO EMBIG, decreased by 18 bp to 144 bp in Q2, falling again below the EURO EMBIG Composite, which in the same period remained almost unchanged, measuring 147 bp at end-June. A mild fall in Q2 was also recorded in the dollar risk premium for Serbia (by 2 bp to 128 bp). It stayed considerably below the EMBI Composite, which at end-Q2 stood at 312 bp. Serbia's risk premium continued to benefit from domestic factors – favourable macroeconomic outlook and vaccination progress.

As a result of strengthening of the domestic macroeconomic environment and activities undertaken in the previous years to develop the local financial market, on 30 June 2021 Serbia's dinar bonds were included in J.P. Morgan GBI-EM Global Diversified, one of the indices of emerging market bonds issued in local currencies which are most frequently monitored by foreign investors and to whose composition they adjust a part of their investments. This is an indication of trust which Serbia built in the international environment and a confirmation of its attractiveness as an investment destination. The index includes three benchmark issues of dinar bonds, with original maturity of 7Y, 10Y and 12.5Y, maturing in 2026, 2028 and 2032, which are assigned the 0.3% weight in the index. Serbian dinar bonds are also included in GBI-Aggregate (GBI-AGG) and GBI-AGG Diversified, as well as in J.P. Morgan ESG (JESG) GBI-EM index.

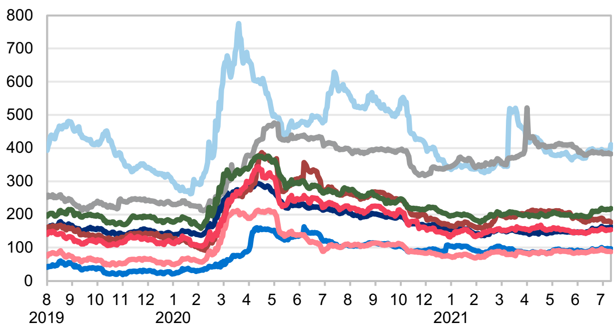
Despite the global crisis and prolonged duration of the pandemic, in June 2021 Standard & Poor's kept Serbia's credit rating at BB+, with a stable outlook for its further improvement, up to investment grade. In its decision, the agency stated that Serbia's credit rating was supported by a credible monetary policy and moderate level of public debt, which were the important preconditions for the adoption of ample packages of assistance to corporates and households underpinning the domestic economy and preventing a sharper fall in economic activity in 2020. The agency also highlighted a significant resilience of

Chart IV.1.6 **Interest rates on new euro and euro-indexed loans and deposits**
(weighted average values, p.a., in %)



Sources: European Banking Federation and NBS.
* Excluding revolving loans, current account overdrafts and credit card debt.

Chart IV.1.7 **Risk premium indicator for euro-denominated debt − EURO EMBIG**
(daily data, in bp)



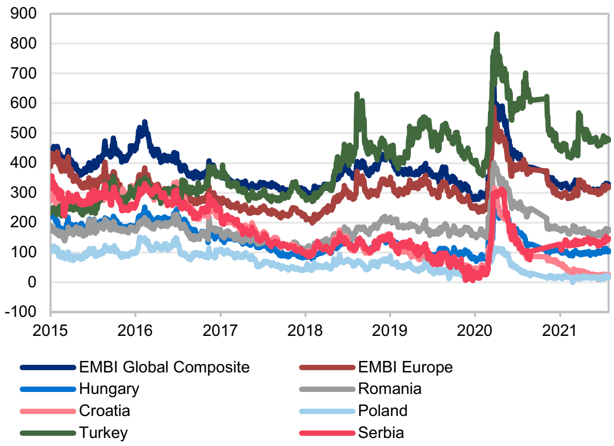
Source: J.P. Morgan.

Table IV.1.1 **Credit rating**
(change of rating and outlook)

	2017	2018	2019	2020	2021
S&P	BB /stable[4)]	BB /positive[4)]	BB+ /positive[4)]	BB+ /stable[2)]	
Fitch	BB /stable[4)]		BB+ /stable[3)]		
Moody's	Ba3 /stable[1)]		Ba3 /positive[3)]		Ba2 /stable[1)]

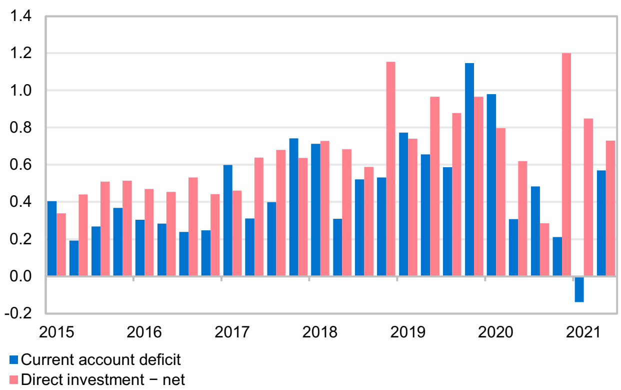
Source: NBS.
[1)] March, [2)] May, [3)] September, [4)] December.

Chart IV.1.8 **Risk premium indicator for dollar-denominated debt – EMBI**
(daily data, in bp)



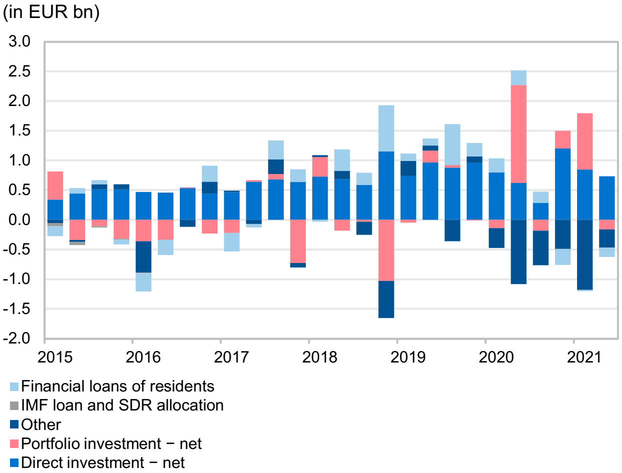
Source: J.P. Morgan.

Chart IV.1.9 **Current account deficit and net FDI inflow**
(in EUR bn)



Source: NBS.
Note: Preliminary data for Q2 2021.

Chart IV.1.10 **Structure of the financial account**
(in EUR bn)



Source: NBS.
Note: Preliminary data for Q2 2021.

the Serbian economy achieved in the last years and the fact that Serbia was ready to face the coronavirus-induced pandemic with significantly lower imbalances than ten years ago, which created room for prompt and adequate reaction already at an early stage of the crisis.

Foreign capital inflow

FDI capital inflow to the balance of payments financial account exceeded the current account deficit in Q2 which, coupled with the current account surplus in Q1, ensured generous coverage of the current account deficit by the net FDI inflow since the start of the year.

According to preliminary data, **FDI** generated **net capital inflow** of EUR 730.5 mn in Q2, and close to EUR 1.6 bn in total in H1. Looking at investments into Serbia only, i.e. FDI inflow, they climbed to over EUR 1.7 bn in H1, which is around 20% more than in the same period last year, with almost two-thirds of investments coming in the form of equity. The majority of investments came from the EU and Asian countries and were channelled to manufacturing (23.7%), followed by mining, transport, construction, financial activities and information and communications, whereby FDI remained predominantly oriented to tradable sectors.

Portfolio investment accounted for a net capital outflow of EUR 161.4 mn, driven by movements in the domestic secondary market of government securities, while in the primary market foreign investors stepped up their investments. The volume of net sale of securities in the secondary market declined month after month, while as of end-June, after their inclusion into J.P. Morgan indices, the market witnessed a rise in demand for dinar government securities.

In Q2, residents reduced their external borrowing under **financial loans by** EUR 151.7 mn. This was supported by the repayment of banks' liabilities to foreign creditors, as well as the rise in receivables from abroad, while a net inflow was generated based on the rising borrowing of the government and to a smaller extent also of domestic companies. An outflow was registered based on company **trade loans** (EUR 94.4 mn) due to higher resident receivables from foreign buyers, as well as under **cash and deposits** (EUR 205.3 mn).

Trends in the FX market and exchange rate

The dinar remained stable against the euro in Q2, so its value at end-June (RSD/EUR 117.6) remained the same as at end-March, as well as at the beginning of the year.

At the same time, due to the euro's strengthening against the dollar, in Q2 the dinar appreciated against the dollar by 1.7% end-of-period.

Appreciation pressures, most pronounced during June, prevailed in the major part of Q2, largely owing to the rise in FX-indexed bank assets[3], as well as the stronger foreign currency supply by some residents and non-residents, especially toward the end of the month with the inclusion of the Republic of Serbia's dinar bonds in J.P. Morgan indices and increased foreign investor demand for those securities. The appreciation pressures in Q2 were also fuelled by the higher purchase of foreign cash from citizens (mostly in May – in part due to the higher purchases of the eighth-series Swiss franc banknotes which were withdrawn from circulation by the Swiss National Bank) and the longer FX position of banks under payment cards, whose amounts, in quarterly terms, came closer to or surpassed the pre-pandemic levels.

In Q2, the NBS was a net buyer of foreign currency in the IFEM, in the total amount of EUR 370.0 mn, mostly in June, while looking since the start of the year, it net bought EUR 320.0 mn, thus further boosting the country's FX reserves.

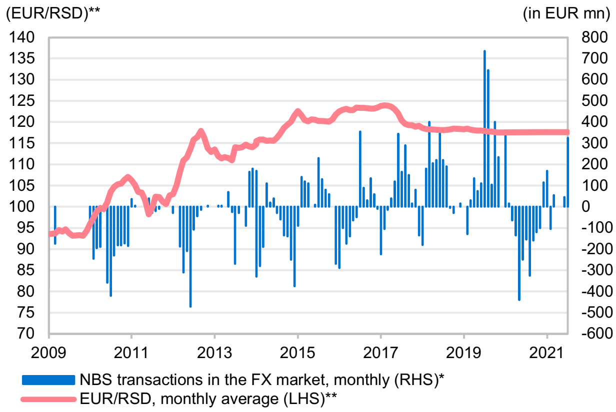
The average value of trading volume in the IFEM[4] in Q2 (EUR 26.1 mn) was somewhat higher than in Q1 (EUR 25.4 mn), and the trading volume in regular FX swap auctions also expanded (in two-week auctions banks bought and sold EUR 26.0 mn each and in three-month auctions – EUR 21.0 mn each).

The currencies of other inflation targeting countries in the region which gained ground against the euro in Q2 were the Hungarian forint (3.4%), Polish zloty (3.1%) and Czech koruna (2.6%). Similarly to the dinar, the Romanian leu did not change its value against the euro, while only the Turkish lira weakened (by 5.7%).

2 Money and loans

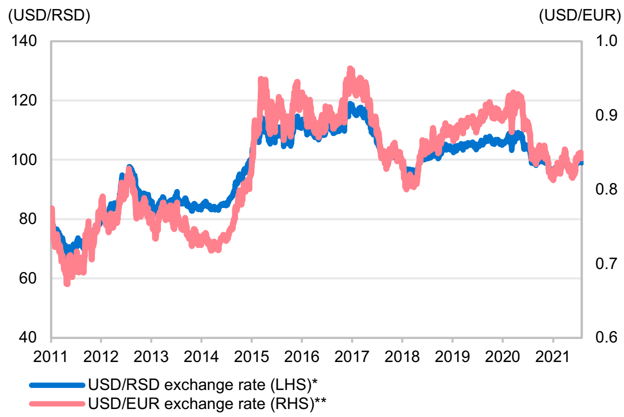
The slowdown in monetary aggregates' and credit y-o-y growth extended into Q2. Such movements are fully consistent with our expectations and largely reflect the high base in 2020, when ample fiscal and monetary stimuli were in place, including the moratorium on repayment of corporate and household loans.

Chart IV.1.11 **Dinar exchange rate and NBS transactions in the FX market**



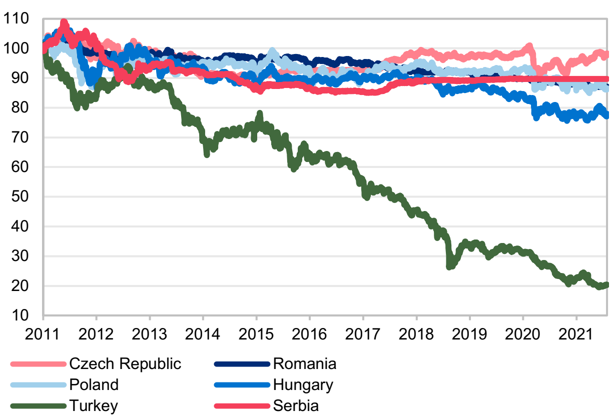
Source: NBS.
* + net purchase; - net sale.
** EUR 1 in RSD.

Chart IV.1.12 **Movements in USD/RSD and USD/EUR exchange rates**



Source: NBS.
* USD 1 in RSD.
** USD 1 in EUR.

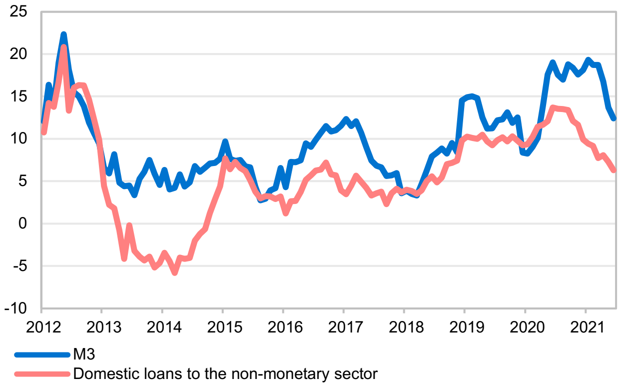
Chart IV.1.13 **Exchange rates of selected national currencies against the euro***
(daily data, 31 December 2010 = 100)



Sources: NBS and websites of central banks.
* Growth indicates appreciation.

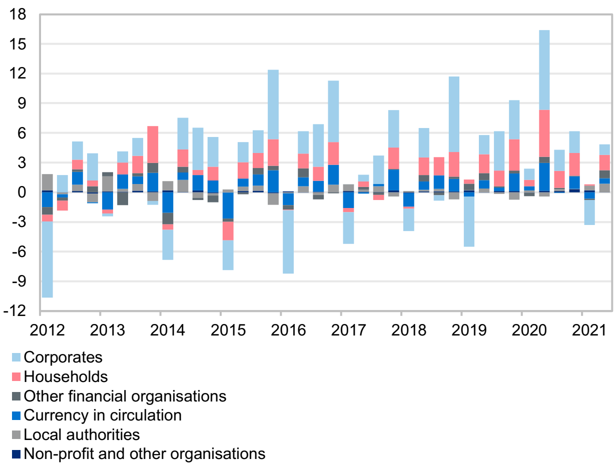
[3] In an effort to balance their open long FX position and decrease FX risk exposure, banks sell foreign currency, which results in strenghtening of the dinar.
[4] Without the National Bank of Serbia.

Chart IV.2.1 **Domestic loans to the non-monetary sector and M3**
(nominal y-o-y rates, in %)



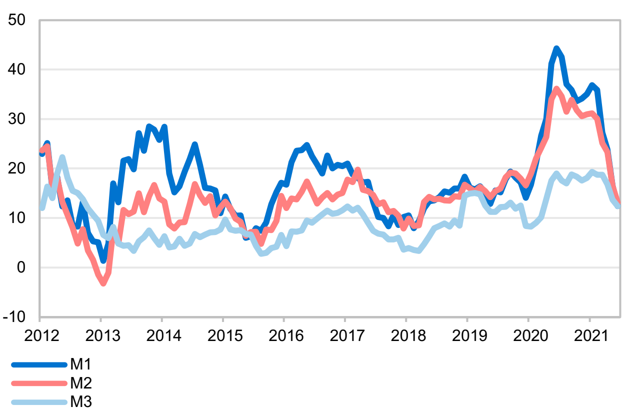
Source: NBS.

Chart IV.2.2 **Contributions to quarterly growth in M2, by sector**
(in pp)



Source: NBS.

Chart IV.2.3 **Monetary aggregate movements**
(nominal y-o-y rates, in %)



Source: NBS.

Monetary aggregates

After a seasonal decrease early this year, the dinar monetary aggregate M2 edged up 4.8% in Q2, mainly owing to the rise in its most liquid components. At the same time, the broadest monetary aggregate M3 added 3.1% in Q2, additionally supported by the rise in FX deposits.

In terms of individual categories, dinar **sight deposits** recorded the highest increase in Q2 (by RSD 59.6 bn), driven mainly by the rising corporate and household deposits. Corporates increased their transaction account balances by RSD 27.7 bn, mainly thanks to the rise in deposits of manufacturing and trade companies. Household transaction deposits increased by RSD 21.5 bn, while other sectors saw relatively minor changes compared to end-Q1.

Dinar time deposits posted a RSD 5.5 bn increase in Q2, led chiefly by the rising deposits of other financial organisations (RSD 12.3 bn), while corporate deposits went down by RSD 11.9 bn. Dinar savings of households (residents) gained RSD 2.3 bn in Q2, extending their stable growth from the last three years. At end-June, dinar savings reached RSD 98.3 bn, their highest level thus far. The continuous growth in dinar savings reflects household confidence in the domestic currency and facilitates the maintenance of financial and price stability. At the same time, higher interest rates and a more favourable tax treatment on dinar savings contribute to their higher profitability.

FX deposits added EUR 270.7 mn in Q2, mainly owing to the higher FX savings of households (EUR 329.7 mn[5]), which reached their new maximum of EUR 11.7 bn at end-June.[6] FX deposits of corporates contracted by EUR 44.6 mn in Q2, while those of other sectors increased mildly relative to Q1.

In y-o-y terms, the growth in monetary aggregates continued to decelerate in Q2 – M1, M2 and M3 posted y-o-y growth of 12.4%, 13.1% and 12.4%[7], respectively, practically returning to their 2019 levels. This slowdown reflected high last year's base, when the pronounced growth in money supply was connected with government

[5] The replacement of the eighth-series Swiss franc banknotes also contributed to this.

[6] Money supply M3 includes only resident funds. With non-resident funds included, at end-June dinar savings amounted to RSD 98.7bn and FX savings to EUR 12.1 bn.

[7] Compared to 27.2%, 25.2% and 18.7% in March 2021.

and NBS measures aimed at boosting liquidity and disposable income of corporates and households and with the change in certain consumer habits amid the pandemic and the rise in precautionary savings. On the other hand, the factors offsetting this slowdown were the third package of economic measures, approval of loans under the Guarantee Scheme (the first and the second), and the recovery of economic activity.

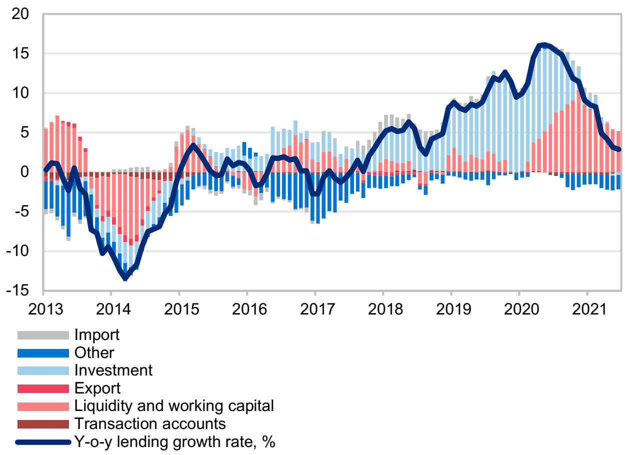
Loans

Under the impact of the high last year's base (especially in the corporate sector) due to the moratorium on loan repayment, **domestic lending** slowed down its y-o-y growth in 2021, consistent with our expectations. In June, excluding the exchange rate effect, **total domestic loans** posted a 6.3% rise y-o-y. At the same time, the growth in **total domestic receivables** (which, apart from loan receivables, also include receivables arising from investment in securities, interest and fees, and other receivables), amounted to 7.0% y-o-y in June.

At the level of Q2, **corporate loans**, excluding the exchange rate effect, recorded a RSD 20.0 bn increase, driven by the expansion of liquidity and working capital loans supported by the Guarantee Scheme (the first and the second)[8]. Liquidity and working capital loans were the dominant corporate loan category accounting for 44.6% in June, followed by investment loans (42.8%). Owing to the NBS monetary policy accommodation and favourable lending terms under the Guarantee Scheme, which pushed the interest rates on new dinar corporate loans closer to those on euro-indexed loans, the overall corporate loan growth in Q2 was led by dinar loans, which also boosted their share in total loans. The degree of dinarisation of corporate receivables edged up by 1.3 pp to 23.6% in June, its highest level in the last six years. Sector-wise, the greatest increase in borrowing in Q2 was recorded for companies in transport, trade and real estate. At the same time, the overall corporate loan growth in Q2 referred to the market segment of micro, small and medium-sized enterprises, while the debt of large enterprises remained almost unchanged relative to end-Q1.

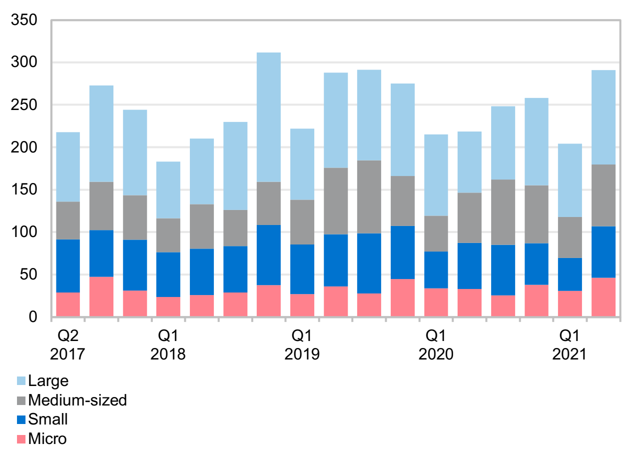
The stock of new corporate loans in Q2 reached RSD 290.9 bn, up by 33.2% compared to the same period last year. In Q2, corporates mostly used liquidity and working capital loans (51.8%), and almost 65% of these

Chart IV.2.4 **Contributions to y-o-y corporate lending growth**
(in pp, excluding the exchange rate effect)



Source: NBS.

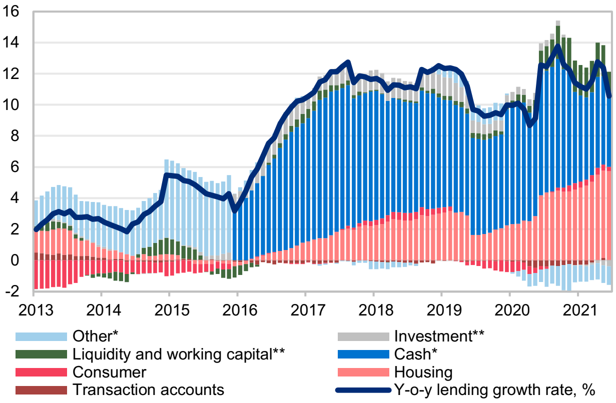
Chart IV.2.5 **Structure of new corporate loans, by enterprise size**
(in RSD bn)



Source: NBS.

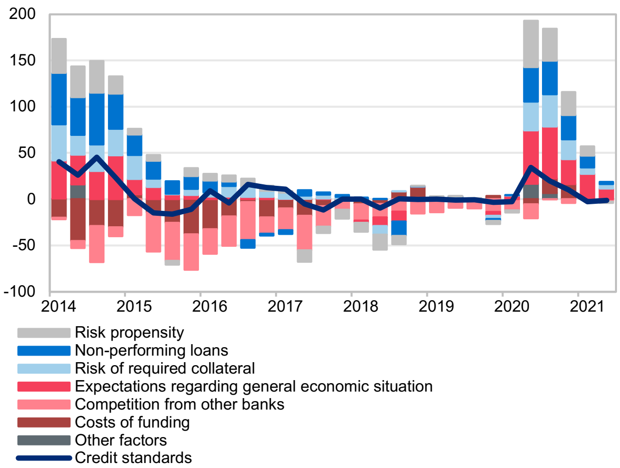
[8] The implementation of the second Guarantee Scheme began in Q2.

Chart IV.2.6 **Contributions to y-o-y household lending growth**
(in pp, excluding the exchange rate effect)



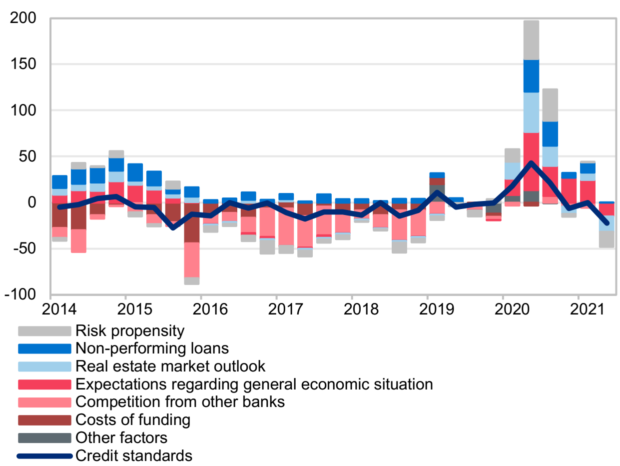
Source: NBS.
* Until December 2015, the contribution of cash loans is shown within the contribution of other loans.
** Loans extended to entrepreneurs.

Chart IV.2.7 **Change in corporate credit standards and contributing factors**
(in net %)



Source: NBS.
Note: Growth indicates the tightening and decline indicates the easing of credit standards.

Chart IV.2.8 **Change in household credit standards and contributing factors**
(in net %)



Source: NBS.
Note: Growth indicates the tightening and decline indicates the easing of credit standards.

loans were absorbed by micro, small and medium-sized enterprises. Investment loans made up 29.2% of new corporate loans in Q2, rising by 54.1% from the same period last year, with almost three-fourths of these loans being approved to micro, small and medium-sized enterprises.

Excluding the exchange rate effect, **household loans** increased by RSD 44.8 bn in Q2. Almost a half of this growth referred to housing loans, which recorded y-o-y growth of 15.7% in June. Next were cash loans, which gained RSD 18.9 bn in Q2 and liquidity and working capital loans approved to entrepreneurs (RSD 5.2 bn). Due to faster growth of housing compared to cash loans, the share of dinar household receivables dropped in Q2 by 0.3 pp to 55.2% in June. In the composition of household loans in June, the dominant categories were cash loans (44.2%) and housing loans (37.8%).

The volume of new household loans in Q2 reached RSD 151.7 bn, double the amount from Q2 2020, when the most stringent containment measures were in place. Cash loans made up 56.6% of new loans in Q2, and housing loans 26.2%, while the amount of new housing loans in Q2 (RSD 39.8 bn) more than doubled y-o-y. Positive trends in the real estate market, a continuous rise in the number of completed apartments since 2016 and favourable borrowing terms have boosted household demand for housing loans.

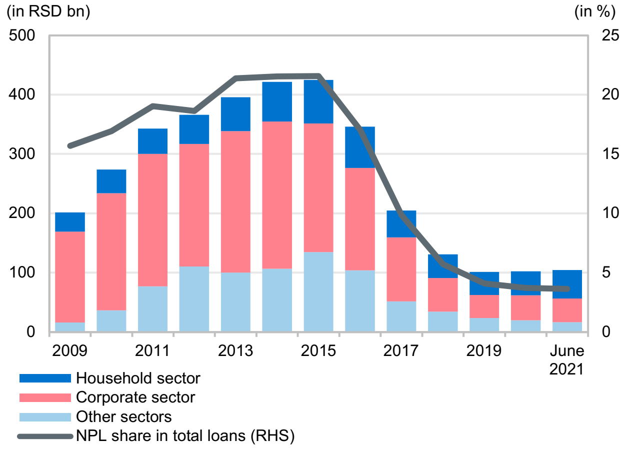
The results of the **NBS bank lending survey carried out in July**[9] show that banks continued to relax their credit standards for dinar corporate loans in Q2, while mildly tightening the standards for FX-indexed loans. Banks have similar expectations for Q3, and in their view, favourable economic outlook is likely to work towards standard easing. Banks assess that household credit standards were loosened in Q2, and that Q3 will see further easing on the back of a positive outlook in the real estate market, the recovery of the labour market, and the higher propensity to risk. Banks also deem that corporate and household credit demand expanded in Q2 and is likely to persist in Q3 as well. Corporate demand was driven by small and medium-sized enterprises and was largely directed toward long-term loans. Another contributor since the start of the year has been capital investment. At the same time, households were mostly interested in dinar cash loans and FX-indexed housing loans.

[9] The NBS has conducted the survey since the start of 2014.

Gross **NPL ratio** is still below its pre-crisis level, measuring 3.6% in June, which indicates that the NBS and government measures were timely and that they prevented stronger negative effects on corporates and households, and thus on the financial stability as well. Also, compared to end-Q1, the share of NPLs in total loans dropped (by 0.2 pp), with the corporate sector[10] recording a decrease of 0.2 pp to 2.9% in June and the household sector[11] by 0.1 pp to 4.0%. The NPL coverage remained high – allowances for impairment of total loans came at 92% of NPLs in June, while allowances for impairment of NPLs stood at 58.2% of NPLs.

Capital adequacy ratio[12] at end-Q2 2021 equalled 22.2%, indicating high capitalisation (regulatory minimum – 8.0%) and resilience of the banking sector to external and domestic risks.

Chart IV.2.9 **NPL share in total loans, gross principle**



Source: NBS.

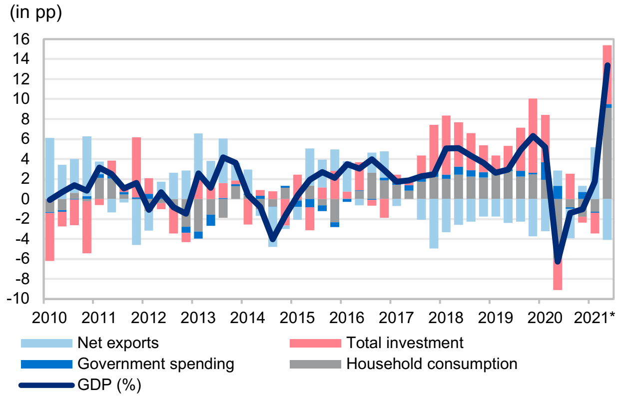
3 Aggregate demand

Consumption and investment growth, which picked up on the back of a timely and adequate economic policy makers' response, led to the continued rise in economic activity in Q2, measuring 1.2% s-a in quarterly terms. Y-o-y, the same factors, along with the expansion of external demand, generated GDP growth of 13.4%. Such robust growth is also owed to the base effect, since global uncertainty and economic crisis caused by the coronavirus were at their height in Q2 2020.

Domestic demand

Private consumption, in our estimate, increased by 13% y-o-y in Q2. Such growth was surely under the impact of the last year's low base, as well as the recovery of service sectors with the improvement of the epidemiological situation as the vaccination progressed. The activity in tourism, catering, transport, recreation and entertainment came closer to, but still has not reached, the pre-crisis levels. Tourist arrivals in Q2 doubled from the same period last year and the number of domestic tourists' overnight stays rose by over 88%, falling short of the 2019 figure by around 10% only. Real catering turnover in the period April–May also rose, by almost 150%, underperforming the year 2019 by 3.4%. On the other hand, the trade turnover, posting a real rise and climbing

Chart IV.3.1 **Contributions to y-o-y GDP growth rate, expenditure side**



Sources: SORS and NBS calculation.
* NBS estimate for Q2 2021.

Table IV.3.1 **Movement in key indicators and sources of household consumption**
(real y-o-y growth rates, in %)

	2020		2021	
	Q3	Q4	Q1	Q2
Household consumption	**-1.2**	**-2.6**	**-1.9**	**13.0 ***
Indicators				
Retail trade	5.8	2.9	5.0	17.9
Catering turnover	-28.2	-32.3	2.8	147.2 **
Number of domestic tourists	11.3	-36.0	-2.2	111.1
Number of overnight stays of domestic tourists	13.0	-28.9	-8.1	88.4
Consumer goods imports (BEC classification), nominal	13.6	13.0	4.0	24.3
Sources				
Total wage bill, nominal	14.1	14.2	11.2	14.4 **
Net remittances inflow, nominal	-10.3	2.4	13.1	34.4
Stock of loans intended for consumption, nominal	15.4	14.2	11.8	11.1

Sources: SORS and NBS calculation.
* NBS estimate.
** April-May.

[10] Includes companies and public enterprises. Looking at companies only, the NPL share in total loans also amounted to 2.9% in June.

[11] With entrepreneurs and private households included, the NPL share was also at the level of 4.0%.

[12] Basel III regulatory framework is applied since 30 June 2017.

to its pre-crisis level as early as May last year, recorded a 17.9% y-o-y growth in Q2 2021.

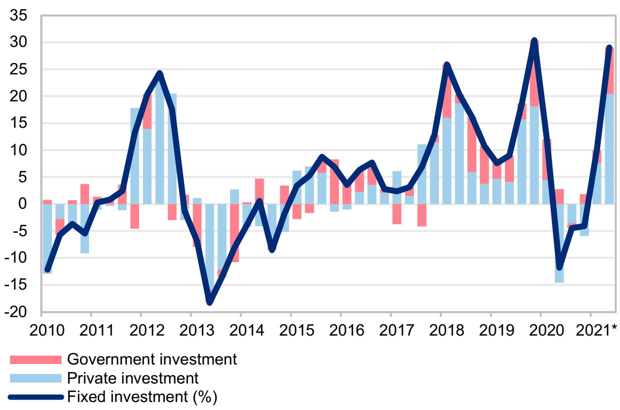
Consumption was also spurred by the rise in disposable income. Thanks to the measures taken to prevent the spread of the coronavirus-induced crisis, aimed mainly at preserving employment, the wages, as the main source of household consumption, continued up, adding to the wage bill growth (14.4% y-o-y in the period April–May). In addition, consumption was also boosted by the payout of EUR 30 government assistance to all citizens of age, within the measures of support to economic recovery. Also, loans intended for consumption increased by around 11% y-o-y and remittances from abroad by 34.4% y-o-y in Q2.

According to our estimate, a positive contribution to GDP growth in Q2 also came from government consumption (0.4 pp), which expanded by 2.0% y-o-y.

Q2 saw a pick-up in **investment activity**, as evidenced by the fixed investment growth, which in our estimate amounted to 29% y-o-y (contribution to GDP growth of 5.9 pp). The rise in private sector investment (27% y-o-y) can primarily be attributed to the improved global epidemiological situation and smaller risk aversion on that account. Investment confidence was largely preserved owing to government measures for overcoming the effects of the crisis caused by the coronavirus pandemic, which is evidenced by the positive business result of the majority of companies in the previous, crisis year. We estimate that the majority of private sector investments were financed from own sources, while investment loans, going up 3% y-o-y in Q2, featured to a lesser extent. Investment growth was also based on the inflow of foreign capital, as evidenced by the FDI rise of around 19.3% y-o-y, to EUR 762.7 mn in Q2. In addition, government continued to intensively invest in infrastructure projects in Q2, so the rise in government investment is estimated at around 35% y-o-y.

Investment growth reflected positively on certain segments of manufacturing and on construction. Namely, the production of capital goods in Q2 increased by 44.2% y-o-y, of which machinery and equipment by 26.4% y-o-y and construction material by 28.7% y-o-y, which can partly be put down also to the base effect. Other investment indicators, such as equipment imports, rising by 50.8% y-o-y, and the number of construction permits issued, also signal a robust growth in investment activity in Q2.

Chart IV.3.2 **Fixed investment**
(y-o-y growth, in pp)



Sources: SORS and NBS calculation.
* NBS estimate for Q2 2021.

Table IV.3.2 **Investment indicators**

	2020		2021	
	Q3	Q4	Q1	Q2
Real y-o-y growth rates (in %)				
Fixed investment (national accounts)	-4.5	-4.1	10.0	27.0 *
Construction (national accounts)	-16.7	-9.1	19.5	35.0 *
Government investment	-4.5	6.1	12.0	35.0 *
Number of construction permits issued	-0,7	17,88	14.1	72.2 **
Production of construction material	1.2	8.7	10.9	28.7
Value of works performed	-16.0	-8.9	20.7	18.1
Imports of equipment, nominal	14.4	-14.3	-10.3	50.8
Production of domestic machinery and equipment	0.3	-8.5	6.3	26.4
Finished product inventories in industry	2.2	1.9	10.4	2.3

Sources: SORS and NBS calculation.
* NBS estimate.
** April-May.

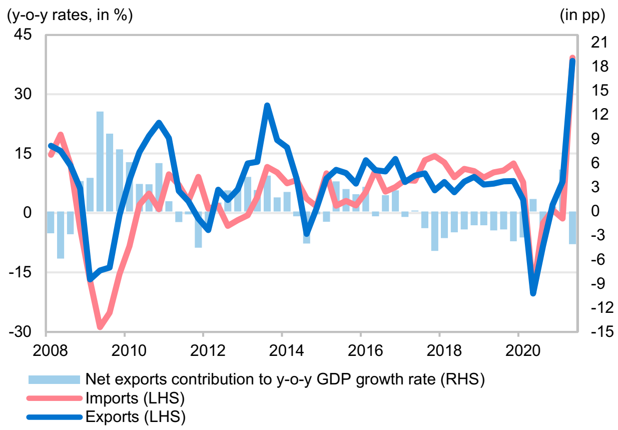
A positive contribution to GDP growth came also from the **rise in inventories**, which can be associated with the full recovery of manufacturing.

In quarterly terms, GDP growth of 1.2 % s-a was based mainly on the rise in consumption, which picked up to 3.0% s-a, and the recovery of private fixed investment, which went up by 5.8% s-a, while net exports worked in the opposite direction.

Net external demand

Foreign trade continued to rebound in Q2. In our estimate, goods and services exports and imports increased by 38.4% and 39.2%, respectively, in real terms, relative to Q2 2020, when, due to the lockdowns, foreign trade suffered the most severe negative effects. This resulted in the negative contribution of net exports to GDP growth in Q2, of 4.1 pp.

Chart IV.3.3 **Exports and imports of goods and services**
(in previous-year constant prices, ref. 2010)

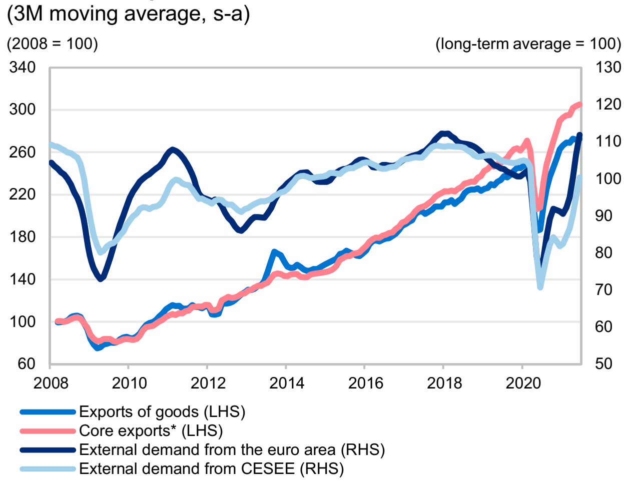


Sources: SORS and NBS calculation.
Note: NBS estimate for Q2 2021.

Commodity exports extended their growth in Q2, supported by the further recovery in external demand and the rise in export capacities. According to the balance of payments data, commodity exports in euro terms were 48.2% higher in Q2 than in the same period last year, in part reflecting the low base effect. Exports growth was primarily led by the manufacturing exports, which increased by 45.4% y-o-y, with mining and electricity exports also providing a contribution. Almost all branches of manufacturing (19 of 23) recorded a y-o-y rise in exports, with the leading share of motor vehicles, electrical equipment, rubber and plastic products, base metals, chemical products, other machinery, food and metal products. On the other hand, the exports of agricultural products were somewhat lower (by 4.5%) than in the same period last year.

Similar dynamics in Q2 and the return to pre-crisis levels were also recorded by the euro-denominated commodity imports (the rise of 49.6% y-o-y), also largely under the impact of the low base from 2020, when the pandemic impact was at its fullest. Imports classification by BEC (Broad Economic Categories) reveals that the growth is mostly owed to the higher imports of intermediate goods (59.7% y-o-y), followed by imports of equipment (50.8% y-o-y) and consumer goods (22.4% y-o-y). Similar movements are indicated by the classification of imports by the EU methodology, showing that imports growth stemmed mainly from the imports of intermediate and capital goods, followed by energy and consumer goods.

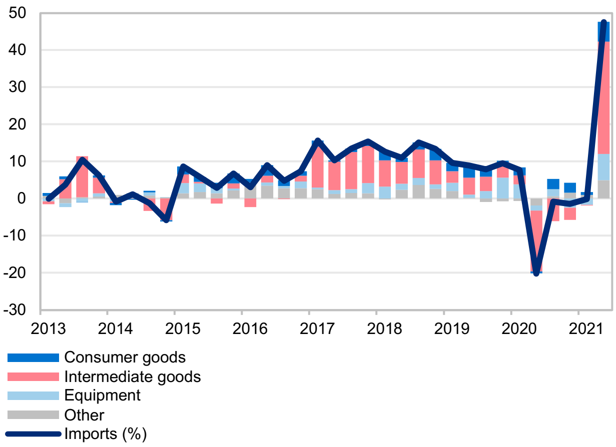
Chart IV.3.4 **Movement of indicators of external demand for Serbian exports**
(3M moving average, s-a)



Sources: European Commission, SORS and NBS.
* Core exports are total exports excluding exports of agricultural products, base metals, motor vehicles, petroleum products and electricity.

Foreign trade in services continued its rebound in Q2. Thanks to exports rising more sharply than imports

Chart IV.3.5 **Movement of key import components**
(contributions to y-o-y growth, in pp)



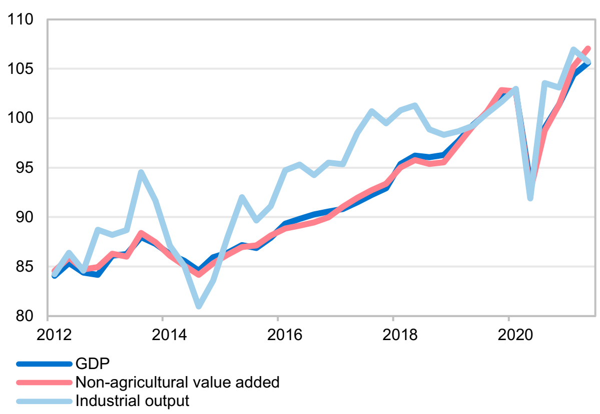
Sources: SORS and NBS calculation.

Table IV.4.1 **Contributions to y-o-y GDP growth**
(in pp)

	2020			2021	
	Q2	Q3	Q4	Q1	Q2*
GDP (in %, y-o-y)	**-6.3**	**-1.4**	**-1.0**	**1.7**	**13.4**
Agriculture	0.2	0.3	0.3	0.0	-0.2
Industry	-1.6	0.6	0.3	0.8	2.9
Construction	-0.1	-1.0	-0.6	0.8	1.8
Services	-3.8	-1.0	-0.7	0.6	6.9
Net taxes	-1.2	-0.2	-0.3	-0.2	1.5

Sources: SORS and NBS calculation.
* NBS estimate.

Chart IV.4.1 **Economic activity indicators**
(s-a, 2019 = 100)



Sources: SORS and NBS calculation.

(42.6% vs. 38.8% y-o-y), the trade in services surplus in Q2 was 62.6% higher than in the same period last year. Exports and imports growth received contributions from almost all service categories, the strongest ones from tourist and transport services (in both exports and imports).

Commodity export/import coverage ratio[13] was at a similar level as at end-Q1, measuring 78.3% in June, or 87.3% with services included.

4 Economic activity

A significantly improved epidemiological situation in the country and abroad, as well as the earlier taken economic measures to mitigate the crisis effects, resulted in an uninterrupted rise in economic activity, estimated to have edged up in Q2 by 1.2% s-a from Q1. In y-o-y terms, according to SORS estimate, GDP growth picked up to 13.4% in Q2, reflecting the continued positive trends in our economy, as well as the low base from the last year, when the most stringent containment measures were in place. The greatest positive impetus came from services, which in the same period last year were the most severely hit by the effects of the pandemic, while manufacturing and construction repeated their sizeable contributions from Q1.

After exceeding its pre-crisis level in Q1 this year, GDP continued up and is estimated to have reached quarterly growth of 1.2% s-a in Q2, supported by the epidemiological improvement globally and at home, the effects of implemented monetary and fiscal stimuli in the domestic market and investment and the consumer confidence preserved on that account. Accordingly, the greatest contribution on the production side came from services, followed by construction, which, in our estimate, rose by 6.0% s-a in Q2.

In y-o-y terms, economic activity expectedly accelerated in Q2, to 13.4% according to SORS estimate, reflecting the uninterrupted positive trends in our economy, as well as the base effect. The strongest growth in gross value added, in our estimate, was recorded in construction (35% y-o-y), despite the fact that in Q2 2020 the level of **construction** activity remained relatively high. Such high growth in Q2 2021 may be associated with the

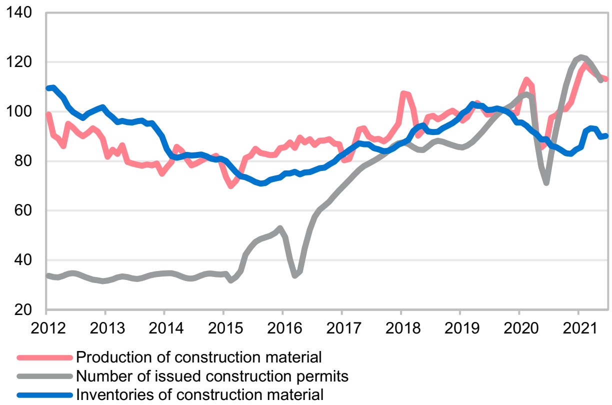
[13] Measured by the 12-month moving average.

continued intensive implementation of infrastructure projects financed by the government, as well as with the speeding up of private investments, thanks to the preserved investment confidence and secured favourable terms of financing. The rise in activity is signalled by almost all construction indicators, most notably the production of construction material that went up by 28.7% y-o-y and the number of construction permits which in the period April–May increased by 72.2% y-o-y, along with the rise in apartment usable area based on the issued permits (36.5% y-o-y). Even when compared with the average level last year, the envisaged value of the works performed based on the construction permits issued between April and May is higher by 56.8%, which confirms that construction activity picked up considerably, hand in hand with employment in the sector which gained 6.0% y-o-y in the same period.

Industry also recorded strong growth in activity (14.6% y-o-y). The volume of industrial production in Q2 also expanded by 14.6% y-o-y, led by export-oriented activities (the rise in the volume of production of manufacturing amounted to 17.7% y-o-y). A half of the growth in Q2 stemmed from five branches – automobile production, rubber and plastic products, electrical equipment, petroleum products and metal products. Moderate growth was recorded also in other branches except pharmaceuticals and tobacco, which negatively contributed to industrial production with 0.6 pp. The recovery of manufacturing would have been even faster had it not been for occasional halts in global supply chains, due to the inability of supply to shortly adapt to the rising global demand with the epidemiological measures in place. This was particularly pronounced in May, when the domestic industry recorded a monthly fall. The energy sector recorded a 7.5% rise y-o-y, while the volume of production in mining contracted by 1.5% y-o-y.

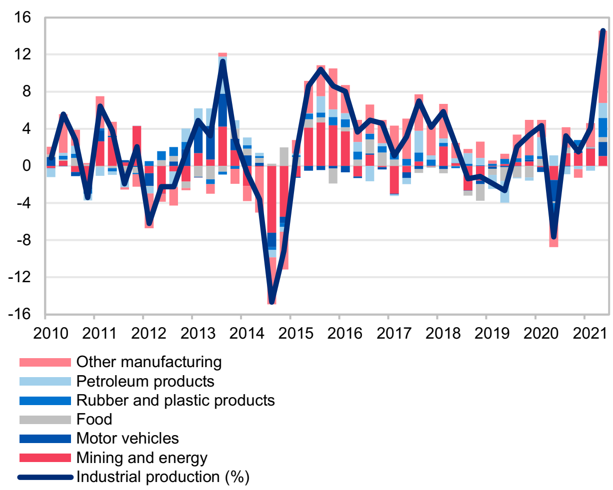
It is estimated that over a half of the y-o-y GDP growth in Q2 stemmed from the recovery of **services** which (aggregately) recorded growth of close to 13.5% y-o-y. The rise in retail trade turnover, which reached its pre-crisis level already in mid-2020, continued into Q2, settling at 17.9% y-o-y. Tourism turnover (measured by tourist arrivals and overnight stays), as well as catering turnover also rose significantly in y-o-y terms in Q2, but it should be kept in mind that this was in part due to the low base, because those sectors experienced almost a

Chart IV.4.2 **Construction activity indicators**
(quarterly averages s-a, 2019 = 100)



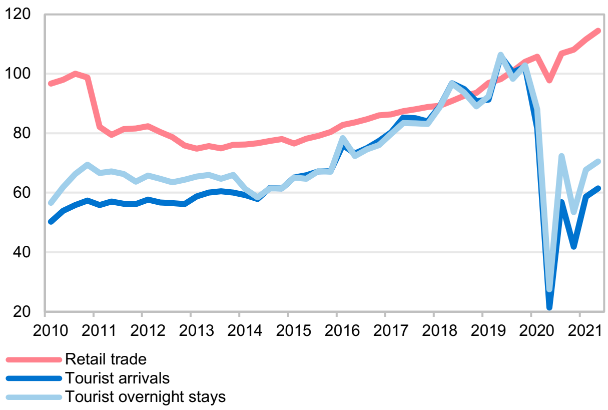
Sources: SORS and NBS calculation.

Chart IV.4.3 **Contributions to y-o-y industry growth rate**
(in pp)



Sources: SORS and NBS calculation.

Chart IV.4.4 **Service sector indicators**
(s-a, 2019 = 100)



Sources: SORS and NBS calculation.

total halt in 2020. The consequences of the coronavirus-induced crisis are still most visible in tourism and catering, as well as in recreation and entertainment, though those sectors have also embarked on the recovery path, thanks to the progress in vaccination and loosening of containment measures.

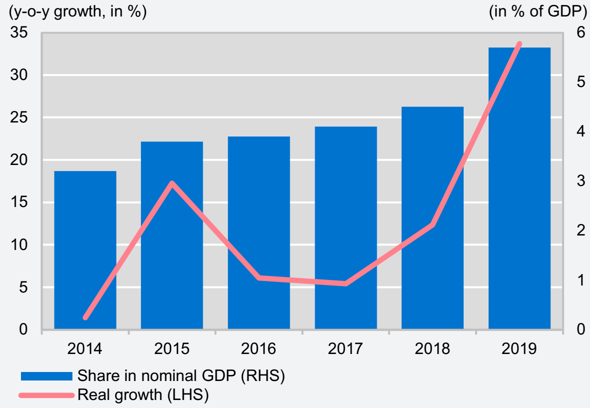
As for agriculture, in the absence of precise estimates about the autumn crop yields, we maintain our earlier estimate about the average agricultural season, which, given the record last season, should result in a mild negative contribution to economic activity growth (-0.3 pp).

Text box 2: Contribution of construction to GDP growth

The construction sector has been rising faster than the rest of the economy since 2014, as illustrated by data on gross value added, which doubled in the 2014–2019 period and recorded the average annual growth of over 10%. As a result, the share of construction in GDP increased from 3.0% in 2013 to 5.7% in 2019, and remained at a similar level in 2020.

The spike in construction was prompted by higher government capital expenditure, which – as public finance entered equilibrium after the implemented fiscal consolidation and, as a result, the room was opened for higher capital outlays – was 3.5 times higher in 2020 compared to 2013. At the same time, the growth was driven primarily by intensive construction of infrastructure facilities. The development of construction was also supported by significant improvement of the business environment owing to the achieved and preserved macroeconomic stability. An important role in attracting FDI (which has been on a continuous rise since 2014 and which even during the crisis year of 2020 stayed at an exceptionally high level) and in achieving a positive overall financial result of the corporate sector, was played by price stability and relative stability of the exchange rate, which contributed to a rise in private investment in the period observed. In addition, owing to the preserved and reinforced financial stability, investment loans also became an important source of private investment financing. A significant contribution also certainly came from legislative reform in construction, which, among other things, significantly simplified and sped up the construction permit issuance procedures. This is also confirmed by Serbia's going up on the Doing Business list in regard to permit issuance – it went up from the 179th position (of 185 countries) in 2013 to the 9th place (of 186 countries) in 2019.

Chart O.2.1 **GVA in construction**



Source: SORS.

According to the latest available data on the technical structure of fixed investment, the share of construction works in total fixed investment amounted to 48.1% in 2019, versus 38.8% in 2013, when the level of investment was twice lower. The rise in the share of investment channelled to construction reflects primarily the simplified procedure for the electronic issuance of construction permits. For instance, the average monthly number of issued permits went up from 627 in 2013 to 1,885 in 2020, and the envisaged value of works based on issued permits was three times higher than in 2013. Owing to this, in the period observed, activity in apartment construction accelerated – the number of completed apartments increased from 13.5 thousand in 2013 to 25.3 thousand in 2020, and the surface area of completed apartments was up by 118% in the same period.

According to data on intermediate consumption obtained from input-output tables of the Statistical Office, available as at 2015, construction largely relies on other economic sectors, whereby the influence of construction on economic activity increases. The volume of intermediate consumption in the construction sector is three times higher than the achieved gross value added, and almost a half of intermediate consumption in construction concerns the absorption of value created in other sectors. It can be therefore concluded that the impact of construction on other sectors is 50% higher than the gross value added created in construction. The strongest influence was exerted on some branches of manufacturing (production of construction material, base metals, metal products and electrical equipment) and trade and some service sectors (architectural, engineering and other professional activities), and to a lesser extent on mining, transportation and catering.

Stepped-up activity in construction also impacted on employment growth in this sector, which was faster than in the rest of the economy. At 115,291 in 2020, the total average number of employees in construction was higher by 24.2%

than in 2013, while the total number of formally employed in the same period increased by 15.4%. Although wages in construction are lower than the average wage, since 2013 they have been rising faster than in the rest of the economy. As a result, the gap between average wage in construction and total average wage declined from 20.4% to 12.3% in 2020.

Given the increasing contribution of construction to economic growth, we analysed its impact in the medium run as well. Several key factors underlie this analysis.

1. The Fiscal Strategy for 2022 with Projections for 2023 and 2024 was adopted, envisaging an increase in the share of government capital investment to around 7% of GDP.

2. The Capital Investment Commission was set up, aimed at providing an overview of all projects in a single place, coordinating their execution from the highest level, and making sure that those projects are implemented as efficiently as possible.

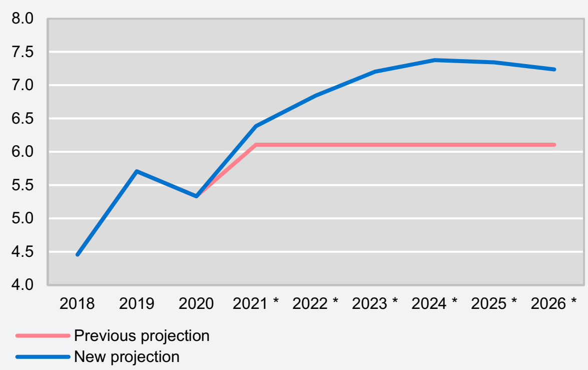
3. A great number of large infrastructure projects were initiated and planned for the coming period – there are concrete indicators in terms of their future implementation. Specifically, the Law on the Subway and City Railway was adopted for the Belgrade subway construction project, providing the basis for the start of its implementation. A financing framework was also defined for some projects in the field of utility infrastructure, and there are relatively solid indications that the European Commission will get involved in the financing of the project of the high-speed rail Belgrade–Niš–Skopje.

Given the above, we have made a list of the largest projects which are known at the moment and which will unfold over the following ten years or so. We estimated their value, gross value added and envisaged duration. We identified around 40 projects in total, the most important of which are: the Belgrade subway, utility infrastructure, the railways Belgrade–Subotica and Belgrade–Niš–Skopje, highways, fast roads etc. Based on available data, we estimated the total value of all projects at around EUR 25 bn. This amount may even be higher as projects in the energy sector have been announced.

Estimated for each project is its gross value added which enters into GDP calculation, as well as the implementation dynamics. The estimate of gross value added was made based on historical data (input-output tables of the Statistical Office). According to our estimate, around 70% of the value of total investment pertains to the output of construction, and gross value added accounts for around 26% of the value of that output. In this way, the total value added of each project was estimated and averaged by year depending on the length of each project. Consistent with this, the total value added of all the stated projects, according to our estimate, equals close to EUR 5 bn and is distributed over a ten-year period, which is the length of the horizon in which we observed the envisaged projects. In each year, we expect around EUR 500 mn of value added in construction on average, which is more than we expected in our earlier projections.

Bearing in mind the above stated, under this projection, we estimate that the share of construction in GDP would reach around 7% in the medium run, versus 6% of GDP in the earlier projection. It should be emphasised that three components determine the structure of the estimated share of construction. The first component is underlying construction, which equals 4% of GDP. This is the average share of construction in the years when we do not have large projects or investment cycles, or any significant shocks in the construction sector. The second component is the effect of the identified projects, whose value equals around 1% of GDP. The third component are the indirect effects on construction. Indirect effects, estimated at around 2% of GDP, represent additional growth in construction spurred by new projects (construction of apartments,

Chart O.2.2 **Share of construction in nominal GDP (new and previous projection)**
(in %)



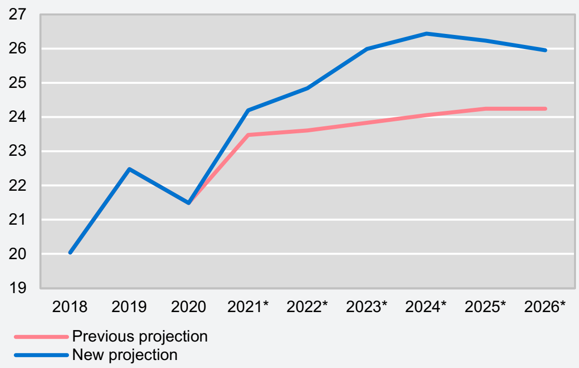
Sources: SORS and NBS calculation.
* NBS estimate.

industrial and accompanying facilities, trade facilities etc.). For instance, the highway construction will entail the construction of petrol stations, catering and lodging facilities. Almost certainly constructed would also be industrial facilities, for which greatly important are the vicinity of the highway and good transport connections.

The effects of the implementation of these projects in the medium run are reflected in several segments. Our previous medium-term GDP growth projection assumed construction growth that is consistent with GDP growth. After reaching 6% of GDP this year, its share would stay at the same level in the medium run as well. Including the announced most important infrastructure projects, the effect on overall GDP growth is higher by around 0.5 pp in the medium run. **Our new medium-term GDP growth projection ranges between 4% and 5%, instead of the hitherto 4%.** Consistent with this, the share of fixed investment in GDP also goes up (by around 2 pp) – it will reach the level of 26% of nominal GDP already in 2023, and remain there in the medium run. A positive effect on other economic sectors can also be expected, which should further accelerate GDP growth. After 2025, the share of construction will gradually start to decline and return to its long-term trend.

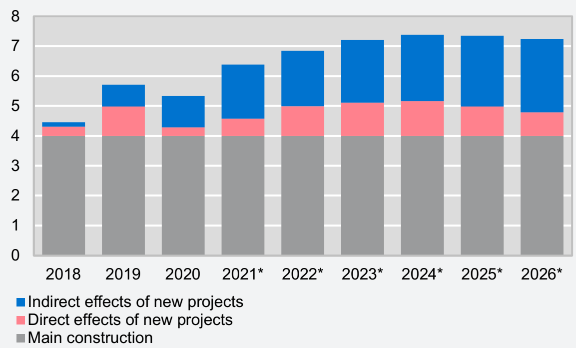
A strong investment cycle would also generate higher imports of equipment and intermediate goods. Over the next several years, this would most probably result in a **current account deficit somewhat higher than projected earlier (up to 1 pp of GDP), but it would also almost certainly imply higher FDI inflows and full coverage of the current account deficit with net FDI inflows, as it has been the case in the previous years**.

Chart O.2.3 **Share of investment in nominal GDP**
(in %)



Sources: SORS and NBS calculation.
* NBS estimate.

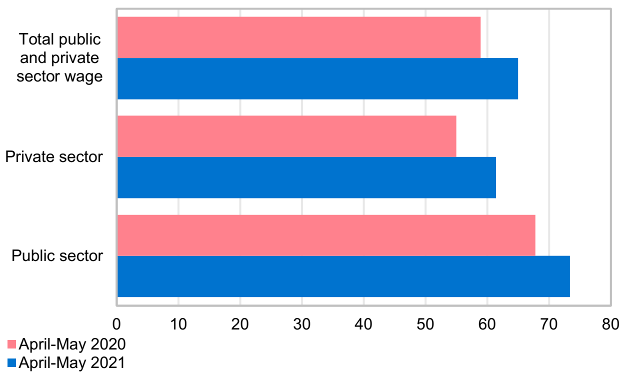
Chart O.2.4 **Structure of the share of construction in nominal GDP**
(in %)



Sources: SORS and NBS calculation.
* NBS estimate.

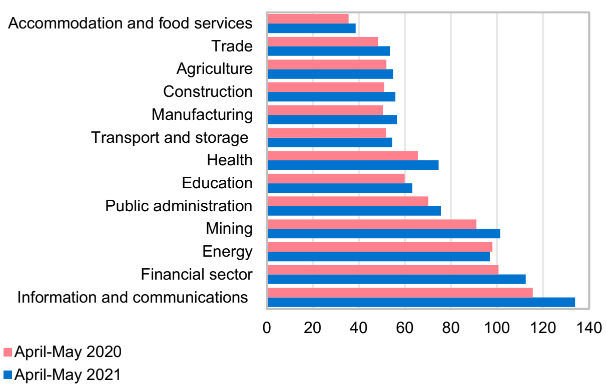
When it comes to inflation, bearing in mind its other key factors as well, **we estimate that faster investment-driven economic growth will not generate any major inflationary pressures in the medium run**, because more intensive investment activity also leads to a higher potential output, which is why the output gap would not close any faster on these grounds. In addition, inflationary pressures may also weaken as the improved quality of infrastructure could reduce the cost of operation of the corporate sector.

Chart IV.5.1 **Average nominal net wage**
(in RSD thousand)



Source: SORS.

Chart IV.5.2 **Nominal net wage by economic sector**
(in RSD thousand)



Source: SORS.

Table IV.5.1 **Formal employment and unemployment**
(y-o-y growth rates, period average)

	2020		2021	
	Q3	Q4	Q1	Q2
Total number of formally employed	2.0	2.3	2.8	3.3
Employed with legal persons	2.3	2.5	3.1	3.5
Entrepreneurs and their employees	2.7	3.2	3.6	4.6
Individual farmers	-7.6	-7.8	-8.6	-8.0
Unemployed	-0.4	-1.9	1.0	4.9
First-time job seekers	12.3	8.9	10.9	14.2
Used to be employed	-11.4	-12.0	-8.7	-4.7

Sources: SORS and NES.

5 Labour market developments

The labour market saw further favourable trends in Q2, reflected in the accelerated growth in average wages and formal employment. In addition, a drop was registered in the number of unemployed persons in May and June, halting the temporary growth from the start of the year.

Wages and labour productivity

The average nominal net wage equalled RSD 64,987 (i.e. EUR 553) in April and May, accelerating to 10.3% y-o-y (from 7.3% in Q1), primarily as a result of higher private sector wages (11.7% y-o-y). In the same period, the average wage went up in the public sector as well (8.2% y-o-y), reflecting the Government's decision to raise public sector wages by 1.5% in April (after a 3.5% increase in January).

The y-o-y increase in the average wages continued in April and May in almost all **economic sectors**, primarily in the information and communications (15.8%) and in health and social protection (13.7%). Two-digit y-o-y growth was also recorded in the majority of service sectors, which generally belong to the private sector, driven by the rising demand for labour force as the containment measures were withdrawn and the economy opened up. Higher wages in April and May compared to the same period the year before were also recorded in construction (9.4%) and the production sector – manufacturing (12.0%), mining (11.3%) and water supply (8.4%), whereas somewhat lower wages were recorded only in the energy sector (-1.0%).

The increase in average wages and formal employment drove the y-o-y rise in the **total nominal net wage bill** (14.4% in April and May), as the main source of personal consumption and domestic demand.

Overall economic productivity increased by 9.7% y-o-y in Q2 (according to our estimate), on account of accelerated economic growth that reflects the low last year's base, but also positive tendencies from the beginning of the year.

Employment

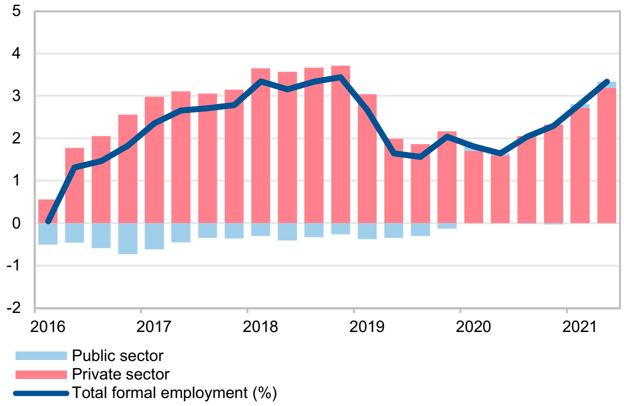
Total formal employment in Q2 rose by around 73 thousand from a year ago, accelerating to 3.3% y-o-y (from 2.8% in Q1). According to SORS data obtained from the Central Registry of Compulsory Social Insurance, such a y-o-y trend in formal employment in Q2 was largely driven by further employment with legal entities (by around 61 thousand on average) and a higher number of private entrepreneurs and their employees (by around 17 thousand on average), while the number of individual farmers dropped by around 5 thousand on average.

The number of formally employed people in the **private sector** in Q2 was around 1.67 mn people on average, which is the highest quarterly figure in the past six years. Compared to the same period last year, private sector employment in Q2 rose by around 70 thousand employees on average, of which **over a half of the new recruits were recorded in manufacturing and wholesale and retail trade**. At the same time, employment rose in other services as well – information and communications (around 9 thousand), professional, scientific, innovation and technical activities (around 8 thousand), administrative and support services (around 5 thousand). Stronger consumer demand due to the relaxation of containment measures and opening of the economy led to job creation in transport and storage as well, and accommodation and food services (by around 4 thousand aggregately). Owing to more flexible control of recruitment by public fund beneficiaries, Q2 saw an increase in formal **public sector** employment by around 3 thousand y-o-y, driven by further employment in health and education sectors, while employment in public administration declined.

According to the National Employment Service, total **registered unemployment reached 540,739 persons in June**, with its y-o-y growth (2.8% in June) considerably moderated relative to earlier months.

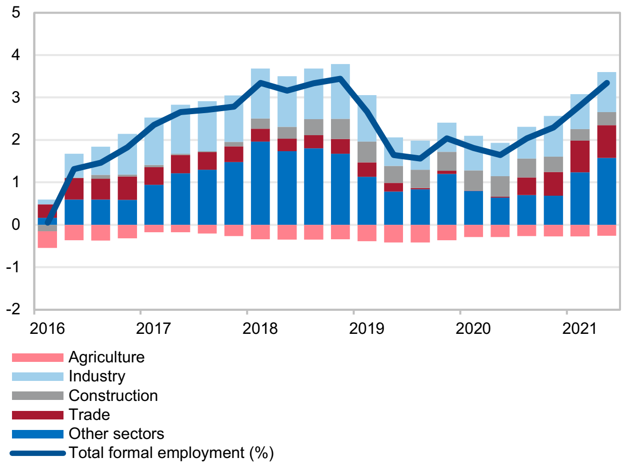
According to the revised **Labour Force Survey**,[14] which, in compliance with the EU regulations, has been methodologically changed for members of the European Statistical System and applied since the start of the year, the employment rate was at 46.3% in Q1 2021, down by 1.3 pp from Q4 2020, primarily due to scaled-down seasonal activity in agriculture and construction. At the same time, the unemployment rate rose by 2.1 pp to 12.8% in Q1. In y-o-y terms, the employment rate dropped mildly by 0.4 pp in Q1, while the unemployment rate was up by 2.3 pp. The participation rate remained relatively high in Q1 2021 (68.5%), particularly taking into account that early this year stringent containment measures were still in place, limiting labour force mobility and business in contact-intensive activities.

Chart IV.5.3 **Structure of y-o-y growth in total formal employment**
(in pp, period average)



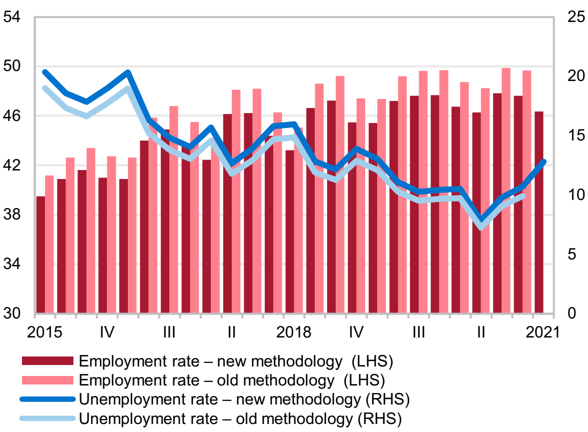
Sources: SORS and NBS calculation.

Chart IV.5.4 **Contribution to y-o-y growth in total formal employment by economic sector**
(in pp, period average)



Sources: SORS and NBS calculation.

Chart IV.5.5 **Labour market indicators according to the Labour Force Survey**
(in %)



Source: SORS.

[14] According to the new methodology implemented by the SORS since January 2021, data on employment and unemployment rates from the Labour Force Survey have been revised for the period Q1 2015 - Q4 2020. For more information see Text box 3, p. 38.

Text box 3: Impact of new Labour Force Survey methodology on labour market indicators

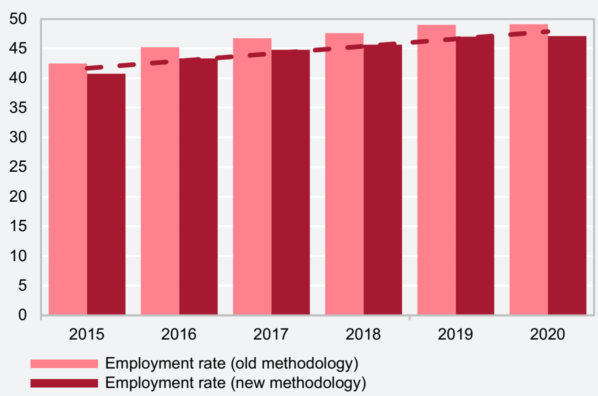
To follow the structure and trends in the domestic labour market, we rely on the registered employment survey carried out by the SORS by cross-referencing data from the Central Register of Compulsory Social Insurance and the Statistical Business Register. Data on registered unemployment are obtained from the records of the National Employment Service. In addition to data from the formal labour market, through the Labour Force Survey[1], data from the informal labour market are collected and published, completing the picture of the main indicators of employment, unemployment and (in)activity.

Under new EU regulations in force as of January 2021, all EU member states must apply modernised concepts in their labour force surveys in order to more precisely follow trends in the labour market, whose dynamics and structure are subject to frequent changes. As a member of the European Statistical System, **the SORS has been implementing the Labour Force Survey under the new methodology since 2021**. The methodological changes relate primarily to determining the status of an employed person, including the coverage of key reference populations – the employed, unemployed and inactive persons. Inactive persons are now observed as people outside the labour force. The changes reflect on the key labour market indicators – the employment and unemployment rates, revised, for the time being as of 2015. The main change relates to people engaged in the production of agricultural goods and provision of services exclusively for self-consumption (not intended for the market) who are no longer classified as informally employed. No longer classified as employed are also the persons on leave for three months or more for different reasons (care for children or incapacitated adults, strike, personal reasons, job-unrelated training etc.).

Starting from 2021, the survey is based on a new, standardised questionnaire, with the aim to improve the quality of gathered data and their international comparability. All questions determining the status and characteristics of individuals in the labour market have been redefined, in order to cover **small jobs** in a more precise way. These jobs were not covered by earlier questionnaires as the respondents did not recognise them as concrete jobs. They include: work via digital platforms, contracting transportation services via web applications, use of translation services, taking care of children, elderly and incapacitated persons, pets etc. – these jobs dominantly belong to informal sectors. Owing to this methodological change, the group of employed persons now includes a specific number of self-employed persons, active on the labour force supply side. A more realistic insight into the number of informally employed persons is thus obtained.

To **estimate the effects of the new methodology** on key statistical indicators and create a series of data comparable with those published as of 2021, in 2020 the SORS carried out a test and regular survey. The results of the test survey show that, compared to the old methodology, the total number of employed persons in Q4 2020 is lower by around 119 thousand – they are mainly classified as people outside the labour force (around 105 thousand) and, in a smaller number, as unemployed persons (around 14 thousand). Close to nine thousand fewer employed persons are recorded in agriculture and construction in Q4 2020. The **sharpest drop in employed persons was recorded in the activities of households as employers** (by almost 114 thousand), dominantly in the area of the production of goods and provision of services for self-consumption, which was most affected by the methodological changes. The new methodology brought no **significant changes in employment levels in activities belonging mainly to the industry and services sectors**.

Chart O.3.1 **Employment rate dynamics under the new and old methodology of the Labour Force Survey**
(in %, period average)



Source: SORS.

[1] Since 2015, surveys have been carried out on a pre-defined annual sample of households, relying on the 2011 population census; data are gathered via telephone and face-to-face, computer surveys.

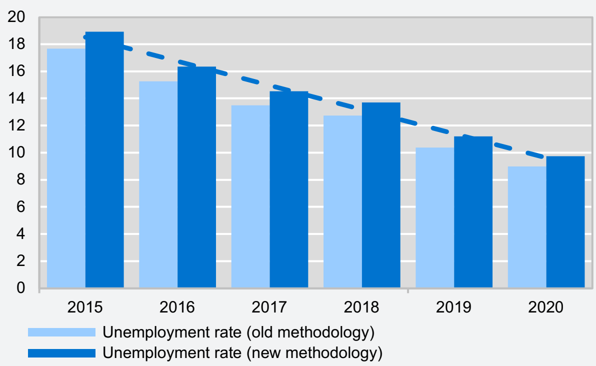
By age group, in Q4 2020 employment contracted the most among persons aged 60 and above, i.e. around 70 thousand persons are classified as people outside the labour force (under the new methodology). The smallest decline in employment was recorded among young persons aged 15–29 (around four thousand).

On account of excluding people engaged in the production of agricultural goods and provision of services exclusively for self-consumption, the employment rate from Q1 2015 to Q4 2020 was adjusted down by around 2 pp on average. Still, the **employment rate maintained an upward trend throughout the period observed.** In 2020, it measured 47.1% on average, 6.4 pp more than the 2015 average (Chart O.3.1). On the same grounds, the **informal employment rate fell to 13.0% in Q4 2020**.

The modified concept of employment also entailed an adjustment of the **unemployment rate**, which, under the new methodology, was revised up by around 1.0 pp on average for the period from Q1 2015 to Q4 2020. The **unemployment rate remained on a downward trajectory** – from 18.9% on average in 2015 to 9.7% in 2020 (Chart O.3.2).

Changes in the statistical coverage of employed and unemployed persons also reflect on the number of active, working-age population (aged 15–64) that declined by around 53 thousand in Q4 2020 compared to the old methodology. Under the new methodology, in **Q4 2020 the participation rate** was revised down by 1.2 pp to 68.1%.

Chart O.3.2 **Unemployment rate dynamics under the new and old methodology of the Labour Force Survey**
(in %, period average)



Source: SORS.

In addition to capturing the main indicators and the increasingly frequent more flexible forms of employment**, the revised Labour Force Survey can serve in future for the analysis of a number of specificities in the labour market**, such as: determining obstacles to labour market participation and the most efficient job seeking methods, more precise measuring of leave and reasons for leave, a detailed overview of the business structure of self-employed persons, identifying second generation immigrants and their status in the labour market etc. This would ensure a higher quality and more reliable estimate of the labour market state and structure, particularly amid unpredictable shocks, such as the current pandemic.

6 International environment

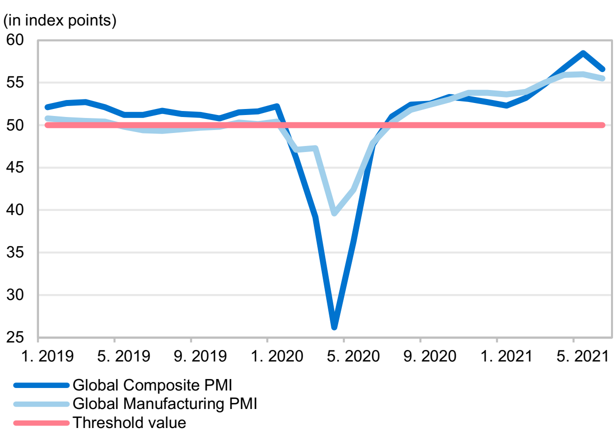
The global economic recovery is accelerating against the backdrop of more intensive vaccine rollout during Q2 and the gradual opening of economies. However, the recovery still remains uneven and concentrated in large economies (notably the USA and China), while some emerging and developing countries are faced with new health, as well as economic challenges amid the continued need for fiscal incentives, and also narrowed space for their implementation.

Inflation in the international environment rose during Q2, notably due to the hike in the prices of petroleum products and their extremely low base from last year. Cost-push pressures also rose based on the higher prices of other primary commodities and disruptions in production and value chains during the pandemic, which drove production prices up, though this has translated onto growth in industrial product prices excluding energy only to a small degree. This is also confirmed by the relatively stable core inflation in most countries. Leading central banks estimate that factors that drove inflation up since the start of the year are of temporary nature, hence they continued to pursue an extremely accommodative monetary policy.

Economic activity

Global economic activity was given stronger wind in the back during Q2, triggered by comprehensive fiscal stimuli in developed economies and more intensive vaccine rollout. This is confirmed by the leading global economic activity index going deeper into the expansion zone, as a result of several months of growth in industrial activity and the recovery of the service sector during Q2. Leading international institutions share the assessment that the availability of vaccines is the main line dividing global economic recovery into two blocks. On the one hand, almost all developed economies expect to see the continued normalisation of activities in the remainder of the year, which is why short-term projections for these countries have been revised up. On the other, a large number of emerging economies and developing countries was faced with vaccine shortage, accelerated spread of new virus strains, as well as partial withdrawal of economic support, which undermines the effects of the recovery achieved so far and aggravates growth prospects going forward. Though the World Bank forecast global economic growth of 5.6% in 2021 in its June Global Economic Prospects, which is the fastest pace of post-crisis recovery in the last eight decades, it was estimated

Chart IV.6.1 **Leading PMI indices of global economic activity and manufacturing**



Sources: J.P. Morgan and Markit Group.

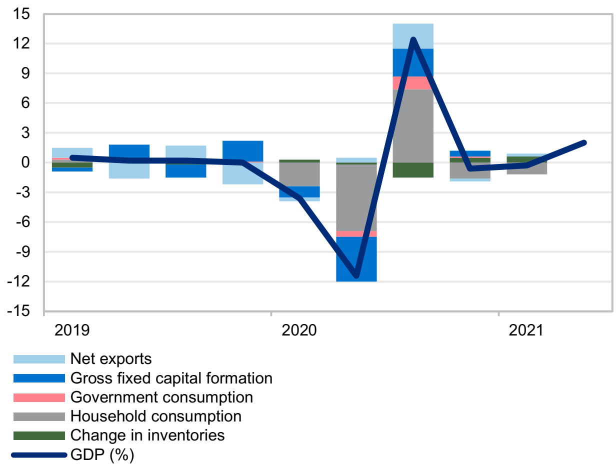
that **economic recovery is still uneven** and mainly focused in large economies, notably the USA and China. In its July World Economic Outlook Update, the IMF kept the April global growth projection of 6.0% in 2021, with risks to the projection in the short-term still skewed to the downside due to the possible deterioration of the epidemiological situation and a slowdown in the pace of vaccination, potential tightening of financial conditions as well as pronounced cost-push pressures on global inflation.

In Q1, **euro area GDP** fall was mitigated to 0.3% s-a (from -0.6% s-a in Q4 2020), primarily thanks to the smaller negative contribution of household consumption (-1.2 pp in Q1) and the rise in inventories (with an 0.6 pp contribution to GDP) due to occasional halts in global value chains. In addition, net exports rose in Q1 (with an 0.3 pp contribution to GDP), while fixed investments and government consumption stagnated. As for our key foreign trade partners, Germany and Italy, divergent movements were recorded in Q1 – Germany's GDP went down 2.1% s-a due to a contraction in private consumption, while Italy's GDP rose slightly (by 0.2% s-a) on the back of rising inventories.

In June the **ECB** estimated that **euro area economic activity in Q2 recovered significantly**, in conditions of more favourable epidemiological situation and mass vaccination campaigns. According to Eurostat's preliminary data, euro area recorded GDP growth of 2.0% s-a in Q2, which was also indicated by the dynamics of the leading Economic Sentiment Indicator (ESI)[15] for euro area – in June it reached a record-level in two decades (117.9 points), and at the same time, the Eurozone PMI composite[16] touched its maximum in 15 years (59.5 points). Despite a global shortage of input, industrial production and export remain the backbone of the euro area's economic recovery, with the revival of services, primarily in catering and tourism. As containment measures are being loosened further and economies are beginning to open, the ECB expects the euro area's economic growth to continue during H2, which at the level of 2021 was estimated at 4.6% in June (compared to 4.0% in March), with short-term economic prospects still depending on the course of the pandemic and adequacy of the response by European countries.

Chart IV.6.2 **Contributions to s-a GDP growth rate of the euro area**

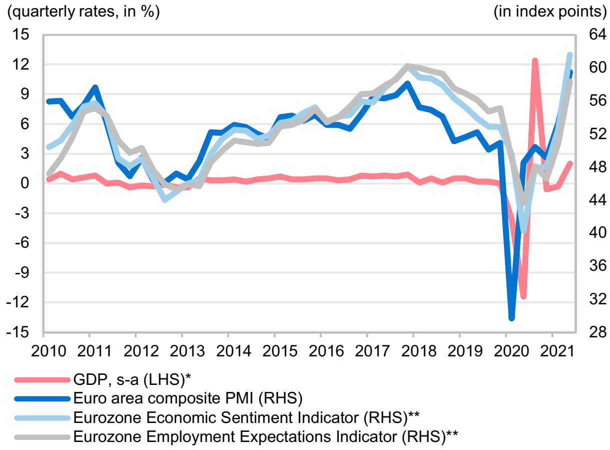
(in pp)



Source: Eurostat.

Chart IV.6.3 **Movements in GDP and economic activity and employment indicators of the euro area**

(quarterly rates, in %) (in index points)



Sources: Eurostat, Markit Group and European Commission.

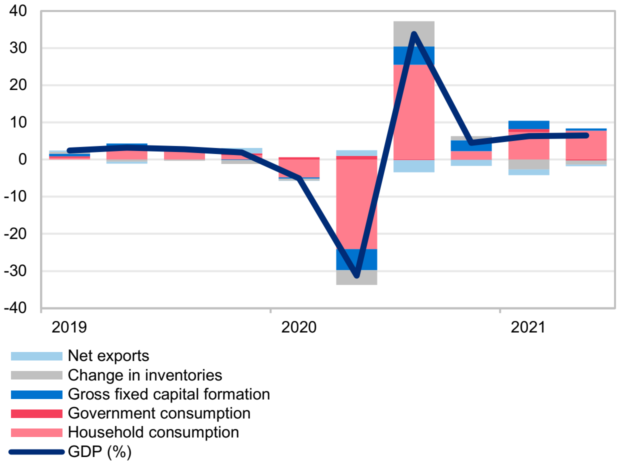
* Eurostat's preliminary flash estimate for Q2 2021.

** ESI and EEI are standardised relative to PMI.

[15] The value of the ESI above 100 points indicates improvement, and below 100 worsening of economic expectations.

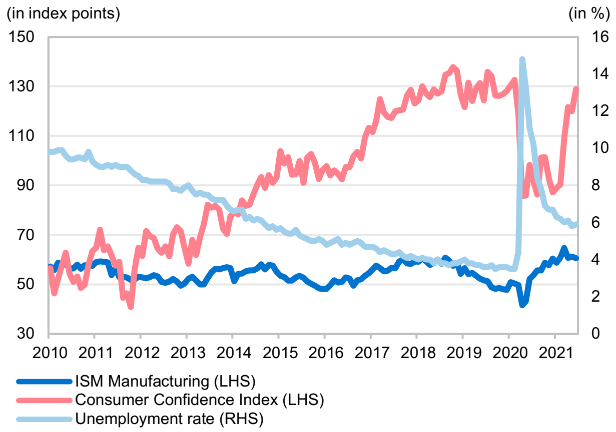
[16] The value of Eurozone PMI composite above 50 points indicates expansion, and below 50 a decline in economic activity.

Chart IV.6.4 **Contributions to the annual US GDP growth rate**
(quarterly, in pp)



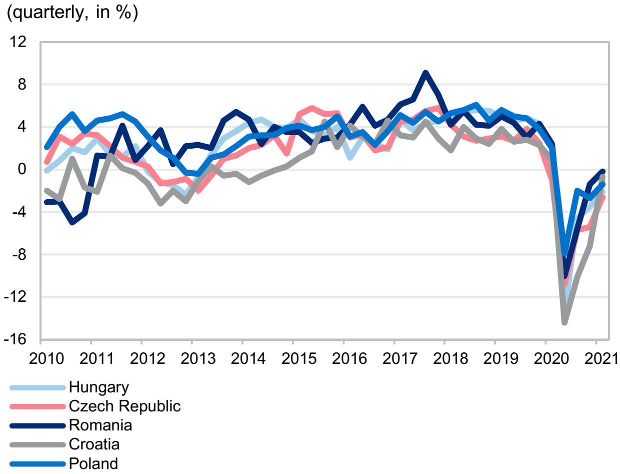
Source: U.S. Bureau of Economic Analysis.

Chart IV.6.5 **Leading economic indicators and unemployment rate in the USA**



Sources: Institute for Supply Management,Conference Board and U.S. Bureau of Labor Statistics.

Chart IV.6.6 **Y-o-y GDP growth rates in CESEE countries**
(quarterly, in %)



Source: Eurostat.

The positive effects of government support contributed to the continuation of favourable movements in the **euro area labour market**[17] during Q2 as well, hence the rate of overall unemployment was trimmed to 7.7% in June (from 8.1% in March), thus coming close to the pre-crisis level from February 2020 (7.4%). This was also indicated by the dynamics of the leading Employment Expectations Indicator (EEI)[18] for the euro area, which in June reached its highest level (111.7 points) since end-2018.

The US economy accelerated growth in Q1 to 1.5% s-a, i.e. to 6.3% annualized, driven by the rise in private and government consumption, as well as investments in fixed assets (with a 10.5 pp aggregate contribution to GDP), while inventories and net exports decreased (with a 4.2 pp negative aggregate contribution to GDP). According to the preliminary assessment of the US Bureau of Economic Analysis, US GDP accelerated its growth in Q2 to 6.5% annualised on the back of the continued loosening of physical distancing measures and more favourable financial conditions, as well as the materialisation of the effects of fiscal packages from March this year. This is also supported by the fact that the ISM Manufacturing PMI for the USA has been kept in the expansion zone for more than a year (60.6 points in June), where the Consumer Confidence Index (CCI) for the USA has also been since March (128.9 points in June). In June, the Fed came out with an assessment of US economic growth for 2021 of 7.0% (compared to 6.5% in March).

Favourable situation in the **US labour market** was recorded in Q2 as well – with a 5.9% unemployment rate in June and 9.5 mn unemployed persons, which is far below their highest level from April last year (14.8% and 23.1 mn persons respectively), though still beyond the pre-crisis level (3.5% and 5.7 mn persons in February 2020). The number of non-farm payrolls in June rose by around 850,000 persons from May, which is the highest monthly increase in ten months. Also, around 95% of new jobs in June were created in the service sector, notably in recreation and catering, under the impact of increased demand for services.

In the **Central and Southeast European region**, the y-o-y fall in GDP was greatly mitigated, from -3.3% in Q4 2020 to -1.25% in Q1 2021, dominantly due to the

[17] Since January 2021, Eurostat has been applying a new labour force methodology, with certain changes in the individual's employment status, as well as labour market indicators – employment, unemployment and participation rates.

[18] The value of the EEI above 100 points indicates managers' high employment expectations, while the opposite holds true for values below 100.

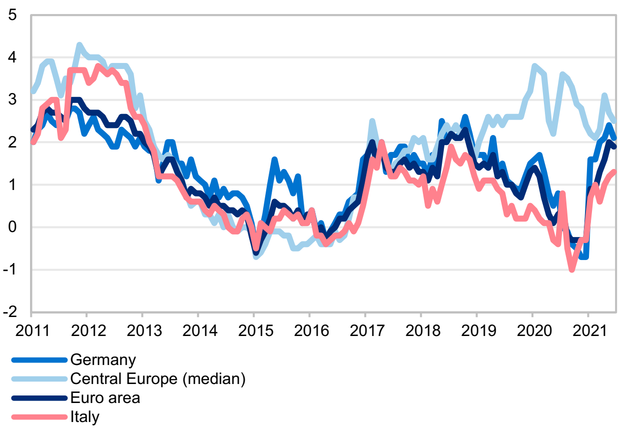
alleviated negative contribution of total household and government consumption (to -0.65 pp), as well as the increase in total investments (with an 0.35 pp contribution to GDP). In contrast, net exports declined in Q1 (with a -0.95 pp contribution to GDP). Observed by countries in the region, the highest GDP growth was recorded in Serbia (1.7%), followed by Slovenia and Slovakia (1.6% and 0.2%, respectively), while other countries registered a y-o-y GDP fall in Q1, though less than in the previous quarter. Although the vaccination process progressed in Q2 across the region, the Consensus Economics analysts estimated that economic growth prospects are still uneven across countries, given new virus strains and travel restrictions. With regard to this, several countries in the region postponed the withdrawal of fiscal incentives. Growth should be further supported by access to the Next Generation EU funds, the withdrawal of which is connected with progress in the reform processes.

According to the preliminary estimate of the National Bureau of Statistics of China, after a huge y-o-y surge in Q1 (18.3%), the **Chinese economy** recorded y-o-y growth of 7.9% in Q2 on the grounds of stable production growth and a slower rise in service activities. The Bank of Russia estimated that the **Russian economy** returned to the pre-crisis level in Q2, thanks to the recovery of global trade and higher prices of primary commodities, of which Russia is a net exporter.

Inflation movements

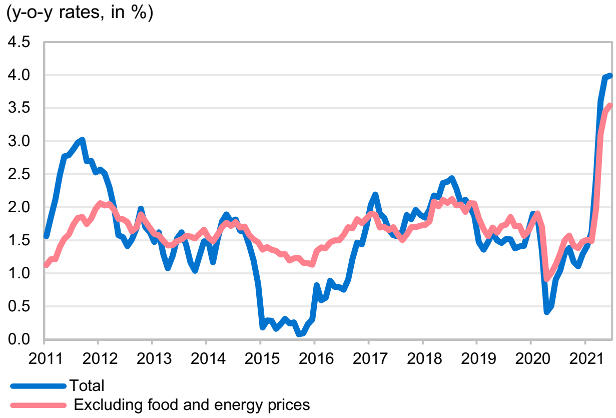
Amid the rising prices of energy and their extremely low base from last year, whose effect was most pronounced in May, y-o-y inflation in the **euro area** first rose to 1.6% in April, and then to 2.0% in May, which is its highest level since October 2018. Afterwards, it dipped slightly in June, to 1.9%, under the impact of the slower y-o-y increase in the prices of energy, as well as services. Though production prices went up amid the rising cost-push pressures due to the higher prices of primary commodities and disruptions in production and value chains during the pandemic, so far this has spilled over onto the rise in the prices of industrial products excluding energy only to a smaller extent. Bearing in mind that y-o-y **core inflation** continued to move close to 1.0%, the ECB estimated that inflation growth since the start of the year is temporary. As for Serbia's key foreign trade partners, **Germany's** y-o-y inflation, measured by the change in HICP, after recording 2.4% in May, edged down to 2.1% in June, while **Italy's** inflation equalled 1.3% in June. Preliminary assessments suggest that inflation in the euro area picked up to 2.2% y-o-y in July under the impact of temporary factors, while core

Chart IV.6.7 **HICP for selected countries**
(y-o-y rates, in %)



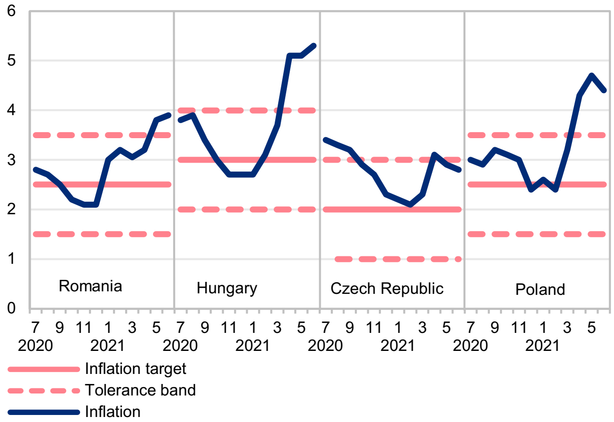
Source: Eurostat.

Chart IV.6.8 **US inflation, measured by PCEPI**
(y-o-y rates, in %)



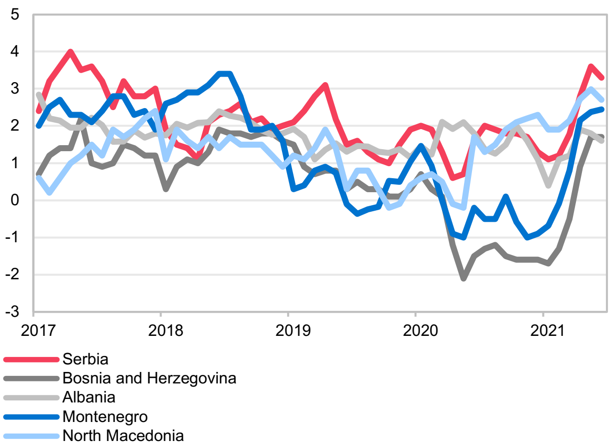
Source: Federal Reserve Bank of St. Louis.

Chart IV.6.9 **CPI movements in selected CESEE countries in the previous year**
(y-o-y rates, in %)



Sources: Central banks of selected countries.

Chart IV.6.10 **CPI movements in Western Balkans**
(y-o-y rates, in %)



Sources: Statistical offices of selected countries.

inflation slowed down to 0.7%, which is yet another proof that pressures on inflation are of temporary nature.

Demand growth in the wake of the opening of economies and comprehensive fiscal and monetary measures, as well as cost-push pressures on account of the rise in the prices of primary commodities and short-term restrictions on the supply side due to bottlenecks in production and supply chains, led to an acceleration of inflation in the **USA**. Headline y-o-y inflation, measured by the personal consumption expenditures index, rose from 2.4% in March to 4.0% in June, which is the highest level since July 2008. Inflation excluding the prices of food and energy – to which the Fed attributes particular importance – reached 3.5% y-o-y in June and thus overshot the inflation target (average 2%).

The prices of petroleum products and their extremely low last year's base led to inflation growth in all observed **Central and Southeast European** countries, therefore in many of them it overshot the inflation target in Q2. The most pronounced inflation growth was recorded in Hungary, where y-o-y inflation reached 5.3% in June, a contribution to which came from growth in core inflation and food prices, in addition to petroleum product prices. After reaching 4.7% in May, y-o-y inflation in Poland in June came down to 4.4%, primarily under the impact of a slowdown in core inflation due to the base effect. Inflation in the Czech Republic slightly overshot the target in April, only to slowdown afterwards under the impact of lower food prices, and until end-Q2 it moved at a level barely below the upper bound of the target tolerance band (2.8% y-o-y in June). Inflation growth in Romania, in addition to petroleum product prices, was also facilitated by the prices of vegetables in May and June which were unexpectedly higher than usual for the season, therefore inflation reached 3.9% y-o-y in June.

Driven by the rise in global prices of primary commodities during Q2 and their low base from last year, y-o-y inflation also rose in the **Western Balkan** countries, therefore in Montenegro and Bosnia and Herzegovina it returned to the positive territory. Inflation in Turkey continued up in Q2, reaching 17.5% in June, which is its highest level since May 2019, due to the depreciating lira and the hike in the prices of food products.

Monetary policy

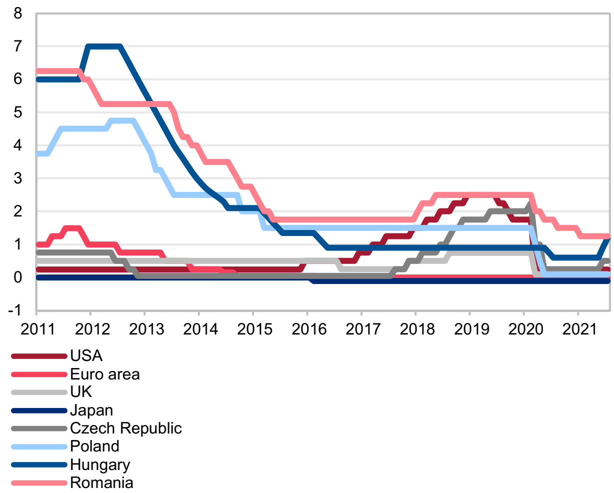
During Q2, the **ECB** did not change its key interest rates or asset purchase programmes and, as previously announced, the pace of purchases within the Pandemic

Emergency Purchase Programme (PEPP) was significantly faster than at the start of the year. In the June meeting it announced that increased purchases of securities within the programme would continue into Q3 as well. It reiterated the programme's flexibility, hence the announced amount does not need to be used entirely if favourable financing conditions can be maintained by a smaller purchase volume, though in the opposite scenario it may even be increased. At the start of July, the ECB announced the results of its monetary policy strategy review that began in January 2020. According to the new strategy, instead of the previous target of below, but close to 2%, the symmetrical inflation target is now 2% in the medium term. The ECB stated that when making monetary policy decisions, it would also take climate change into account. The next review of the adequacy of monetary policy strategy has been announced for 2025. In accordance with the new strategy, in its July meeting the ECB revised its forward guidance on interest rates. The new guidelines envisage that the rates would remain at their current or lower levels until the ECB in its projections starts expecting the inflation within the projection horizon to reach 2% and stay there until the end of the projection period, as well as until the ECB estimates that core inflation movements are consistent with inflation target achievement. Due to this, in the transition period, inflation might be moderately above the target. For the time being, the ECB announces further monetary policy support to economic growth and, accordingly, expects higher inflation in the medium-term, though it believes it will remain below 2%.

During Q2, **the Fed** also kept its monetary policy instruments unchanged. The federal funds target range was kept at its current level (0–0.25%), where it will remain until the Fed estimates that maximum employment has been achieved, with inflation reaching 2% and a tendency to slightly overshoot that level for a while. Also, it kept the current dynamics of asset purchases within the quantitative easing programme (monthly purchase of Treasury bonds in the amount of USD 80 bn and agency mortgage-backed securities of USD 40 bn), and the guideline that the purchases will not slow down until substantial further progress has been made toward the achievement of the Committee's goals. Yet, the Fed's latest projections of the federal funds rate for the first time envisage the rate going up in 2023, indicating that the majority of FOMC members is more optimistic that goals will be achieved faster than initially expected.

Amid the rising inflationary pressures, stemming not only from the higher global prices of primary commodities, but

Chart IV.6.11 **Policy rates across selected countries**
(p.a., in %)



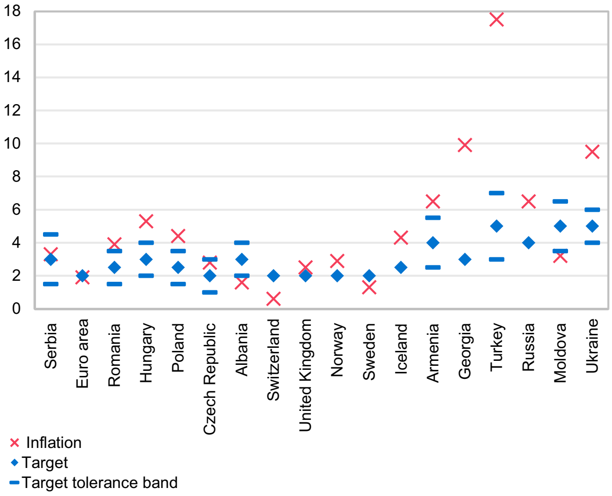
Sources: Central banks of selected countries.

Table IV.6.1 **Inflation, policy rates and inflation targets by country**
(in %)

Central bank	Inflation*	Inflation target	Policy rate**
Serbia	3.3	3.0 ± 1.5	1.00
Poland	4.4	2.5 ± 1.0	0.10
Czech Republic	2.8	2.0 ± 1.0	0.50
Hungary	5.3	3.0 ± 1.0	1.20
Romania	3.9	2.5 ± 1.0	1.25
Turkey	17.5	5.0 ± 2.0	19.00

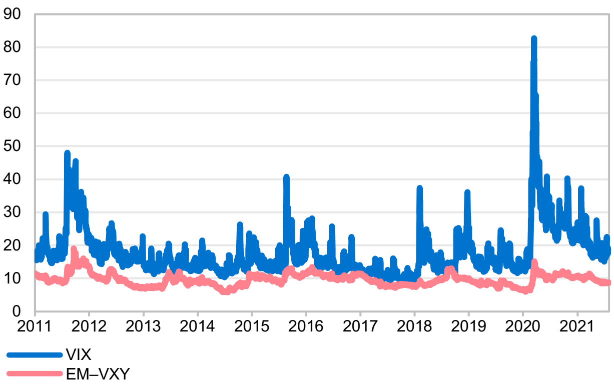
Sources: Websites of central banks.
* CPI, y-o-y rates in June.
** End-July 2021.

Chart IV.6.12 **Inflation and target by country in June 2021**
(p.a., in %)



Sources: Eurostat and websites of central banks.

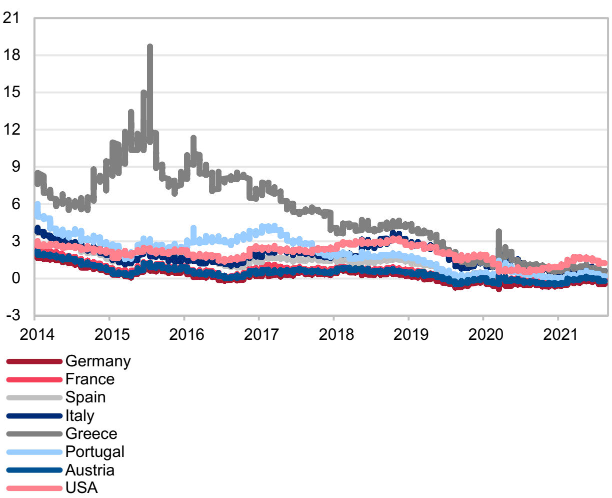
Chart IV.6.13 **Implied volatility of the global financial market***



Source: Bloomberg.

* VIX (Chicago Board Options Exchange Market Volatility Index) measures implied volatility of the S&P 500 index; EM–VXY (J.P. Morgan emerging markets implied volatility index) measures aggregate volatility of emerging market currencies based on three-month forward options.

Chart IV.6.14 **Yields on ten-year bonds of selected countries**
(daily data, in %)



Source: Bloomberg.

from domestic factors as well, some central banks in Central and Southeast European countries responded in Q2 by raising their policy rates. In its June meeting, the central bank of the **Czech Republic** raised its policy rate for the first time since February 2020, by 25 bp to 0.50%, with officials underlining that the rate hikes will continue in H2 2021. The central bank of **Hungary** also raised its policy rate in the June meeting – by 30 bp to 0.90%, and then to 1.2% in July, stressing that it would continue with monetary policy tightening until inflation outlook is stabilised. The central bank of **Poland** kept its policy rate at 0.1%, and the **Romanian** central bank at 1.25%.

In early July, the central bank of **Turkey** raised its reserve requirement rate on FX deposits by 200 bp, and made a decision to apply higher remuneration rates on a portion of reserve requirement assets that are converted from foreign currency into the lira.

Financial and commodity markets

Investors' optimism that progress in vaccine rollout this year will lead to a robust recovery of global economic activity contributed to the fall in the implicit measure of financial market volatility (VIX) in Q2 (by 3.6 pp to 15.8%), as well as the volatility of currencies of emerging markets, measured by EM–VXY (by 2.4 pp to 8.6%). During July, with growing concerns that the spread of the delta variant might jeopardise global economic recovery, volatility in financial markets increased (18.1%), while EM-VXY did not change significantly (8.7%).

The opening of economies and loosening of containment measures reflected on a mild rise in the yields on **ten-year government securities** of the majority of developed European countries in Q2 (by around 0.1 pp on average), with yields on ten-year German bonds still remaining negative (-0.2% at end June). On the other hand, after reaching a 14-month peak in March, yields on ten-year US Treasury bonds were revised down in Q2, by 0.2 pp to 1.5%, and in July to 1.2%. In July the yields on government securities of developed European countries also declined (by around 0.2 pp), therefore French and Austrian securities also entered the negative territory.

Movements in the value of **the dollar vis-à-vis the euro** were mostly dictated by the fact that investors expected the Fed's monetary policy response to inflation movements. Thus, investors expectation that the Fed – despite rising inflationary pressures – would keep the rates unchanged for an extended period of time, with a fall in the yields on US Treasuries, reflected on the weakening of the dollar against the euro during April and May, to

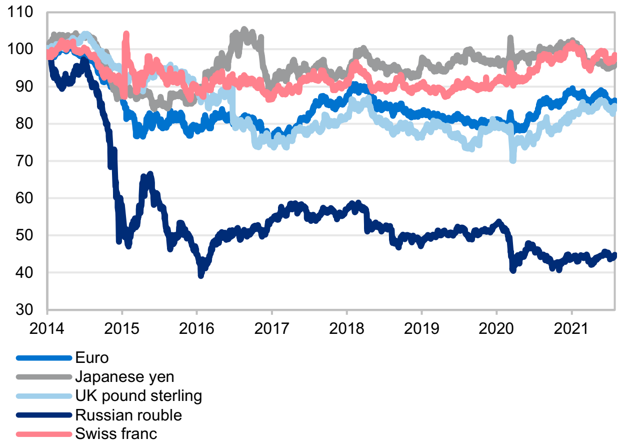
EUR/USD 1.23 at end-May. Afterwards, amid rising expectations that already in Q3 the Fed might announce the contraction in the asset purchase volume within the quantitative easing programme, the dollar started to appreciate, reaching EUR/USD 1.19 at end-Q2, though it was still weaker than at end-Q1. At the end of July, the dollar was worth the same vis-à-vis the euro as at end-Q2.

Since the start of Q2 and until the beginning of June, the **price of gold** rose, reaching USD 1,902 per ounce amid the fall in the yields on US Treasuries and the weakening of the dollar, the rise in inflation expectations, spread of new coronavirus strains, and larger gold purchases by investment funds. Thereafter, the price of gold dropped to USD 1,763 per ounce by end-June, as a result of greater optimism in terms of global economic recovery, as well as owing to hints at the possibility that the Fed might tighten its monetary policy sooner than originally expected. In July, the price of gold rose again, to USD 1,826 per ounce, on the back of concerns over the spread of the delta variant.

Oil price rose 20% in Q2 and reached USD 75.1 per barrel at end-June. This was facilitated by the falling crude oil inventories in the USA, recovery of oil demand after the opening of euro area and US economies, and a sharp spike in China's oil demand. Also, working in the same direction was the decision of OPEC+, made in the meeting in early June, to continue to adhere to production caps, as well as the projections of the International Energy Agency (IEA) that oil demand would grow faster than the supply. In early July, negotiations about increasing production within OPEC+ were discontinued due to misunderstandings between the United Arab Emirates and Saudi Arabia, though at the end of the month an agreement was nevertheless reached to gradually step up oil production every month, starting in August, and until last year's agreed cap is made up for. After falling to USD 68.6 per barrel on 20 July, the oil price rose to USD 75.4 per barrel at end-July.

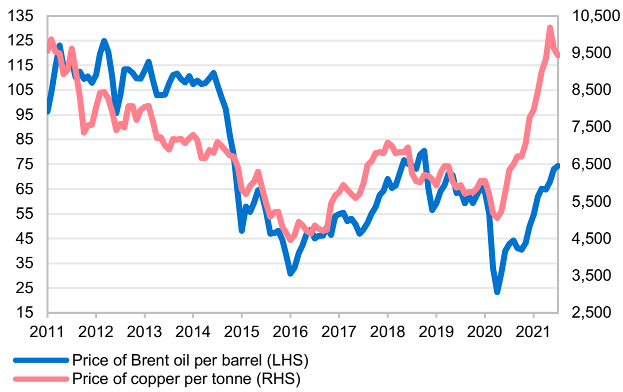
The growing industrial activity in China and developed economies and the announced infrastructure projects in the USA, moderate depreciation of the dollar, as well as disruptions in production and value chains in South America amid the worsening epidemiological situation, contributed to a further rise in the **prices of metals and minerals** which, according to the World Bank index, measured 12.7% in Q2. All components of this index recorded growth in Q2, with the price of the iron ore rising the most (27.5%), and touching its highest level on record. After a record-high level in May, the price of copper was slightly revised down in June, as was the price of zinc – after a several-year maximum achieved in May.

Chart IV.6.15 **Exchange rates of selected national currencies against the dollar***
(daily data, 31 December 2013 = 100)



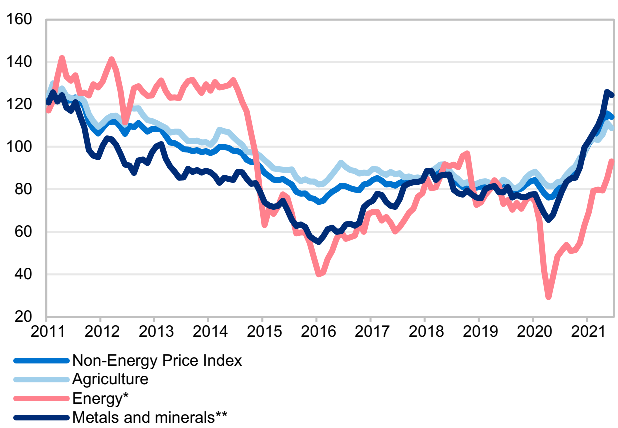
Source: IMF.
* Growth indicates appreciation.

Chart IV.6.16 **Oil and copper price movements**
(average monthly prices, in USD)



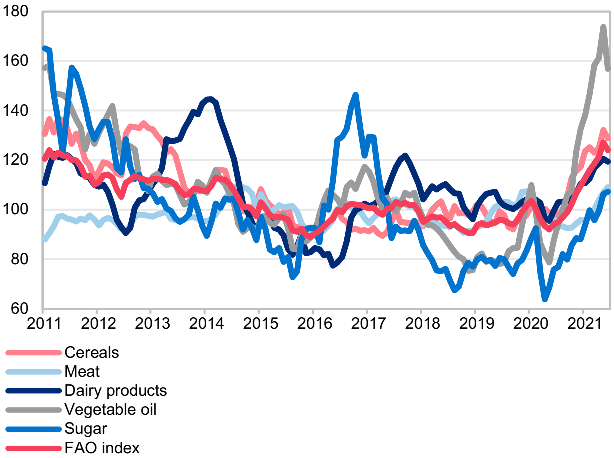
Source: Bloomberg.

Chart IV.6.17 **Primary Commodity Price Index**
(2010 = 100)



Source: World Bank.
* Crude oil, natural gas and coal.
** Copper, aluminium, iron ore, lead, nickel, zinc and tin.

Chart IV.6.18 **World Food Price Index**
(in real terms, 2014−2016 = 100)



Source: UN FAO.

Global food prices, measured by the **FAO index**, also continued up and, due to the strong growth in the prices of vegetable oils, sugar and cereals, reached their maximum in May after more than ten years. Still, June saw them edge down slightly after 12 consecutive months of growth, therefore at end-Q2, in real terms, they were 4.6% higher than at end-Q1. The prices of cereals in the global market, which are of particular importance for Serbia, rose by 4.7% in Q2, while their dip in June is attributable to corn yields in Argentina which exceeded expectations. The prices of wheat declined only slightly. Having reached a record level in May, the prices of vegetable oils (notably palm, soybean and sunflower) declined in June, and at end-Q2 they were 1.0% lower than at the end of Q1. Under the impact of unfavourable weather conditions in Brazil, the world's largest sugar exporter, the prices of sugar rose by 12% in Q2, which is their new several-year maximum. Meat prices rose 8.8% in Q2 driven by demand from Eastern Asia, which was also the reason behind the 2.1% rise in the prices of dairy products in Q2.

V Projection

Economic growth projection for this year has been revised up from 6.0% to 6.5% due to faster than anticipated economic growth since the start of the year on the back of a brisker rise in investment and exports and faster recovery in service sectors. Growth will mostly be led by domestic demand, with a key contribution expected to come from continued implementation of infrastructure projects, timely and adequate response of economic policy makers in Serbia and the resulting favourable terms of financing and preserved production capacities and jobs. In addition, higher export supply, together with a normalisation of global economic flows amid continued vaccination and the expected rebound in external demand, will lead to double-digit export growth and an improvement in the foreign trade deficit. In our judgement, the same factors, coupled with the expected further acceleration of implementation of new planned infrastructure projects, will contribute to a more favourable medium-term growth outlook. At this point, we therefore expect economic growth to move between 4% and 5% p.a. in the coming years, instead of 4% as we previously anticipated. The risks to the projection remain associated with the global course of the pandemic and its impact on movements in the commodity and financial markets. Overall, they are judged to be symmetric, with risks associated with international factors slightly skewed to the downside, and those associated with domestic factors mildly tilted to the upside.

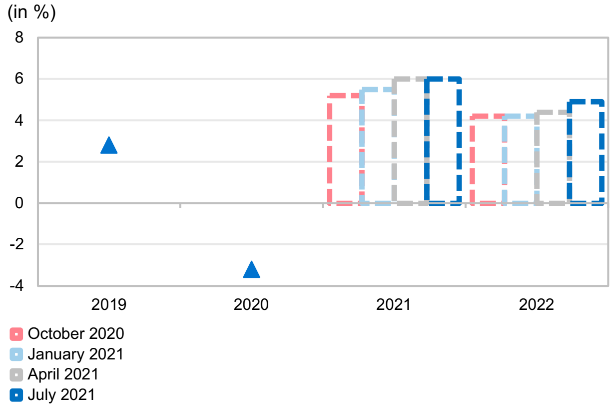
Under the central August projection, y-o-y inflation will move within the upper part of the target tolerance band (3±1.5%) in the second half of this and the first quarter of next year. Such inflation movements will result from elevated global prices of oil and primary agricultural commodities, which to some degree, through cost-push pressures, spilled over to higher prices of petroleum products and food at home, together with the base effect for vegetable prices. As the effect of the above transitory factors wanes, inflation is expected to slow first in Q2 2022 and then move within the lower part of the target tolerance band until the end of the projection horizon. Core inflation, which is particularly influenced by monetary policy measures, will remain relatively stable over the projection horizon, and its mild growth is not expected until the end of the projection horizon, as domestic demand growth picks up further. Higher than expected growth in primary commodity prices in the past months is the key reason why the new inflation projection is higher in the short term than the previous projection we published in May. Uncertainties surrounding the inflation projection continue to stem from the international environment, and relate primarily to the speed of global economic recovery, particularly in the euro area, movement in global prices of primary commodities, bottlenecks in global supply chains and capital flows to emerging economies. In part, the risks to the projection are also associated with the domestic market – new agricultural season, pace of recovery of demand and movement in administered prices. Overall, the risks to the inflation projection are judged to be symmetric.

GDP projection

Though both global and domestic growth outlooks continue to hinge mainly on the course of the pandemic, it is encouraging that the global economic upswing is already under way and that projections are being revised up. The epidemiological and economic situation improved much both globally and at home in Q2, thanks to progress in vaccination and large-scale fiscal and monetary stimuli in many countries. Containment measures were relaxed and many economies opened up.

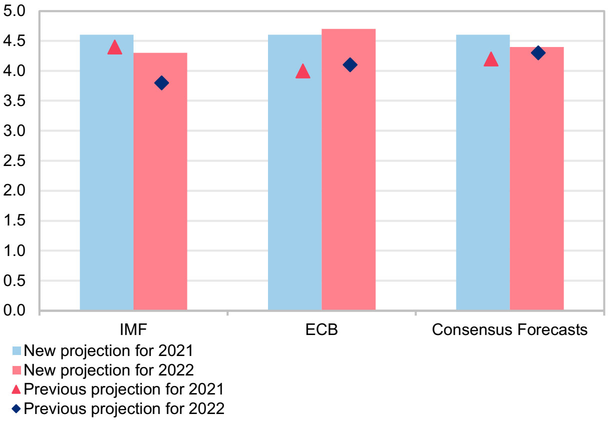
Since its previous report, the IMF did not revise its global growth forecast for 2021 (6.0%), but the gap between the expected speed of recovery in advanced and emerging economies widened due to unequal access to vaccines and an uneven pace of vaccination. US and UK growth in

Chart V.0.1 **Global real economic growth outturn and IMF projections for 2021 and 2022**
(in %)



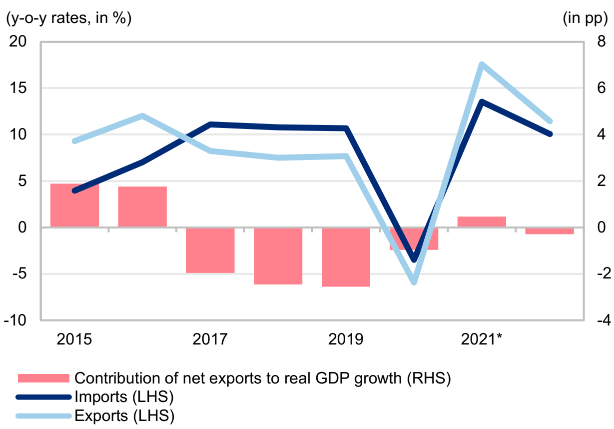
Sources: IMF WEO and WEO Updates.

Chart V.0.2 **Revisions of euro area GDP growth projections for 2021 and 2022**
(in %)



Sources: IMF, ECB and Consensus Forecasts.

Chart V.0.3 **Real export and import growth**



Sources: SORS and NBS.
* NBS estimate for 2021 and 2022.

Table V.0.1 **Revision of IMF forecast of real GDP growth for 2021 and 2022**
(in %)

	2021		2022	
	Previous projection	New projection	Previous projection	New projection
World	6.0	6.0	4.4	4.9
Euro area	4.4	4.6	3.8	4.3
Germany	3.6	3.6	3.4	4.1
Italy	4.2	4.9	3.6	4.2
USA	6.4	7.0	3.5	4.9
Russia	3.8	4.4	3.8	3.1
China	8.4	8.1	5.6	5.7

Sources: IMF WEO (April 2021) and IMF WEO (July 2021).

particular were revised up for this year (by 0.6 pp and 1.7 pp, respectively, to 7% each) amid greater vaccine availability and effectiveness, as was euro area growth. Emerging economies' growth forecasts were, conversely, revised down – China's (by 0.3 pp to 8.1%) and India's especially (by 3.0 pp to 9.5%) due to a worsening of the epidemiological situation in Q2. Global growth forecast for 2022 was revised up by 0.5 pp to 4.9% amid expectations of a general improvement in the health situation and the anticipated voting on further fiscal support in the USA in H2 this year.

In the period since our previous *Report*, international financial institutions revised up their projections of 2021 **growth in the euro area and some of its largest economies**. Consensus Forecasts' latest July projection revised 2021 euro area growth up by 0.4 pp (to 4.6%) relative to April, while growth for 2022 was revised up by 0.1 pp (to 4.4%), which are the assumptions we used in our current projection. Growth will be led by domestic demand, i.e. the expected rebound in investment and consumption buttressed by progress in vaccination, ECB's monetary accommodation, fiscal relief packages in most euro area economies and the recovery of external demand, notably that of China and the USA. In their latest projections, both the ECB and the IMF expect growth to measure 4.6% this year. As for Germany, our largest individual foreign trade partner, Consensus Forecasts revised up its economic growth projection for 2021 by 0.1 pp (to 3.4%), while the IMF projects its growth at 3.6%, the same as in April. Italy's growth projection was revised up the most relative to April (4.9% relative to 4.2% according to the IMF), as Italy is expected to be the largest beneficiary under the Next Generation EU Fund programme.

Relative to our previous *Report*, Consensus Forecasts revised up the 2021 GDP growth rates for the majority of **Central and South East European countries**, Serbia's important trade partners. Going forward, the speed of recovery of this region will depend primarily on the pace of vaccination and its effectiveness in suppressing new virus strains, the pace of recovery of the euro area, which is the most important trade partner of this group of countries, and the available scope for further fiscal and monetary stimuli.

The rise in external demand, coupled with the effects of higher supply on account of earlier investment in export sectors, ought to support **two-digit growth in Serbia's export of goods and services this year**. At the same time, though growth in imports, notably of equipment and intermediate goods, picked up evident speed in Q2 as the investment cycle continued, export of goods and services has been rising at a faster pace since the start of the year. For this reason, our current projection anticipates a higher volume of foreign trade and a **positive contribution of net exports this year** (0.5 pp), by contrast to the May projection when we estimated the contribution of net exports to be slightly negative. In the coming years, as the investment cycle gathers anticipated momentum on account of planned significant infrastructure projects, we expect the contribution of net exports to be slightly negative. By extension, we expect the **share of the current account deficit this year to be smaller than expected, measuring around 4% of GDP**, with a realistic possibility to be even lower. In the medium term this share is projected to measure between 4% and 5% of GDP. The rise in export capacities and the anticipated global economic recovery, **together with a current account deficit fully covered by net FDI inflows** as in the past six years, will continue to work towards improving the external position.

Domestic demand is expected to provide a significant positive contribution to GDP growth this year and in the medium term. It will recover at an accelerated pace, helped by:

– improvement of the epidemiological situation in the past months thanks to successful vaccination;

– ensured stable terms of financing and preserved investment and consumer confidence thanks to monetary and fiscal stimuli which continued this year as well;

– continuation of the investment cycle after its temporary slowdown during the pandemic; it is expected to accelerate further next year, primarily on account of announced projects involving railway, road, and utility infrastructure construction;

– employment and wage increase in most sectors and a preserved labour market in the conditions of the pandemic.

The domestic service sector recovered in Q2 as the epidemiological situation improved notably and containment measures were relaxed. Although our projection assumes another spike in the number of coronavirus infections during autumn both at home and globally, this wave is expected to be much weaker thanks to successful vaccination, causing no major disruptions to the domestic economy.

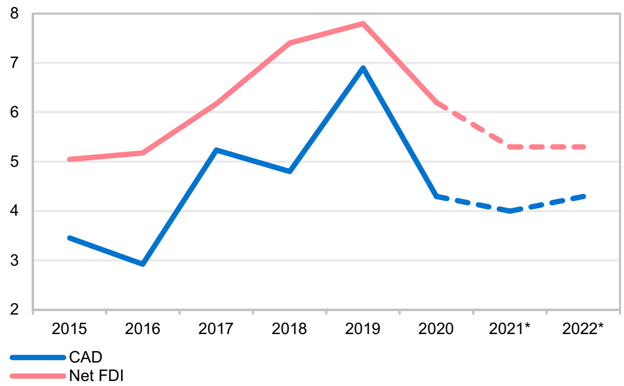
Fiscal support to economic recovery from the crisis continued this year as well. Q2 saw the start of the implementation of the third package of economic measures worth around 4.5% of GDP, tailored so as to provide maximum assistance to hardest affected sectors

Table V.0.2 **Economic growth estimate by country**
(real growth, in %)

	April 2021		July 2021	
	2021	2022	2021	2022
Poland	4.0	4.9	4.8	5.1
Czech Republic	3.3	4.6	3.7	4.7
Hungary	4.5	5.1	6.3	5.0
Romania	5.0	4.7	6.9	4.6
Slovakia	4.2	4.5	4.3	4.8
Slovenia	4.4	4.4	4.7	4.5
Croatia	4.9	4.8	6.6	4.5
Bulgaria	3.3	3.8	4.1	3.8
Albania	5.1	4.8	5.1	4.1
Bosnia and Herzegovina	3.0	4.0	3.3	4.0
North Macedonia	4.0	3.9	3.8	3.8

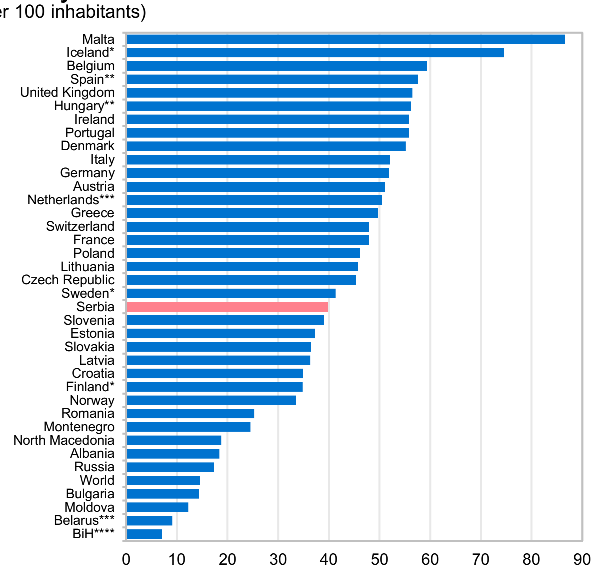
Source: Consensus Forecasts.

Chart V.0.4 **Current account deficit and net FDI inflow**
(in % of GDP)



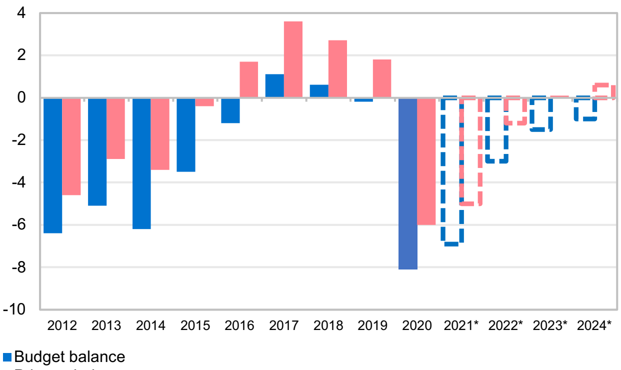
Source: NBS.
* NBS projection.

Chart V.0.5 **Number of fully vaccinated persons – 31 July 2021**
(per 100 inhabitants)



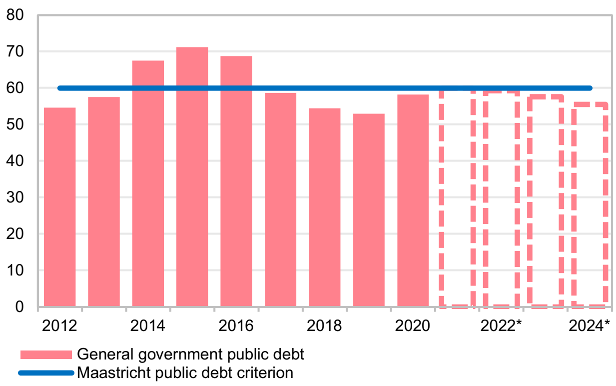
Source: Our World In Data.
* 30 July 2021.
** 29 July 2021.
*** 25 July 2021.
**** 21 July 2021.

Chart V.0.6 **General government fiscal and primary budget balance**
(in % of GDP)



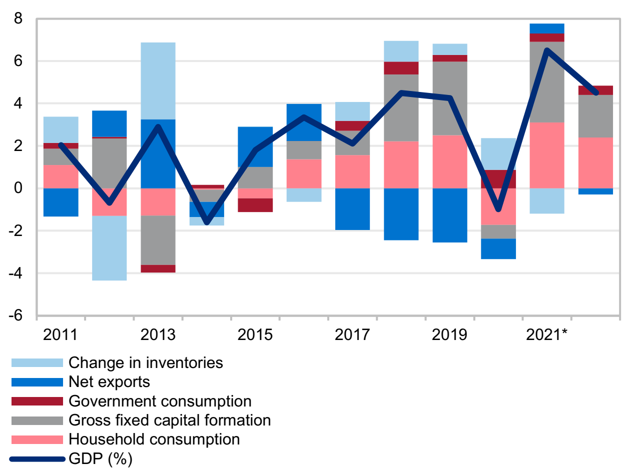
Source: Ministry of Finance.
* Projection from the Fiscal Strategy for 2022 with Projections for 2023 and 2024.

Chart V.0.7 **General government public debt**
(in % of GDP)



Source: Ministry of Finance.
* Projection from the Fiscal Strategy for 2022 with Projections for 2023 and 2024.

Chart V.0.8 **Contributions to real GDP growth**
(in pp)



Sources: SORS and NBS.
* NBS estimate for 2021 and 2022.

and households. Approval of loans under the Guarantee Scheme will be extended until mid-2022. As a result, the disposable income of corporates and households is expected to go up, as is investment and personal consumption. According to the Fiscal Strategy for 2022 with Projections for 2023 and 2024, the share of capital expenditure is also planned to increase to around 7.2% of GDP this year and remain at a similar level in the coming years, supporting a rise in investment and potential output. **Fiscal trends in the first six months this year are more favourable than expected (general government deficit measured 1.4% of GDP in H1),** mostly as revenues outstripped expectations thanks to a faster economic activity rebound. This created space for further fiscal support without threatening the sustainability of public finances. Central government public debt measured 55% of GDP at end-June and, at the annual level, it is not expected to exceed the Maastricht criterion of 60% (with a planned general government deficit of 6.9% of GDP). In the medium run, the fiscal deficit is expected to decrease gradually and turn into a primary surplus, sustaining a return of the public debt to a downward trajectory.

Our projection assumes growth in government capital expenditure this and the next year to be consistent with the Fiscal Strategy, but its share in GDP may remain high in the coming years as well. In addition, given the significant indirect effects expected from the implementation of infrastructure projects, we expect private investment to go up as well on the expenditure side and activity in industry and transport to increase on the production side. On this account, we also anticipate that the relatively high FDI inflow of around EUR 3 bn on average per year will be maintained, supporting a rise in total factor productivity and potential output.

Favourable terms of financing in the domestic market contribute to higher disposable income and, by extension, investment and consumption. Dinar loans increased as a result of past monetary policy easing of the NBS and the relaxation of banks' credit standards, as well as the approval of loans to micro enterprises and SMEs on favourable terms. The cost of borrowing in euros remained favourable as well, reflecting the ECB's monetary accommodation. Also supporting a favourable cost of borrowing is the country's lower risk premium and the fact that its credit rating is a step away from investment grade, which may even be achieved during the projection horizon.

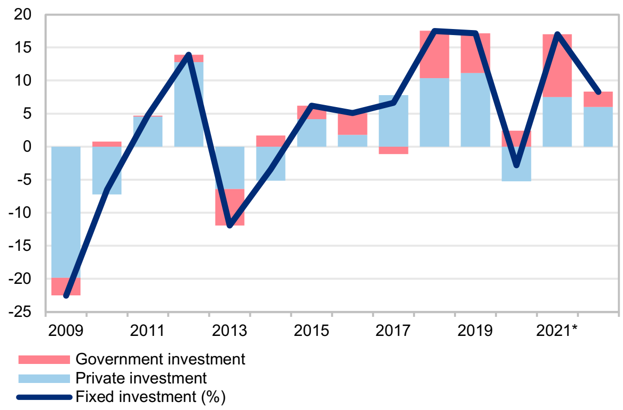
Timely measures taken by the Government and the NBS, directed in particular at preserving the **labour market,** buttressed its relative resilience to the fallout from the pandemic, as indicated by all of the most significant indicators of unemployment and activity. Though the rise in formal employment and wages slowed temporarily in Q1, it is again gathering momentum in most sectors.

In view of the above, **private consumption** is expected to contribute close to 3.0 pp to GDP growth this year. Consumption growth will be supported mostly by continued wage and employment growth, higher disposable income as a result of preserved favourable terms of taking new and repaying outstanding loans, direct fiscal stimuli and increased consumer confidence as advances are made in ending the epidemic. A similar pace of consumption growth is expected in the coming years as well, buttressed by the expected end of the pandemic and reduced propensity for precautionary savings. Though slower than last year, **government consumption** is expected to provide a positive contribution to GPD this year as well (0.4 pp), due primarily to higher outlays for healthcare (vaccines, medical workers' wages and purchases of medical supplies).

The largest positive contribution to GDP growth this year is expected to come from **fixed investment** (3.8 pp) which outstripped expectations since the start of the year, leading to an upward revision of the economic growth projection for this year to 6.5%. More than a half of this contribution will come from **private investment** whose recovery is supported by the preserved macroeconomic stability, investors' reduced risk aversion due to advances in vaccination and winding down the pandemic, maintained favourable terms of financing and global economic recovery which should lead to continued solid FDI inflows to Serbia. A positive contribution is also expected from **planned government investment projects**, particularly in transport infrastructure. This is signalled by the planned growth in government capital expenditure. In the medium term, fixed investments will make a notable contribution to economic growth given the announced large investments in infrastructure, and they are expected to approach 26% of nominal GDP in 2023.

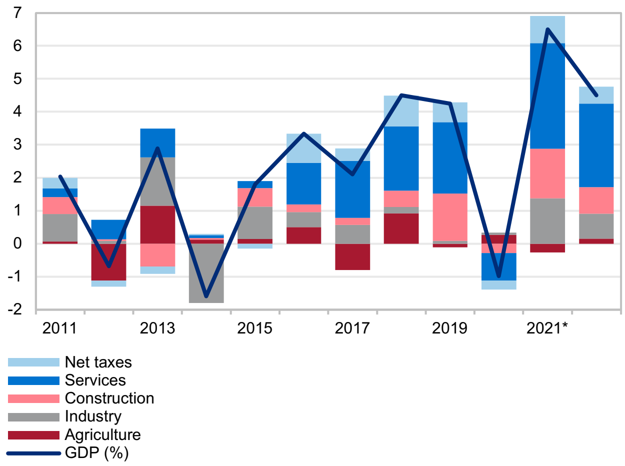
The only component of domestic demand estimated to provide a negative contribution this year are **inventories**, which have been rising for several years in a row. A negative contribution is expected to come primarily from lower inventories in agriculture, as this year's season is expected to be average after last year's excellent one, while agricultural exports in the last mercantile year were encouraged by higher global prices. Depletion of inventories is expected for finished industrial products as well.

Chart V.0.9 **Fixed investment**
(y-o-y growth, in pp)



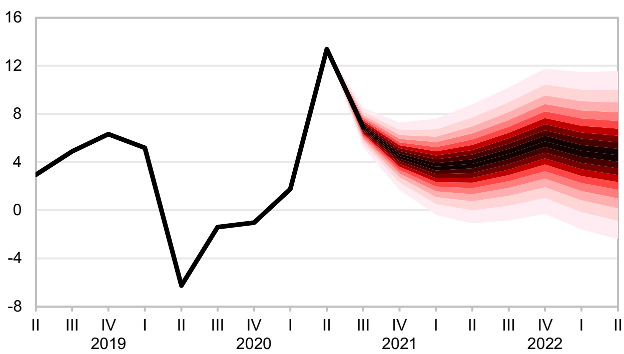
Sources: SORS and NBS calculation.
* NBS estimate for 2021 and 2022.

Chart V.0.10 **Contributions to real GDP growth, production side**
(in pp)



Sources: SORS and NBS.
* NBS estimate for 2021 and 2022.

Chart V.0.11 **GDP growth projection**
(y-o-y rates, in %)



Source: NBS.

On the **production side**, this year we expect a full recovery of activity in service sectors and continued growth in production sectors, excluding agriculture. Stepped-up growth in activity in service sectors, particularly those that were hardest hit by the pandemic, will be supported by the anticipated rise in consumption as the epidemiological situation improves, higher disposable income and living standard, and reduced propensity to save. Manufacturing industry growth will be propped up by the activation of new and expansion of existing capacities on the supply side, and by the expected acceleration of economic growth of our main foreign trade partners on the demand side. A positive contribution to GDP growth should also come from construction, given the planned further increase in government capital expenditure, most notably the current and planned projects in the area of transport infrastructure, and favourable trends in the real estate market. Assuming an average agricultural season after last year's excellent one, agriculture is expected to provide a mildly negative contribution to GDP growth this year.

On the whole, the risks to the GDP projection are judged to be symmetric.

Risks associated with the **international environment are mildly tilted to the downside**. According to international financial institutions, World Bank and the IMF, **global economic recovery** remains uneven and concentrated in advanced economies, and its outlook depends greatly on the pace of vaccination, with risks judged to be tilted to the downside, especially in the short term. A lack of vaccines in emerging and developing economies and the spread of new virus strains could lead to a worsening of the epidemiological situation, dampening the global growth outlook. Temporary breaks in global production chains and the resulting higher costs of production and distribution are also a downside risk to the global economic growth projection. It should, however, be borne in mind that the pace of vaccination is gathering speed in the euro area, and in the countries of Central and East Europe, which are also our important trade partners, and that their economic growth is mostly expected to be higher than previously anticipated. In part, this is also the result of large-scale packages of economic measures and the fact that many companies adapted to changed working conditions. Another relatively favourable circumstance for Serbia is the fact that it was primarily the production sector which recorded growth in the euro area in the past months, which helped our exports remain relatively resilient to the effects of the pandemic. Any sharper fall in economic activity in the euro area and the countries with which we have important trade ties would reflect on lower growth in Serbia's exports and, by extension, subdued output in manufacturing, while a faster recovery would have the opposite effect.

According to the projections of international financial institutions and consistent with futures, **global prices of primary commodities** are expected to stabilize in the coming period and decline gradually thereafter. As Serbia is a net importer of oil, a lower than projected oil price would spill over to higher disposable income and lower operating expenses, reflecting positively on GDP. Conversely, lower global prices of metals and cereals would have a negative impact on GDP as Serbia is a net exporter of these products. In that case, the aggregate effect on GDP would be neutral or mildly positive. On the other hand, primary commodity prices could continue up due to numerous supply-side factors, such as a slower pace of increase in oil output or reduced supply of primary agricultural commodities due to adverse climate factors. This would have the opposite effect on our GDP.

The speed of global growth and the strength and duration of inflationary pressures will also determine **movements in the international financial market, global financial conditions and, by extension, capital flows to emerging economies**. Leading central banks assess that the factors behind inflation growth since the start of the year are transitory, but if inflationary pressures turn out to be more durable in character, their monetary policies could tighten sooner than expected, as could global financial conditions. On the other hand, if global growth is slower, the Fed and the ECB would need to extend their extreme monetary accommodation going forward. In that case, liquidity in the international financial market would remain high over a longer time period, reflecting positively on capital flows to emerging economies, including Serbia.

We judge the **risks from the domestic environment** to be mildly skewed to the upside, mostly as FDI inflows might exceed expectations. Namely, our current projection assumes FDI inflows at broadly the same level as in 2020, which is a quite conservative estimate given Serbia's favourable macroeconomic outlook and the expected implementation of major infrastructure projects, as well as higher than expected FDI inflows in prior years.

In addition, **fiscal trends** since the start of the year were more favourable than expected as revenues outstripped expectations, creating further scope for supporting corporates and households without threatening the sustainability of public finances. Additional fiscal support to corporates and households, along with a preserved labour market, would lead to higher disposable income and, by extension, higher investment and consumption.

Table V.0.3 **Key risks to the GDP projection**

Risk	Possible channels of influence on GDP in Serbia	Estimate of the risk effect relative to the baseline scenario
International environment		
Uncertainty regarding the course of the pandemic and the effect on global economic growth	Lack of vaccines in emerging and developing economies and the spread of new virus strains could lead to a worsening of the epidemiological situation, dampening the outlook for global growth. Faster vaccination would work in the opposite direction. Temporary halts in global supply chains and the resulting higher costs of production and distribution are also a downside risk to the global growth projection. A slower global recovery would lead to a slackening of external demand, lower Serbian exports and slower growth in manufacturing, and vice versa.	↓
Pace of euro area's recovery from the pandemic	Slower euro area growth would lead to lower Serbian exports and reduced investment which, on the production side, would lead to slower growth in manufacturing. Conversely, if the euro area recovers faster, exports and investment in Serbia would go up.	↕
Capital flows, relations of main currencies in the international financial market, monetary policies of leading central banks	Heightened/diminished uncertainty in the international financial market and the rise/fall in risk aversion would decrease/increase the inflow of investment and raise/lower the costs of borrowing. Accommodative monetary policy measures of leading economies help diminish risk aversion and enhance investor sentiment.	↕
Prices of primary commodities: – crude oil (Serbia is net importer) – cereals (Serbia is net exporter) – base metals (Serbia is net exporter)	A rise/fall in the price of oil would decrease/increase the disposable income and increase/decrease operating costs. A rise/fall in prices of base metals and cereals would increase/decrease exports.	↕
Domestic environment		
Higher than projected FDI inflows	Higher than projected FDI growth would contribute to faster recovery of industrial production and exports, as the bulk of FDIs is directed into manufacturing, and vice versa.	↑
Additional fiscal support	Additional fiscal support to corporates and households, together with a preserved labour market, would lead to an increase in the disposable income and, by extension, investment and consumption.	↑
Agricultural season	Higher/lower than expected growth in agricultural production contributes to a rise/fall in exports and manufacturing.	↓

Note: ↑ means a more favourable GDP outcome relative to the baseline scenario, ↓ means a less favourable outcome, and ↕ means that risks to the projection are symmetric relative to the baseline scenario.

On this account, we judge the risks to GDP growth to be tilted to the upside.

A smaller-scale downside risk is associated with **agricultural production**, due to weather conditions during the summer months and the fact that we assumed this year's agricultural season to be average after last year's above-average one. On the one hand, SORS data point to better than expected wheat yields this year and more surfaces under autumn cultures, other than sunflower, than last year. On the other hand, reduced land humidity resulting from a long drought in the past months could lead to lower than assumed yields of corn and industrial plants. This would reflect on subdued exports, but the effects on exports on this account would be stronger in 2022 than in 2021.

Inflation projection

Short-term inflation projection

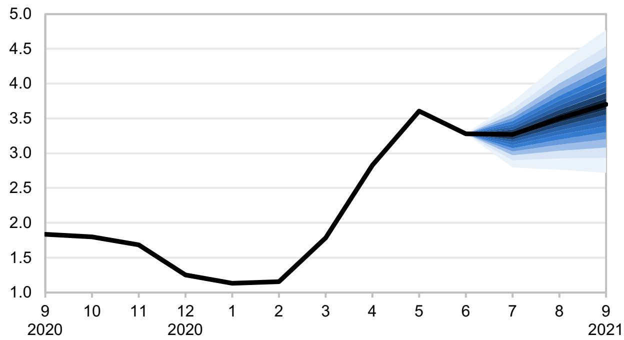
Under the central projection, y-o-y inflation will move at around 3.5% on average in Q3.

In early Q3, inflation is expected to hover around its June level and to rise moderately thereafter. This will be due primarily to a higher y-o-y contribution of fruit and industrial and food products, as well as of prices within core inflation. The contribution of petroleum product and vegetable prices is expected to go down.

We estimate that core inflation will be close to its current level in July and August (2.0%) and gather slight speed in September guided by a higher contribution of the prices of package travel arrangements. Its potential departures from the projection will to a large extent depend on the statistical coverage of the prices of package travel arrangements.

In the short term, the risks to the projection are also associated with unprocessed food prices, oil price movements and their spillover to petroleum product prices at home and, to some extent, with cost-push pressures in industrial production.

Chart V.0.12 **Short-term inflation projection**
(y-o-y rates, in %)

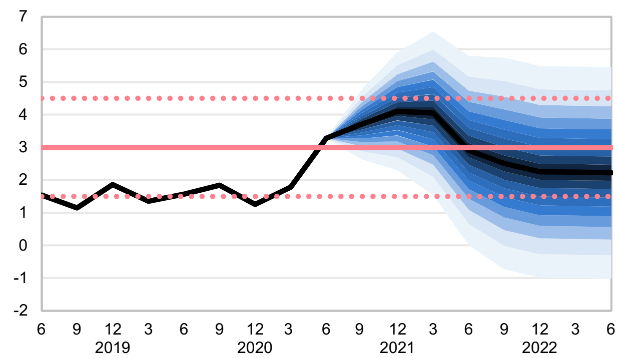


Source: NBS.

Medium-term inflation projection

Under the central August projection, we expect **y-o-y headline inflation** to remain within the bounds of the NBS's target tolerance band until the end of the projection horizon, i.e. in the next two years. Inflation will temporarily, in the second half of this and the first quarter of next year, most likely move within the upper part of the target band, and then first slow down in Q2 2022, only to settle within the lower part of the target tolerance band where it is expected to remain until the end of the projection horizon. We expect growth in y-o-y inflation to be temporary, as it will be led by elevated global prices of oil and primary agricultural commodities which to some degree spilled over to higher petroleum product and food prices at home through cost-push pressures.[19] Together with the base effect for vegetable prices,[20] this will result in y-o-y inflation most likely hovering above the target midpoint in the next three quarters. As the effect of the above transitory factors wanes, y-o-y inflation will slow and level off within the lower part of the target tolerance band.

Chart V.0.13 **Inflation projection**
(y-o-y rates, in %)



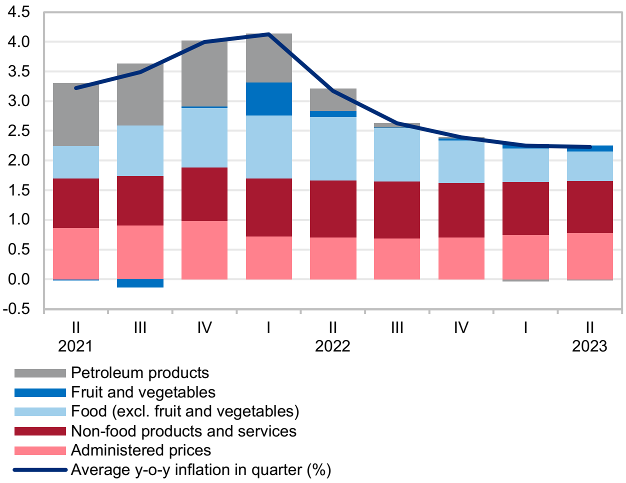
Source: NBS.

The fan chart depicts the probability of various inflation outcomes in the next eight quarters. The central projection is within the darkest central band and the probability that inflation would lie in it is 10%. Each following shade includes 10% probability, which means that outturns of inflation somewhere within the entire fan chart are expected with probability of 90%. In other words, the probability that inflation in the next eight quarters would lie somewhere outside the band in the chart is 10%.

[19] For more details, see Text box 1, p. 15.

[20] For more details, see Text box 4, p. 69.

Chart V.0.14 **Contributions to y-o-y inflation by component**
(in pp)



Source: NBS.

Table V.0.4 **Key projection assumptions**

	2021		2022		2023	
External assumptions	May	Aug	May	Aug	May	Aug
Euro area GDP growth	4.2%	4.6%	4.3%	4.4%	1.9%	2.0%
Euro area inflation (average)	1.5%	1.9%	1.2%	1.5%	1.3%	1.4%
3M EURIBOR (December)	-0.5%	-0.5%	-0.5%	-0.5%	-0.4%	-0.4%
International prices of primary agricult. commodities (Q4 to Q4)*	12.7%	21.7%	-9.0%	-10.9%	/	-6.5%
Brent oil price per barrel (December, USD)	63	71	60	66	58	63
Internal assumptions						
Administered prices (Dec. to Dec.)	5.6%	5.4%	4.0%	4.0%	4.0%	4.0%

* Composite index of soybean, wheat and corn prices.
Sources: ECB, Consensus Forecasts, Euronext, CBOT, Bloomberg and NBS.

The key reason why our new short-term inflation projection is higher than the one we published in May is a higher than expected increase in primary commodity prices in the past months.

Core inflation, which is particularly influenced by monetary policy measures, will remain relatively stable over the projection horizon. Its moderate growth is not expected until the end of the projection horizon as economic activity and employment continue up and domestic demand accelerates further. Core inflation stability in the coming period is also anticipated on account of a further increase in supply as vaccination leads to a normalisation of doing business. On the other hand, demand growth is expected to continue, spurred also by fiscal measures. Hence, we expect supply and demand to become more or less balanced going forward. Companies will try to respond to elevated demand through increased use of existing and new resources, which will have a positive effect on employment and the acceleration of domestic demand towards the end of the projection horizon.

In terms of individual components, transitory inflation growth this year will be determined mainly by elevated **petroleum product prices**. Namely, reflecting unexpectedly robust global oil price growth early this year, petroleum product prices at home are expected to rise and provide a somewhat higher positive contribution to inflation in the next three quarters. After this, the impact of petroleum product prices on inflation will weaken and wear off until the end of the projection horizon.

After extremely low food inflation early this year, higher cost-push pressures in food production are the key factor why we project **food prices (excluding fruit and vegetables)** to rise in the next three quarters and to slow thereafter. The rise in global prices of primary agricultural commodities (corn, wheat, soybean) as well as oil has pushed up raw material costs in food production in the domestic market. We estimate that the departure of these costs from their neutral level is the highest since 2013, which customarily indicates their decline in the future and an expected weakening of cost-push pressures on food prices. In the medium term, food price growth is expected to be moderate, guided mainly by a gradual rise in demand.

The contribution of fruit and vegetable prices to inflation is expected to be negative until the end of the year and turn positive from early 2022 until the end of the projection horizon. The positive contribution of fruit and vegetable prices is anticipated to be somewhat higher only in Q1. This will be supported by the positive base effect for vegetable prices, which increased less in the first two months of this year than is usual for the season.

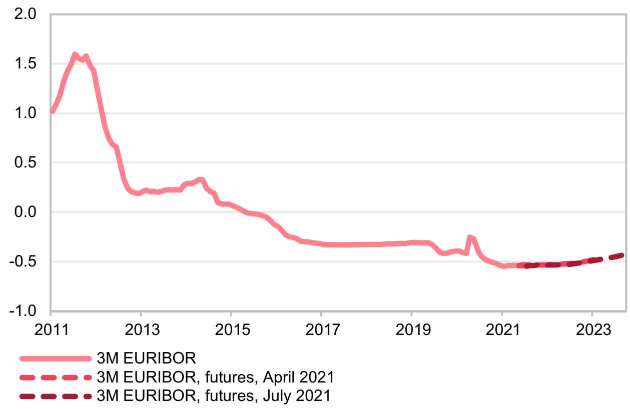
We expect **administered price** growth to be somewhat higher than last year (5.4%), mostly reflecting the already implemented adjustment in electricity prices and the inclusion of the fee for renewable energy sources in CPI calculation in January and February. We assumed higher administered price growth also because of the increase in the prices of utility services expected during the year. The projection also includes the cigarette price hike recorded in February and expected in July, consistent with the planned increase in excises. Administered price growth for the next two years is expected to measure around 4%.

As in our previous projection, we expect growth in the **prices of non-food products and services** to be moderate, consistent with a gradual recovery in demand. It is possible that, as the pandemic nears its end, the prices of some products could temporarily display unusual movements due to supply-demand mismatches, just like at the start of the pandemic. As prices of this product category depend on the prices of numerous industrial components and raw materials as well as the functioning of global supply chains and consumer behaviour which change due to the pandemic, somewhat faster growth in the prices of individual products could be possible. Still, such price increases are expected to be temporary in character and not to reflect on the projected medium-term inflation trajectory.

In terms of inflation factors, this inflation projection, like our previous five projections, is also determined by the fact that **global supply and demand** remain predominantly under the impact of the course of the pandemic. The outlook for global recovery has improved, however, with progress in vaccination, as the pandemic is better controlled and its impact on production and consumption has weakened. Additionally, leading central banks have extended their monetary accommodation which, together with fiscal packages, instils optimism that the global economy is exiting the crisis.

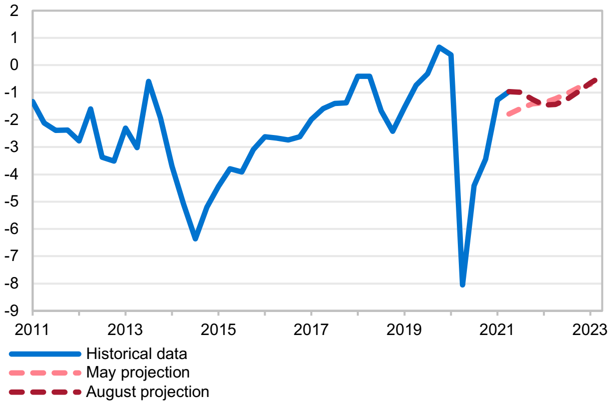
Growth outlooks vary from country to country and depend greatly on success in vaccination. Better results on that plane are the key reasons behind improved growth prospects of the euro area, our most important economic partner. Our projection assumes euro area

Chart V.0.15 **Expected 3M EURIBOR**
(p.a., in %)



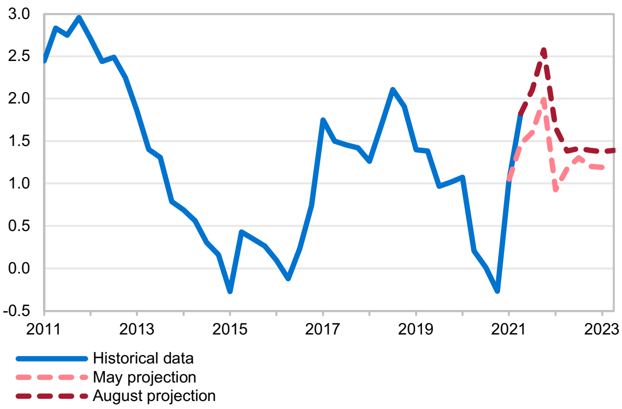
Source: Bloomberg.

Chart V.0.16 **Output gap projection**
(in % of potential output)



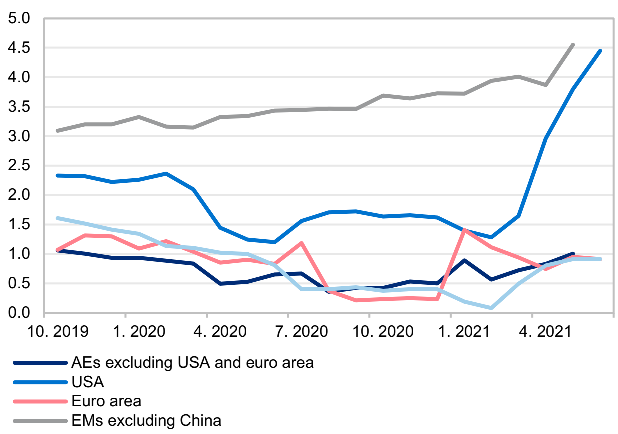
Sources: SORS and NBS.
* Output gap is estimated on the basis of NAVA.

Chart V.0.17 **Assumption for euro area inflation**
(y-o-y growth, in %)



Source: NBS calculation based on projections of relevant institutions.

Chart V.0.18 **Core inflation in the world**
(annual percentage change)



Sources: WEO Update, IMF, July 2021.

growth of 4.6% this year, up by 0.4 pp relative to our previous projection. In 2022 and 2023, we expect 0.1 pp higher euro area growth than three months ago – 4.4% and 2.0%, respectively. Euro area output gap, which we assume to stay negative until the end of the projection horizon, is not expected to reflect fully on **Serbia's output gap**, due to the concentration of the pandemic's negative effects in non-tradable sectors mostly. Our negative output gap will contract gradually from around -1.7% late this year to around -0.8% late next year, gradually softening the disinflationary impact of demand on inflation during the projection horizon. The rebound in domestic demand will be supported by fiscal policy measures, accommodative monetary policy and the expected continued favourable terms of financing for businesses and households. The closing of the output gap will also be supported by higher external demand and continuing favourable financial conditions in the international environment.

In addition to the positive effect of the NBS's monetary policy easing on domestic demand, another positive impulse ought to come from the continuing extremely low interest rates in the euro area until the end of the projection horizon. Futures indicate that the three-month EURIBOR will be negative until the end of our projection horizon, and that it will not turn positive until mid-2025.

Faster than expected economic recovery is still not enough for most central banks worldwide to lift their stimuli. Leading central banks have signalled their intention to pursue a highly accommodative monetary policy for as long possible, to ensure the fastest possible recovery from last year's recession. This has fuelled market expectations that central banks will be ready to accept higher inflation growth as well. On the other hand, monetary policy makers in these countries judge that the factors behind elevated inflation rates this year are temporary in character and that accommodative monetary policies will continue. Caution is also warranted given the challenges facing many companies – breaks in supply chains, shortages of some raw materials, much higher prices of oil and other primary commodities, mismatch between labour force supply and demand in some market segments, etc., all of which could lead to a rise in inflation.

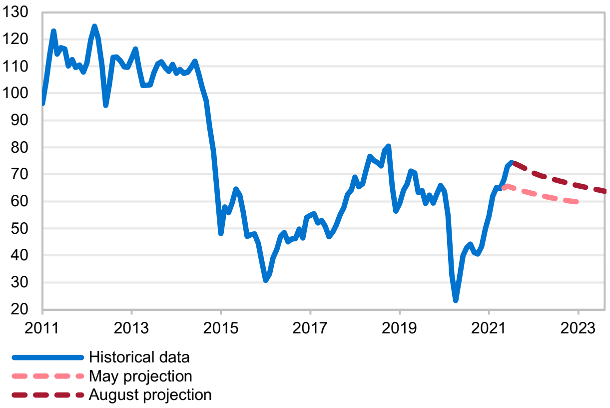
Inflation should be somewhat higher in the USA due to robust fiscal spending and an extremely accommodative monetary policy in the conditions of accelerated economic activity rebound. Euro area inflation is again expected to be somewhat higher than three months ago (1.9% and 1.5% in 2021 and 2022), mostly under the impact of higher energy prices and stronger economic recovery. Euro area inflation rates will be temporarily higher this year also because of the return of the VAT rate in Germany after its last year's reduction due to the pandemic. This will be the key factor behind Germany's y-o-y inflation rate growth to 3.8% in July (the highest level since 2008). Average euro area inflation is, however, not expected to exceed 2% this year either, which, according to the new ECB's strategy, is the symmetric inflation target. In **most countries of our region**, which are also our important trade partners, inflation growth this year is assessed as temporary. With this in mind, this year we expect slightly higher **inflationary pressures from dinar-denominated import prices, but this impact ought to be transitory** and pressures on this account are expected to subside as of next year until the end of the projection horizon.

Such assumption is consistent with the IMF's assessment[21] that elevated inflation this year is likely to be temporary in most countries, resulting in part from the base effects from last year's extremely low primary commodity prices, and from transitory supply and demand mismatches after last year's pandemic shock. On the supply side, higher primary commodity prices, breaks in global supply chains and much higher transport costs which were on the rise from mid-2020, place pressure on producer price growth, causing concern that producer prices could to a greater extent spill over to consumer prices as the economies open and demand goes up. The pandemic has also affected demand, with demand for different groups of products rising unusually (particularly for housing and work-from-home electronics), which together with supply disruptions generates shortages of some components (e.g., microchips), creating bottlenecks (e.g. in automobile production). The IMF, however, assesses that this supply-demand mismatch is transitory. Core inflation remains relatively low in most countries. Headline inflation should subside to its pre-pandemic, relatively low ranges in 2022 in most countries, once the effect of transitory disturbances wears off. This judgement rests on the following: labour market slack remains substantial, inflation expectations are well anchored and structural factors have lowered the sensitivity of prices to changes in slack.

The rise in global primary commodity prices is much faster than anticipated three months ago. Most of these prices shot past their pre-pandemic levels in Q1 already

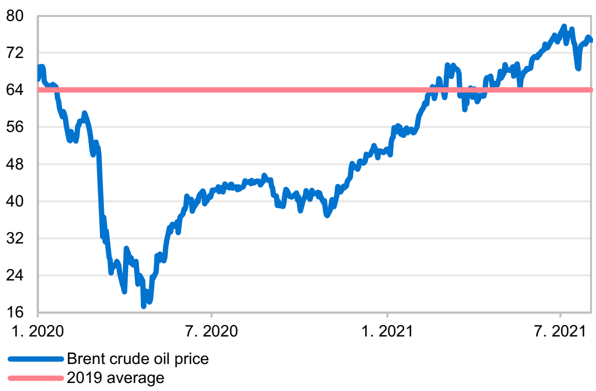
[21] WEO Update, IMF, July 2021.

Chart V.0.19 **Assumption for Brent oil prices**
(USD/barrel)



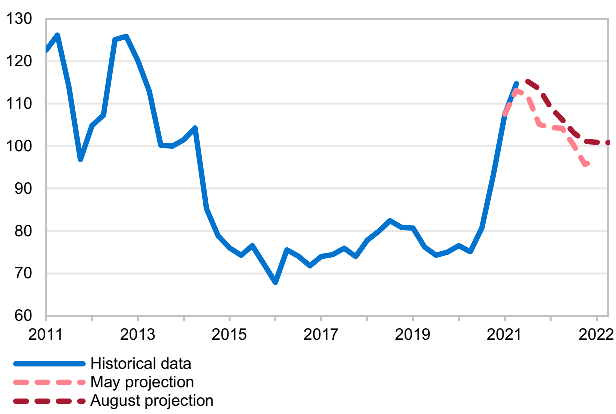
Source: Bloomberg.

Chart V.0.20 **Brent oil prices since the beginning of 2020**
(USD/barrel)



Source: Bloomberg.

Chart V.0.21 **Assumption for international prices of primary agricultural commodities**
(Q4 2013 = 100)



Sources: CBOT, Euronext and NBS calculation.

and continued to rise thereafter. **The global oil price** thus exceeded its 2019 average in late July by almost 20%. As the global oil price continued to rise since our previous projection, we have revised up our assumptions for these prices in this and the next year relative to our projection three months ago. Consistent with oil futures, in our new projection we assumed that the global oil price will measure USD 71 per barrel in December 2021 and USD 66 per barrel in December 2022. This is consistent with the projections of leading international institutions, which do not anticipate the global oil price to rise much above its current level. According to the IMF's July projection, after slumping by 32.7% last year, the global oil price will be 56.6% higher in 2021 and decline moderately in 2022 by 2.6%.

The IMF expects the **prices of other primary commodities** to be 26.5% higher than their average level last year, propped up by robust growth in **metal and food prices**. They are expected to subside by around 0.8% in 2022.

With regard to **global prices of primary agricultural commodities** relevant for us, they are anticipated to see powerful growth in 2021 and subside thereafter. Our projection of these prices relies on futures data from global stock exchanges. Consistent with these data, we revised the assumption of growth in these prices up for 2021 (to 21.7% y-o-y in Q4 compared with 12.7% in our prior projection) and down for 2022 (to -10.9% y-o-y in Q4 compared with -9.0%). Consistent with this, **we expect prices of primary agricultural commodities in the domestic market,**[22] **which mirror movements in their global counterparts**, to display similar dynamics.

In the conditions of low and stable inflation for eight years in a row, anticipated low demand-side inflationary pressures and the achieved credibility of the NBS, we expect **inflation expectations to remain relatively stable until the end of the projection horizon**.

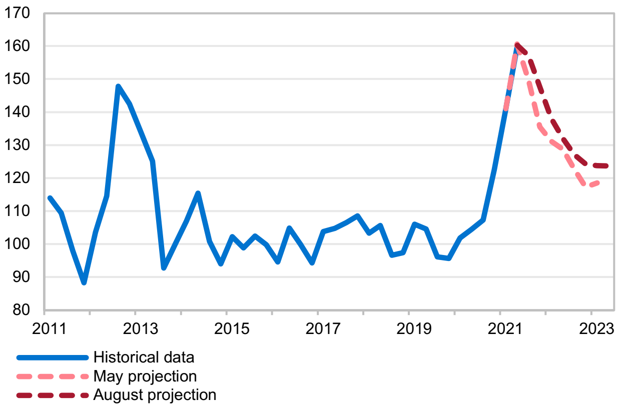
The key risks to the inflation projection remain associated with the international environment and relate primarily to the speed of global recovery, global prices of primary commodities and capital flows to emerging economies. In part, the risks to the projection also relate to the domestic market – new agricultural season, speed of the recovery of demand and movement in administered prices. **On the whole, the risks to the inflation projection are judged to be symmetric.**

[22] Measured by the composite index of wheat, corn and soybean prices.

The pace of global economic recovery could be either faster or slower than expected. Through its impact on the global prices of primary commodities and global inflation, in the conditions of a relatively stable exchange rate, it could result in a somewhat different inflation trajectory than the one we projected. If global vaccine availability improves and vaccines prove to be effective against new virus strains, the remaining containment measures would be lifted sooner, concern would dissipate more quickly and consumption growth would be more robust, particularly if households start using the savings they accumulated during last year and companies step up investment. Also, the planned fiscal support in the USA in H2 2021 could produce stronger than anticipated stimulating effects on the global economy. In that case, demand could temporarily exceed supply, which remains under the impact of raw material shortages and logistical bottlenecks, potentially leading to a spike in global prices which would spill over to the domestic market. However, vaccine rollout remains highly unequal across countries, casting a shadow on the global growth outlook. The number of vaccinated persons is extremely low in low-income countries, and it is not satisfactory in most emerging economies either. According to the IMF, the highest priority is to ensure rapid, worldwide access to vaccines. Slower-than-anticipated vaccine rollout would allow the virus to mutate further, raising concerns with regard to vaccine effectiveness and new containment measures, impeding further normalization of global economic activity expected in H2 this year. Slower global growth would lead to a slackening of growth in demand for primary commodities and their global prices which, in the conditions of a relatively stable exchange rate, could spill over to a slowdown in domestic inflation. Also, the demand for Serbia's exports would be lower in case of slower global growth, which could push up supply in the domestic market, causing inflation to slow. In view of the more pronounced short-term risks that global growth could be slower than assumed due to new coronavirus waves that could occur before vaccines are globally available, we judge the risks to domestic inflation on account of speed of global recovery to be mildly tilted to the downside.

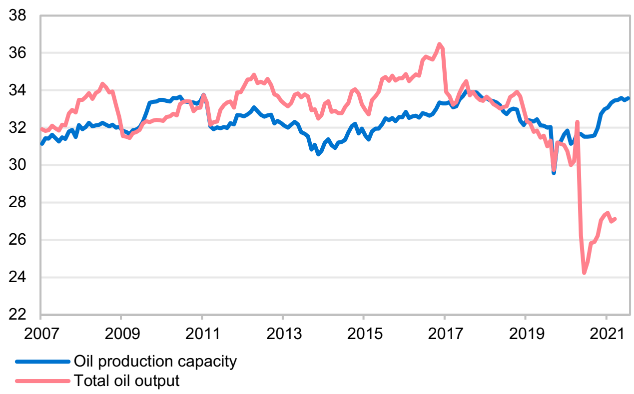
The outlook for global recovery will largely determine movements in demand for **oil and other primary commodities**. Supply-side factors are specific for each primary commodity. Though market participants, consistent with futures, do not expect **global oil prices** to

Chart V.0.22 **Assumption for domestic prices of primary agricultural commodities***
(Q4 2013 = 100)



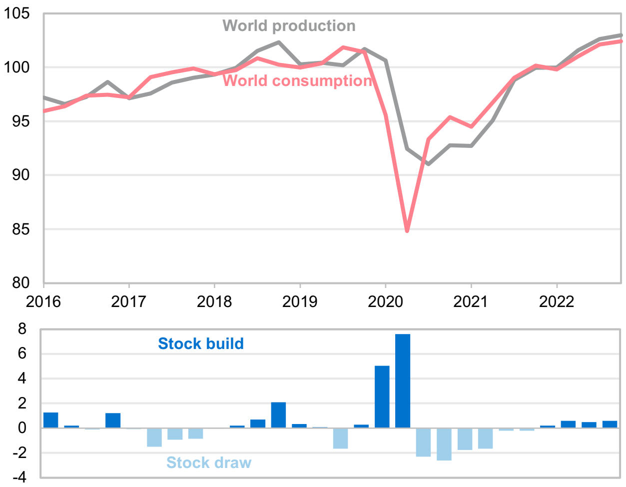
Sources: Commodity Exchange Novi Sad, CBOT, Euronext and NBS calculation.
* Measured by the composite index of wheat, corn and soybean prices.

Chart V.0.23 **OPEC output and oil production capacity**
(million barrels per day)



Source: EIA.

Chart V.0.24 **World liquid fuels production and consumption balance**
(million barrels per day)



Source: WEO Update, IMF, July 2021.

increase notably until year end relative to their current level, shifts are possible in either direction on account of supply-side factors. In mid-July, OPEC+ countries reached a deal to gradually ease production caps until September 2022, when they estimate global oil demand will reach its pre-pandemic level. The group will start boosting supply in a coordinated manner in August, in order to respond to growing demand while taking care to keep inventories relatively low. The IEA[23], however, estimates that this will probably not be enough in H2 this year and that insufficient supply in the oil market may persist, as may pressures towards oil price growth. On the other hand, any failure of OPEC+ countries to adhere to the deal on production caps and higher global demand could result in a lower than anticipated price of oil. It is also a question to what extent US sanctions on Iran and Venezuela will be observed. The EIA[24] expects Iran's oil output to increase in the coming months, despite US sanctions. It also expects OPEC+ countries to downsize production to adjust to any increase in oil supply from Iran and Venezuela. The response of US producers to a higher global oil price is also uncertain, particularly in 2022. In view of numerous supply and demand-side factors, we estimate that shifts in the global oil price are possible in either direction and that the risks to the inflation projection on this account are symmetric.

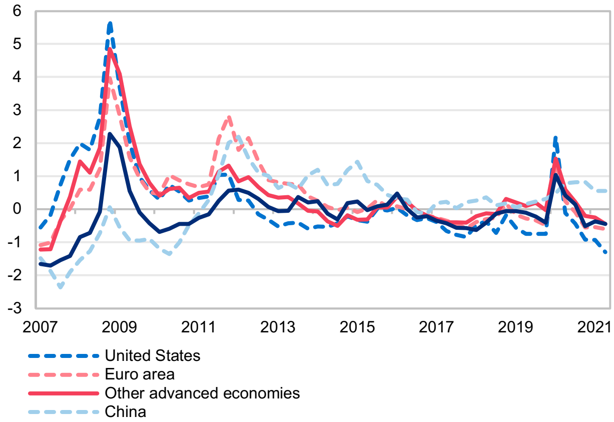
Global **prices of primary agricultural commodities** greatly depend on oil price movements, particularly through the costs in production. Also, energy prices impact demand for inputs in the production of ethanol and biofuels and, by extension, the prices of agricultural products such as corn, sugar and vegetable oil, which adds to uncertainty regarding their future movement. A key factor behind the current gap between supply and demand of primary agricultural commodities is the renewable energy policy, particularly in the USA. On the one hand, there is a possibility of disruptions in the supply of some products going forward as well, particularly in view of weather conditions – drought in America and excessive rain in much of Europe, raising concerns over this year's agricultural season. Global grain supply chains have, on the other hand, much recovered from last year's labour force shortages, and a new agricultural season could ramp up supply even more than anticipated, leading to a more moderate than assumed growth in these prices. As it is still difficult to assess this year's global agricultural season, the risks to the inflation projection on account of movement in global prices of primary commodities are judged to be symmetric.

[23] The International Energy Agency.

[24] Monthly Energy Review, U.S. Energy Inflormation Administration, July 2021.

Improved global growth outlook and the announcement of leading central banks that they will continue to pursue an extremely accommodative monetary policy helped alleviate uncertainty in the international financial market. **Global financial conditions** remain highly favourable, despite concerns over new virus strains and the possibility of inflation being more persistent than anticipated. According to the IMF, financial conditions were eased further in the USA to levels last seen before the global financial crisis. Emerging economies, including Serbia, could still benefit from high global liquidity, as key policy rates of leading central banks are expected to stay unchanged until the end of the projection horizon. Still, amid concerns of inflation, the market increasingly expects central banks to lift their stimuli sooner than anticipated. If leading central banks assess that inflation growth is not transitory after all and accordingly revise their monetary policy stance going forward, global financial conditions could tighten more

Chart V.0.25 **Financial conditions index**
(standard deviations from mean)



Sources: WEO Update, IMF, July 2021.

Table V.0.5 **Key risks to the inflation projection**

Risk	Possible channels of influence on inflation in Serbia	Estimate of the risk effect relative to the baseline scenario
Pace of global economic recovery	– Slower/faster global economic recovery results in lower/higher demand for primary commodities in the international market and, by extension, a fall/rise in their prices which, in the conditions of a relatively stable exchange rate, produces disinflationary/inflationary effects; – Slower/faster global economic recovery leads to a slowing/acceleration of inflation growth in the international environment and, in the conditions of a relatively stable exchange rate, to disinflationary/inflationary pressures at home on account of import prices; – Slower/faster global economic recovery leads to a slowing/acceleration of external demand growth, lower/higher Serbian exports, higher/lower supply in the domestic market and thereby produces disinflationary/inflationary effects; – Slower/faster global recovery causes leading central banks to pursue a more/less accommodative monetary policy stance which results in lower/higher interest rates globally and, through a rise/fall in loans and disposable income, in a rise/fall in demand and inflationary/disinflationary pressures.	↓
Crude oil prices in the global market (Serbia is net importer)	A fall/rise in the global oil price spills over to a fall/rise in petroleum product prices and thereby produces a disinflationary/inflationary effect. This fall/rise also has secondary effects, as it spills over to a decrease/increase in other prices, mostly through transport costs. Also, through a rise/fall in disposable income it contributes to an increase/decrease in demand and can produce inflationary/disinflationary effects.	↕
Global prices of primary agricultural commodities (Serbia is net exporter)	Prices of primary agricultural commodities in the domestic market largely mirror the dynamics of these prices in the global market. Their rise/fall produces inflationary/disinflationary effects.	↕
Uncertainty in the international financial market and capital flows to emerging economies	Higher/lower uncertainty in the international financial market results in higher/lower risk aversion of investors and lower/higher capital flows to emerging economies, which leads to depreciation/appreciation of the domestic currency and, by extension, a rise/fall in prices.	↕
New agricultural season	An above-average/below-average agricultural season results in higher/lower supply of agricultural products and may, therefore, produce disinflationary/inflationary pressures.	↑
Pace of recovery of domestic demand	Deterioration of the epidemiological situation could slow the initiated recovery in economic activity, demand and the labour market, which would produce disinflationary effects. However, preserved production capacities, as well as higher disposable income and favourable terms of financing, diminish the negative effects of the pandemic on demand.	↑
Administered prices	Lower/higher growth in administered prices leads to lower/higher inflation.	↕

Note: ↑ means a more inflationary effect relative to the baseline scenario, ↓ means a more disinflationary effect, and ↕ means that risks to the projection are symmetric relative to the baseline scenario.

quickly. On the other hand, if inflation returns to relatively low pre-pandemic levels in advanced economies in 2022, leading central banks' stimuli could last even longer than expected. With this in mind, we judge the risks to the inflation projection on this account to be symmetric.

When it comes to domestic factors, another, though smaller, risk to the inflation projection is the **character of this year's agricultural season**. We assumed it to be around its long-term average (after last year's above-average season), as it is still difficult to estimate the final outturn. Wheat harvest was successful and yields were higher than last year. Corn and other summer cereals suffered the consequences of extremely hot weather and drought, however, and their yields are expected to be below average. Weather conditions will probably affect fruit and vegetables as well. As yields might undershoot expectations, costs in food production could go up slightly, but this could be offset by higher imports. In view of the above, we judge the risks to the inflation projection on this account to be mildly skewed to the upside.

The risks to the projection are also associated with the **speed of the recovery of domestic demand**. Any worsening of the epidemiological situation could slow economic recovery. On the other hand, preserved production capacities, jobs and wages in the largest part of the economy, as well as higher disposable income and favourable terms of financing thanks to the adopted monetary and fiscal policy measures, could result in even faster than expected economic recovery, particularly in view of the successful vaccination strategy. Fiscal support could additionally encourage domestic demand this year. In view of the above, we judge the risks to the inflation projection on account of domestic demand to be tilted to the upside. At the same time, further FDI growth could exceed expectations, as was the case in the prior period, leading to a brisker economic recovery but also to faster potential output growth. As a result, the output gap would not close faster, i.e. inflationary pressures would not be generated, on account of demand.

According to our estimate, there is a risk that **administered price** growth at home could be somewhat lower or higher than anticipated, so risks on this account are symmetric as well.

Going forward, monetary policy priority will be to maintain price and financial stability, support the fastest possible economic growth, further rise in employment and households' living standards, strengthen the export sector, as well as maintain a favourable investment environment. The NBS will continue to closely monitor movements and the impact of key factors from the domestic and international environment on inflation, financial stability and the speed of economic recovery and to adjust its measures in line therewith in the interest of our economy and households.

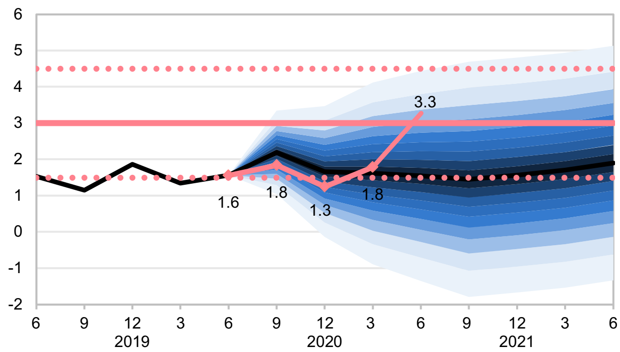
Outcome of the August 2020 inflation projection

At the time of making our projection in August 2020, we had in mind that the projected inflation trajectory will for the most part depend on the success in containing the pandemic globally and its impact on supply and demand. We also anticipated some changes in price relations, as changes in supply and demand varied greatly across sectors due to the pandemic. We also took into account that timely and large-scale monetary and fiscal policy measures will greatly mitigate the negative impact of the pandemic on supply and demand.

Under the August 2020 projection, we expected y-o-y inflation to move within the lower part of the target tolerance band until the end of the projection horizon. **Inflation did indeed move in line with our expectations set out a year ago up until Q2 this year**, when it departed from the projected trajectory due to an unexpectedly robust rise in global prices of oil and primary agricultural commodities since the start of this year.

The global oil price gained almost 50% since the start of the year until and including Q2, leaping to around USD 75 per barrel. Such powerful surge in the global oil price was spurred primarily by a better outlook for global economic growth due to the initiated vaccination process, and limited supply in the oil market. Though global oil price growth was anticipated, such high leap was not signalled by either futures or the projections of relevant international institutions. Consistent with futures, on which we customarily base our projection assumption regarding future movement in the global oil price, in August 2020 oil price was expected to grow moderately in 2021 by around 7% (from USD 44 per barrel in December 2020 to USD 47 per barrel in December 2021). The powerful leap in the global oil price spilled over to **domestic prices of petroleum products,** which for the most part determined the acceleration of y-o-y inflation from 1.8% in March to 3.3% in June this year, with the contribution of petroleum products to inflation rising from close to zero in March to 1.2 pp in June.

Chart V.0.26 **Achievement of August 2020 inflation projection**
(y-o-y rates, in %)



Source: NBS.

Global prices of primary agricultural commodities also recorded unexpectedly high growth since the start of the year, pushing up costs in food production. The contribution of **food prices (excluding fruit and vegetables)**, to y-o-y inflation rates in Q2 was somewhat higher than we anticipated a year ago.

Other inflation components moved in line with our expectations set out a year ago.

Text box 4: Estimate of the impact of base effects on y-o-y inflation

Like many other countries, Serbia has seen a temporary rise in y-o-y inflation rates this year, due in part to the base effect, i.e. low base from the previous year. The base effect component is always present, especially with volatile inflation categories, such as unprocessed food prices (fruit and vegetables), but this year it is additionally amplified by the base effect for energy prices, given that global oil prices collapsed last year amid the pandemic and thus, led to a decrease in petroleum product prices in the domestic market as well. When assessing inflationary pressures against the background of unusual price changes in the previous year, it is essential to differentiate between the impact of the current and past price movements on the change in y-o-y inflation rates.

Base effect is the effect of the exiting of the untypical m-o-m change in prices a year ago from the calculation of y-o-y inflation rates on the change in y-o-y inflation relative to the previous month. To understand the base effect better **in the technical sense**, we need to go back to the method of calculating y-o-y inflation. Y-o-y inflation (π_t) is derived as the percentage change in CPI in a given month relative to the same month a year earlier:

$$\pi_t = \left(\frac{P_t - P_{t-12}}{P_{t-12}}\right) \times 100,$$

where P_t is the CPI level in a given month, and P_{t-12} is the CPI level in the same month a year earlier. It follows that the m-o-m change in y-o-y inflation is the difference between the monthly inflation rate in the current month (p_t) and the monthly inflation rate in the same month of the previous year (p_{t-12}):

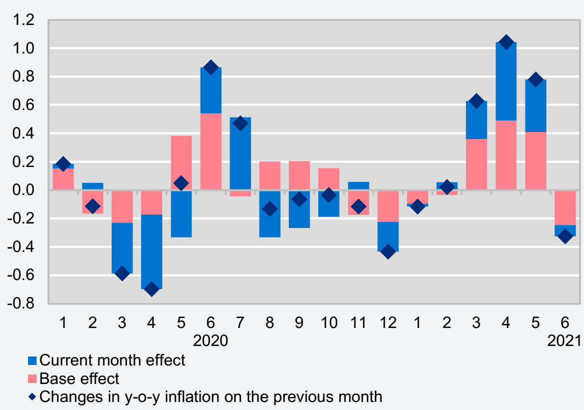
$$\pi_t - \pi_{t-1} \approx p_t - p_{t-12}.$$

In other words, if the m-o-m fall in prices in the same month of the previous year was sharper than this year, its dropout from the calculation of y-o-y inflation increases y-o-y inflation relative to the prior month, even if prices in that particular month of the current year are recording a m-o-m decline.

In contrast to the technical approach, **from an economic point of view**, only the effect of an untypical change in the m-o-m inflation rate a year ago on the current y-o-y inflation rate is considered a base effect.[1] The economic approach requires distinguishing between price changes in the base period that were expected and those resulting from one-off factors, as the base effect stems from the deviation of the m-o-m inflation rate in the past year from its usual pattern for that month.

In assessing the base effect, we followed the ECB methodology, according to which the contribution of the base effect to monthly changes in y-o-y inflation is calculated as the deviation of the monthly (nonseasonally adjusted) inflation rate 12 months ago from the estimated typical monthly change. Typical monthly change is the change that is seasonally usual for a particular month, taking into account the trend in inflation movement. It is derived as the average monthly change in prices calculated on the basis of data for a longer time period and increased by a specific seasonal factor for that month. In other words, when estimating the typical monthly change for CPI categories, we took into account whether they are affected by seasonality, i.e. whether it is seasonally usual for them to fall or rise in a particular month. Accordingly,

Chart O.4.1 **Base effect and current month effect in 2020 and 2021**
(in pp)



Sources: SORS and NBS calculation.

[1] ECB *Monthly Bulletin*, January 2005 and January 2007

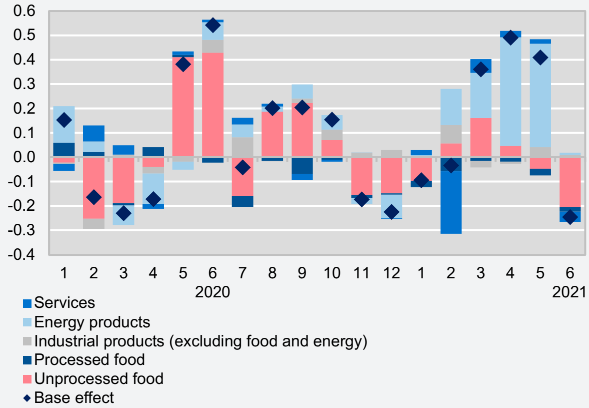
the base effect in the observed month will be positive if one year ago prices increased less (or fell more) than seasonally usual for that month, and vice versa – it will be negative if one year ago these prices increased more (or fell less) than they normally do. A positive base effect will work towards increasing, and the negative base effect towards decreasing y-o-y inflation.

Following the economic approach, we separated the sources of change in y-o-y inflation rates on the base effect and the effect of the current month for 2020 and H1 2021 (Chart O.4.1) and decomposed the base effect on its key components (Chart O.4.2). As in other countries, the base effect in Serbia in this period stemmed mainly from unprocessed food (above all, fruit and vegetables, but also fresh meat) and energy, i.e. from the change in the prices of those inflation components that deviated the most from their typical monthly changes last year.

Looking at 2020, changes in y-o-y inflation were also, expectedly, under the impact of both positive and negative base effects from the previous year, while the effect of the current month was negative for seven months. As noted in the February 2020 *Inflation Report*[2], the most significant was the base effect from unprocessed food prices, especially of vegetables (which make up around 33% of this inflation component), due to their untypical movement in 2019, recorded in other countries as well. Since the beginning of 2021, in addition to the base effect from unprocessed food prices, we have seen a positive base effect from energy prices, particularly in April and May, which pushed y-o-y inflation rates up. This happened because of the untypical fall in energy prices in the same months of the previous year, under the impact of a sharp fall in global oil prices amid the pandemic. The base effect from other inflation components was less pronounced, as in the same period last year they exhibited no major departure from their typical pattern. An exception in this respect were the prices of services, whose base effect in February was negative, due to the untypical hike in landline telephony services in February 2020.

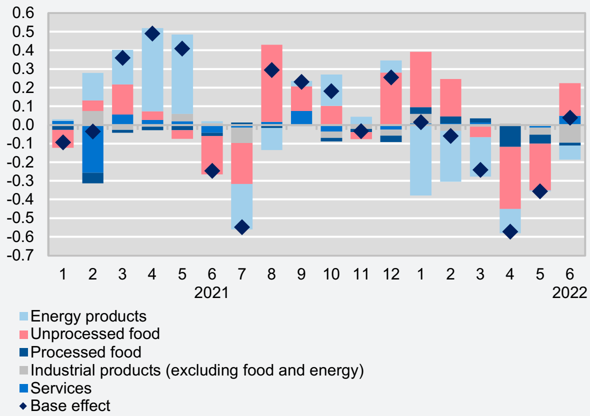
In our estimate, the base effect will continue to have a considerable impact on the y-o-y inflation profile in the period ahead, contributing first to its temporary rise above the target midpoint in the second half of the year,

Chart O.4.2 **Decomposition of the base effect into key components in 2020 and 2021**
(in pp)



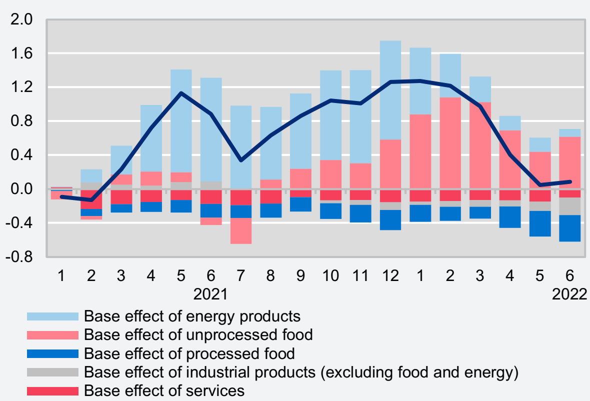
Sources: SORS and NBS calculation.

Chart O.4.3 **Decomposition of the base effect into key components in 2021 and 2022**
(in pp)



Sources: SORS and NBS calculation.

Chart O.4.4 **Cumulative impact of the base effect on y-o-y inflation since January 2021**
(in pp)



Sources: SORS and NBS calculation.

[2] See the February 2020 *Inflation Report*, Text box 5, p 67.

and then to its lowering, especially in April and May 2022, its impact gradually waning thereafter. The reason for the rise in y-o-y inflation rates is the low base effect, notably for unprocessed food prices, given that their fall was first sharper than usual in the period August–October 2020 and that it extended into December 2020, even though it is seasonally typical for vegetable prices to go up at that time, and given that they increased less than expected in the first two months of this year. Early this year, petroleum product prices also deviated from their usual pattern, but they did so in the opposite direction – their growth was stronger than usual, which is why early next year the higher base for energy prices will mitigate the effect of the lower base for unprocessed food prices. From February to June 2022, the base effect will be negative for energy prices and from March for unprocessed prices too, leading to a slowdown in y-o-y inflation.

In cumulative terms (Chart 0.4.4), total base effect will contribute 0.9 pp to the y-o-y inflation growth in the period August–December. After that, from February to June, total base effect will reduce y-o-y inflation by 1.2 pp.

Table A
Indicators of Serbia's external position

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Q1 2021	Q2 2021
EXTERNAL LIQUIDITY INDICATORS (in %)																		
FX reserves/imports of goods and services (in months)	6.1	9.0	7.5	5.4	9.7	8.4	8.8	7.7	7.6	6.6	6.7	6.2	5.4	5.4	5.7	6.1	6.5	5.9
FX reserves/short-term debt	177.0	265.1	250.6	162.6	220.6	191.2	299.9	237.3	268.6	294.0	256.4	234.0	202.1	210.9	279.8	247.1	267.6	
FX reserves /GDP	22.1	34.8	30.5	22.9	32.6	31.7	34.0	32.4	30.7	27.9	29.1	27.8	25.4	26.3	29.1	29.0	30.4	28.9
Debt repayment/GDP	4.7	9.7	9.6	10.1	12.1	11.3	11.7	12.3	12.6	13.3	11.1	12.3	10.9	11.3	10.0	7.6	6.6	
Debt repayment/exports of goods and services	19.8	36.2	37.5	37.5	48.8	37.5	37.3	36.0	33.0	32.7	25.2	25.9	22.2	22.9	19.7	15.9	12.3	
EXTERNAL SOLVENCY INDICATORS (in %)																		
External debt/GDP	56.2	55.2	55.1	58.8	68.6	74.5	68.1	76.1	70.4	72.4	73.4	72.0	65.1	62.2	61.5	66.3	68.8	
Short-term debt/GDP	12.5	13.1	12.2	14.1	14.8	16.6	11.3	13.7	11.4	9.5	11.3	11.9	12.6	12.4	10.4	11.7	11.4	
External debt/exports of goods and services	234.9	205.7	214.3	218.9	276.9	247.1	216.5	223.6	184.0	177.7	166.8	152.4	132.2	126.0	121.0	138.8	141.5	
FINANCIAL RISK EXPOSURE INDICATORS (in %)																		
FX reserves/M1	290.3	356.1	306.7	300.4	393.4	416.6	429.6	402.1	330.4	278.1	250.2	207.3	176.2	168.0	174.1	130.0	141.5	132.1
FX reserves/reserve money	169.8	179.5	173.8	140.7	190.5	196.4	207.6	197.9	199.9	196.6	193.7	196.6	185.0	171.4	194.1	157.1	177.0	172.5
OPENNESS OF ECONOMY (EXPORTS + IMPORTS)/GDP	67.1	73.0	74.7	78.0	65.1	75.3	78.0	84.5	87.1	91.8	96.2	100.6	106.2	108.2	111.6	104.5	111.2	118.0
MEMORANDUM: (in EUR million)																		
GDP [1]	22,276	25,906	31,551	35,701	32,486	31,546	35,432	33,679	36,427	35,467	35,740	36,779	39,235	42,892	45,967	46,467	11,603	12,643
External debt	12,520	14,291	17,382	20,982	22,272	23,509	24,123	25,645	25,644	25,679	26,234	26,494	25,526	26,662	28,254	30,813	32,341	
External debt servicing	1,054	2,513	3,039	3,594	3,922	3,564	4,154	4,130	4,595	4,728	3,960	4,508	4,285	4,849	4,592	3,527	767	
Central bank foreign exchange reserves	4,922	9,020	9,634	8,162	10,602	10,002	12,058	10,915	11,189	9,907	10,378	10,205	9,962	11,262	13,378	13,492	14,276	14,092
Short-term debt [2]	951	968	1,044	1,832	1,852	1,758	612	455	196	99	303	672	844	1,401	1,925	1,616	1,460	
Current account balance	-1,778	-2,356	-5,474	-7,125	-2,032	-2,037	-3,656	-3,671	-2,098	-1,985	-1,234	-1,075	-2,051	-2,076	-3,161	-1,981	138	-570

CREDIT RATING (change of rating and outlook)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	July/May	Feb	July	March/ Dec	Dec	Nov	March	Aug	July	Jan	Dec	Jan/March/ June/Dec	March/Dec	Dec	Sept/Dec	May	March
S&P	BB- /stable	BB- /positive	BB- /stable	BB- /negative	BB- /stable		BB /stable	BB- /negative				BB- /positive	BB /stable	BB /positive	BB+ /positive	BB+ /stable	
Fitch	BB- /stable			BB- /negative		BB- /stable		BB- /negative		B+ /stable	B+ /positive	BB-/stable	BB /stable		BB+ /stable		
Moody's									B1 /stable			B1 /positive	Ba3 /stable		Ba3 /positive		Ba2 /stable

Methodological notes:

Foreign exchange reserves/imports of goods and services (in months) - ratio of end-of-period foreign exchange reserves to average monthly imports of goods and
Foreign exchange reserves/short-term debt (in %) - ratio of foreign exchange reserves to stock of short-term debt at remaining maturity at end-of-period.
Foreign exchange reserves/GDP (in %) - ratio of end-of-period foreign exchange reserves to GDP.
Debt repayment/GDP (in %) - ratio of debt repayment (excl. early repayment of a part of debt to London Club creditors) to GDP during period under review.
Debt repayment/exports (in %) - ratio of debt repayment (excl. early repayment of a part of debt to London Club creditors) to exports of goods and services
External debt/GDP − ratio of end-of-period outstanding debt to GDP.
Short-term debt/GDP − ratio of end-of-period short-term debt at remaining maturity to GDP.
External debt/exports (in %) − ratio of end-of-period outstanding debt to annual value of exports of goods and services.
Foreign exchange reserves/M1(in %) - ratio of foreign exchange reserves to money supply at end-of-period.
(Exports + imports)/GDP (in %) - ratio of value of exports and imports of goods and services to GDP during period under review.

[1] According to ESA 2010. Data for 2020 is a sum of quarterly data published by SORS. Data for Q2 2021is NBS estimate.

[2] At original maturity.

Notes:

1. The Statistical Office revised GDP data for the period 2005-2017, which led to a change in the share of macroeconomic indicators in GDP.
2. Data are subject to corrections in line with the official data sources.
3. Starting from 2007 data on exports and imports of goods and services are shown in accordance with BPM6. Data for 2005 and 2006 are shown according to previous methodology.
4. Starting from 2007 the general trade system of registration of exports and imports of goods is applied. This is a broader concept and includes all goods entering/exiting the country's economic territory, apart from goods in transit. Data for 2005 and 2006 are disseminated using the special trade system.
5. External debt servicing does not include advance debt repayments.

Table B
Key macroeconomic indicators

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Q1 2021	Q2 2021
Real GDP growth (in %)[1]	5.5	5.1	6.4	5.7	-2.7	0.7	2.0	-0.7	2.9	-1.6	1.8	3.3	2.1	4.5	4.2	-1.0	1.7	13.4
Consumer prices (in %, relative to the same month a year earlier)[2]	17.7	6.6	11.0	8.6	6.6	10.3	7.0	12.2	2.2	1.7	1.5	1.6	3.0	2.0	1.9	1.3	1.8	3.3
NBS foreign exchange reserves (in EUR million)	4,922	9,020	9,634	8,162	10,602	10,002	12,058	10,915	11,189	9,907	10,378	10,205	9,962	11,262	13,378	13,492	14,276	14,092
Exports (in EUR million)[3]	5,329	6,948	8,110	9,583	8,043	9,515	11,145	11,469	13,937	14,451	15,728	17,385	19,312	21,166	23,349	22,196	6,215	6,843
- growth rate in % compared to a year earlier	19.1	30.4	-	18.2	-16.1	18.3	17.1	2.9	21.5	3.7	8.8	10.5	11.1	9.6	10.3	-4.9	12.0	46.6
Imports (in EUR million)[3]	9,612	11,970	15,468	18,267	13,099	14,244	16,487	16,992	17,782	18,096	18,643	19,597	22,343	25,257	27,960	26,346	6,691	8,070
- growth rate in % compared to a year earlier	0.7	24.5	-	18.1	-28.3	8.7	15.7	3.1	4.7	1.8	3.0	5.1	14.0	13.0	10.7	-5.8	-2.5	47.4
Current account balance[3]																		
(in EUR million)	-1,778	-2,356	-5,474	-7,125	-2,032	-2,037	-3,656	-3,671	-2,098	-1,985	-1,234	-1,075	-2,051	-2,076	-3,161	-1,981	138	-570
as % of GDP	-8.0	-9.1	-17.3	-20.0	-6.3	-6.5	-10.3	-10.9	-5.8	-5.6	-3.5	-2.9	-5.2	-4.8	-6.9	-4.3	1.2	-4.5
Unemployment according to the Survey (in %)[6]											18.9	16.4	14.5	13.7	11.2	9.7	12.8	
Wages (average for the period, in EUR)[7]	210.4	257.8	347.1	402.0	337.8	331.8	372.5	366.1	388.5	379.8	367.9	374.5	394.5	419.7	465.9	510.8	540.6	552.7
RS budget deficit / surplus (in % of GDP)[4]				-1.6	-3.0	-3.2	-3.8	-5.6	-4.9	-5.9	-2.7	-0.2	0.7	0.6	0.2	-8.4	-1.7	-3.5
Consolidated fiscal result (in % of GDP)[4]	1.1	-1.4	-1.8	-2.5	-4.2	-4.3	-4.5	-6.4	-5.1	-6.2	-3.5	-1.2	1.1	0.6	-0.2	-8.1	-0.9	-1.8
RS public debt, (central government, in % of GDP)[8]	47.6	33.9	27.9	26.8	30.9	39.5	42.8	52.9	56.0	66.2	70.0	67.7	57.8	53.6	52.0	57.4	54.8	55.0
RSD/USD exchange rate (period average)	66.87	67.03	58.39	55.76	67.47	77.91	73.34	88.12	85.17	88.54	108.85	111.29	107.50	100.28	105.28	103.03	97.60	97.59
RSD/USD exchange rate (end of period)	72.22	59.98	53.73	62.90	66.73	79.28	80.87	86.18	83.13	99.46	111.25	117.14	99.12	103.39	104.92	95.66	100.43	98.74
RSD/EUR exchange rate (period average)	82.99	84.11	79.96	81.44	93.95	103.04	101.95	113.13	113.14	117.31	120.73	123.12	121.34	118.27	117.85	117.58	117.58	117.57
RSD/EUR exchange rate (end of period)	85.50	79.00	79.24	88.60	95.89	105.50	104.64	113.72	114.64	120.96	121.63	123.47	118.47	118.19	117.59	117.58	117.58	117.57
MEMORANDUM:																		
GDP (in EUR million)[5]	22,276	25,906	31,551	35,701	32,486	31,546	35,432	33,679	36,427	35,467	35,740	36,779	39,235	42,892	45,967	46,467	11,603	12,643

[1] At constant prices of previous year. Data for 2020 calculated as the sum of four quarters, according to SORS publications. Data for Q2 2021- SORS flash estimate.

[2] Retail prices until 2006.

[3] Starting from 2007 data on balance of payments (current account, exports and imports of goods and services) are shown in accordance with BPM6. Data for 2005 and 2006 are shown according to the previous methodology. Due to the break in the series for 2007, exports and imports growth rates are not shown. Starting from 2007 the general trade system of registration of exports and imports is applied. This is a broader concept and includes all goods entering/exiting the country's economic territory, apart from goods in transit. Data for 2005 and 2006 are disseminated using the special trade system.

[4] Includes below-the-line items (payment of called guarantees, bank recapitalisations and debt takeover) in line with IMF methodology, as of 2008 on RS budget level and as of 2005 on consolidated level.

[5] According to ESA 2010. Data for 2020 calculated as the sum of four quarters, according to SORS publications. Data for Q2 2021- NBS estimate.

[6] Data are revised according to the new methodology of the Labour Force Survey from 2021.

[7] Until 2018, wages are shown according to the old methodology. As of 2018, wages are shown according to the new methodology and data are based on Tax Administration evidence. For conversion of wages from RSD to EUR, we used the average of the period RSD/EUR exchange rate. Data for Q2 2021is the average of two months.

[8] Data on the share of public debt in GDP were downloaded from the website of the Ministry of Finance.

Notes:

1. The Statistical Office revised GDP data for the period 2005-2017, which led to a change in the share of macroeconomic indicators in GDP.
2. Data are subject to corrections in line with official data sources.
3. Source for the data on unemployment: Labour Force Survey, Statistical Office.
4. Source for public debt: MoF.

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Executive Board meetings and changes in the key policy rate

2020

Date	Key policy rate (p.a, in %)	Change (in basis points)
9 January	2.25	0
13 February	2.25	0
11 March	1.75	-50
9 April	1.50	-25
7 May	1.50	0
11 June	1.25	-25
9 July	1.25	0
13 August	1.25	0
10 September	1.25	0
8 October	1.25	0
12 November	1.25	0
10 December	1.00	-25

2021

Date	Key policy rate (p.a, in %)	Change (in basis points)
14 January	1.00	0
11 February	1.00	0
11 March	1.00	0
13 April	1.00	0
13 May	1.00	0
10 June	1.00	0
8 July	1.00	0
12 August	1.00	0
9 September		
7 October		
9 November		
9 December		

Press releases from NBS Executive Board meetings

Press release from Executive Board meeting held on 10 June 2021

At its meeting today, the NBS Executive Board voted to keep the key policy rate at 1.0%.

As assessed by the Board, the effects of past monetary and fiscal measures can also be expected going forward, helping maintain the favourable financing conditions of businesses and households, and propping up their disposable income. An impetus will also come from the adopted third stimulus package this year, worth around 4.3% of GDP.

The Executive Board pointed to the strong GDP growth since the beginning of the year which outperformed expectations, but also preliminary estimates – according to SORS data, it came at 1.7% y-o-y in Q1, which is more than the preliminary estimate of 1.2%. On the production side, robust growth was powered the most by construction and industry, and on the expenditure side, by fixed investments and net exports. The remarkably high y-o-y growth rates posted by industrial production (33.9%), commodity exports and imports (73.2% and 63.6%, respectively) and service sector indicators in April are partly attributable to the low base from April 2020, when the economic effects of the pandemic were at their highest in Serbia and worldwide, but also to the continuation of positive trends since the start of the year, as these indicators recorded m-o-m increases as well. The Board expects that the economic growth will continue in the period ahead, largely as a result of the coordinated monetary and fiscal policy measures which preserved investment and consumer confidence and propped up fixed investment and consumption growth. Accelerated recovery will be also underpinned by the progress in the vaccination process and its beneficial impact on the revival of many activities within the services sector. There is no doubt that external demand will recover, driving up our exports that will continue to be diversified by geography and product. All of this, along with the planned increase in government capital expenditure for infrastructure projects, will drive GDP growth in 2021 as a whole to 6%, or possibly higher.

The absence of the seasonally typical vegetable price growth early in the year was compensated for in April, which, coupled with the low base effect for petroleum product prices, pushed inflation in April to 2.8% y-o-y. The Executive Board expects a somewhat higher inflation rate in May too. However, this inflation rise is temporary and reflects primarily the low 2020 base, above all for petroleum products, which is also the case in most other countries due to last year's pandemic-related collapse of global oil prices. At the same time, low core inflation of 1.8% signals the absence of any major demand-side inflationary pressures and the Executive Board expects that its stable movement around the current level will persist in the period ahead. The ensured relative stability of the exchange rate remains an important factor of low and stable inflation, as do the anchored inflation expectations of the financial and corporate sectors, which confirm monetary policy credibility.

In keeping the rate on hold, the Executive Board had in mind that the movements in the international environment still largely hinge on the course of the pandemic. While global growth prospects are better than anticipated, the recovery will be uneven across countries and largely dependent on the vaccine rollout and economic policy support. The expected acceleration of euro area growth and the pick-up in inflation since the beginning of the year have not, for the time being, softened the stimulus measures of the ECB, because the factors behind higher inflation rates are assessed to be temporary in nature. The Fed is not raising its interest rates yet either, even though the pace of economic recovery, fuelled by the exceptionally accommodative fiscal policy, has sparked long-term inflation expectations and interest rates. Better growth outlook for the global economy and the announcements of leading central banks that their interest rates would stay low going forward, have to some extent mitigated uncertainty in the international financial market, so financing conditions for emerging economies remain favourable. Uncertainty persists in the global commodity markets, notably the market of oil, primary agricultural products and food, but no major further growth in their prices is expected.

The Executive Board stresses that, as so far, monetary policy priority will be to ensure price and financial stability, while supporting faster growth of our economy and employment, further growth of the export sector and a favourable investment environment. The NBS will continue to carefully monitor the trends and impact of the key factors in the domestic and international environment on inflation, financial stability and the speed of economic recovery, and to adjust its measures accordingly, in the interest of our corporates and citizens.

The next rate-setting meeting will take place on 8 July.

Press release from Executive Board meeting held on 8 July 2021

At its meeting today, the NBS Executive Board voted to keep the key policy rate at 1.0%.

As assessed by the Executive Board, the effects of past monetary and fiscal measures, including the third economic assistance package worth around 4.3% of GDP, can also be expected going forward, helping maintain the favourable financing conditions for corporates and households, and thus propping up their disposable income.

The Board stressed that Serbia is one of the few economies that exceeded pre-crisis levels of economic activity already in Q1. Particularly important is the fact that well-coordinated monetary and fiscal policies managed to preserve production capacities and jobs, as well as consumer and business confidence. Having this and the successful vaccination process in mind, the Board expects that the economic growth this year will be driven mainly by the higher fixed investment and consumption. External demand is on the path of recovery and Serbian exports – diversified by product and geography, are rising further, supported by the continued strong inflow of FDI. All of this, along with the planned increase in government capital expenditure for infrastructure projects, will drive GDP growth in 2021 as a whole to 6%, or possibly higher.

Consistent with Executive Board expectations, y-o-y inflation rose in May (to 3.6%), just as it did in most other countries, notably as a result of last year's low base. The low base effect is associated primarily with petroleum product prices which recorded a sharp decline in the months following the outbreak of the pandemic due to the collapse of the global oil price. The Executive Board expects inflation to move around the target midpoint (3%) in the coming months, and to slow down as of Q2 next year when the effect of temporary factors relating to petroleum product and food prices wears off. The absence of any major inflationary pressures is signalled by the stable movement of core inflation, which measured 2.0% y-o-y in May. The ensured relative stability of the exchange rate remains an important factor of low and stable inflation, as do the anchored inflation expectations of the financial and corporate sectors, which confirm monetary policy credibility.

In making the decision to keep the key policy rate unchanged, the Executive Board was aware of the fact that developments in the international environment are still largely dependent on the course of the pandemic. Though economic recovery remains uneven across countries, with a risk that it might undergo a slowdown due to new virus strains, the global economy's medium-term outlook is favourable thanks to the vaccination process. Potential risks to global economic growth may include disruptions in value chains and imbalances in the labour market, as they increase production costs and lead to global concerns that inflationary pressures might rise. Leading economic activity indicators in the euro area, our key foreign trade partner, suggest that recovery in Q2 is robust, driven by growth in manufacturing, as well as in the services sector. For the time being, accelerated growth in the euro area, coupled with higher inflation from the start of the year, is not driving the ECB towards a decision to reduce the level of monetary policy accommodation, because higher inflation factors are assessed as temporary. Also, the Fed believes that developments in the US economy still do not call for the withdrawal of central bank's support measures. Good prospects for global economic growth and announcements by leading central banks that their rates will remain low going forward have alleviated uncertainty in the international financial markets to some degree, therefore financing conditions for emerging countries are still favourable. Uncertainty persists in the global commodity market, notably in terms of movements in the global oil price, which went up by more than 45% in the first half of the year. The increase in the global price of oil was under the impact of a strong surge in demand which exceeded the supply, due to it being limited by decisions of OPEC+ countries. An upward trend is also recorded by global prices of other primary commodities, as well as food prices.

In conditions of pronounced global uncertainty caused by the pandemic, the NBS preserved price and financial stability for the eighth year in a row, and at the same time it is on an equal footing with the Serbian Government in providing support to corporates and households. The Executive Board underlined that safeguarding price and financial stability will remain a priority of the monetary policy, together with support to faster growth of our economy and employment, further rise in the export sector, as well as favourable investment environment. The NBS will continue to carefully monitor the trends and impact of the key factors in the domestic and international environment on inflation, financial stability and the speed of economic recovery, and to adjust its measures accordingly, in the interest of our corporates and citizens.

The next rate-setting meeting will take place on 12 August 2021.

Press release from Executive Board meeting held on 12 August 2021

At its meeting today, the NBS Executive Board voted to keep the key policy rate at 1.0%.

As assessed by the Executive Board, the effects of past monetary and fiscal measures can also be expected going forward, helping maintain the favourable financing conditions for corporates and households, and thus propping up their disposable income.

The Board noted that economic activity indicators since the start of the year have exceeded expectations – according to SORS estimate, GDP grew 13.4% y-o-y in Q2, as a result of continued positive trends in the economy, but also the low last year's base, when the most stringent epidemiological measures were in place. At the quarterly level, GDP is estimated to have increased 1.2% seasonally-adjusted. Such outcome is underpinned by the improved epidemiological situation globally and at home, the effects of monetary and fiscal stimuli in the domestic market, as well as by the continued implementation of infrastructure projects. On the production side, the strongest positive contribution to growth in Q2 came from the services sector, which was hit by the pandemic the most last year, while manufacturing and construction provided significant contributions, as in the quarter before.

Looking at the inflation profile, the Board stated that inflation has moved around the target midpoint (3±1.5%) since April. As in other countries of the region, higher y-o-y inflation relative to the previous quarter is mainly attributable to the low base for petroleum product prices from the same period last year, as well as to the higher cost-push pressures fuelled by the surge in the global prices of oil and other primary commodities in the previous months. At the same time, the Board underlined that there are no major inflationary pressures on the demand side. The absence of major inflationary pressures is also indicated by the persistently low and stable core inflation (around 2%) and the short- and medium-term inflation expectations, which revolve around the target midpoint in case of the financial sector and are even lower in case of the corporate sector. The Executive Board expects that inflation will continue to move within the target tolerance band in the period ahead.

Though movements in the international environment are still greatly dependent on the course of the pandemic, global economic recovery is picking up the pace thanks to vaccine rollout and the gradual elimination of epidemiological measures, with a continued implementation of fiscal and monetary stimuli in a number of countries. New virus strains still pose a risk to global growth, as do occasional halts in supply chains and imbalances in the labour market since they ramp up production costs. Growth in our key economic partner, the euro area, has been accelerating since April, therefore its projections for this and the following year have been revised up. So far, accelerated growth in the euro area, as well as higher inflation since the start of 2021, has not driven the ECB to lower the degree of monetary policy accommodation, because higher inflation factors are judged to be temporary. The Fed also has not changed its monetary policy so far, though it noted progress in achieving its objectives, which it will continue to assess at upcoming meetings. Global financial liquidity is still exceptionally high, which reflects positively on capital flows to emerging countries, Serbia included. On the other hand, uncertainty is still present in the global commodities market, notably in terms of movements in the global price of oil, given that in July it was more than 15% above the pre-pandemic level, i.e. the average for 2019. The global prices of other primary commodities, including global food prices, were also at significantly higher levels.

The Executive Board underlined that safeguarding price and financial stability will remain a priority of the monetary policy, together with support to faster growth of our economy and employment, further rise in the export sector, as well as favourable investment environment. The NBS will continue to carefully monitor the trends and impact of the key factors in the domestic and international environment on inflation, financial stability and the speed of economic recovery, and to adjust its measures accordingly, in the interest of our corporates and citizens.

At today's meeting, the Executive Board adopted the August Inflation Report with new macroeconomic projections, which will be presented to the general public in more detail at the press conference on 18 August.

The next rate-setting meeting is scheduled for 9 September 2021.

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